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Pàrlamaid na h-Alba

Official Report

INFRASTRUCTURE AND CAPITAL INVESTMENT COMMITTEE

Wednesday 16 November 2011

Session 4

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CONTENTS

INFRASTRUCTURE AND CAPITAL INVESTMENT COMMITTEE
9th Meeting 2011, Session 4

CONVENER

*Maureen Watt (Aberdeen South and North Kincardine) (SNP)

DEPUTY CONVENER

*Jamie Hepburn (Cumbernauld and Kilsyth) (SNP)

COMMITTEE MEMBERS

*Jackson Carlaw (West Scotland) (Con)
*Malcolm Chisholm (Edinburgh Northern and Leith) (Lab)
*Neil Findlay (Lothian) (Lab)
*Adam Ingram (Carrick, Cumnock and Doon Valley) (SNP)
*Gordon MacDonald (Edinburgh Pentlands) (SNP)

COMMITTEE SUBSTITUTES

Graeme Pearson (South Scotland) (Lab)
Sandra White (Glasgow Kelvin) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Matthew Conway (Ofcom)
Stuart Gibson (Reform Scotland)
Vicki Nash (Ofcom Scotland)
Ewan Sutherland (University of the Witwatersrand)
Dr Jason Whalley (University of Strathclyde)

CLERK TO THE COMMITTEE

Steve Farrell

LOCATION

Committee Room 1

Scottish Parliament

Infrastructure and Capital Investment Committee

Wednesday 16 November 2011

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

Decision on Taking Business in Private

The Convener (Maureen Watt): Good morning, everyone. I welcome you to the ninth meeting in 2011 of the Infrastructure and Capital Investment Committee. I remind everybody to switch off their phones and BlackBerrys, as they affect the broadcasting system. I think that we are all present and correct today.

The first agenda item is the committee's decision on taking item 4 in private. Is that agreed?

Members *indicated agreement.*

Broadband Infrastructure Inquiry

10:00

The Convener: Item 2 is the start of our inquiry into Scotland's broadband infrastructure. We will hear our first oral evidence for our work on the inquiry. I welcome our first panel of witnesses: Vicki Nash, director of Ofcom Scotland, and Matthew Conway, director of regulatory development and nations at Ofcom.

I will start the questioning. Can you comment on the findings of recent reports on the availability of broadband in Scotland, especially the finding that Scotland continues to fall behind the rest of the United Kingdom in broadband take-up? Is it because of relative poverty that there is low take-up in Glasgow? Is there any evidence about the impact of the lack of broadband usage on economic growth?

Vicki Nash (Ofcom Scotland): I will start on that subject. You are right to highlight the issue of take-up. Although the level of availability is lower in Scotland, it is not significantly so; yet, the difference in take-up is quite marked. In Scotland, we have seen a slowing—in fact, a flatlining—of take-up over the past three years. In the past couple of years, it has risen by only 1 per cent, from 60 to 61 per cent, whereas the UK average has now gone up to 74 per cent. We are falling well behind.

There is certainly a link to poverty. There is also a link to age. The take-up in Scotland is driven by low take-up among those aged over 55 and significantly lower take-up among those in socioeconomic classes C2, D and E. Those two things are related.

The question about the link to economic development is a good one. We know about the link to household economics. Research has been published by Martha Lane Fox that shows that the average household can save about £560 a year if it has an internet connection, simply by being able to shop around and buy cheaper goods and services such as rail travel. We know that not having broadband can lead to a significant financial deficit for households. There is also an impact in households with young children who use the internet during their school day but do not have continuity of that experience at home. There are some deficits in terms of household economy and educational experience, so it is right to focus on take-up.

As recently as last week, the Scottish Government signed up to a digital participation charter along with a variety of partners, including BT and Microsoft. There is now a sense that, in Scotland, we are starting to engage with those at

the front line in looking at take-up. There will be an on-going debate about the availability of broadband, but it is right to focus on take-up. It is not just a question of availability.

The Convener: Have some households chosen to do away with their land line—and therefore the possibility of a broadband connection—in favour of mobile phones and hand-held devices?

Vicki Nash: That is a related issue—absolutely. We have also seen lower take-up of personal computers in Scotland, which is clearly driving the lower take-up of broadband. Increasingly, households are going mobile only. Mobile broadband is an important part of the mix of connectivity and some people are choosing to give up their land lines because they feel that they can do everything through mobile technology. However, our figures for broadband take-up encompass both fixed and mobile broadband, and the take-up of those technologies in Scotland is lower than the take-up in the rest of the UK. People are actively making the choice now.

It is a question of looking at the reasons for that. Certainly, take-up is linked to the economy and age, but we need to drill down a lot further into how we can drive take-up. It is pleasing to see the Scottish Government committing itself to the digital participation charter, and we have also had discussions with some fairly front-facing organisations that are absolutely seized of the importance of getting households to take up home broadband and are looking to find ways in which they can drive that. It is all very well for Ofcom to publish the data and for people to talk about it, but we have to get the front-line organisations—those that work with communities every day—to drive and support that take-up.

Neil Findlay (Lothian) (Lab): This is not a subject of which I have a great deal of knowledge. What is the difference in terms of technology and cost between using a land line and using a mobile connection?

Vicki Nash: With fixed-line broadband, people often have a bundle of services, so the prices tend to be lower for accessing the internet. There are a variety of packages for mobile broadband, and the cost depends on what you sign up to. There is a lot of choice in the market. Because of the nature of the technology, depending on the time that you spend on the internet, it is more likely to be cheaper to connect via fixed-line broadband than via a mobile connection.

Matthew Conway (Ofcom): One way to come at the issue involves speed, which is the thing that most people care about in the first instance. The next generation of mobile broadband, which will be enabled through the spectrum that we will auction next year, will deliver the same sorts of speeds as current generations of fixed broadband do. Mobile will always lag behind fixed in terms of the sheer speed of the service. Therefore, if you choose mobile as your only means of accessing broadband, you make a choice, of a sort, not to get the same sorts of speeds as you would get through a fibre connection. That is a significant difference.

Jackson Carlaw (West Scotland) (Con): Is our overall uptake skewed by our population demographic? If we were to consider the uptake in the groups other than the over-55 group, would it in fact match the rest of the UK? Might it be that we should concentrate, therefore, on the over-55 group and the socioeconomic group that you identified? Alternatively, do we lag behind the rest of the UK in all groups? I realise that it is a relative matter, because we are not miles away.

Vicki Nash: Those are certainly two major drivers. Another is geography—if you were to take out Glasgow and the surrounding area, the figure for Scotland would be a lot closer to the UK average.

There are other differences, too. According to our communications market report data, take-up is lower in the 16-to-34 age group as well. The picture is complex. However, if you could tackle the issues in Glasgow, you would go a long way towards matching the UK average.

Jackson Carlaw: That latter age group is the one in which one would least expect to see a deficit. I am not quite in the over-55 group, but I sort of assume that my age group is a dinosaur in comparison with the 16-to-34 age group in its familiarity with this way of operating. Is low take-up driven by Glasgow?

Vicki Nash: I am not sure about that. The deficit that I was talking about concerns Scotland versus the UK. I am happy to get back to you on that point after we have dug out the specific figures for the 16-to-34 group in Glasgow. Certainly, take-up in that group overall in Scotland is lower than the UK average for that group.

Jackson Carlaw: Might that have a prejudicial impact on learning?

Vicki Nash: That is a good question that needs to be borne in mind in relation to the benefits of increasing take-up throughout Scotland. There needs to be a good drill-down into the issue to consider the impact on the economy, learning, the older age group and various other factors across the piece.

Jackson Carlaw: I am quite keen to separate out anecdotes from fact. The geography and the technical and commercial challenges that exist in Scotland are regularly cited as issues. What does Ofcom believe are the real obstacles in that regard

to the targets that we have set in Scotland and at Westminster?

Vicki Nash: I am sure that Matthew Conway can come in on that question, too. The overall picture is that roll-out is being driven by commercial considerations across a whole range of markets; that is the nature of the game.

Jackson Carlaw: Roll-out happens where there is a population centre with a critical mass.

Vicki Nash: Absolutely. The availability of cable, which is an important part of the broadband mix, has pretty much flatlined in Scotland—the figure over the past four or five years has been 37 per cent. There is some growth in 3G services. In the most recent communications market report, we report the highest percentage increase in the availability of 3G throughout Scotland. It is not the case that all markets are static—the next-generation market is clearly developing—but the roll-out will continue to be driven by population and economies.

With regard to our activities, it is important to recognise the whole range of technologies and solutions that exist for providing broadband, particularly in rural areas. Matthew Conway mentioned the auction that we will run next year to provide a 4G spectrum, which will increase the availability of next-generation access, particularly in rural areas.

We have recently published work on white space technology, which is a solution for rural areas. A variety of technologies can contribute to the overall connectivity strategy for Scotland. The key for the Scottish Government, which has now published its intention to develop that strategy, is to decide what is right for which areas and how to go about using the money that it has set aside, as well as the broadband delivery UK money.

Jackson Carlaw: So, in a sense, the technical and geographical issues are red herrings. The key aspect is commercial viability: whether the population mass exists to justify the commercial investment. In other words, a technical solution would be available, but it is perhaps not thought to be commercially viable at present because the population mass does not exist to support it.

Matthew Conway: Yes, absolutely. You can ultimately serve almost everyone if the money is there to deliver the service.

To add to Vicki Nash's comments, we are just beginning to examine—and we intend to continue this work in the coming year—some information on rural areas to the effect that connectivity is about not just population size but the distance from larger population centres. As technology develops, people can be further away from a larger population centre and still benefit from it.

I will probably get the exact distance wrong, but it always used to be the case that one could be up to 2km away from a telephone exchange and still get something passably approaching a broadband service. That distance expands as technology enables us to exploit copper cables to a greater extent. We can use fibre—which has similar properties—as we get better technology, and the new technologies for using spectrums mean that wireless signals are getting better over a slightly wider range.

If you live in a large population centre, you will get services. If you live in a smaller centre but are quite close to a large one, the communication services enable you to get that benefit. However, if you are in a small area and are a long way away from anywhere large, the technology will get to you only if someone is prepared to pay for it.

Jackson Carlaw: What intrigues me is that populations existed, and then broadband became available and made its way out, but populations move. Am I wrong to get the impression that more and more people are beginning to base decisions about where they might live on the ability to connect to broadband? That might create a vicious circle, as it could lead to a devaluing of property and other things in areas where people think that they will not have that connectivity.

Vicki Nash: My response to that would be a bit like yours. I have heard anecdotal evidence that people who are buying houses are seeking information about which services—broadband, mobile coverage or DAB, depending on what is important to them—are available in the area. I do not think that we have any hard evidence or data to support that. I wonder whether a critical mass of people will suddenly move to Durness or Wick on the basis that if they all move there, they will get broadband.

Matthew Conway: The counter-proposition would involve not those people who move to where there are communication services but those people who live where there are none and who have said for years, "I do not want a mobile-phone mast in my back garden." Their attitude is changing to, "I want to live where I want to live, but I am prepared to accept some of the downsides of having good communication services, because I value them and I now appreciate that I have to have a tower somewhere close if I want these things."

10:15

Jackson Carlaw: Maybe we can attach it to a wind turbine. That is another debate.

The Convener: On that point, we are always talking about cabling and rolling out from centres of population, yet we read very little in the

background information about wireless technology. You mentioned mobile phones and wireless masts and we have excellent masts for television coverage. Why is wireless given so little prominence? Is it very expensive? What is the problem?

Matthew Conway: There are many aspects to that. To start with a comparison with TV, the reason why 98.5 per cent of the UK population gets terrestrial television is that broadcasters have an obligation to reach 98.5 per cent of the population. This is where we get into the post-digital-switchover issue about covering all services, not just the public service ones. Services that are not public services—the commercial services—will reach only 92 per cent after digital switchover, using 90 masts as opposed to the 1,174 masts that take us up to 98.5 per cent.

So terrestrial television is a very clear example of a public intervention to ensure that services go much further than they would on a commercial basis. That intervention has never really existed in mobile services. There have been roll-out obligations on the licences to date, but they have not been particularly challenging, because they have been population based and have been in the 80 to 90 per cent region. Just as terrestrial television reaches 90 per cent of people quite happily, mobile services reach 90 per cent of the UK population quite happily.

As I am sure you are aware, the debate that is happening now is about whether the licences that we auction next year for spectrum to enable the next generation of mobile broadband should have significantly higher UK-wide roll-out obligations as well as sub-UK roll-out obligations, so that we avoid the situation in which a UK figure is reached at the expense of large tracts of Northern Ireland, Scotland and parts of Wales—in other words, a concentration on the metropolitan UK, plus semi-urban England.

Jamie Hepburn (Cumbernauld and Kilsyth) (SNP): In response to Jackson Carlaw, you talked about the increasing acceptance in some areas of the necessity of infrastructure for the availability of mobile phone and mobile broadband. That is not my experience, which is that there is still great concern about the plethora, or the perception of a plethora, of towers being erected here, there and everywhere. I understand that often companies can share the facilities. Given that that is the case and that we have a national grid for the provision of gas and electricity, has any thought at all been given to a similar arrangement for the provision of this technology, so that we would not see so many competing masts?

Matthew Conway: The starting point is that the mobile industry in the UK was never a state-owned monopoly; it grew from a competitive basis, so its starting point is different. Notwithstanding that, there are no barriers whatsoever to mobile operators sharing masts; indeed, there are essentially only two mobile mast networks between the five operators. T-mobile, Orange and Three share masts through one arrangement, and Vodafone and O2 share masts through another. There are other mast owners, such as Arqiva, but the set-up is not as fragmented as you think. There are circumstances in which we can mandate sharing; we have never observed a need to do so at this stage, but those powers exist if need be.

The UK Government recently announced that it will invest £150 million in extending 2G—voice and basic text—mobile coverage across the UK. A key element of the thinking about that will be the extent to which infrastructure that is funded by the state is open access. On the one hand, that approach means that the infrastructure is available to all; on the other, it prevents the need for additional infrastructure.

Jamie Hepburn: You said that there are circumstances in which you can compel companies to share infrastructure. Will you expand on that? What are those circumstances?

Matthew Conway: That is a good question, but I am afraid that I do not have the detail in my head. We will come back to you on that.

Jamie Hepburn: Thank you. That would be useful.

Jackson Carlaw: You touched on this in response to the convener when you talked about licences in the forthcoming period, but what is Ofcom's role in the provision of broadband infrastructure to urban and rural communities in Scotland? Where do you see your input to that dynamic?

Matthew Conway: We need to distinguish between fixed and mobile broadband. We have no role in relation to the extent of the roll-out of fixed broadband, which is a universal service. That is a matter for the UK Government, and it is for public authorities to decide whether they wish to procure services that go beyond the baseline.

On the roll-out of mobile broadband, we set the terms for wireless telegraphy licences. There is no universal mobile service per se, but the debate around the licences that we will auction next year is essentially about the creation of a near-universal service for future generations of mobile broadband, and we are the regulator that is responsible for setting the obligations in that regard.

Adam Ingram (Carrick, Cumnock and Doon Valley) (SNP): Are the Scottish Government's broadband targets set at the correct level?

Vicki Nash: That is a fairly open-ended question. They mirror the UK Government's commitment to have the best broadband network in Europe by 2015. That is being monitored by the Scottish Government. It is helpful that we have targets because they help us to understand Government thinking, be it from the UK Government or the Scottish Government. An important part of my role is to work with the Scottish Government and the Scottish Parliament and feed their aspirations back into Ofcom's thinking.

We contribute to the roll-out of superfast broadband through the regulatory framework—Matthew Conway mentioned the work that we are doing—and we also promote competition. In the early days of Ofcom, we undertook some work with BT to require it to open up its services to enable other internet service providers to provide services. We did that in relation to first-generation broadband and we did it more recently in relation to next-generation broadband, through our work on ducts and poles. That increasing competition brings benefits for consumers in terms of product choice and the driving down of prices.

It is helpful to have Government targets and we work within the regulatory powers that we have to try to reach them, but it is not for us to comment on whether they are good or bad. It is also helpful that the targets are aligned.

Adam Ingram: We have discussed the fact that we are far from achieving the take-up targets. We have a target that next-generation broadband should be rolled out to everyone by 2020, with significant progress by 2015, and we have the UK and European targets. How are we doing on those?

Vicki Nash: We are getting there. We recently published our first report under our relatively new duty on infrastructure reporting, which includes a map of the availability of first-generation and second-generation broadband services. It shows that NGA services are available to 41 per cent of households in Scotland. That is below the UK average, but the figure is higher than last year's.

I guess it is a question of the extent to which you want to see progress being made. What is the speed of the curve, if you like, going up to reach the targets? We are clearly seeing the figure increase, with the funding that is now available through BDUK and the funding that the Scottish Government has committed to next-generation provision, and we expect it to increase further.

Any increase also depends on the extent to which the procurement exercise can be rolled out to get the solutions put in place to deal with the many challenges that we talked about in delivering superfast broadband services to rural areas. We expect the figure to rise, but the rate at which it will do so is very difficult to comment on and to put a figure on. I can say only that I expect it to increase once the procurement option is in place.

Adam Ingram: Okay. Last week, the Cabinet Secretary for Infrastructure and Capital Investment indicated that he had a pot of about £144 million to help achieve the targets and stimulate the roll-out. We have heard that UK metropolitan areas—they are called semi-urban areas in England—are already achieving full roll-out because they are commercially viable. Where should that £144 million be spent in Scotland to achieve the coverage that we are looking for?

Vicki Nash: The interesting thing is that, as we have said, there are a range of solutions, depending on whether we are talking about an urban area, a semi-rural urban area or a rural area. There are different possible solutions for communities of different shapes and sizes. Ultimately, it is for the Scottish Government to determine the way in which it undertakes that procurement option with the funding that it has. We publish the data through our communications market report and our infrastructure report, and that information is useful not only to us as a regulator but to other public agencies in central and local government and to regional development agencies. It means that they can try to assess what funding they will put into the pot and how important it is to them to have full connectivity and therefore to make bids for the available funding.

Clearly, as has been said, the Highlands and Islands areas are ahead of the game. They have BDUK pilot funding available and are now considering providing solutions on broadband provision in some quite challenging rural communities. The south of Scotland is ahead of the game in relation to the development of a solution for that area, too. Across the central belt, some local authorities are more developed than others in relation to the solutions for their communities and determining the benefits for them. It is a question of considering the whole of the public sector in Scotland and asking who can provide what, what are the best solutions, what are the best procurement options—one contract, or two or three—and what range of technologies can serve the different communities. We can never take a one-size-fits-all approach, because that will never reach the rural communities without an awful lot more money on the table than is available at the moment to fibre up the whole of Scotland. There are a range of solutions and the Scottish Government should determine its priorities and how it can get the biggest bang for its buck.

Matthew Conway: I can, perhaps, add one statistic, partly to put those comments in context.

According to the infrastructure report that we published recently, ever so slightly more households cannot currently get a 2 megabit per second service in England than in Scotland. I just wanted to provide that bit of balance. Superfast broadband availability is undoubtedly much lower in Scotland than it is in England, but if the starting point is to get everybody to that basic level of 2 megabits per second, which is the established norm these days, 14 per cent of England and 13 per cent of Scotland cannot reach that. The picture is complicated.

Adam Ingram: According to BT, across the UK, you could get two thirds coverage of the population through private investment and people's own activities, with the remaining third requiring public partnership—public sector intervention, if you like. In Scotland, probably more than one third would require that intervention, given our greater rurality and so on. Would you suggest that, when it distributes the £144 million to prioritise areas, the Scottish Government should establish a fund that partnerships between, say, local authorities and private providers could bid for?

10:30

Vicki Nash: My understanding is that the Scottish Government has had a number of meetings with a range of public sector organisations, including local government and the economic development agencies, to stimulate interest in the fact that money is available, to come up with local solutions and to generate local interest as well as—perhaps—some additional money from those bodies with a view to putting together more local strategies. My understanding is that that is the basis on which the Scottish Government is trying to aggregate that demand, and that it will decide how to allocate the money accordingly.

Matthew Conway: We are not a procurement agency. We are happy to advise the Scottish Government as it sees fit, but Northern Ireland is one part of the UK that it might look at to see how things have been done. Superfast broadband availability there is 97 per cent, so it is clear that the Northern Ireland Executive has done something.

Adam Ingram: Do you think that that represents value for money?

Matthew Conway: That is certainly not for us to judge.

Adam Ingram: Has any analysis been done of value for money in relation to such matters?

Matthew Conway: I am afraid that I do not know.

Malcolm Chisholm (Edinburgh Northern and Leith) (Lab): The issue of broadband take-up in Glasgow has already been touched on, but I will revisit it. The fact that only 50 per cent of the population in Glasgow have broadband is well known. I was interested to see that Consumer Focus Scotland recently produced a report on wider access to digital communications. Do you think that some of its suggestions are relevant to dealing with the Glasgow situation?

It makes the point that

"much more can and should be done to support and enable all consumers in Scotland to participate more fully in the digital revolution".

It talks about the adoption of

"comprehensive, consistent and joined-up approaches"

involving everyone, including Ofcom. It says that the Scottish Government should carry out further research

"on the extent to which different factors act as a barrier preventing consumers in Scotland from getting the maximum benefit from digital services, including a particular focus on the low levels of broadband take-up in Glasgow."

It also says that the Scottish Government should consider developing

"an area-based approach to support the roll-out of its holistic digital inclusion programme."

Would any of those suggestions be helpful? What is your general take on that report?

Vicki Nash: We discussed that report with Consumer Focus Scotland as recently as yesterday, because our director of consumer policy was up. It is an excellent report: it is comprehensive and it makes a number of very helpful suggestions. I would not gainsay any of them—I think that they are all extremely sensible.

Among the interesting ideas that Consumer Focus Scotland mentioned was that of social tariffs to encourage people to take up broadband services at a more affordable cost. Social tariffs apply to some extent to fixed-line services, but they are not widely available for broadband. It was a helpful piece of work; Consumer Focus Scotland really drilled down and looked at the issue from the consumer's perspective. I understand that the organisation is now engaged with the Scottish Government in rolling out the digital inclusion strategy and getting higher figures on digital participation, in particular. Its report is well written and has made a useful contribution to the debate.

Malcolm Chisholm: You have pre-empted my next question, because I was going to quote the part of the report on social tariffs and pay-as-you-go broadband services

"for different groups of potentially disadvantaged consumers."

You have given a generally positive response to that idea, but is it a realistic prospect for addressing the economic barriers that low-income families face?

Vicki Nash: It is not something that we could mandate—we could not make it happen—but it is worth looking at the extent to which it would drive take-up.

I add the caveat that, when we ask people about their reasons for not taking up broadband, cost does not necessarily feature in the top three. That said, it may be that people are not willing to say that they cannot afford broadband, so they cite other reasons, such as not having the skill or the need, or being too old. Lack of money does not tend to feature as one of the top barriers.

Malcolm Chisholm: I have a final question. I mentioned the Consumer Focus Scotland call for further research. Is it your view that we need further research because we are not sure what the main factors are behind the low take-up?

Vicki Nash: What is needed is probably a pulling together of all the research that exists and then a determination of whether we need to do any more research or whether it is now a question of doing the front-facing engagement. There are an awful lot of reports and press coverage around the take-up figure, and we now really need front-line action. How can we use content from housing agencies, libraries, local government and the health services to give people a compelling reason to engage? I accept that there may be a sector of the population that says no thanks, but action is needed on the front line. More research is possible, but actions speak louder than words.

Malcolm Chisholm: Okay. Thank you.

The Convener: You mentioned the fact that various organisations at a local level are looking at schemes for their own areas, through, for example, the Aberdeen city and shire economic future in the north-east and the pathfinder projects in the Highlands and the Borders. Do you agree that a more strategic approach to broadband is needed to avoid fragmented provision that is based mainly on commercial viability or local initiatives?

Vicki Nash: That is an interesting question. Again, it takes us back to my point about the extent to which we want one size to fit all. There are local initiatives, including some really innovative work with white space technologies in Bute and satellite technologies in the Angus glens, and the question is the extent to which we want everybody to be forced to take the same route. We need to be realistic and say that the same route will not be applicable to all areas for the reasons that we talked about—the challenges of geography and economies of scale.

It is helpful to have local initiatives because the local authorities know their areas best, and they know what will work. At the Scottish Parliament's cross-party group on digital participation, which we are pleased to support, we have seen some innovative work being undertaken in Fife. Digital Fife is working to engage people and to drive take-up, which itself can drive availability.

A one-size-fits-all approach is not the right one, but I am sure that the Scottish Government is aware of such individual initiatives so that it can look at aggregating demand and delivering solutions and, probably most importantly, sums of money to help provide the overall strategy. An aggregated approach that draws on local knowledge and local work is probably best.

Gordon MacDonald (Edinburgh Pentlands) (SNP): I want to ask about European comparisons. We have already mentioned the 2020 strategy, in which the European Commission stresses the importance of widely available, quick and affordable broadband. Can you provide any indications of how the broadband infrastructure in the UK and Scotland compares with that in other European countries?

Matthew Conway: Not at the moment. As Vicki Nash said, the UK Government has set itself the ambition of having the best broadband in Europe by 2015. In the course of our normal work, we will provide the underlying data that will inform the scorecard. It has not been possible to pull that together for the first infrastructure report that we have published, but I think that it is our intention to provide the first set of data to inform the assessment in the summer of next year.

Jamie Hepburn: I wonder whether Ofcom has identified any reductions in what are known as not-spots for broadband and mobile access in Scotland.

Matthew Conway: Sorry, I missed the first half of that question.

Jamie Hepburn: I am not sure what the first and second halves were, so I will repeat it all: has Ofcom identified a reduction in what are known as not-spots? I take not-spots to mean areas where people cannot get broadband or mobile access.

Matthew Conway: This is where we pull together pretty much everything that Vicki Nash and I have said this morning.

A lot of the lead lies with the UK and devolved Governments. On the fixed side, the UK Government has the ambition of ensuring that everyone has access to broadband of at least 2 megabits per second by 2015, with 90 per cent of

the UK population having access to superfast broadband. Theoretically, that would eradicate fixed broadband not-spots in almost all cases.

On the mobile side, there is the combination of the steps that we will take next year in the obligations that we will set for 4G wireless licences, which will prevent future mobile broadband not-spots from emerging on their current scale, and the UK Government's £150 million investment in trying to push up current 2G mobile services to cover 99 per cent of the UK population. There is, of course, a devolved layer to that, which applies in all three devolved nations and conceivably either complements that or takes it further.

If a person is in the remaining 1 per cent shortfall, that is an absolute shortfall to them, and the extent to which political bodies choose to push the 99 per cent up to 100 per cent is ultimately a political decision. By definition, the nearer you get to 100 per cent, the more expensive solutions become. There is almost no service that is genuinely universal, but in the context of communications, in which we think of terrestrial television coverage as being universal—it is available to 98.5 per cent of the UK's population—if those combined initiatives succeed, broadband availability will be taken up to essentially universal levels.

Jamie Hepburn: That is good. Obviously, those are the targets for the future, but my question was whether there has been any noticeable reduction in not-spots thus far.

Matthew Conway: Yes.

Jamie Hepburn: I presume that the plan is in place because we have that problem.

Matthew Conway: Fixed broadband is slowly expanding as BT takes through its programme of investing where it sees the commercial benefit in doing so and pushing up towards the two thirds figure. Virgin Media has pretty much done its commercial roll-out, but there are further incremental approaches at the margins.

On the mobile side, 2G coverage is pretty much as good as it will ever be on a commercial basis—it has had so long that it has reached commercial roll-out level. On a population basis, 3G availability is still improving. In particular, part of the direction that the UK Government gave us in December last year was to offer the holders of 3G licences—the licences that were auctioned in 2000—what was essentially a perpetual licence rather than one that is planned to expire in 2021, in return for taking an increased population roll-out obligation from the current 80 per cent to 90 per cent. With commercial roll-out, that should see 3G continuing to increase a bit at the edges.

The unknown bits are the impact of UK Government and devolved Government funding on both fixed and mobile broadband infrastructure, and how quickly the roll-out of new 4G mobile services will happen. They are unknown simply because those things have not really started yet.

Malcolm Chisholm: I want to ask a couple of questions about the Reform Scotland report "Digital Power". I think that, later on, we will see somebody from Reform Scotland—or rather somebody who wrote that report. Does Ofcom agree with Reform Scotland that there is no up-to-date map of Scotland's existing fibre network?

Vicki Nash: There is not one to my knowledge. My understanding is that various operators in that space have offered to provide information, but I am not sure whether that offer has been taken up or whether information has been aggregated. Perhaps you can ask Reform Scotland that question.

Malcolm Chisholm: Thank you.

The "Digital Power" report identifies enabling existing utility ducts for broadband infrastructure and derating fibre as ways of improving competition in urban areas and creating investment in rural areas. Do you agree? Do you have any influence in such matters?

Vicki Nash: I will leave the derating question to Matthew Conway. We have no powers to require other utilities to make their ducts or services available. However, such an approach would be possible, and it can work. I understand that it works in Paris, and I gather that, in Bournemouth, the water, sewage or electricity ducts—I am not sure which—are used for delivering communication services. Therefore, the approach is possible, but we do not have powers to order other utilities to open up their networks.

10:45

Matthew Conway: I can add something about both those issues.

We have no influence over rating, which is a heated issue that has been running for some time and is a matter for the Valuation Office Agency to take forward. We have no locus in respect of other sectors' infrastructure—and vice versa.

Infrastructure UK, which is within the Treasury, is particularly seized of the amount of expenditure that will need to go into the UK's infrastructure across all the network industries over the next decade. It believes that that sum is so high that it is in the UK's interests to take a more co-ordinated—that may be the wrong word, but I do not want to use the word "holistic"—approach that gives a better idea of investment across infrastructures and of how they relate to one

another. In particular, it is talking to the joint regulators group, which involves all the UK-wide economic regulators as well as some of the nation-specific ones, about what regulatory barriers might exist—for example, what barriers might prevent a telecommunications company from making use of a power company's infrastructure? The hypothesis is that, on the whole, regulatory barriers do not exist and any issues are to do with individual companies' desire to move outside their core business. There are also genuine concerns about, for example, how safe it is for a telecoms engineer to climb an electricity pylon. If regulatory barriers are identified, the UK regulators will be keen to understand those and do what we can to get them out of the way where they are a genuine hindrance to infrastructure sharing.

Malcolm Chisholm: Sorry—who did you say derating was a matter for?

Matthew Conway: I think that derating is a matter for the UK Valuation Office Agency, although I could be wrong. It is certainly not a matter for us as the regulator.

The Convener: Can you explain a bit more about rating and valuation? I am not sure what the connection is with companies using other companies' infrastructure.

Matthew Conway: Sorry. There is no connection; those were two separate points. There is a question about the rating of communications infrastructure, and those rates are not a matter for us as the regulator. There is a separate question about how different sectors can share infrastructure. Those of us who regulate the different sectors—us, the Office of Gas and Electricity Markets, the Water Services Regulation Authority and the Office of Rail Regulation, for example—speak to the Treasury collectively. We did so recently in relation to whether bits of our individual regulatory regimes get in the way of our doing something on a cross-sectoral basis. If anybody genuinely identified a regulatory barrier that served no purpose, we would be keen to examine it and do something about it if we could—recognising that, at the end of the day, we are creatures of statute.

The Convener: Thank you very much for your evidence this morning. I suspend the meeting briefly to allow a change of witnesses.

10:47

Meeting suspended.

10:50

On resuming—

The Convener: I welcome to the meeting the second panel of witnesses. Dr Jason Whalley is from the University of Strathclyde, Ewan Sutherland is a research fellow at the University of the Witwatersrand in Johannesburg, and Stuart Gibson is a consultant to Reform Scotland. Jamie Hepburn will begin the questioning.

Jamie Hepburn: Good morning, gentlemen. I will kick off with a couple of specific questions, the first of which is for Ewan Sutherland. I do not know whether you were present when my colleague Gordon MacDonald was questioning Ofcom on international comparisons with regard to broadband infrastructure, but the witness from that organisation said that although it did not really have much information on that, it is working on it. You have prepared a report on this very issue for the Organisation for Economic Co-operation and Development, so can you tell us whether, in preparing a plan for broadband infrastructure, we can learn from the approach that has been taken in some of the countries that you have examined?

Ewan Sutherland (University of the Witwatersrand): The OECD carries out a considerable amount of comparative work involving its 30-odd countries and, every six months, publishes data on speeds, prices and, increasingly, the adoption of fibre. Of course, you also have to take into account differences in geographical size, different political and legal systems and different stages of development. National broadband plans have become much more complicated. In the past, telecommunications tended to be an economic lever; you did something with the price to make something else happen.

However, such activity is increasingly focusing on an issue that is at the centre of what is known in the UK as race online 2012—persuading people that they want the technologies as well as giving operators the right economic incentives to deploy them. That approach varies enormously around the world. I suppose that Singapore is the leader in all this because by next year it will have installed fibre in every home. However, it has roughly the same population as Scotland in the same area as the Isle of Wight and, despite the plethora of Scottish names, many people in Singapore live in high-rise buildings, which makes things relatively easy. In that sense, it does not provide a terribly helpful example, unless everyone in Scotland moves into the Red Road flats.

The question, then, is how we might follow the Japanese and Korean examples in order to get

fibre out to rural areas. The challenge is, on the one hand, to roll out more fibre and put together a plan that provides incentives for operators to do so while, on the other, finding incentives for people to adopt the technologies and to be willing to pay enough to justify the initial investment. In some cases, the solution has been duct sharing, while the Americans have taken the fascinating but rather risky route of creating a duopoly between cable and telephone companies. At the moment, it looks as though the cable companies are getting ahead in that game. We simply do not have that type of infrastructure. I have just come from Africa, where there is a different model; there, wireless operators are competing with each other.

Within the OECD there are very useful statistics and countries have addressed the matter in different ways, from which we can draw out lessons for Scotland.

Jamie Hepburn: Are there examples that are particularly relevant—Singapore and the Red Road flats aside?

Ewan Sutherland: The question is this: how do you get very high levels of fibre penetration and encourage people to adopt it? Singapore also has classes for seniors. I suspect that very soon I will be in that category myself. There is no point deploying infrastructure that people do not want to pay for, will not use and will not try to use. You have to go out and encourage people to use it, which is a very tricky balancing act.

The situation is more complicated in Europe because there are cascading frameworks. There is the European Union treaty at the top, then competition rules, state-aid rules, the legislative framework and directives and then you come down to action at member-state level and sub-divisions thereof—councils, communities and families. There are plenty of examples, but there is change all the time as policies are deployed. This is not an area in which policies are adopted and they stay: they change and evolve. One of the problems that we had in producing the OECD report was that OECD member states are constantly changing their targets and upping their game as they go on.

Jamie Hepburn: Thank you. Given Ofcom's answer to Gordon MacDonald's question, I will not be surprised if you get a telephone call from them. Stuart Gibson has prepared for Reform Scotland a report that has perceived the need for a digital framework and strategy for Scotland. What are the main issues that need to be addressed in order to provide a suitable digital infrastructure?

Stuart Gibson (Reform Scotland): My take is that there has been a lot of debate about capacity, speed and how quickly people will be able to download films at home, but the debate needs to shift much more towards activity and regeneration, which is clearly a big issue for Scotland and many other countries.

I will touch on the conversation about other countries and what they are doing. The Scandinavian countries are often given as examples of places that have broadband strategies that are more advanced than ours, but Wales and other parts of the UK, such as Yorkshire and Cornwall, are ahead of Scotland as well. We are a bit behind the game in terms of a broadband strategy.

The key thing is that there is a limited pot of money here. We will need more money than has been allocated—I think everybody knows that. There is a wee bit of a game being played around how much should be provided by Westminster—to which telecoms is reserved—how much should be provided here and how much might be provided by the European Union, for example.

Targeting of the money that is available is concentrated on remote and rural areas. That is important whether you are talking about inclusion, or making sure that remote and rural communities remain, and remain economically active. That is a big issue and the Highlands and Islands and the south of Scotland are making decent progress in addressing that, but there is also—in our view—a requirement in a number of our towns and cities.

The view tends to be that if you live in Edinburgh or Glasgow everything is great, and that enterprise-level companies can afford to buy the services and lots of people can provide them. However, outside Edinburgh—in Midlothian, East Lothian, Lanarkshire, Ayrshire and so on—the quality of connectivity is still not very good. We could, to some extent, increase economic activity, particularly among our small and medium-sized enterprise population, if connectivity in Scotland's suburban and urban areas was as good as it is in comparable countries, such as the Scandinavian countries, which have a much better track record than ours in the birthrate of new companies and so on. I would like the debate to be about the benefits of better connectivity to economic activity and success.

The Convener: Has what you describe resulted from more public or private investment, or from folk coming together locally?

11:00

Stuart Gibson: My colleagues might know more about that than I do, but I think that the issue is, to an extent, about prioritisation. We need to prioritise connectivity as being well worth investing in and we need to do that relatively quickly and to have in place a national strategy.

The ways in which countries deploy private and public capital differ significantly, as do the networks. We in Scotland can learn from other countries.

Ewan Sutherland: The convener's question has a variety of answers. For example, electricity companies in Denmark got into broadband and deploying fibre on the fairly rational basis that they are good at digging trenches and putting things in them. Municipalities in Sweden have undertaken considerable activity and have taken the view that providing fibre broadband in a city brings business activity to the city. In some respects, that became a competitive game. Norway has similar stories.

Nokia and Ericsson are fairly well-known Scandinavian brands that have a long tradition of involvement, as have the Scandinavian Governments. Those companies took a lead in developing the global system for mobile communications standards many years ago—they pushed that hard and saw it as a clean economic development. Involvement has been at all levels—from municipalities, regions, nations and electricity companies, as well as telephone companies.

The Convener: How does that compare with Dr Whalley's examination of the Highlands and Islands?

Dr Jason Whalley (University of Strathclyde): When Sweden licensed its 3G spectrum, it had a beauty contest, which required companies to cover the rural areas. Sweden was basically defined in two parts. Stockholm and Uppsala formed a market, Malmö and Lund formed another, Gothenburg was the third and everywhere else was rural. The licence gave companies tight obligations to roll out their networks. When companies told the regulator that they could not do that in time, the regulator was not particularly understanding and said, "You got the licence on those terms. You will deliver."

That approach relates to the wider agenda of Sweden's Social Democratic Party, which has prioritised investment in rural areas for many years. Sweden started from a much more advanced position than ours because it has acknowledged the need to invest in rural areas to ensure that they are sustainable economically and socially.

The move from dial-up to the broadband digital subscriber line in the Highlands and Islands was a sexy subject, so people were enthusiastic about it. After the last BT exchange was upgraded to DSL, people forgot about broadband and did not think that it was important. The attitude was, "You've got it now, haven't you?" People had it, but what was missing was what they did with it. We seem to have forgotten about that next stage.

As my colleague Ewan Sutherland said, Scandinavia has a bigger interest in economic development and all the cities there are involved in it. One aspect of that is the tying together of different utility sectors—one city-owned company will provide multiple utilities. Such joined-up investment and open-access based models are missing in Scotland.

What we do with the networks—what the services are—is also missing. E-education and e-health get academics interested, but I imagine that the average person does not want such services—they want to use websites such as Facebook and to watch the iPlayer. Their interests are different.

Unfortunately, we do not have a good enough understanding of what people want to do with fast connections, so that we could understand what connections we need in the first place. That situation is in stark contrast to many European countries, which have done much bigger surveys of what people do and want, and of what SMEs want from fast networks. The Netherlands has conducted big countrywide surveys to ask SMEs what information and communications technology they need. If we had that information, we could start to think about what policies and services are relevant. We in Scotland are missing that underlying understanding.

The Convener: How could we go about obtaining that understanding? It strikes me that organisations such as the Federation of Small Businesses or the Confederation of British Industry Scotland should see how companies in other countries use their broadband services to increase their sales or whatever.

Dr Whalley: We need to get a wide range of people interested. What is very different about Scandinavia is that the links between politicians, academics and industry there are much tighter; they talk a lot more, which allows an exchange of ideas. There are also bigger surveys. In Sweden, the regulator issues a very big survey every year, the results of which are given to academics to analyse. Policy makers can get the results very quickly. That basic research is missing here. It has not been that attractive for people to do it in the past.

Very few researchers in Scotland are interested in ICT; other parts of the economy are more attractive to them. That means that there is only a small amount of available capacity, for example at the University of Aberdeen, the University of Glasgow, the University of Edinburgh and the University of Strathclyde. It is about getting people to fund the surveys and persuading organisations such as CBI Scotland to do them quickly.

Ewan Sutherland made a point about targets. Companies' requirements change. Scandinavia

and Holland conduct annual surveys that ask the key questions. Surveys have to be done regularly, which requires prioritisation and investment from, in this case, the Scottish Government.

Jackson Carlaw: There seems to be a theme developing to the effect that in Scotland and the UK social media use has predominated. You say that surveys are undertaken elsewhere. Are you saying that the surveying has in itself encouraged people to confront potential wider use of the medium? Does something else have to happen for people to say in a survey that they want other uses for the medium?

Dr Whalley: To a degree, that is correct. What is missing is the information being disseminated in a manner that companies understand. Some companies are doing very creative things with ICT by backing up their data and offering real-time videoconferencing, but that often happens in isolation and people close by are not aware of it. Once information is disseminated to show good practice and what can be done with the technologies, other people become more aware of it. They might not adopt the same practices, but they become aware of the facts.

During the transition from dial-up to DSL in Scotland, there were lots of mechanisms for telling people what they could do with broadband. For example, a touring bus went round the Highlands, which was a good and relatively cost-effective way of showing what can be done with the technologies. That element is now missing; dissemination exists, but who reads academic papers other than other academics? What is missing is CBI engagement to demonstrate what happens and how it can be useful. People would not necessarily adopt all the practices, but at least they would be aware of what was happening.

Ewan Sutherland: There is another element. Jackson Carlaw mentioned social media. One of my concerns about the numbers that are coming from the Office for National Statistics and Ofcom is that we seem to be seeing saturation in parts of the UK.

I should explain how I came to that point. Scotland appeared to be stagnating in terms of adoption of broadband, which worried me, so the obvious thing to do was to check the regions of England. That worried me even more, because I saw something that my colleagues at the OECD had not seen, which was a decline. I spent some time trying to understand why there should be a decline in the north-east of England and the south-west of England. The reason is not immediately apparent. It might be a result of the recession and global economic crisis or of people leaving the UK to go back to other parts of Europe—I am not sure.

However, what is clear is that we need sufficient understanding of the number of people who use the internet for social media or other applications and the number of people who do not use it. I am afraid that that will not come out of statistics from the operators. The only way to get those numbers is by stopping people in the street or knocking on their doors and asking, “Excuse me. Do you have a computer? Do you use the internet? What are you using it for? Why are you not using it? When was the last time you used it? How much time do you spend on it?” We need to do that regularly to get a sense of how the situation is changing for individuals and for small and medium-sized enterprises. We need to ask whether they have a website and whether they are using more sophisticated applications. It is necessary to understand that.

To pick up on Mr Gibson’s point about economic development, the issue might have different significance in different sectors of the economy. For example, concerns about the use of ICT in the tourism sector might be more influential because people increasingly use social media to decide where to go on holiday and what activities to engage in. People want to look at an application on their mobile phone that tells them what are good activities to engage in or good hotels to go to. If there are not sufficient skills in the sector to use social media to ensure that the information is available, that affects the tourism sector. There will be different answers in different sectors.

Stuart Gibson: The other day, I was told something that I think is true, which is that the electricity and gas industries and other utilities have substantial lobby groups because they have been around for a long time, whereas broadband is a relatively new phenomenon and has poor lobbying, other than some fragmented groups such as Reform Scotland and the Royal Society of Edinburgh and various academics and interested parties. We have been able to make a limited amount of noise in the 12 or 18 months for which I have been particularly involved with the issue.

I have visited MSPs in the Parliament, and I know that the inboxes of members from rural areas are full of messages from people complaining about poor broadband speeds, whereas members who represent city centre areas probably do not have that problem. One issue is that there has not been a lot of noise about the issue because it has not been around for long.

I am worried that other countries are moving ahead faster than we are. The nation and the Government have picked up the ball only since the election in May this year. Our report came out in August last year and the RSE report came out not long after that. They said more or less the same things. We are talking about them now to an

extent, but not a lot happened to get the debate up and running until the elections in May.

There has been relatively little time since then for the debate to get up and running nationally. We are still engaged in that, but at the same time, we are trying to produce a plan and to push forward with improvements in the Highlands and Islands and the south of Scotland using Westminster money and some Scottish money. A lot has been going on in the past few months.

The Convener: You have said that organisations are considering the issue locally. Apart from that, is the problem basically that—let us face it—it has until now been left to BT to decide when to roll out improvements, rather than it happening as a result of a push from Government or whoever?

Stuart Gibson: People express many views about broadband and BT. There is a bit of an issue in the UK. BT does a good job. We could ask it to roll out broadband across the country—it has pretty well been asked to roll it out throughout Cornwall—and, if we give it enough money, it will do that. BT has to make a commercial decision. It has tough commercial decisions to make at present, as do most companies, and it could invest its capital in various places.

Although BT is not quite the monopoly provider in this country, its network goes way deeper than that of any other company. The only comparable investor is Virgin Media, which—as I am sure members know—operates largely in the central belt because that makes good economic sense. Not everyone would agree, but my contention is that BT does not necessarily have a great deal to gain from entering the debate, given that the alternative is that it can deploy high-speed broadband and upgrade local exchanges at a rate that suits it fairly well because there is not enough competition to make it move faster.

Ewan Sutherland: This is possibly being overly technical but, some years ago, Ofcom reached an agreement with BT under the Openreach terms that probably no more than a dozen people in the world understood. One of my friends in the Australian Competition and Consumer Commission was forced to read it and claims that it took him days to grasp fully what it meant. The problem is that it was really an agreement to open the copper network that did not, at that time, contain provisions to move to fibre. That was at a time when Her Majesty's Government had given rather more power to Ofcom than many of us thought was appropriate—it seemed to be in the policy area rather than purely in the regulatory area. It has been very difficult to rebalance that and get enough competition in on the BT network and the right incentives. If you put up enough money, BT will build you the fibre network, but you may not have that money.

11:15

Adam Ingram: Okay. Well, we certainly do not have that money. I will ask the question that I asked Ofcom about the Scottish Government's broadband targets. Are they set at the correct level?

Stuart Gibson: I think that they are set at the European level and mirror, to a large extent, the UK level. Nobody is going to complain too much—that is why they are set at that level. They are also fairly vague. I was at a conference last week at which John Swinney stood up and gave a robust commitment to roll out broadband and high-speed connectivity in Scotland. I have no reason to doubt that commitment. Indeed, he committed not just to match the targets, but to do better than them—that is very much what the Scottish Government wants to do. If it were to achieve them, that would be pretty good. It is already at the procurement stage in the Highlands and Islands, with a plan and some idea of what it will cost to cover 90 to 95 per cent of the Highlands and Islands. A plan for the south of Scotland is also pretty well in place, and the Government has some idea of what it will cost to carry that out. Momentum is gathering, and if the Scottish Government achieves its plans for 90 per cent coverage—it looks as though that will be in 2015 or 2016—that will be quite a step change in those areas. In that context, perhaps the targets are reasonable.

Dr Whalley: It is interesting to have targets for coverage and speed, but I am more interested in the use of the technologies. It would be nice to have a Scottish dimension to the race online 2012 campaign to get people using things online. I would be much more interested in focusing on that than on having a target that is nice to boast about or use to compare with other countries. Use makes the difference, and I would like to see effort being put into that. If we got 85 per cent coverage and a large number of people using the technologies, I would be much happier, as that would generate the economic development that Mr Gibson mentioned.

Adam Ingram: Are you concerned that 25 per cent of SMEs have no online capability and no interest in gaining online capability?

Dr Whalley: Yes.

Stuart Gibson: I am desperately concerned about that, although I do not necessarily believe it. At the beginning of the year, the Scottish Government commissioned a report that took the views of 1,000 SMEs, most of which were very small. I do not think that it has commissioned a report that gets to the heart of the question at all.

Scotland sits on the edge of Europe and we are further away from the centre of things in Europe than anybody else. Therefore, it is more important for us than for anybody else to have a really good network connection to our major market. We should invest in that as a priority. We could also get Scottish Enterprise and Highlands and Islands Enterprise working on e-commerce platforms for our SME communities so that they can sell their goods and services not just in Europe, but all over the world using electronic networks. How powerful a driver would that be for the Scottish economy?

Ewan Sutherland: I think that we need to be careful. Vice-president Kroes set the European targets recognising that there was enormous variation. In western Europe, there were fairly strong copper networks going out to most homes, whereas in much of eastern Europe such networks did not exist; therefore, the rural areas had to be covered purely by wireless technology—there was no copper. She had to set a European target that was very woolly, but at a national level—at European Union member state level or below—we will be able to set much more specific targets that ought to be achievable.

The Australians took a deep breath and said that they would put in a very large sum of money but would reach 93 per cent of Australian homes and businesses in fairly short order with 1 gigabit per second broadband. The difficulty for the Australians is not the first 75 per cent of coverage but the people between 90 per cent and 93 per cent because, by Scottish standards, they are extremely remote. One of the dangers of setting a target is that although it might be achieved, a percentage of people beyond it might never be reached.

The figures for the Republic of Ireland, Iceland and New Zealand show that people are setting targets that mean that very large percentages of the population will have access to the service. Encouraging people to use it is a separate point. First, you need to get the network built.

Neil Findlay: On that point, I am all for increasing the coverage and I have listened with great interest this morning, but we need to be careful about how we talk about new technology. There seems to be a bit of techno-snobbery that suggests that if someone does not have broadband, a Twitter account, Facebook and so on, then that is the equivalent of walking about in flares and platform shoes. There is a bit of a reaction: "You haven't got it? Oh dear." We are missing an element of this, which is that it is important for businesses and individuals to lift the phone and speak to someone or visit a customer and provide a personal service. Booking a holiday was mentioned, and the fact that an individual visits the local shops and speaks to someone rather than sitting in the house and doing everything via a computer adds a whole other element that is also important. When they visit the travel agent, they might go to a neighbouring shop and buy something else. I would not put all the eggs in the new technology basket.

Ewan Sutherland: One argument that the Federal Communications Commission in the USA uses is that by having broadband, you can save a considerable amount of money because you can access services. My mother, who lives in Troon, had passed a birthday, which I had better not mention, and discovered that it made travel insurance slightly more difficult to arrange. Her broadband connection made it possible to search for and find travel insurance, so there are economic arguments about access. I cannot remember the numbers, but a Scottish Government paper showed enormous potential savings if people can be persuaded to access Government services electronically.

Neil Findlay: I do not question that, but if you save money and have no friends because you sit in the house at a computer all the time, what advantage have you gained? I say that flippantly, of course, but you get the point that I am trying to make.

Dr Whalley: You have raised quite an interesting question about what people do with technology. We do not have to go back many years to reach a time when the academic argument was that technology replaces social interaction. In the states, people such as James Katz have done lots of work on whether that happens in practice. For some people, it does; for others, it complements their existing face-to-face relationships, whether with their butcher, their friends or their church.

There are many examples of organisations in the social sector using technology to complement their existing activities. For instance, in June this year there was an NGA meeting at the University of Edinburgh and a guy from Holland turned up and made the point that all we do in Scotland is talk. He said that he had been to mosques and churches in Holland with fibre connections, which they wanted so that they could broadcast their services to the people who cannot get there on time. The technology is not replacing the activity; it is just complementing it.

You are right that it is a sexy area—everyone has a Twitter account and a Facebook account; but the use that they put them to and what happens as a consequence are often forgotten about in debates on the issue. The technology is just a means to an end, which could be making friends or economic activity, as Ewan Sutherland suggested.

Adam Ingram: Neil Findlay is just an old-fashioned boy.

Neil Findlay: I fully embrace these things, but we should not just pretend that they are the solution to everything. They have consequences down the line. I have seen people who were highly sociable become much less sociable as a result of relying on technology.

Adam Ingram: We have a pot of £144 million available. How should it be spent? It is clear that there is a large funding gap. Can it be filled through private sector finance? How should we proceed?

Dr Whalley: First, it would be nice to take a step back. A couple of years ago, an interesting Ofcom document outlined the different types of telecommunications markets in the UK. It identified those parts of the country that the market would serve, those parts of the country in which there would be no intervention by the private sector and the bits in between, some of which were more attractive than others.

We caught the end of the committee's session with the Ofcom people and the comments about a map of the fibre network. Such a map should be produced before the money is spent, with a view to working out what infrastructure is there and spending the money to plug the bits that the market will not touch, which could be in urban areas where there are estates that are unattractive, on the periphery of urban areas or in very rural and remote areas. It is a question of maximising the money and not competing with areas that will get European assistance and so forth. Before any spending is done, it is necessary to understand the infrastructure and what is available.

A second component of that will be understanding what people do and whether wireless technologies could be used to get them on to the network, followed by an upgrade over time, or whether, in light of the economic characteristics, it would be better just to go for fibre.

Ewan Sutherland: The Republic of Ireland put in some broadband in extremely remote areas. It went to tender and the tender was won by one of the mobile operators, which provided a service for a relatively modest amount of money for a period of time.

This comes back to what the target is. The sort of sum that you mentioned could be used to do some pilot schemes or to put in infrastructure in areas where there is no hope of commercial provision. In France, the Government realised that the mobile phone operators had stopped building out. The French wished to have other areas covered, so they provided masts, the electricity to the base station and space for the different operators. It was a competitively neutral intervention, so it was not a problem.

In a sense, it is difficult to answer your question without knowing what the primary objective is. The money could be spent on educating SMEs on the advantages of the technology. The sum that you mentioned does not sound like one that you would wish to carve up too many times.

Stuart Gibson: It is essential that a map of the fibre infrastructure is provided and that a working party is put together to ensure that we have a good idea of what we have before we start spending limited resources. We could have done that some time ago; we did not need to wait until now to do it. We should have a small working party involving people from the public and private sectors on all the potential sources of funding. We can get on with that. There are some wheels that we could set in motion on issues that have to be worked through. There is some activity in both those areas at the moment, but it needs a bit more momentum.

On the £144 million, the £70 million or so from BDUK is targeted at the remote and rural areas—that is where it is supposed to be spent. The plans are reasonably well advanced for the south and the north, which covers quite a big area of the country.

11:30

Various local authorities have been asked to talk to each other and come up with a broadband plan. At times that is easier than at others. Ayrshire would be a good example of three local authorities that could talk. They all have remote rural areas and towns and economic issues to deal with. A bit more drive at the top—a bit more leadership if I could call it that—would be good.

There is more money available and the private sector could be engaged in the process. At the moment, there is a bit of a stand-off, quite understandably, because if the Scottish Government announced that £500 million was available for broadband, the private sector would say, "That's great. We'll make sure we get as much of that as we can and we won't need to put our hands in our pockets." I can well understand its reluctance to put too much more money on the table, although there is no doubt that more money will be required.

The estimate for getting to 90 per cent coverage in the south and the north is about £300 million. To bring broadband to pretty well everybody, it is between £400 million and £450 million, and there is quite a lot to do beyond that. Broadband is a big investment and there are some big decisions to be made about how much of a priority it is for

Scotland compared with other infrastructure projects.

One of the things that could really unlock private sector investment would be to aggregate public service demand for communications networks, build a network that could service the requirements of the public sector—we touch on the McClelland report to some extent here—and offer contracts to provide services, with all sorts of security, capacity and availability built in on top. If you owned that network, you would be paid when other people use it. That would help to leverage in capital from the private sector.

The Scottish Government might have to do something clever. It might have to sit in the middle and, in effect, underwrite or put its covenant behind some of that income. If it is Scottish Government income, though, it is good-quality income.

There has been much debate about public-private partnerships and the private finance initiative. Clearly there has to be some control over excess profit for the private sector, but you can engage the private sector and the capital markets and get them to put some money into infrastructure in Scotland, as they have done in other parts of the world, provided you can give them an equivalent or slightly better long-term return than what they might get in the gilts market.

Adam Ingram: That is interesting. My understanding is that the Scottish Government has announced its intention to publish an action plan that will include criteria for the allocation of broadband funding in Scotland. What should the priorities and assessment criteria be?

Dr Whalley: That goes back to one of my previous points. If you want to allocate money, you need to ensure that it is not where the markets are going to be or where clever solutions such as open access could offer a solution. Open access will deal with some issues. If that could work as successfully in Scotland as it has worked in Holland and Sweden, it would give the potential to roll out a network, with the councils being the anchor tenants as it were and other people using it. That could work quite nicely but it requires co-ordination, and maybe even some heads to be banged together to get it done.

The Netherlands and Sweden have slightly different social characteristics when it comes to collaboration and the notion of investing in the public sector and for the long term if the returns are quite small but generate an income. The models are interesting but there have to be caveats.

The criteria could be about investing in those parts of the country where ICT would allow communities to remain viable. In some of the remote parts of northern Scandinavia, it is investment in technology that keeps communities viable. People acknowledge that they will never make a return, but they are getting a social benefit and, from that, other benefits. In urban areas, the criteria for using the funding could be about allowing people on low incomes who are marginalised in all the traditional ways to get on to the network. However, I would be careful about talking of a simple rural-urban divide—the situation is much more nuanced than that.

In the past, I have asked Ofcom how it intended to encourage people in some of the estates around Glasgow to get technology, and I did not receive a convincing answer. The Scottish household survey indicates that people want to use technology but that affordability is a big issue.

Ewan Sutherland: A lot depends on whether the current situation is a one-off, or on whether there might be more in future. If you ask people for bids, it may encourage the kind of collaboration that Jason Whalley spoke about. Models that aggregate demand are well established in places such as Canada, where some very remote and difficult areas must be covered. Anchor tenants are also well established. In New Zealand, it was decided that fibre would be provided for schools—although there was discussion over whether it would be for all schools or just for many schools. If I remember correctly, New Zealand is the same size as the British isles but has the population of Scotland, so it has some fairly grim problems in covering rural areas. However, once a fibre connection has been provided for a school, there is something to which other networks can be attached locally. For example, mobile operators will suddenly become quite excited because they can connect to it. There are ways in which to leverage what your money will buy with incentives for operators—who will come along and say, “Yes, that’s very interesting, and we can benefit from it. We will bid for it.” They will offer to do so at lower prices because they will be able to generate other revenues.

Examples of such things exist in all parts of the world. In Scotland, some local authorities may wish to put money into that sort of thing because they regard it as being important for their economy—even though other local authorities may not yet regard it as being so important.

Stuart Gibson: I want to pick up a point that Jason Whalley made. Doing more and better work on digital inclusion and exclusion would not take a big chunk out of the £144 million pot. The nuances in the Ofcom report were disappointing: overall broadband uptake in and around Glasgow had not increased very much, and the areas with problems were exactly the same as those with social problems and problems in education, housing and

health. We have to be a bit clever and spend some money wisely on improving the situation. I do not think that it would cost an awful lot; it probably just requires a really good strategy.

The Convener: We have mentioned some local activities in the Highlands, in the south of Scotland and in lots of other areas. We could end up with many local schemes without any overarching connectivity. Is a more strategic approach required for broadband provision in Scotland, to avoid that sort of fragmentation?

Ewan Sutherland: That is not necessarily the answer. We may end up with a European Union strategy, a United Kingdom strategy, a Scotland strategy, and—for all I know—an Ayrshire strategy. I suspect that one of the answers will come through co-operation. If some local communities or councils are not learning or getting involved, there may be ways of sharing expertise. That sort of thing is done in some of the north-west European countries. In a sense, a broadband forum is required in order that people can be encouraged to share experiences, strategies and problems, and to identify gaps in statistics.

It is useful to have a strategy, and it is useful to have a target such as, "We will have fibre in every Scottish home by 2025." However, a great deal of work is required on how to share learning—and not only within Scotland, but with people in Ireland, Sweden, Norway and wherever.

Stuart Gibson: Yes, we need an overall strategy. I believe that the Government is committed to publishing more information on where it is by the end the year and to coming up with a strategy by the end of March. My hope is that that is much more about execution and implementation than it is about the grand vision, because the grand vision is quite easy but the execution is quite hard, as there is not a huge amount of money and there are a lot of issues about how to spend the money. There should be an overall strategy so that everything flows down from that, instead of cracking on in the south and the north—to some extent because you have to—and building a strategy round that.

Jackson Carlaw: Gentlemen, your discursive answers have been far more interesting than our questions. In anticipation that they might not have been, we had prepared another couple of questions, which I think would simply be an invitation to repeat yourselves, so, unless colleagues have a strong view to the contrary, I will desist from putting them. I think that we have covered the content effectively as we have gone along.

Malcolm Chisholm: I will do the same, as we have covered the ground already.

The Convener: As no one else has any further questions, I thank our witnesses very much for their evidence, which has been most enlightening and will have a strong bearing on the results of our inquiry.

I briefly suspend the meeting to allow the witnesses to leave.

11:41

Meeting suspended.

11:42

On resuming—

Welfare Reform Bill

The Convener: The next item of business is consideration of the legislative consent memorandum on the Welfare Reform Bill. I refer members to paper ICI/S4/11/9/4. As set out in the paper, members are invited to note that the draft report on the LCM on the Welfare Reform Bill will be considered by the committee at its next meeting on 23 November. Members are invited formally to note the information provided by the LCM and to give views on any additional matters, beyond those highlighted in the evidence, that they wish to be incorporated in the draft report. Does anyone have any comments on the paper?

Adam Ingram: From my recollection of the evidence session, the issues that have been identified in the paper are the ones that we would want to pick up on. It might be useful to have a trawl through the witnesses' evidence to see whether there is anything else that we should add.

The Convener: I think that members and the clerks will do that before the draft report is produced.

Neil Findlay: You might recall that, after the evidence session, I broached the subject of possibly getting a Westminster minister to come before us at a joint meeting with other committees to discuss the welfare reform proposals. I do not know whether anything has been done about that.

The Convener: We will report to the Health and Sport Committee, which I think is looking at that angle. If the Health and Sport Committee has a minister up, there is nothing to stop members of this committee attending the meeting and asking questions.

Neil Findlay: Could we ask whether the Health and Sport Committee has made that request?

The Convener: Yes. We will get Steve Farrell to do that.

Malcolm Chisholm: What is there is good, but it would also be good to flag up the relationship between the housing benefit reforms and the 2012 homelessness commitment. We can argue about whether the reforms are good or bad, but the impact on a legislative requirement of the Parliament is a slightly different angle.

The Convener: I think that that will form a big part of our homelessness inquiry.

Jamie Hepburn: It would perhaps be worth welcoming the Government's approach to the matter, because it is not allowing the timescale to be dictated to it and it is waiting to see all the available evidence.

The Convener: Are members content to note those two points? We will obviously have a more detailed discussion of the issue next week.

Members *indicated agreement.*

The Convener: Before we move into private session, on behalf of the committee I thank Jackson Carlaw for his contribution to the work of the committee and its predecessor in the previous session of Parliament. We wish him well in his new role.

Jackson Carlaw: Thank you very much, convener.

The Convener: As previously agreed, the committee will take the remaining agenda item in private.

11:45

Meeting continued in private until 12:38.

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