



One Gigabit Rural & Island Scotland - the report, recordings and outputs from the 2021vSRP Session on 11th March 2021

Session curated by [Scottish Rural Action](#) and chaired by **Dr Brian Cameron**, Director, Scottish Rural Action.

The Scottish Government set up the Social Renewal Advisory Board (SRAB) as a short term group in June 2020 to make proposals that can renew Scotland once we start to emerge from the pandemic. The Board's primary focus was on reducing poverty and disadvantage, embedding a human-rights based approach to policy-making and advancing equality. It published a report in January 2021 – [If not now, when?](#) - with 20 Calls to Action.

Call to Action 9 of the report addresses the need to end digital exclusion with a summary below:

“We call on the next Scottish Government to set a target to end digital exclusion in the next parliamentary term...more investment – and more proactive and tailored approaches – will be needed if we are to meet the needs of those furthest removed and facing a wide range of barriers.”

The purpose of the Scottish Rural Parliament session was to examine opportunities around ‘more investment - and more proactive and tailored approaches’ in the context of rural and island communities.

Summary of Presentations

Dr Megan Palmer-Abbs from the University of Aberdeen and the Nordland Research Institute outlined the delivery approach of digital infrastructure in rural and remote areas and the implications of this approach:

- The public procurement for the last major broadband roll-out in 2014-2017 used the postcode mapping system which is unsuitable for an engineering project. Within this already inappropriate mapping framework, other variables were introduced that created further complexity. Firstly, the fact that within any given postcode area, only 75% coverage was required for the contract to be met.
- Secondly, there is a hierarchy in fixed fibre connection types and as a customer, you may have one of several different configurations. This means that though many rural and island customers are considered connected, their connection may not be fit for purpose nor is not futureproofed in line

with the UK's progression towards 1 Gigabit per second capable infrastructure. This will create significant inequalities if not addressed.

- At the end of the 2017 roll-out, the vast majority of the 25% hardest to reach areas were still in a digital dessert. Accessible communities near big urban centres may have far lower connectivity than some remote settlements. In many areas, the difference between having fit for purpose broadband or not may be the space of a single street.
- In terms of the Scottish Government's R100 Programme, it is difficult to see how this is going to improve things. Procurement on R100 is just completing and it will take years for many of the 25% households and businesses to get connected, if they can, and assess the actual quality of their connection. In the meantime, households and businesses are invited to access the R100 Voucher Scheme which is fraught with challenges.
- We need to have a clear vision of the needs of communities and involve multiple stakeholders in designing solutions that meet immediate needs and are futureproofed for the Gigabit economy. This does not mean putting the onus on committees of volunteers to come up with complex infrastructure plans. Instead, Government must commit to resourcing community involvement as part of the digital infrastructure delivery plan. The model of relying on a blanket approach with contractors who themselves are constrained by the way they understand and engage with communities will leave many behind.

Megan was followed by **Graham Curran**, founder of [Cloudfire Services](#) and Director of [Kyles Community Broadband CIC](#) which was established to help 'the 25%' - approximately 500 residents across the Colintrave and Glendaruel community - to get superfast broadband after the first roll-out left them unserved.

- In 2015, Kyles Community Broadband secured funding to go through two 'painful' EU procurements which took 3 years' intense effort. The first failed due to insufficient budget and the second, with a budget of £1.5M, attracted one bidder who was eventually rejected for multiple reasons including the lack of contingency funding within the EU budget and the lack of a clear path to generate sufficient income to manage the network once it was built.
- At around the same time, late 2017, R100 was launched with work intended to initiate in 2018/19. There have, however, been significant delays with the programme. The build contract has only just been signed off and it is not clear how many of the 25% will eventually be connected.
- The R100 Voucher Scheme has not been a viable option. Voucher Scheme providers have not been interested and have not responded or have responded only to lose interest soon after.
- Options for communities may lie outside the R100 programme. This includes supporting households and businesses to take advantage of mobile broadband through of the 4G mast building programme which is intended to cater for the Emergency Services Network. Kyles Community Broadband is surveying each house, identifying the right network and helping residents get contracts with the right mobile provider. Starlink and similar satellite services may be options in the future.
- Community organisations can help by aggregating demand so that BT, as the R100 contractor, has an informed awareness of each community's needs. Where R100 is unlikely to meet needs, community organisations can support residents to tap into other options through the Voucher Scheme or other approaches, including through taking advantage of the 4G network.
- To plan and implement these approaches, communities need resourcing in the form of technical expertise and paid staff or consultancy support. A pack for community organisations inclusive of technical resources, best practice, hints and tips to aggregate knowledge and experience would also be a useful tool.

Joe Fernand from [Newlands Community Development Trust](#) offered a creative perspective on the human and environmental dimensions of digital inclusion.

- The two previous presentations focused on the hard infrastructure of digital connectivity but there is a parallel area of work to ensure that people can interface with the technology and get the most out of it.
- Newlands CDT offers a range of activities from a weekly Surf Club to individual internet buddying support. These have proven to be very popular and have a life changing impact, particularly in the last year as people have had to re-define their lives in a digital space.
- In the process of delivering these activities and greatly inspired by the [Restarters movement](#) and the Glasgow based [Remade Network](#), Newlands CDT began exploring the opportunities offered through repairing and recycling old technology stock.
- Newlands' Restarters Workshops invites people to bring their electrical goods and learn how to do the repairs themselves, in the process changing their attitudes towards waste and the disposable culture.
- Building on the workshops, Newlands CDT has started a pilot upcycling project staffed by a technician and with a team of volunteers who invite equipment donations from the community, refurbish them and give them out again to others in the community - residents and groups - who need them.
- This kind of circular economic activity helps tackle digital exclusion in a low cost and environmentally sustainable way. It also creates a skills base, apprenticeships and jobs for local communities.

Discussion Points

Delegates assessed current UK and Scottish Government infrastructure delivery as constrained by the fact that it is **inside-out** and **consumer-driven rather than place-driven**, an approach that disadvantages rural and remote communities. No cases spring to mind where an urban community has felt forced to go down a community solution route to obtaining decent connectivity. Is it morally acceptable that rural communities are expected or required to take the initiative to develop what is often considered essential infrastructure?

Policy targets are pick & mix – e.g. are we aiming for the 10Mbps Universal Service Agreement, 30Mbps or 1 Gigabit; are we aiming for 100% connectivity through physical infrastructure. This is resulting in missed opportunities to futureproof the network through current investment programmes including R100. Digital connectivity policy itself should be rooted in a human rights and social justice approach.

Concerns were raised around the lack of integration between planning superfast broadband provision and the improvement of 4G/5G mobile networks.

The following points were noted:

- The R100 and UK Gigabit Programme will not deliver for all non-connected areas in rural and island Scotland.
- Of those premises and businesses that will get connected, several thousand will wait to do so till 2026 if not beyond.
- Many of those already-serviced by Fibre to the Cabinet (FTTC) have connectivity below 10Mbps and limited 4G. They are digitally excluded.

- Current infrastructure is not future-proofed. As we move towards a gigabit economy, more people will experience digital exclusion bearing in mind Fibre to the Premises (FTTP) is needed to support 5G.
- The voucher schemes are not working for 'very hard to reach' communities
- Communities and individual consumers require different support packages – advice, financial assistance, skilling up – which are not integrated with current digital inclusion programmes.

The following solutions were identified:

Accurate information to enable digital planning:

1. Include connectivity questions in Scotland's 2022 Census.
2. Fund a programme of rural & island community connectivity surveys to be delivered by community bodies and local businesses. Proactively identify those communities that require a survey and produce a toolkit to assist with this programme.
3. Employ inclusive approaches to government consultations on digital and mobile connectivity. Online consultations about digital connectivity defeat the purpose.

Stop creating silos between broadband and mobile connectivity

1. Scotland Digital Strategy to integrate investment plan in target 100% 4G/5G coverage building on the Emergency Services Network
2. Ofcom to undertake macro level roaming feasibility study in very hard to reach communities.

Stop creating silos between infrastructure, people and the environment

1. Scotland's Digital Strategy to integrate investment plans in rural & island community experts - third sector organisations and small and micro enterprises – who can drive forward on-the-ground approaches to supporting consumers and developing circular economies around tech repair and repurposing initiatives.
2. Establish an Inclusive Connectivity Implementation Group under the auspices of the Digital Strategy to take forward Social Renewal Advisory Board Call to Action 9.

Support grass-roots digital innovation

1. Establish a national directory and Incubator of grass-roots rural digital innovation.
2. Fund a digital democracy pilot in rural and island local authorities to feed into the Local Governance Review process.
3. Invest in the development of online SMART villages and physical digital community hubs supported by a Scotland-wide Network of Village Halls.

Documents and initiatives mentioned during session:

- Information on the Scottish Government's Social Renewal Advisory Board can be found [here](#).
- Dr Megan Palmer-Abbs research into Scotland's digital lottery and the impact of next generation broadband roll-out on businesses can be found [here](#).
- Gigabit Kinross, a community broadband initiative, can be found [here](#).
- [Rural Communications](#), a rural business in Moray, supports local residents and enterprises to make use of the R100 Voucher scheme.