

T: 0300 244 4000  
E: scottish.ministers@gov.scot

Edward Mountain MSP  
Convener  
Rural Economy and Connectivity Committee  
Scottish Parliament  
Email: rec.committee@parliament.scot

30 September 2020

Dear Convener,

I would like to thank the Committee for their time on 19 August, and for allowing me to provide an update on the Reaching 100% (R100) contracts, as well as the Scottish Broadband Voucher Scheme (SBVS) and the Scottish 4G Infill (S4GI) programme. We are delivering real progress towards our 100% superfast broadband commitment, and indeed exceeding that with extensive gigabit capable fibre deployment under R100, and I was pleased to have the opportunity to share some of the detail with you all.

I note your request for further information on a number of matters and I am more than happy to provide that detail below.

### **The number of houses to be connected in the central and south lots contracts?**

The R100 contracts are central to our 100% commitment and, whilst progress in the £384 million North lot has unfortunately been delayed by Gigaclear's legal challenge, which has now been dismissed, we have already seen work get underway in both the £83 million Central lot and the £133 million South lot. Prior to work on the ground commencing, we issued BT with an updated intervention area for both contracts, which took account of higher than anticipated commercial build.

Based on these updated figures, there are now around **41,000 premises** in the intervention area for the Central lot, of which just over **32,000** will receive a connection through the R100 contract with around a further 4,700 to be delivered commercially. This leaves around **4,000 premises** being eligible for the main Scottish Broadband Voucher Scheme voucher – worth up to £5,000 per eligible domestic or business premises.

In the South lot, there are now around **22,000 premises** in the updated intervention area. BT has indicated that they will build to around **21,000** of these through the R100 contract with around a further 800 to be delivered commercially. This leaves just fewer than **200 premises** eligible for the main voucher (£5,000 per premises) through the SBVS.

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

While we have contracts in place for delivery in the Central and South Scotland lots, it is worth noting that commercial build plans can and, indeed, do change. There are agreed monitoring plans in place with each commercial provider that will allow us to monitor their future build plans, with updates to be received from suppliers regularly throughout the year and any changes will be reflected in the online address checker. Should any premises subsequently fall out of commercial build plans, they will then become eligible for a voucher through the SBVS.

### **The estimated costs of the interim voucher scheme in financial years 2020-21 and 2021-22? The intended beneficiary group for interim vouchers or vouchers?**

The costs associated with the interim portion of the SBVS, which is a demand-led scheme, will ultimately be dependent on how many applicants are eligible for a voucher and how many of those choose to take up and deploy their voucher. Evidence of take-up from similar schemes across the UK indicates take-up for broadband vouchers can be relatively low.

For the interim voucher, we have modelled take-up at between 4%-8% over two financial years. In 2020/21, because of commencement in the second half of the financial year, we expect the interim portion of the SBVS to cost between £427,000 and £671,000. In 2021/22, we expect it to cost in the region of £749,000 to £1.2 million.

The interim voucher is intended for use for premises where we know that a minimum of a superfast broadband roll-out is planned, but unlikely to be delivered until after 31 December 2021; offering a subsidy worth up to £400 to deliver an earlier connection. We will also ensure that those in the most difficult-to-reach locations can secure vital connectivity by providing an additional subsidy of £250 where necessary, raising the total to £650 per premises in such locations. This will not prevent the deployment of the planned R100 intervention through the contracts – for example, where a gigabit per second capable fibre to the premises build is ultimately scheduled under the R100 programme. However, the interim voucher will allow access to an interim superfast service using alternative technologies, while the build on the longer term solution is undertaken.

### **Can you also provide the details of premises receiving access through the commercial build?**

Figures provided in the *Reaching 100% Programme – Public Consultation Report (Revised)* show that there are 2,524,440 premises in Scotland that are already capable of accessing superfast broadband. It also shows that there are 81,393 premises classified as “Under Review”. This includes premises where a commercial provider has indicated their intention to build a commercial solution to that premises. By keeping these premises as “Under Review” for State Aid purposes, it allows us the flexibility to bring these premises back into scope for the R100 programme should a commercial solution fail to transpire.

Continued expansion of commercial coverage across Scotland has a key role to play in supporting our 100% superfast broadband commitment. This is why we made the decision to offer 10 years of non-domestic rates’ relief on newly laid and lit fibre to encourage new infrastructure investment, and I have been very encouraged by the plans emerging from commercial suppliers already operating in Scotland.

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

St Andrew’s House, Regent Road, Edinburgh EH1 3DG  
[www.gov.scot](http://www.gov.scot)



Accredited  
Until 2020



For example, at the end of July, Openreach outlined plans to make Gigabit-capable full fibre broadband available to more than 250,000 homes and businesses in 60 towns, villages and rural areas across Scotland. At the beginning of August, CityFibre announced that they had surpassed their milestone target of 17,500 premises in Stirling, making it Scotland's first full-fibre connected city and have just announced further investment in Renfrewshire. Virgin Media recently confirmed that further network expansion is now underway as part of their £3 billion Project Lightning (a UK-wide programme), which will increase their fibre coverage footprint in Scotland to around 46%.

We are also seeing plans emerging from operators new to Scotland. As a result of their engagement throughout the R100 procurement process, France-based operator Axione has now indicated its intention to proceed with commercial delivery of fibre broadband in selected areas across Scotland.

### **The information consumers will see on the online checker under various scenarios?**

Of course, the three distinct strands of activity that make up our commitment to deliver 100% superfast broadband access mean that there is potentially a lot of information for the public to process. One of the criticisms of the previous online checker was that the information provided by Openreach was postcode based and therefore not premises specific. Our new online checker provides information of a much more granular nature, at premises level, giving enquirers far greater clarity as to what is available and when. Therefore, having entered their details, enquirers will see one of seven possible scenarios, as listed below. The associated messaging for each of the scenarios is included as an appendix to this letter.

Scenario	Web Scenario Description
1	In intervention area, build expected by end of 2021
2	In intervention area: build expected after 2021 - eligible for interim voucher ( <i>central and south only</i> )
3	North lot, sub 30mbps, no planned build - eligible for SBVS main voucher*
4	South and Central lots, in intervention area: no planned build OR not in intervention area - eligible for SBVS main voucher
5	Commercial: already connected
6	Commercial: planned build
7	DSSB HIE remaining build $\geq$ 24mbps

\*This scenario will be removed once the contract is signed and build plans are finalised for the North lot.

### **The source of the database of addresses for the voucher scheme and how issues with missing addresses in this database and associated databases are being addressed?**

The address data we have used to inform the new online checker comes from an Ordnance Survey product called AddressBase. AddressBase is updated every six weeks by Ordnance Survey in relation to new premises built/created and old premises removed. Where possible it matches Local Authority address records with Royal Mail Postcode Address File data. There are a small number of cases where AddressBase has been unable to match the two records. As a result, the address displayed on the checker may look 'incorrect' to the user, as it is listed not as the familiar Royal Mail address, but as the Local Authority address. This

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)



is still technically the correct address, but the user may not recognise it, as it is not how it would appear on any mail they receive, for example.

## **A list of the 40 sites which are part of the 4G infill programme and their stage of development?**

Whilst universal broadband provision is obviously vital for Scotland, particularly in light of the impacts of the COVID-19 pandemic and our economic recovery going forward, good quality mobile connectivity is equally important for many, particularly in more remote and rural parts of the country.

The Scottish Government is publishing regular progress updates on the S4GI programme (most recently on 16 September), on a site-by-site basis, on our website at <https://www.gov.scot/publications/scottish-4g-infill-programme-progress-update/>, and a map showing the site locations is also available at this link.

## **Lessons learned on the 4G infill programme and progress so far towards Scotland's 5G strategy?**

From our perspective, it is regrettable that we have had to remove so many candidate sites from the programme. For the vast majority of sites, this was due to lack of interest in using the sites by mobile network operators. This is because they considered that even with all capital costs subsidised, the sites would still be commercially unviable. This makes it clear that industry commitment is paramount, and without it, a solution cannot be delivered. Furthermore, one site – at Pennan – was refused planning permission by the Local Authority. This reiterates that there are many factors at play when solving mobile coverage problems, any of which can threaten the viability of delivering a solution to any given area. We are in active dialogue with DCMS's Shared Rural Network team to ensure that they take into account of our experiences which will be very relevant to the delivery of their programme.

The Scotland 5G Centre has been making considerable progress with its three "Wave 1" projects, as follows:

The Wave-1-Rural Testbed facility will, in the first instance, be at two locations in Scotland: the Orkney Islands and the within the area of the Loch Lomond and the Trossachs National Park. The key focus has been planning, design and procurement for the deployment of the 5G rural testbed. Site surveys, radio planning, specification and modelling of Loch Lomond and Trossachs Area and Orkney have been carried out. While civil works had started for installation of backhaul, with fibre already placed for the Loch Lomond region, this has been paused until COVID restrictions are lifted, estimated September 2020. A key unique mitigation action to continue progress and support home working is the creation of table top 5G mini networks complying with safety and regulations.

The DCMS 5G New Thinking project which is a £8.5M project over 24 months and £5M awarded from DCMS has formally started and is led by Cisco with S5GC and University of Strathclyde as partners. This project will bring added value to the Wave 1 rural testbed as it will look at new business models and shared spectrum networks for the provision of mobile and fixed wireless access in rural areas.

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

St Andrew's House, Regent Road, Edinburgh EH1 3DG  
[www.gov.scot](http://www.gov.scot)



Accredited  
Until 2020



The Wave-1-Urban testbed, delivered by University of Glasgow, will focus on showing the 5G capability of Self-Organising Networks in an urban environment designed to make the planning, configuration, management, optimisation and healing of mobile networks simpler and faster, minimising human intervention, improving system performance, maximising return on investment and delivering better services. It will also open up new 5G use cases for urban scenarios, in collaboration with partners from academia and industry.

The team have piloted a range of use cases examples ahead of the testbed activation when they will be able to make full use of all 5G capabilities. The use cases include: **Robotic Control** focusing on remote control of a robotic arm over low latency 5G; **RFID for Space Management; Virtual Reality Training** to enable live remote training of students and personnel; **Augmented Reality Wayfinding** to guide users (including tourists) around the university. It will be scaled up for use in tourism and real time crowd management for fringe events like COP26; **blockchain testbed** is under deployment and it will utilise the S5GC testbed.

The team at the University of Glasgow has also secured approval of the Industrial Doctoral Training Centre (total funding approximately £4 million) for 14 international rate studentships (worth £145K+ each) this year, 14 next year and 6+ following years. The industrial collaborators on this include Nokia, NXP, Leonardo, Digital Catapult and 5 other SMEs AI Drivers, AI Biotech, Stech, SweGaN & BRD.

Installation of the 5G Urban testbed on the University of Glasgow campus has recommenced following easing of lockdown and a go-live date for the new testbed and associated control room is end of October 2020.

The third Wave 1 Project, Infralink, led by Scottish Futures Trust (SFT), will create tools to help the public and private sector re-engage and open up the discussion about improving connectivity across Scotland. The branding and naming of the project to Infralink has completed and creation of a first tranche of engagement material which includes: a 'pitch pack' setting out the objectives of the programme, the deliverables, the benefits, the expectations from all parties; a high level view of the project plan; template memorandum of agreement for use with "Group 1" – a pilot group of public sector participants; and, appropriate comms materials. The delivery method for the asset register has been established and will be via Connected Places Catapult. Commencement and conclusion of a legal procurement process to support the creation of a set of the Scottish standardised documents and state aid considerations.

*Kind regards*



Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

St Andrew's House, Regent Road, Edinburgh EH1 3DG  
[www.gov.scot](http://www.gov.scot)



Accredited  
Until 2020



## R100 website - Online checker scenarios

<p><b>SCENARIO ONE – IN INTERVENTION AREA, BUILD EXPECTED BY END OF 2021</b></p> <p>Good news.</p> <p><b>**Your address should be able to get superfast broadband by the end of 2021.**</b></p> <p>That's because a new superfast connection is being built in your area. It's part of the Scottish Government's broadband improvement scheme. Exciting stuff.</p> <p>The new connection will mean your community can get faster internet speeds. That'll make it easier to videocall loved ones, watch shows online, work from home, and more – without any hiccups.</p> <p>What happens once it's built?</p> <p>Easy – if you'd like a faster connection, you'll be able to choose a superfast service from an internet provider. You might even be able to upgrade to superfast with the internet provider you've already got.</p> <p>Until then, you can pop back to this page now and again to see when superfast broadband has reached your area.</p> <p>Still got questions? Here are some handy [Frequently Asked Questions (FAQs)](<a href="https://scotlandsuperfast.com/factsheets-and-faqs/faqs/">https://scotlandsuperfast.com/factsheets-and-faqs/faqs/</a>)</p>
<p><b>SCENARIO TWO - IN INTERVENTION AREA, BUILD EXPECTED AFTER 2021 (central and south only)</b></p> <p>Good news.</p> <p>A new superfast connection is being built in your area. It's part of the Scottish Government's broadband improvement scheme. Exciting stuff.</p> <p>Your connection will be delivered after the end of 2021, based on the current engineering schedule.</p> <p>The new connection will mean your address can get faster internet speeds. That'll make it easier to videocall loved ones, watch shows online, work from home, and more – without any hiccups.</p> <p>What about between now and then?</p> <p>Well here's more good news: you may be able to get a one-off, £400 voucher from the Scottish Government. You can use it for the cost of fitting a faster commercial broadband supply in the meantime by an approved supplier. Think of this as a</p>

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

temporary way to speed things up until the permanent connection is up and running. Options might include things like satellite broadband and more.

You can find out more about these plans, options available to you, and how to apply for a voucher [here](<https://scotlandsuperfast.com/how-can-i-get-it/voucher-scheme/>)

Still got questions? Here are some handy [Frequently Asked Questions (FAQs)](<https://scotlandsuperfast.com/factsheets-and-faqs/faqs/>)

### **SCENARIO THREE - NORTH LOT, SUB 30mbps, NO PLANNED BUILD – ELIGIBLE FOR SBVS MAIN VOUCHER**

There aren't plans to build a faster connection in your area at the moment. The Scottish Government is finalising plans for part of its' broadband improvement scheme which will provide superfast broadband to a large number of premises across the north of Scotland, and until plans/contracts are finalised it is not possible to confirm whether your address will be included in these plans. The good news is there are other options to speed things up at your address, and **you may be able to get a superfast broadband voucher.**

Being able to get faster internet speeds can make it easier to videocall loved ones, watch shows online, work from home, and more – without any hiccups.

That's why you may currently be able to get up to £5000 from the Scottish Government in the form of a superfast broadband voucher. You can use it for the cost of fitting a new, faster commercial broadband supply by an approved supplier. Options could include things like fibre, wireless and more.

You should note that if you choose to secure a superfast connection through the main voucher scheme, your address will not be included in our wider superfast broadband plans.

You can find out more about the options available to you at this time and how to apply for a voucher [here](<https://scotlandsuperfast.com/how-can-i-get-it/voucher-scheme/>)

Still got questions? Here are some handy [Frequently Asked Questions (FAQs)](<https://scotlandsuperfast.com/factsheets-and-faqs/faqs/>)

### **SCENARIO FOUR - SOUTH & CENTRAL LOTS, IN INTERVENTION AREA: NO PLANNED BUILD OR NOT IN INTERVENTION AREA– ELIGIBLE FOR SBVS MAIN VOUCHER**

There aren't plans to build a faster connection in your area at the moment. But the good news is there are other options to speed things up at your address. **You may be able to get a superfast broadband voucher.**

Being able to get faster internet speeds can make it easier to videocall loved ones, watch shows online, work from home, and more – without any hiccups.

That's why you may be able to get up to £5000 from the Scottish Government in the form of a superfast broadband voucher. You can use it for the cost of fitting a new,

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

faster commercial broadband supply by an approved supplier. Options could include things like fibre, wireless and more.

You can find out more about options available to you and how to apply for a voucher [here](<https://scotlandsuperfast.com/how-can-i-get-it/voucher-scheme/>)

Still got questions? Here are some handy [Frequently Asked Questions (FAQs)](<https://scotlandsuperfast.com/factsheets-and-faqs/faqs/>)

## **SCENARIO FIVE – COMMERCIAL: ALREADY CONNECTED**

Great news.

**\*\*Your address can now get superfast broadband.\*\***

The Scottish Government has been informed that a superfast connection has been built in your area. Exciting times.

The connection means your address can get faster internet speeds. That'll make it easier to videocall loved ones, watch shows online, work from home, and more – without any hiccups.

What happens now?

Easy – if you'd like a faster connection, you can choose superfast broadband from an internet service provider. You might even be able to upgrade to superfast with the internet service provider you've already got. Organisations like Ofcom can also help you find the best deal. Visit [boostyourbroadband.com](<https://www.boostyourbroadband.com/>)

And [here's](<https://scotlandsuperfast.com/how-can-i-get-it/commercial-operators>) the list of commercial operators who have informed the Scottish Government of which premises they can provide superfast broadband services to.

Still got questions? Here are some handy [Frequently Asked Questions (FAQs)](<https://scotlandsuperfast.com/factsheets-and-faqs/faqs/>)

## **SCENARIO SIX – COMMERCIAL PLANNED BUILD**

Good news.

**\*\*The Scottish Government has been informed that a commercial broadband provider plans to build a superfast connection in your area.\*\***

The new connection will mean your address can get faster internet speeds. That'll make it easier to videocall loved ones, watch shows online, work from home, and more – without any hiccups.

If you haven't received a connection by 1 July 2021, you may be able to get a one-off [£400](<https://www.scotlandsuperfast.com/how-can-i-get-it/voucher-scheme/>) voucher from the Scottish Government. You can use it for fitting a faster commercial broadband supply in the meantime by an approved supplier. Think of this as a

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)



temporary way to speed things up until the permanent connection is up and running. Options might include things like satellite broadband and more.

[Here](https://www.scotlandsuperfast.com/how-can-i-get-it/commercial-operators/) are the suppliers that we gather information from.

Still got questions? Here are some handy [Frequently Asked Questions (FAQs)](https://scotlandsuperfast.com/factsheets-and-faqs/faqs/)

### **SCENARIO SEVEN - DSSB HIE REMAINING BUILD $\geq$ 24mbps**

Good news.

**\*\*A new superfast connection is being built in your area.\*\*** It's part of the Digital Scotland Superfast Broadband programme, being delivered in your area by Highlands and Islands Enterprise.

Your connection is planned for delivery by the end of 2020 based on the current engineering schedule. Find out more about the programme at [www.hie.co.uk/digital](www.hie.co.uk/digital)

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See [www.lobbying.scot](http://www.lobbying.scot)

St Andrew's House, Regent Road, Edinburgh EH1 3DG  
[www.gov.scot](http://www.gov.scot)



Accredited  
Until 2020

