Island Digital Connectivity Resilience

SIF Member Meeting – Mon 24th November 2:00-3.30pm

Digital connectivity is fundamental to how islands operate and function, yet storms, power cuts and subsea cable damage continue to expose significant vulnerabilities. The session brought together the Scottish Government (SG), UK Government (UKG), Openreach and Shared Rural Network (SRN) to discuss potential solutions to some of the challenges in islands as well as how, Government, Openreach, network providers and communities can be better prepared.

SUMMARY

- **Broadband** rollout, jointly delivered by SG and UKG includes 4 key programmes – Digital Scotland Superfast Broadband, Scottish 4G Infill, R100, and Project Gigabit.
- R100 will run up to 2028 and includes the Scottish Broadband Voucher Scheme (up to £5,000 for alternative solutions such as wireless/satellite). Info and updates at https://gov.scot/digitalconnectivity
- **Shared Rural Network (SRN)** is a UK-wide partnership to improve rural 4G through both operator-funded and publicly funded elements. Partial Not Spots (PNS) are complete and Total Not Spots (TNS) rollout ongoing to 2027. Info and updates at https://srn.org.uk/
- **Telecommunication Resilience (UKG)**: Core network is highly resilient (up to 5 days or more generator back up), Mobile masts typically only 1 hour back up (critical sites have 4-8 hours); 999 roaming available but not universally, some providers have emergency response teams with Cells of Wheels, generators and satellite connection but limited in number.
- **Ongoing improvements**: Ofcom is reviewing minimum power back-up requirements; and DSIT is exploring better access to real-time data from energy providers; and developing a joint emergency framework for isolated communities.
- **Future developments**: Emergency Services Network (ESN) in place by 2029, 4G-based and requiring 5–7-day backup at 3,000 EE masts; satellite to phone back up service; householder battery backup (currently prioritised for vulnerable users). Info and updates on preparedness https://prepare.campaign.gov.uk/
- **PSTN**: legacy copper network will be fully retired by Jan 2027 and while fibre offers improved performance, is doesn't give the same level of power outage resilience, with householders needing battery back-up units.

FULL NOTE OF MEETING

1.Broadband Rollout in the Islands: Sarah Eynon, Scottish Government Broadband

There is a strong history of telecom public sector investment in Scotland and while it is not an area devolved by the UK Government (UKG) to the Scottish Government (SG), since 2011 there has been a collaborative arrangement in place between SG and UKG to ensure that connectivity is extended across Scotland.

- **Investment programmes** - two programmes, Digital Scotland Superfast Broadband (DSSB) and Scottish 4G infill, are complete, and two are in progress, R100 and Project Gigabit. Each programme has built on the previous one and on commercial investment, with public investment only allocated to areas with no clear plans for commercial sector investment. The best way to keep up to date is through the Scottish Government's broadband address checker, which provides detailed information at a premises level: https://gov.scot/digitalconnectivity

- **R100** has been running for 5 years and was divided into 3 contracts - north, central and south – which are being delivered by Openreach. The majority of Scottish islands fall within the north contract. It includes delivery of the R100 Scottish Broadband Voucher Scheme (SBVS) which provides up to £5,000 to enable premises not included in the contracts to access alternative connectivity mechanisms, for example, fixed wireless access to satellite.

  As well as the individual property connections delivered (over 90,000 so far at November 2025) the R100 programme has been key in building the network of infrastructure across rural and island Scotland to enable wider connectivity. Challenging terrain including water and vast areas of land has made this some of the most complex delivery in Europe, involving 15,000,000 metres of cable and ducting, agreements for over 10,000 wayleaves to access rural land, and 220 kilometres of subsea cable. This work supports wider broadband delivery in Scotland both now and in the future. The programme is due to run until 2028 and all work is on track.

- **Project Gigabit in Scotland** - aims to achieve the UKG target of 99% UK coverage at gigabit speeds by 2032. SG is managing the first two regional contracts in this programme, both awarded to GoFibre, one covering East Lothian and the Scottish Borders and another for the North East, on behalf of UKG. Orkney and Shetland have an ongoing procurement, and the conclusion of that exercise will be announced in the next few months. SG and UKG are also jointly managing a wider contract for the rest of Scotland (Type C, Call off 6), which includes some of the hardest-to-reach communities in the Highlands, Na h-Eileanan an Iar, Argyll and Bute, as well as parts of Central and South of Scotland.

- **Challenges and opportunities of island deployment –** a combination of roads, weather, tourism (particularly in relation to ferry and accommodation availability), and

landscape and wildlife considerations can create challenges and impacts on both the infrastructure rollout and local communities. Co-ordination, working with suppliers and close collaboration with local communities has been key to success, helping to overcome obstacles and in extending the reach of the programme.

- **Fair Isle** – fewer than 50 properties and presenting a real challenge due to distances involved. A subsea cable is in place between Orkney and Shetland but using a splinter off the main cable to cover such a long distance hadn't been tried before. Openreach developed a world-first in terms of taking technology that was normally used to deliver on land to many homes and created a signal booster from the subsea cable that could overcome the distance of 110 km and transmit a continuous full fibre signal. The project has been a major success and has brought improved resilience and opportunities to the community.

- **Papa Westray** – a great example of working together, delivered as a voucher scheme project where thanks to the community and their innovative and creative thinking, drinking water pipes were used to deliver the fibre cable and now every resident and business in the island receives speeds comparable to the R100 contracts.

- **Wireless** – another key part of connectivity is wireless, and the Scottish 4G Infill (SG4I) programme, which started in 2017, was one of the first public sector interventions in the general space for 4G. Initially delivering 28 masts, this was extended to 55 masts by the end of the programme. SG4I was developed and delivered by SG, Scottish Futures Trust, and the contractor, WHP Telecoms. The location and design of masts were bespoke, driven by communities and built to work with local suppliers and to overcome local challenges e.g. access to power, hard to reach locations etc. 17 have been built in islands and the learning has been shared with the Shared Rural Network.

- **Emergency cover** – highlighted in the evaluation of the S4GI project has been its impact on improved access to doctors, hospitals and emergency services as well as the positive impact on businesses and daily life in general.

- **Digital Strategy** – It was reported that investment in telecoms over the last 10 years has been viewed as one of the biggest success stories for SG and for the people of Scotland. It's a critical tool for small businesses to grow, flexibility for home working and ensuring access to educational and health resources. The new, recently published, Scottish Government Digital Strategy clearly sets out the ambition to build a nation where digital connects people to opportunities, creates economic growth and delivers improved public services.

2. Shared Rural Network (SRN): Lucie Smith, Mova

- **About:** working with UKG, SG and Mobile Network Operators (MNOs), the SRN is focused on improving rural outdoor 4G coverage across all four Nations of the UK, and is broadly split into two parts: an industry funded element which completed last

year, and was funded and managed by the mobile operators and focused on areas where there was some 4G coverage but not coverage from all operators, Partial Not Spots (PNS), and the publicly funded element.

The publicly funded element is then further split into two parts. The first part has taken place in England, Scotland and Wales using existing Home Office emergency services infrastructure and upgrading it to provide commercial access for all operators, and the second part, just in Scotland, where the UK Government is providing further funding to install new masts where there is no coverage at all, in areas called Total Not Spots (TNS).

- **Rural focus:** SRN is focussed on the most rural places, considering where people live, where visitors go, where there are roads etc. It was reported that since 2020 it has hit and exceeded the target early of improving 4G coverage for 95% of the UK.

- **Progress:** work on the Partial Not Spot (PNS) element of the SRN programme which was funded and delivered by the mobile operators is now complete and the first of the Total Not Spot (TNS), publicly funded sites, those in areas where there's no coverage, went live last year, with more to come.

- **Impact:** going from no or partial coverage to having 4G from all four operators provides significant benefits to businesses, residents, tourists and access to services. Although the programme will not deliver 100% coverage from all operators everywhere in Scotland, it is anticipated that people should really feel a difference over the over the life cycle of the programme, as the improved coverage is delivered.

- **Future sites:** SRN has worked closely with communities to understand which of the proposed sites would be most beneficial and an updates map of revised sites to be delivered by the end of the programme in January 2027 was published mid-2025. Full details are on SRN's website and maps shared show forecast coverage for all Local Authority areas - navy blue areas forecast to have coverage from all four networks, yellow areas some coverage but not from all networks and the red with no coverage.

3. Telecommunication Resilience: Rob Willis, UKG resilience, Department for Science Innovation & Technology (DSIT)

The positive progress on broadband and mobile connectivity is welcome, and this presentation's focus was on the resilience within the sector when services are disrupted due to severe weather and subsea cable breaks.

- **About**: the infrastructure is designed to have high levels of resilience, but cable damage, technical faults and severe weather can cause problems in terms of resilience. The UKG works closely with communication providers and Ofcom, which is the independent regulator, to try and achieve high levels of resilience and the speaker was keen to reassure the audience that it is fully aware of the impact on island

communities when services are disrupted.

The pandemic was a game changer in terms of how people now rely on connectivity for every day, whether it's keeping in touch with family and friends, online banking, shopping, conducting businesses and services, etc, and when services are disrupted, it has a direct impact. The impact around access to emergency and lifeline services is of particular concern both in terms of people being unable to contact 999 and in communication between services.

3.1 Resilience mitigations already in place to help cope with disruption:

- **Core network resilience:** the whole phone network is based around a core network and local access networks. Local access networks include your home, domestic routers, the street cabinet and mobile masts, whereas the core network is based on the telephone exchanges, switch sites etc that enable the whole system to function. It was reported that the core network is resilient and very rarely fails. It is very power resilient with up to five days generative fuel available and can be topped up with fuel if needed for longer periods. If a local network goes down, whether that's your home or the nearest mobile phone mast, the core network will still be up and running and individuals are able to connect again once the local fault is corrected.

- **Mobile Network:** the mobile phone network does have some resilience, able to operate for about an hour without power. At more critical sites, there is back-up power which can last 4 to 8 hours.

- **Fixed line resilience/PSTN Migration:** battery backup units, already free of charge to vulnerable customers, are improving and now able to last 4-7 hours if the power goes off which exceeds the one-hour regulatory minimum and will support migration away from the failing PSTN.

- **Emergency call resilience:** The 999/112 emergency call system is highly resilient, with robust infrastructure but local network availability during a power outage can leave people without access to the service. 999 call mobile roaming means if the network mast goes down, it will roam to the nearest mast to get a connection, but it was acknowledged this isn't available everywhere.

- **Emergency response teams:** some communication providers have emergency response teams that can deploy Cells on Wheels (CoWs) and tow-to-site generators and satellite capabilities to restore coverage in affected areas, although these solutions are fairly limited in numbers.

- **Sector preparedness and coordination:** regular reviews and exercises are carried out to assess resilience. Exercise Mighty Oak was a national power outage exercise that took place in 2023 and involved every UK government department to increase awareness and readiness for national-scale incidents. Industry also engaged on this,

including telecommunications.

3.2 Current work to reduce impacts of storms:

- **Minimum power back-up and Ofcom's review:** Ofcom is investigating historical data and back up arrangements for the mobile and fixed network, particularly in areas more vulnerable to storms and outages.

- **Real-time data:** exploring better collaboration with the energy sector to access real-time fault data to help operators deploy emergency responses more quickly and efficiently to the sites in need.

- **Joint emergency response framework:** to enable communication and escalation in specific cases where there are problems and communities are isolated, or at critical sites such as an airport or hospital.

3.3 Other developments likely to reduce risk improve resilience:

- **Emergency Services Network (ESN):** should be developed by 2029 and replace Airwave which is similar to a radio platform that enables the emergency services to communicate within their service or other emergency services as well. The new system will be based on 4G, making it critical that mobile phone masts are fully power resilient. 3,000 EE masts will have ensured 5-7 days of back up power across the UK.

- **Satellite Direct-to Device Connectivity:** expected to have a key role in future proofing connectivity resilience. The speaker explained it is currently possible to connect to a satellite and get through to an Apple or Google call centre which can put you in touch with 999. From 2026, O2, Vodafone and Three will be rolling out a direct-to-device satellite service which would provide mobile coverage when terrestrial networks are down. If there was no signal from your mobile phone mast you would get an automatic connection to a satellite.

- **Battery technology:** full fibre is extremely useful but there is only scope for higher resilience against domestic power cuts if accompanied by a long-lasting battery in a customer's premise. These are available but in short supply and are currently prioritised for vulnerable customers, who are eligible to request one from their provider. It is hoped in time this will be rolled out to everybody. They are already available through EE and cost around £85.

3.4 How else to future proof preparedness and resilience:

- **Public funding:** much will depend on funding. The cost of large-scale resilience upgrades is significant, and it was noted Government has already made a significant contribution. If a strong case could be made options could include some of those above around satellite provision and back batteries at vulnerable locations. The

audience was told that any response and solution would need to be proportionate.

- **Prioritisation:** formally allowing prioritisation of critical telecoms assets during power reconnections would help but the point was made that it may have unintended consequences for other areas e.g. water, and communities also need to be prioritised.

- **High Altitude Platforms (HAPS):** in the future technology may enable HAPS such as unmanned aircraft, balloons, kits etc, to provide mobile connections in the sky rather than from a mast.

- **Increasing public preparedness:** in light of the power outage in Spain and Portugal, the Government believes increasing public preparedness for disruption may the most useful. For example, making sure people know what to expect and how to stay connected during a power outage. This is covered as part of the Prepared campaign launched by the Cabinet Office 2024. https://prepare.campaign.gov.uk

4. PSTN Switch off: John Livermore, Openreach

The speaker works on the All IP programme, also known as the PSTN switch off.

- **Stakeholder Meetings:** for the last two years the speaker has had regular online user group meetings with all 32 councils in Scotland and has gained a good understanding of the issues. Other stakeholders can join the meetings, and all are encouraged to share ideas and raise any concerns. Members of SIF would be welcome, and the next meeting is planned for **28th January and the speaker will forward an invite -** john.livermore@openreach.co.uk

- **Openreach:** Openreach is not BT. Openreach is an independent supplier to the communication provider world and currently has 690 customers including Sky, BT, Gamma, Vodafone, Talk Talk etc.

  The speaker's role is to reach beyond Openreach customers and speak to their customers, for example, NHS, Local Authorities, Gas, Electricity and Water companies etc, to raise awareness of PSTN and to increase preparedness.

- **PSTN:** is the copper network that was installed by BT and has been around for 50 years, initially invented for voice calls. Over the last 20-25 years, ISDN and then broadband have come on stream. It's a very different world and PSTN hasn't been able to keep up.

  The network is complex. It was similar a situation in electricity and gas a few years ago when there was a lot more choice in provider because there were a lot more companies, the idea being that more competition helps to keep the price down. In telecommunication and broadband, the same thing applies with 690 suppliers to choose from.

It was explained that there were 5,500 physical buildings that are telephone exchanges and of those around 1,000 are considered “parents” and 4,500 “children”, and like a spider’s web, where the parent sits in the middle and reaches out to other exchanges around it.

The equipment, installed by the BT Group in the 1980’s is now over 40 years old and in 2017, it was reviewed and the decision taken that it was becoming impossible to maintain. The replacement is not like for like and works on glass fibre which is faster and can handle more bandwidth for broadband but cannot transmit electricity like copper lines and so will only work in a power cut for the end customer if they have some kind of battery back up from their Communications Provider.

- **Fibre:** as well as BT, Sky and TalkTalk are also wholesalers and have their own equipment, all based on copper. For some years, Openreach has been rolling out fibre to the cabinet, which is a halfway solution where copper is kept in the ground between the green cabinets in the street and the customers premises, whist fibre is then taken from the cabinet to the Telephone Exchange.

  Full fibre means fibre to the premises. The connection inside the premises must be changed by an Openreach engineer to something called an ONT and is effectively sending and receiving light through glass filaments. As previously stated, if there was a power cut, the telephone exchange has diesel generators to carry on working, so you still have a working phone even if there was no power at your premises. Once you move to something that is even part fibre, there is not the same resilience. The exchange still has the generators, and will keep the full fibre lines working, but the customers router and ONT will require power at the customer's end through battery backup units, if supplied by your Communications Provider. There are a lot of advantages of fibre, but it is not a like for like replacement.

- **Switch off:** starting with 16 million lines, there are 3 million lines still to move by the end of January 2027 before the old equipment is switched off.

  It is the customers Communications Provider that decides which option to migrate the customers line to. Where fibre isn’t available or the line has a special service on it such as a telecare device, BT has a wholesale product that can be bought by any of the Communication Providers and will emulate the PSTN. It provides 50 volts which gives some resilience and allows you to keep the same analogue equipment. This is called Pre-Digital Phone Line and wont supply broadband. It is a voice only service. This may be suitable for analogue equipment used by the customer, such as a Telecare device, but it is recommended that you check with your hardware supplier for confirmation. If you do migrate to a Fibre line you will be given a new router in many cases by your supplier, but if you decide to use the analogue adapter on the back of the router to continue to use your analogue equipment that you used on the old exchange, it may not work effectively. Again check with your hardware supplier.

- **Actions to take now:** It was highlighted that it is down to a customer's Communications Provider to move you successfully and safely to something else which will be either full fibre (FTTP) or could be part fibre and part copper (FTTC) or keep you on your copper line, but move it to a different solution in the Telephone Exchange (SKY, TalkTalk, BT). The speaker ran through a check list of what customers still on copper can do now: firstly, know what you've got; audit what have you have on the old system, what have you got on it? what plugs in? where did you buy the equipment from? Then secondly contact the device (hardware) providers and ask if it will continue to work if moved to a fibre solution. For example, if it's an alarm, who did you buy it from? and ask if it will work with a router and if not, what can be done.

  Finally speak to your phone company or broadband provider. The need to have those conversations, particularly for the vulnerable. BT and others have contacted councils to request a data sharing agreement to enable identification of telecare clients. For members of a family or community that are vulnerable, it is possible to contact their phone company and ask that they are registered as someone that needs extra help with moving from the old to new network.

5. Questions & Discussion

- **5.1. Broadband:** points in the chat noted that while progress has been great in laying cables, the actual connections seem to be a while off. The cable was laid in Eigg in 2021 and isn't expected to be connected until 2028 and in the meantime third party access isn't allowed; A question was asked how to find out the timetable and who is the main contact for information. It was again highlighted that while subsea cables have been a game changer for immediate access, they have also introduced unsupported vulnerability to islands.

  Sarah: much of the hard work in laying the cable has been completed upfront and ahead of schedule but not all the connections are live. Turning connections on is based around end users being ready and making sure the final piece of work doesn't need revisited multiple times. The best way to keep up to date is through the SG Digital Connectivity broadband address checker, which provides detailed information at a premises level: https://gov.scot/digitalconnectivity

  Rob: subsea cables are a vital part of the of connectivity and keeping those resilient and secure is a challenge. In Scotland, the majority of breakages to date have been the result of fishing vessels. There is an issue around the radio system in fishing vessels being turned off in certain areas and the DSIT and Cable Owners have been working with the fishing industry to raise awareness and find solutions. Further work is needed and improved enforcement and increased fines are being considered.

  Storm damage is more difficult to mitigate. It would cost billions for cable owners to factor in resilience measures to better protect the cables. Improving preparedness and having local solutions in place if cables do break seems a more proportionate

solution. In Shetland, for example, when the cable broke recently, a second cable, owned by Openreach and used only by BT provided a second resilience cable. Other operators could buy into similar measures. Satellite backhaul is another avenue to be explored.

- **5.2 Project Gigabit in Orkney & Shetland:** A participant was interested to know why there is a delay with the lot 6 Project Gigabit procurement for Orkney and Shetland.

  Sarah: as it remains in the procurement process and going through evaluation, Sarah could not share the reasons for change in the timetable.

- **5.3 Storm Amy – Representative from Tiree Community Council:** the storm knocked out the fibre cable, which meant no 999 calls from most of the island for six days, and it took six weeks for the undersea cable to be fixed and connectivity to be restored. In general, everything said about resilience planning sounds good, but when applied to a real-life situation, it didn't work. The exchange only has a one-hour battery life and the masts, even if they had power, couldn't communicate because of the cable damage. The Vodafone microwave link was also lost, and the participant highlighted the frustration over the lack of partnership working with the local community and the limited information made available to them. There is a lot to be learned from the situation. The question was asked if any of the organisations that had spoken today had carried out a review of the events and if there would be a report that could be shared with islanders. The community council has asked Openreach for information but has received no reply.

  Rob: Rob believed the breakage was caused by the rough seas during the storm but doesn't have the full detail and understood that BT worked hard in getting over to Tiree to provide a satellite connections and other solutions with other providers following. DSIT are planning to **review resilience in 2026 for all UK Islands in the wake of similar incidents and community isolation**.

- **5.4 Telecare, Representative from Isle of Luing Community Trust:** what is being done to drive Telecare operators to both communicate with customers and to standardise something that actually works?

  John & Sarah: the Local Government Digital Office has been working on this for some time, particularly in terms of standardising the software. Colin McFadden and Sharon Hannah suggested as good contacts. **Sarah will send an introductory email between Colin, Sharon Hannah and Colin McFadden. Luing rep to send his email address to John & Sarah.**

- **5.5 Storm Amy, Representative from Isle of Colonsay Community Council:** Colonsay is a small island with a population of around 100. The community was left without mobile phone coverage for a month after Storm Amy and have really struggled to find a contact to let them know the cabinet was damaged or to access

support or updates through telecoms providers. Not having a credible contact point wastes many hours of volunteer time, increases vulnerability and greatly reduces island resilience and the speakers were asked what is being done to improve this, and whether the UKG Resilience Team is the best first point of contact or if there is a SG contact.

Sanday Development Trust representative & SIF director: agreed that action to establish direct lines of communication for island communities would make a massive difference. Customer Service staff often can't help and don't understand the situation or the uniqueness of island challenges and solutions with their information often being wildly inaccurate. It also wastes time and resources for contractors coming to an island when they don't understand the situation beforehand.

Rob: agreed there are a lot of parties and layers involved between operators and infrastructure. The official advice is to contact the provider in the first instance but clearly this hasn't worked. If the community is becoming isolated through lack of communication, then DSIT could potentially help with locating the best contact - telecoms.resilience@dsit.gov.uk
Openreach - Report unsafe or damaged Openreach equipment

Sarah: as telecoms isn't devolved SG doesn't deliver any infrastructure agreements and would be unlikely to have any better contacts than Rob.

- **Storm Amy, Representative Mull Community Council:** Mull was left completely without any communication for a few days after storm Amy and it has been a shock to realise that most of the masts have no back up power. It was noted that a generator can be requested but how can residents do that when all the phone lines are down and maybe the roads are blocked? It would seem more resilient to have backup generators already on site. The panel were asked when the contract to EE to ensure 5-7 days of back-up power would be operative and whether it will cover all islands that are a fragile situation.

- **Rob:** the lack of back-up power is recognised as a key gap in resilience and in theory the EE contract should cover islands, and it will link into the work of Ofcom in developing better back up resilience but is unlikely to solve the issue completely. The Emergency Services Network will be based on 4G mobile phone capable technology and should be in place by 2029. Satellite technology is also evolving quickly and may be a game changer over the next few years.

- **Representative Isle of Luing:** it's encouraging that the generators are getting rolled out to emergency masts, but can communities get more information about where and when this is happening? When there is a storm and the power goes off, many island communities are left with no phone, no mobile and no broadband but if there is a mast with a signal, people could travel to it if needed.

- **Representative Scalpay:** the community is keen to see a new mast installed in the island and has raised the issue with their MP. The map that Lucie shared showed Scaplay in blue, suggesting it has coverage from all 4 operators when in fact it has no signal at all. Between Scaplay and Harris there is a synchronous microwave link which is attached directly from the parent over to the cabinet via a fibre link, but the microwave link has no battery back-up so if the power goes off it shuts down and puts the broadband off too and this also means there is no telephone and no emergency signal. **Participant to follow up with John and Lucie and emphasised the need for continuity of supply, and clear and simple guidance on communication and preparedness.**

6. Additional points & questions from the meeting chat

- **4G Infill:** In the Isle of Luing, the programme used the UK ESN mast location and claimed it as infill. It is not, as it is designed to cover the roads not the villages! We still have no mobile service in the villages.

- **Colonsay:** Sarah outlined the good example from Jura, but this has not been the case in Colonsay – month with no signal at all. Damaged infrastructure, impossible to get contact with contractors to fix/maintain it. There was no emergency coverage (999) for some of the island for a month. It's still not fully up and working.

- **Share Rural Network:** maps presented are inaccurate for Scalpay, Colonsay and Luing.

- **Battery back-up:** back-up from communication providers is not sufficient for remote areas that have outages that can last for days. What is being done to look at solutions or these areas?

- **Communication:** the problem is that the communication providers do not operate the infrastructure. There are multiple layers of contractors and sub-contractors, who maintain/service masts and investigate damage and issues. i.e. MBNL / Ericsson / others. Trying to get an answer from someone, when there is a problem is nigh on impossible.

- **Standards:** what standards do MNOs have to meet during outages? Distribution Network Operators for electricity are fined if outages are over a certain period.

- **Local control:** keeping control locally is key to resilience. It allows the community to decide what level of service/resilience is required and then go about delivering it. As soon as large corporates get involved, control is lost.

- **R100 Voucher Scheme:** funding for households that are not connected/have poor connection was mentioned. How can households access this?

The go-to place is SG's broadband address checker which provides detailed info at a premises level, including voucher eligibility:
Address Checker - https://gov.scot/digitalconnectivity

- **Shetland voucher scheme:** we took advantage of the Scottish Govt voucher scheme and have a community broadband scheme (Shetland Broadband) but this is only a short-term solution, and we need to know that we will be getting full fibre eventually. Shetland Broadband has resilience issues (it goes down in the wind and rain - quite a lot of that in Shetland). Any information would be gratefully received.

- **Businesses**: how are rural/island businesses being catered for in fibre roll-out? Some have not been able to access FTTC in the past and have to find other options for broadband.

- **Sub-sea cables:** how quickly can we expect resilience solutions from Openreach for all islands linked by subsea cables for when cables fail?

- **R100 in Luing:** have to say Luing is now full fibre, and it is brilliant, so we are positive about the R100 rollout. The fibre service does bring other issues, and resilience is the key one for us. Mobile networks do not give us coverage so new ideas are needed to ensure that resilient comms is delivered. If some masts are being fitted with resilient power can their locations be published?

KMC
8 January 2026