



OFFICIAL REPORT  
AITHISG OIFIGEIL

# Economy and Fair Work Committee

Wednesday 22 June 2022

Session 6



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Pàrlamaid na h-Alba

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**Wednesday 22 June 2022**

**CONTENTS**

	<b>Col.</b>
<b>DECISION ON TAKING BUSINESS IN PRIVATE .....</b>	<b>1</b>
<b>BROADBAND CONNECTIVITY.....</b>	<b>2</b>

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**ECONOMY AND FAIR WORK COMMITTEE**

**17<sup>th</sup> Meeting 2022, Session 6**

**CONVENER**

\*Claire Baker (Mid Scotland and Fife) (Lab)

**DEPUTY CONVENER**

\*Colin Beattie (Midlothian North and Musselburgh) (SNP)

**COMMITTEE MEMBERS**

\*Alexander Burnett (Aberdeenshire West) (Con)  
\*Maggie Chapman (North East Scotland) (Green)  
Jamie Halcro Johnston (Highlands and Islands) (Con)  
\*Fiona Hyslop (Linlithgow) (SNP)  
\*Gordon MacDonald (Edinburgh Pentlands) (SNP)  
\*Colin Smyth (South Scotland) (Lab)  
\*Michelle Thomson (Falkirk East) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Kate Forbes (Cabinet Secretary for Finance and the Economy)  
Robert McGhee (Scottish Government)

**CLERK TO THE COMMITTEE**

Anne Peat

**LOCATION**

The James Clerk Maxwell Room (CR4)



## Scottish Parliament

### Economy and Fair Work Committee

Wednesday 22 June 2022

*[The Convener opened the meeting at 09:33]*

### Decision on Taking Business in Private

**The Convener (Claire Baker):** Good morning, and welcome to the 17th meeting in 2022 of the Economy and Fair Work Committee. Today's meeting is being held virtually. I am not anticipating any connectivity problems but, if there are such problems, Colin Beattie, as deputy convener, will take over the chairing of the meeting.

Our first item of business is to decide whether to take agenda item 3 in private and whether discussions of the committee's work programme should be taken in private at future meetings. Do members agree to take those items in private?

**Members** *indicated agreement.*

## Broadband Connectivity

09:33

**The Convener:** Our next item of business is an evidence session on broadband connectivity. I welcome the Cabinet Secretary for Finance and the Economy, Kate Forbes MSP. She is joined by Clive Downing, who is the reaching 100 per cent programme director in the Scottish Government, and Robert McGhee, who is the deputy director for digital connectivity in the Scottish Government.

As always, it would be helpful if members and witnesses could keep questions and answers as concise as possible.

I invite the cabinet secretary to make a short opening statement.

**The Cabinet Secretary for Finance and the Economy (Kate Forbes):** Thank you very much, convener. I will take the opportunity to make some comments about a very important area for Scotland.

Every part of the economy and every part of Government is currently being transformed by digital connectivity and by the data, technologies and applications that it enables. Although, prior to the pandemic, all of us recognised the critical need for reliable digital infrastructure, the pandemic has emphasised that need further still, and it has certainly forced the pace of digital transformation. We are investing substantial Scottish Government resources in a reserved area so that we can deliver improvements in digital infrastructure through unprecedented times. I am certainly proud of what we have achieved, but I am also conscious of the need to make sure that we complete the job and do it well.

We delivered the commitment to ensure that every home and business could access superfast broadband connections by the end of last year through a combination of the R100 contracts, the nationwide voucher scheme and commercial coverage. All remaining connections that are being delivered through the R100 contracts will be full-fibre connections, which will deliver gigabit-capable connectivity on the ground. The R100 programme currently has ships out in the North Sea laying 16 new fibre optic subsea cables to connect 15 Scottish islands. That is quite clearly a transformational investment.

I had seen the United Kingdom Government's gigabit project—through which £5 billion is available for investment across the UK—as the next opportunity to deliver more targeted investment, and I thought that it could work quite well alongside the R100 programme. However, as things stand, the sort of investment that the

Scottish Government is currently making in subsea cables and so on will not be possible via project gigabit, which will, instead, focus on the cheapest non-commercial premises.

Project gigabit has an arbitrary cost cap of £7,000. In other words, if it costs more than £7,000 to connect to a premises anywhere in the UK, the UK Government will not fund that. I hope that the committee will join me in appealing to the UK Government to express the point that connecting the hardest-to-reach areas in Scotland will inevitably cost more than £7,000 per property.

My correspondence with the UK Government Minister of State for Media, Data and Digital Infrastructure has not been fruitful to date. She has said that the Scottish Government is seeking “to have greater spend” in areas such as islands and parts of rural Scotland than that which is going to “parts of England” and that she

“cannot ask people in other parts of the country to suffer”.— [Official Report, House of Commons, 26 May 2022; Vol 715, c 399.]

It is quite clear that all of us have an interest in connecting the hardest-to-reach areas and, even if it costs more than £7,000 per property, we need to complete the job. However, having already invested in a reserved area well over £600 million from the Scottish Government’s budget, we cannot simply keep picking up the tab for the UK Government on broadband. Therefore, it looks like project gigabit is going from a transformational opportunity to a missed opportunity for Scotland. I hope that we can get into a bit more detail on that when it comes to the question-and-answer part of this session.

The Scottish 4G infill programme is working with our project partner, WHP Telecoms, which has activated 28 mobile masts, and we are doing work on 5G through the Scotland 5G Centre. I could talk more about that, but I am conscious of keeping my remarks brief, so I will stop there. I hope that we can get into some of that work in the questions.

**The Convener:** Thank you very much, cabinet secretary.

I note that Jamie Halcro Johnston has provided apologies for not being at today’s meeting.

I will start the questions and then take questions from other members. There will be questions on the UK Government’s gigabit project, which the cabinet secretary has talked about, but I will start with progress on the R100 programme.

Following the delay to concluding contracts for the R100 programme, we now expect some areas not to have connection until 2026-27. Are you confident that that deadline can be met? We are seeing cost increases for various reasons, including inflation. Are you confident that the

budget that is in place is sufficient? You have talked about the challenges of reaching the more remote areas of Scotland and the increased costs that are involved in that. Are you confident that the new deadline of 2026-27 for the R100 programme will be met?

**Kate Forbes:** We are delivering at pace. As of 30 April this year, 7,685 premises were able to access superfast broadband through the R100 contracts, and a further 2,200 connections have been made through the broadband voucher scheme. I am keeping the pressure up considerably on Openreach, in order to try to roll that out at pace.

With regard to the current conversations, I am always looking for us to go further by identifying any other properties or areas that we might be able to reach, perhaps through a combination of project gigabit and R100.

In short, we are working to that deadline, and we are working to that budget. Obviously, when it comes to the budget, I want to ensure that the Scottish Government contributes, which we are, with more than £600 million. However, ultimately, in a reserved area, it is also my duty and responsibility to ensure that we maximise any UK Government spend. If additional funding becomes available—such as through project gigabit, which is a £5 billion project—that can complement our work and we can, therefore, exceed the budget that has been set but through the UK Government Treasury, I would certainly not say no to that.

The nuance that I am incorporating here is that we have set a budget and I am confident right now in our budget but, if I can go further with additional funding from the UK Government, I absolutely will. I hope that that nuance makes sense. Ultimately, we want to maximise the available funding. We have set out our contribution but, if we can secure a greater contribution through project gigabit, we would absolutely do that.

**The Convener:** Am I correct that the Audit Scotland report shows that progress on R100 is slowest in the north, which is recognised as a more difficult area to deliver in? Therefore, we face similar challenges in that it appears that that is happening first in the areas that are more accessible and cheaper to deliver in, before we get to the areas in which it is harder to deliver.

**Kate Forbes:** We signed the contract with the north lot a year later than we signed the central and south contracts, due to the legal challenges. However, the north contract has the largest share of the investment of £600 million—£384 million. That is double the total amount that was invested through the previous programme in the Highlands and Islands. Therefore, you are right to say that that has been delayed more than the central and

south lots, but it also includes, for example, 16 subsea cables, which other parts of Scotland do not require. It is a more intensive process and arguably, it is one of the most important parts of R100, if R100 is built on the concept that we start from the outside in—that we start with the hardest-to-reach premises and work backwards, rather than doing what project gigabit is doing, which is starting with the cheapest commercially easiest-to-reach properties.

**The Convener:** You mentioned the subsea cables. Can you confirm that the vessel collected the supplies from Norway in May and that the cables are still expected to be laid by the end of this year? Is that still the timescale?

**Kate Forbes:** I will see whether an official wants to comment on the updated timescales, but I understand that work is progressing as expected. Robbie McGhee might want to provide an update on the progress on the subsea cables.

**Robert McGhee (Scottish Government):** Absolutely. I can confirm that that work is on track and that the cables are due to be installed by the deadline. Indeed, you will be able to track the ships as they do a bit of island hopping over the course of the summer. There will be a really intensive period of work over the next few months by Openreach, BT—[*Inaudible.*]—subcontractors involved in that. As things stand, that work is on track to be done over the summer, although there is the issue of whether the weather supports such endeavours.

**The Convener:** Thank you. I will now bring in Alexander Burnett, to be followed by Colin Smyth.

**Alexander Burnett (Aberdeenshire West) (Con):** Good morning. Why has the voucher scheme not worked as well as you might have hoped? Why was the uptake so low? I wrote to you about the possibility of extending the deadlines for that. There are questions about why some applications for vouchers were turned down and what will happen to the unspent money. I appreciate that you might not have all those figures in front of you. Will there be a formal report or analysis of the scheme, so that we can properly scrutinise why it did not work as well as it could have done?

09:45

**Kate Forbes:** I know that Alexander Burnett has had a significant interest in the voucher scheme on behalf of his constituents. We extended access to the interim voucher by three months and significantly stepped up our advertising efforts. We used local, national and social media, but in those further three months there was no tangible increase in the number of inquiries or applications.

I will see whether officials want to come in in a moment. The scheme is demand led, so it is ultimately a decision for property owners whether to go down that route. Obviously, some areas were able to combine the broadband voucher scheme with funding from the UK Government's voucher scheme: the £5,000 from the Scottish Government combined with UK Government funding of up to £1,500 for homes or £3,500 for businesses.

In relation to effectiveness, the reason why we did not extend the scheme further is that we did not see a significant uptake in the additional three months. The other point to make is that we tried to use positive examples; we put a lot of positive examples on the website of how households have been able to use the voucher scheme, and we have been working with around 60 local broadband suppliers to allow them to expand their networks.

However, with hindsight, I feel that we did everything that we could to maximise awareness and raise understanding of how the voucher scheme could work. I will see whether officials want to come in on why there was not a bigger uptake, but I certainly could not see value in extending the scheme any further, because of the low uptake. Incidentally, if you want the latest figures, as of June 2022, the R100 voucher scheme has delivered 2,202 connections, and a further 1,008 are in the pipeline. Fourteen per cent of those connections have been fibre to the premises. I will stop there and see whether you want to ask a follow-up question; alternatively, I will ask officials whether they have any ideas as to why there was not a bigger uptake.

**Alexander Burnett:** Do you have an updated figure for the unspent money? I agree that you promoted the scheme—we all promoted the scheme to constituents—but, despite all the additional promotion and the extension, there was not a bigger uptake. What do you think was fundamentally wrong with the voucher scheme? People will not take something up if it is not attractive enough, so what was wrong with the scheme?

**Kate Forbes:** I do not think that I have an answer as to the scheme's attractiveness. The correspondence that I receive, the communication that I have had with individuals and the positive examples that there have been show that those who wanted to use the scheme, applied for it and secured it were happy with the process of working with local broadband suppliers and accessing the funding. No significant reasons are being given anecdotally or in our feedback from those who were unable to secure the voucher. It was a demand-led scheme. You may have other ideas,

but my approach was to be as flexible as possible and to be willing to adapt and extend the scheme.

Take-up of the voucher scheme compared well with other demand-led interventions that are available in Scotland. Ofcom's "Connected Nations 2021" report showed that just 288 connections across Scotland have been delivered through the UK Government's universal service obligation, which is less than 1 per cent of all the universal service obligation-eligible properties in Scotland. The UK Government's gigabit broadband voucher scheme has delivered just 604 connections to date.

We tried to make the scheme as flexible as possible; the terms and conditions were designed to ensure that those who chose to utilise the voucher could also afford to take a service, but there is a very similar picture of voucher scheme uptake across the board.

**Alexander Burnett:** How much is the unspent money and where will it go now?

**Kate Forbes:** I will have to come back to you on that, because the full broadband funding that I have made available is still available. The figure of more than £600 million that I identified to reach 100 per cent of properties is still more than £600 million. There may be ways to redeploy funding, but it will still be spent on broadband.

**Colin Smyth (South Scotland) (Lab):** Cabinet secretary, you talked about the challenges that rural areas face in accessing digital opportunities—connectivity in particular. However, there are also barriers when it comes to skills and an understanding of the business opportunities that good digital services provide, especially for small businesses, which make up the vast majority in rural areas.

Last week, you announced that you were scrapping proposals for a rural entrepreneur fund. Whenever we have a round of the digital boost funding, it is oversubscribed and many businesses do not get to access it. What specific support is being provided to businesses in rural areas to ensure that they do not fall behind big businesses in our cities when it comes to breaking down the barriers to digital opportunities?

**Kate Forbes:** That is a good question. As you know, there is always reluctance to talk about the opportunities of broadband when not everybody has access to it yet. However, you are right in saying that if, for example, 95 per cent of properties have access to broadband through the previous programme, they are not all necessarily making maximum use of it. That work was stepped up during the pandemic.

The digital boost fund has been running for a number of years and is one of the most effective

ways to address the matter. Our commitment to spend £100 million through digital grants still stands. In the first 100 days of this parliamentary session, we provided £25 million to spend on digital connectivity. That includes not only software but the skills side, and the digital boost fund has been effective on that.

You are right that, in recent times, the fund has been oversubscribed. Incidentally, prior to that, it had quite a low subscription rate. Trying to promote our digital products, whether the digital loans scheme, digital boost or something else, was quite challenging, but businesses are increasingly understanding how digital can be transformational.

Assistance is provided primarily through grant support, which still stands. It has not been changed. At the same time, it also brings in the opportunity for training and skills.

There is a lot more to that answer. For example, there is a lot more on training and reskilling because, ultimately, businesses also need digitally equipped, trained and skilled employees. We support various programmes in that regard. One of the first things that I did was set up the digital start-up scheme, which took people who were furthest from the job market, provided them with intensive retraining or reskilling in digital skills and supported them to find work. There are other ways in which we can approach the matter.

**Colin Smyth:** Is there not an argument that we need something specific for small businesses in our rural areas, because they are not grasping those digital opportunities? That is often because they do not have the skills but also because they are not aware of them. It is not just about bidding for digital boost funding but about bringing those businesses to a point at which they are fully aware of the opportunities that exist. That is a big problem for small businesses in rural areas in particular.

**Kate Forbes:** I will give an example of something that we have tried to do. You will be familiar with CodeClan, which provides intensive retraining or reskilling for employees in digital skills. We intentionally supported it to open a facility in the Highlands that was specifically geared towards rural businesses. It was different from the CodeClan that is based in Edinburgh and was specifically geared towards rural businesses.

There are examples of things that we have done. However, it needs to go both ways. There must also be an appetite to embrace that. Whether it is the middle of Edinburgh or Skye, the same challenges exist around skills in a very competitive environment. If you think that there might be some ways in which we could adapt the digital boost scheme or digital grants to make them particularly



relevant to rural areas, I am open to suggestions and ideas. However, it is a challenge across Scotland.

**Colin Smyth:** I will take you up on that offer, cabinet secretary. The convener will prevent me from doing that just now, but I will follow up that opportunity.

On the issue of mobile connectivity, there are again challenges for rural areas. In your opening comments, you suggested that the 4G infill programme had connected 22 masts. My understanding is that the intention was to deliver 45 new masts by 2022. Are you still on target for 45 new mast sites by the completion date of 2022?

**Kate Forbes:** Twenty-eight masts are live. The most recently installed mast is in Aberdeenshire. The Scottish 4G infill programme is investing £28.75 million in up to 55 mobile not-spots. We publish regular programme updates, and we are committed to being on track to connect as many mobile masts as possible. It has not always been plain sailing. There are two challenges with mobile phone masts. The first is that, because mobile connectivity is a reserved area, we have to work quite collaboratively with the commercial providers. We do not have the regulation powers to enforce or compel. We can build the masts, but we still have to work closely with the commercial providers to ensure that those masts are used. The second challenge is that, because it is a reserved area, the past few years have been quite difficult.

However, it is one of our most successful programmes. Those 28 masts are now live, and the money is still there for us to connect up to 55 mobile not-spots, which we will do as quickly as possible.

**Colin Smyth:** I was not clear about the figures, cabinet secretary. The Government had quite a specific target of 45 new masts by 2022. Is that still a target, or is there a new target date for all the planned 55 masts?

**Kate Forbes:** We have a pipeline of all the further build activity and site activations from now until the programme concludes in March 2023. I am happy to provide the committee with more information on what the plans look like between now and March 2023. I am not familiar with your figure of 45. We are working to try to connect up to 55 masts by March 2023.

**Colin Smyth:** You mentioned that we need providers to use those masts. Are mobile companies stepping up to the market and using those masts, or is it simply the case that we have one provider? Again, that is a challenge for people in rural areas if they do not use that provider. Is there uptake from commercial providers so that

several share the masts rather than there being one provider?

**Kate Forbes:** The short answer is yes. Over the past three years in particular, we have seen a massive effort from commercial mobile providers to work with us on the infill programme. It is to their credit that, even though we do not necessarily have the powers of compulsion or regulation, they have chosen to work with us collaboratively to make these masts a success. Many mobile operators are looking at how they can deliver their coverage obligations through the infill masts programme.

**Robert McGhee:** I can add a bit more detail on the 4G infill programme. As the cabinet secretary said, 28 sites are now live and another 20 towers have been built. In the main, the towers are served by fibre, so there is some work to be done to get those connections and get operators' kit installed before services go live. However, there will be a steady stream of those throughout this year. Over and above that, another five towers are currently in build.

That is all to demonstrate that we are already well in excess of that original target of 45. We have already outstripped that and managed to create real momentum, and that is after a period in which the programme had to shut down deployment in the early months after the pandemic hit. We are therefore pleased with the momentum that has been generated, and I can confirm that we are already in excess of the original target of 45.

10:00

**Colin Beattie (Midlothian North and Musselburgh) (SNP):** I have a couple of questions on connectivity. Can the cabinet secretary provide an update on the test 5G networks that were established on Orkney and at Loch Lomond?

**Kate Forbes:** Yes, I can. Obviously, the 5G networks are working alongside the Scotland 5G Centre. We are working in those areas, particularly on the 5G networks. I will see whether any officials want to come in on the two specific examples, because I am not as well versed in the two local examples that Colin Beattie mentioned; I am probably more familiar with the more general points around the Scotland 5G Centre.

**Robert McGhee:** 5G deployment is, by and large, very much a commercial endeavour. Through one project that it delivered in the first stage of its work, the Scotland 5G Centre tested the technology and deployed some private 5G networks in both rural and urban locations, which generated lessons on how those networks can be deployed in those situations in the future.

Some excellent work has been done in Orkney, where successive projects have built up. The other element within wave 1 of the work of the Scotland 5G Centre was about making public sector assets more accessible to telecom companies. We have a strong academic base in the centre that utilises the knowledge of the University of Strathclyde, the University of Glasgow and other academic partners and puts that together with industry. In the coming years, we are looking to generate those lessons about how networks can be deployed in different ways, utilising different models in both rural and urban environments.

**Colin Beattie:** Is there an expectation that the network will be maintained by a commercial operator?

**Robert McGhee:** There are a number of different instances. The work in Orkney has been looking at utilising some of the new freedoms or flexibilities on spectrum that Ofcom introduced. That could see different models being utilised. It might not necessarily be a mobile network operator that would maintain the network; it could also be more of a community-led model or one involving a new mobile player that is more local in nature. That is what the pilot projects in those areas are looking to test.

However, as I said at the start, primarily, people who are in the business of 5G deployment will be led by mobile network operators. We have already started to see the 4G infill programme, and the shared rural network has started to see MNOs deploy in far more rural places than they have done traditionally in the past. I think that that trend will continue but, clearly, we want to support the development of models that will add value to that and potentially support more local solutions.

**Colin Beattie:** Is there an end date for those tests in Orkney and Loch Lomond? In connection with the maintenance of the network, when will there be clarity as to the model that is being used?

**Robert McGhee:** That is probably one that we can follow up on in writing, because I do not have the detail on specific end dates to hand. We can certainly get more detail to the committee on that.

**Colin Beattie:** And on the model that is likely to be used?

**Robert McGhee:** Yes, absolutely. The lessons from the first phase—certainly from the Orkney programme—have already been written up and shared, and they have informed the next stages. We can go into a bit of detail on that in follow-up.

**Colin Beattie:** Cabinet secretary, what are your expectations for the commercial roll-out of 5G networks across Scotland? Are there areas of the country where additional public support or subsidy

will be necessary to encourage the private sector to act?

**Kate Forbes:** We have the 5G strategy, and we established the Scotland 5G Centre to facilitate investment in the deployment, development and commercialisation of 5G in Scotland. Last September, the Scottish Government announced an additional £4 million of funding to deliver the S5GConnect programme, which involves a network of 5G innovation hubs. There is public investment in that area already, but the aim is to accelerate the adoption of 5G and to realise the technology's potential economic contribution.

The difficulty is that all the issues that we are discussing are reserved. Our role must complement the work that is already being done, whether that is commercially led or UK Government led. We deemed that we could add value by creating the 5G hubs in Forth Valley, Dundee, Dumfries, Kilmarnock and Aberdeen, all of which will have a different focus. We can add value and contribute some funding but, ultimately, the work in that area must be commercially led or UK Government-led.

**Colin Beattie:** Based on what you have said, it would appear that there will be regions of Scotland that will need additional public support, perhaps from the UK Government rather than from the Scottish Government, to get the private sector into action.

**Kate Forbes:** It is not always investment that is required to get the private sector to operate in this area. You are talking about 5G providers rolling out 5G networks. Obviously, we want to incentivise them to do that. We are doing that in a number of different ways, not least through the 5G centres. However, ultimately, that will be a commercial decision by the providers.

We can provide an incentive by doing things such as developing use cases on private 5G test networks, and we can support small and medium-sized enterprises with the skills that they need. If a commercial provider sees an appetite for adoption and commercialisation, the roll-out of 5G will be more commercially attractive to them. There are other ways in which we can incentivise commercial providers to roll-out 5G.

**Fiona Hyslop (Linlithgow) (SNP):** The Scottish Government's spend of £600 million in what is, in effect, a reserved area represents a considerable investment. The provision of such digital connectivity must be for a purpose. How are you ensuring that the R100 programme, and the 4G and 5G support, fits in with the Scottish Government's aims and responsibilities in devolved areas? I am thinking, in particular, of the green recovery, the wellbeing economy, city deals and the work of the enterprise agencies. How are

you ensuring that there is synergy with your national strategy for economic transformation to make sure that we are getting best value for that additional complementary spend?

**Kate Forbes:** That is a great question. Our economic and our social objectives rely on our having adequate—in fact, huge—broadband infrastructure.

From an economic perspective, tech is forecast to be the second-fastest growing sector over the next few years, so the economic opportunities for Scotland are enormous. In the past few years, a number of global businesses have chosen to relocate, or to establish, their tech hubs in Scotland. An example is the Barclays campus; other banks have established tech hubs in Scotland, too. They have done so because they recognise that we have the talent, the pipeline of labour and a growing reputation in technology. However, that relies on the basics of broadband connectivity.

On the social side, the committee will be aware of the work that was done during the pandemic to connect Scotland. We have tried to reduce digital exclusion by providing devices, internet connections, training and support for digitally excluded low-income households. When we got that right by providing skills alongside the hardware that was required, that transformed lives, because people who had felt isolated, excluded or lonely during the pandemic could reach other people.

Both those examples are probably in the Government's DNA. Both our economic aspirations for prosperity and our wellbeing aspirations for inclusion and so on rely on broadband connectivity. We can wait and wait for the UK Government to deliver the infrastructure that we need or we can get on with that ourselves. We have chosen to get on with it ourselves.

**Fiona Hyslop:** Aspirations are all well and good, but I will ask about delivery. From a commercial point of view, the cities were already connected to the levels that were required, so I go back to Colin Smyth's point: how are we ensuring that the additional Scottish Government spend of more than £600 million is leveraging economic growth in other areas? I ask about that aspect in particular, given that we are the Economy and Fair Work Committee.

You have gone through the Government's plans, but what difference will that money make? You have talked about aspirations, but how will you know that your plans are being delivered? What will success look like in places that are being connected as a result of Scottish Government spend?

**Kate Forbes:** You and Colin Smyth are right to say that the infrastructure is insufficient. Once that is in place, it is great.

I will give an example. The digital boost development grant used to be about a couple of million pounds a year but is now up to £25 million. The other thing that we have done differently is that private funding needs to be leveraged in as part of that. It is not just a case of receiving a grant, spending it and then forgetting about it. The grant needs to be matched by private sector investment. That means that, almost immediately, we double the amount of public and private funding to invest in digital connectivity. In relation to the economic strategy, one of the most effective ways of improving productivity that was identified related to private sector investment and capabilities.

On outcomes, the committee knows that we have a commitment to improve productivity significantly, in line with productivity in comparator countries in the Organisation for Economic Co-operation and Development. If you want metrics of success, that is a big metric of success. The steps along the way involve ensuring that every penny of public sector spend on digital is doubled by the private sector. That is an example of aspiration, in relation to where we want to get to on productivity, and reality, because that is already happening through the digital funding that is being spent on improving capabilities and skills.

I have already cited an example in which I used the past tense, because those things have already worked. If you ask Barclays and other banks why they have located their tech hubs in Scotland, they will say that the reason is, in part, that they think that Scotland is an attractive place to establish them because of that combination. That is creating, and is set to create, a considerable number of jobs. Barclays is not the first bank to have done that, and it will not be the last. Those tangible outputs are the results of investment that has been made.

**Fiona Hyslop:** I am very familiar with the digital boost fund; I was instrumental in delivering it as part of economic recovery. We have had evidence, particularly from women who are involved in business that, because of the nature of their business, they have had challenges in accessing the fund. Therefore, I would be grateful if the cabinet secretary would agree to look further into access to that for women, and for businesses in rural areas, as has been raised previously.

10:15

**Kate Forbes:** I am happy to agree to do that. As I said to Colin Smyth, we are keen to be adaptable. If the committee has ideas about how

to make the digital boost scheme more accessible, I would be keen to work with the committee on that.

**Fiona Hyslop:** Good.

**The Convener:** I think that the committee will contact you about that issue, cabinet secretary. We heard evidence about the matter during our town centres and retail inquiry.

**Maggie Chapman (North East Scotland) (Green):** Good morning, cabinet secretary, and thank you for what you have said so far. I have a couple of questions that follow on from Fiona Hyslop's questions. In our town centre and retail sector inquiry, which we are coming to the end of, and in thinking back over the winter, it has become clear that resilience is an issue. It is important to have infrastructure in place, but there is an issue about how we build into that infrastructure the resilience to cope with bad weather events such as storm Arwen and ensure that businesses and residents can move to omnichannel or multimodal interactions, whether that is home working or bricks and clicks in retail.

How does the Scottish Government ensure that we have not only the infrastructure but the support that backs up that infrastructure to ensure access to reliable and resilient connections, and fast access to the maintenance that is required if there are connectivity issues?

**Kate Forbes:** At the end of the day, we have to work closely with the commercial providers on that. You mentioned maintenance. Obviously, we have a real interest in supporting local broadband providers and ensuring that it is not only some of the bigger businesses that benefit from the big roll-out of R100. Ultimately, when it comes to resilience, maintenance and so on, we need to work closely with those organisations.

There is a massive skills question, too. Let us take the Connecting Scotland programme. If an individual who had previously been digitally excluded and who is now accessing broadband has issues, we need to be on hand and ready to respond quickly to that need. We have a number of partners in that regard, including organisations such as housing associations. I suppose that my point is that we need localised resilience and the response has to be at the point of need. That includes the providers, whether they are small, medium or large, as well as partners that are perhaps more trusted, such as housing associations or, indeed, banks. The Barclays digital eagles programme tries to equip customers who are perhaps more excluded with the skills that they need. There is a huge programme of work in all that, and Ofcom has a role, too, when it comes to ensuring that all providers meet a certain standard of resilience and embed that.

**Maggie Chapman:** I realise that, as you have identified, there are challenges around what is reserved and what we have powers over.

To follow on from that, you have talked about building in connections and networks to secure resilience at local level. Are there alternative models of ownership or control that we should be looking at as well? Obviously, there is an important role for the big broadband corporations and for mobile connectivity to support what we are doing, but community ownership offers something adaptable, flexible and localised that can secure the resilience that smaller towns and villages and rural areas need. What are your thoughts on that?

**Kate Forbes:** I am extremely supportive of that, because I represent an area where there has perhaps been a disproportionately large reliance on local community solutions, such as Locheilnet in Lochaber and Cromarty Firth Wireless Networks in the Black Isle—there are lots of local examples. Certainly, the broadband voucher scheme that I mentioned earlier provided an opportunity to work with about 60 local broadband providers to give them the opportunity to connect.

Communities have been absolutely dependent on those local providers. Therefore, the worst thing that we could do right now is to focus only on, for example, one major provider as that might make it harder for some of the community schemes to become commercially viable. That is a challenge that we need to manage quite carefully. As I said, about 60 local broadband providers, including CloudNet IT Solutions in the Orkney Islands and Shetland Broadband, have used the voucher schemes to connect eligible properties.

There are a number of examples of areas where that approach has worked. However, most households simply want a reliable connection.

**Maggie Chapman:** That is fair enough—and that will be important as hybrid working continues after the pandemic.

I have a question about the use of the application of connectivity, whether it is broadband or mobile connectivity, which might link back to something that Fiona Hyslop was talking about. There are real economic opportunities emerging in relation to issues such as how we use 5G data to manage traffic flows, deal with accidents and better predict supply chain issues, and there are also links into health and food supplies. Where in the policy and strategy landscape is thinking happening around such issues?

**Kate Forbes:** Thinking is definitely happening around those issues. I will draw your attention to the internet of things, because that is part of our digital strategy. There are already examples of how we are using the internet of things to gather reliable data about the world that can inform

decision making and improve services. At the moment, that is being used to monitor river levels for flooding, prevent damp in social housing and so on—I have had the privilege of using some of the social housing that is using the internet of things, and it is remarkable. There are examples of it being used around the health and wellbeing of livestock, such as cattle, and to understand the performance of industrial machinery.

In the 2017-18 programme for government and the subsequent 2017 digital strategy, we committed to ensuring that Scotland had that underlying infrastructure to support widespread networks. We will continue to implement that approach. That is a good example of where we want 5G to get to. It all boils down to data, how you use the data and, of course, how you ensure that you have an ethical approach to the use of data.

**Maggie Chapman:** Absolutely. One of my final points was going to be about data trusts and the ownership of data. Those are interesting questions that I do not know whether anyone has got to grips with, although I know that interesting thinking is going on around that. However, that is probably not a topic for today.

We are moving towards a digital economy in which everything relies on some kind of digital connectivity, whether it involves food production, livestock monitoring, traffic management or whatever.

There are interesting opportunities to think differently about broadband, mobile connectivity provision and charging. For example, there is a very clear desire for universal provision. How do you see a future Scotland doing universal provision?

**Kate Forbes:** We will need to be in a position of universal provision. I do not think that that is optional, and it has the potential to be transformational if we get it right. If universal provision is a great equaliser across geographies, income levels and communities, it has the potential to be transformational.

My concern is that although we have a vision, telecoms is ultimately a reserved area. Telecoms is fascinating, because the entirety of it—all the powers of regulation and so on—is reserved, so our spend has got to go hand in hand with regulation. For example, banks expect their customers to increasingly rely on broadband connectivity, so we have to put in place support for those customers, and there has to be alternative provision. That is an example of where the pace is so fast in some cases that some people are being left behind. If we are to realise the sort of transformational objective where broadband is another utility that you expect without question, we

need to be conscious of how we take everybody with us.

**Maggie Chapman:** Thank you, cabinet secretary; I will leave it there.

**Michelle Thomson (Falkirk East) (SNP):** I turn back to the macroeconomic environment. As you know, consumer price inflation was at 9.1 per cent in May 2022, and we anticipate that it will peak considerably higher. In terms of supply chain issues, we have had Brexit and the pandemic, and as you know, the committee did an inquiry into those. How might the UK macroeconomic environment have an impact on rising costs for delivery or the timelines for our existing programmes?

**Kate Forbes:** It will inevitably have an impact on the roll-out of our programmes. An obvious example that comes back to me through various different providers and so on is labour. At a time when there is an extreme shortage of, for example, engineers, you ultimately need boots on the ground to roll out any major infrastructure project. If the labour market has been reduced through a hostile visa system, providers, contractors and subcontractors end up recycling the same workers to deliver that project.

Secondly, it is inevitable that there will be an inflationary impact on some of the costs of major infrastructure builds. This major infrastructure initiative, which is huge, will not be immune to the challenges that our economy faces. I will pause and see if Robert McGhee wants to come in on any other technical impact.

I think that he is muted.

10:30

**Robert McGhee:** We are proactively monitoring inflationary impacts across all our programmes. The nature of our contracts offers some protection. For example, R100 is, in essence, a fixed-price contract. The only changes that can arise relate to predetermined survey assumptions. Some inflationary pressures can trigger those changes in some circumstances but not across the piece, so it is not impacted by wage inflation, for example. However, it is a fact of life that the costs of raw materials—the component parts of the networks that are being built—are increasing.

On the 4G infill programme, which we have talked about, our supplier WHP secured some of the components quite far in advance and that has insulated us from some of the most recent rises in costs. As I think that I said earlier, the construction of towers across the 4G infill programme is largely complete now. We also have some contingency built into that programme for the estimated cost of towers.

There has been a proactive approach to managing the matter as we go so we expect that the impact will be minimised, certainly on the S4GI. With R100, we are taking the same approach. We are working with Openreach to mitigate the inflationary impacts. Openreach is also seeking to innovate as it goes and push costs down. In effect, it is trying to reduce the amount of network build and how many of the components are needed to reach rural communities. That ability to innovate and make the build more cost effective, as well as some of the contractual protections, will be a significant factor in allowing us to mitigate the risk of cost overrun.

**Michelle Thomson:** It is heartening to hear about what you have built into the contracts as a protection against the increase in costs.

On labour force issues, cabinet secretary, the engineers in particular are real boots on the ground that have to be deployed. It is not like you can send in a bot. Sometimes, I look at the detailed reporting of each of the programmes. That is the standard function that pulls out issues. However, it would be useful for the committee to have more flavour of where a gap in labour availability is pushing out timescales because I suspect that that issue will continue to run when we consider other sectors. It would be useful if more information about that was made available.

**Kate Forbes:** The chief executive of Openreach, Clive Selley, has described the process of recruiting workers in the European Union post-Brexit as “torturous”. He stated that the Home Office’s points-based process is

“constraining the rate of fibre build in the UK”.

Robbie McGhee set out many of the protections that we put in place but you need only to listen to organisations such as Openreach on that. The challenge of recruiting workers has featured in probably every meeting that I have had with Openreach for the past year and a half or so. That is over and above the issues that some of the more local suppliers have identified with struggling to source equipment such as fibre, fixed wireless or fixed mobile hardware due to the global supply chain issues and some stockists capping the amount that can be ordered.

We have stepped in and offered greater flexibility to the delivery timescales for the voucher scheme-led solutions if the supplier can demonstrate that they are experiencing such issues. However, it is clear that they are all grappling with those macroeconomic frustrations, some of which are fixable right now. They could be fixed with, for example, visas that are specific to particular industries or particular skill sets.

**Michelle Thomson:** Absolutely. I know that you have raised that matter on a number of occasions.

**Gordon MacDonald (Edinburgh Pentlands) (SNP):** Good morning, cabinet secretary. I will ask you about project gigabit. The UK Government’s £5 billion was set aside for the hardest-to-reach 20 per cent of the population. The UK Parliament Public Accounts Committee highlighted in a report that the UK Government Department for Digital, Culture, Media and Sport had allocated only £1.2 billion of that £5 billion, had not awarded any new contracts and

“wanted to ensure that taxpayer money was not wasted, and that public funding was used only when absolutely needed.”

Do you share the Public Accounts Committee’s concern that the UK Government’s approach to rolling out project gigabit

“risks perpetuating digital inequality across the UK”?

**Kate Forbes:** The way in which it is being approached at the moment creates a massive risk of that. To add to the criticisms that you have identified, there has also been criticism that the commitment has been watered down and that it is now a commitment to providing nationwide gigabit coverage by 2030, with the aim being to reach 99 per cent of properties. Based on the UK Government’s approach and the arbitrary cost cap of £7,000 per premises, we know that that means that connections will be secured only to the easiest-to-reach and most commercially valuable properties.

If the UK Government simply takes the approach of connecting the easiest-to-reach properties, it is inevitable that properties in hard-to-reach constituencies such as mine and Alexander Burnett’s, and other members’ rural constituencies, will lose out. We can see in the UK Government minister’s response that if the focus is on the hardest-to-reach properties, it will be at the expense of easy-to-reach properties in England. The whole point is to reduce digital exclusion and create a level playing field, rather than exacerbate the divide.

Fundamentally, we need a change. It is not necessarily a question of providing additional funding because £5 billion is available. It is not a case of providing more money, but of believing that we must connect our islands, the most rural peninsulas, and the houses that are down the beaten track that cannot be connected for anything less than £7,000.

**Gordon MacDonald:** Regarding that figure of £7,000, the Public Accounts Committee said that rural and remote areas should receive

“significantly increased investment on the basis that the commercial sector will be unlikely to be able to fill the gap.”

Given that we need to significantly increase the investment in order to cover the hardest-to-reach

20 per cent, what discussions have you had with the UK Government recently about that? Is there any sign of movement on the issue?

**Kate Forbes:** Such is my concern about the issue that I raise it with UK Government ministers, whoever they are, whenever I meet them. Whenever we end up on a visit together or whatever, I raise the issue. I have raised it with the minister for levelling up and, obviously, the digital minister, and I will keep hammering home my point.

For me, the situation is binary. If the cost cap remains as low as it is, the UK Government will, in effect, be excluding the properties that have the most to gain from superfast broadband. With R100, we have taken the approach of starting with the hardest to reach and working backwards. We are willing to invest the funding, but if we want to finish the job, ultimately, the UK Government will have to take a more flexible approach. I do not think that it is appropriate to say that connecting an island comes at the expense of connecting a town in England. It is fundamentally different.

If you would like to hear about the official discussions, I am sure that Robbie Drummond could come in, but I certainly raise the issue whenever an unsuspecting UK Government minister and I end up at an event together.

**The Convener:** Would it be possible for you, either today or in writing, to give us an estimate of how many households are likely to be impacted by the £7,000 cap? Do you already have that information? Would you be able to share it with us?

**Kate Forbes:** We will do our level best to do that. The information might be in the form of percentages, rather than absolute figures, but we will do our level best to give you as much information as possible.

**The Convener:** That is helpful. Do you have any comments on Ofcom? You talked about inequalities in the current funding system. I understand that Ofcom published its Scottish report in December last year. How does Ofcom fit into the situation that we face in Scotland? What does it contribute?

**Kate Forbes:** Ofcom is vital in that system because it determines the criteria for the services that are delivered. However, it certainly has no role in setting the parameters for project gigabit, because its job is to regulate and establish standards when it comes to UK Government investment and so on. I assume that your question was more about the generality of its role rather than one about its specific—

**The Convener:** We understand the role of Ofcom, but in the discussions on Scotland's

getting a deal that works for us, is the information provided by Ofcom helpful? Is it something that it takes into consideration? It produces a Scottish report. Is it part of its remit to look at where the inequalities in delivery are in the UK?

**Kate Forbes:** It cannot determine how money from project gigabit is spent. Therefore, there is a limit to its role, but it has an important role and an objective on equality. However, its role is limited in the sense that it cannot determine how Government funding is spent. For example, it determined criteria for services that were delivered under the UK Government's broadband universal service obligation. Therefore, it has a role in that regard, but that role is limited with regard to how UK Government funding is spent.

**The Convener:** It is certainly limited with regard to the politics of the situation, but the information that it provides can help to support some of the cases that have been made today.

**Kate Forbes:** Yes.

**The Convener:** Thank you for attending the evidence session, cabinet secretary. That brings us to the end of the meeting. We will now move into private session.

10:42

*Meeting continued in private until 10:53.*





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