

Argyll and Bute Digital Connectivity Update

1.0 EXECUTIVE SUMMARY

- 1.1 The main purpose of this report is to provide the Business Continuity Committee with the latest available information concerning the current Digital Connectivity across Argyll and Bute.
- 1.2 The Covid 19 pandemic has re-emphasised the critical importance of Digital Connectivity across Argyll and Bute. Argyll and Bute Council, our CPP partners, the private sector, our communities and individuals have made great use of the existing digital network to remain connected and productive but there still remains gaps in the quality and coverage of the connection that needs to be addressed as quickly as possible. This report provides an overview of where the Argyll and Bute region currently is in relation to digital connectivity and also the steps that officers are taking in respect to securing further investment and improvements together with an update on other Government programmes.
- 1.3 It is also worth noting that Digital Connectivity will also be an intrinsic part of the post Covid19 economic and wider recovery of the area. As outlined in the Audit Scotland's, Argyll and Bute Best Value report 2020 *'It is essential the council drives partnership working to improve broadband and connectivity, making sure that technology is robust and fit for purpose. In line with its 2016 Assisted Digital Strategy, the council should take steps to ensure the changes it introduces as part of digital transformation continue to work to include communities with no broadband or mobile connectivity.'* Much is still to be done to reach our ultimate objective of universal coverage across our area.

2.0 RECOMMENDATIONS

- 2.1 The recommendations are:-
- (i) To note the update in relation to digital connectivity across Argyll and Bute including the update on the Government's national programmes as applicable to Argyll and Bute.

- (ii) Members may wish to consider engaging in additional, political lobbying in support of ongoing work by council officers and Senior Management to help secure further funding to improve the Digital Connectivity across Argyll and Bute for the benefit of local residents, the delivery of essential public services and to help businesses recover from the Covid-19 pandemic.

Argyll and Bute Digital Connectivity Update

2.0 INTRODUCTION

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- 2.2 The Covid 19 pandemic has re-emphasised the importance of Digital Connectivity across Argyll and Bute. The following update contained in this report will give Members an overview of where we currently are and also the steps that Officers are taking in respect to attracting further investment and improvements to digital infrastructure. This is currently being taken forward through commercial and Government national programmes.
- 2.3 Digital Connectivity has proven essential for the Council to continue its business, work with CPP partners and communicate with communities, private individuals and the private sector. There have been gaps in connectivity in terms of quality and coverage however and improving digital infrastructure further will be an intrinsic part of the post Covid19 economic recovery of the area and the delivery of future public and private services. The need for better digital infrastructure has also been identified in the recent published Argyll and Bute Best Value Audit 2020 report that stated. *'It is essential the council drives partnership working to improve broadband and connectivity, making sure that technology is robust and fit for purpose. In line with its 2016 Assisted Digital Strategy, the council should take steps to ensure the changes it introduces as part of digital transformation continue to work to include communities with no broadband or mobile connectivity.'* Much is still to be done to reach our ultimate objective of universal coverage across our area.

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4.0 DETAIL

4.1 Broadband Availability

The current position of broadband coverage across the Argyll and Bute area is as follows

- 84% can access speeds >30Mbps*
- 0.7% are between 24 and 30 Mbps
- 2.7% are between 15 and 24 Mbps
- 1.9% are between 10 and 15Mbps
- 7.1% are between 2 and 10Mbps
- 3.7% are below 2Mbps
- Full Fibre availability is currently at 0.93%

* It should be noted that these speeds are subject to people paying for these services

4.2 DSSB Phase 1 Closedown

Phase 1 of the Digital Scotland Superfast Broadband (DSSB) programme was split in to two distinct programmes - Highlands and Islands (HIE) Area and the Rest of Scotland (RoS) Programmes. These programmes have now basically finished however some final works are still ongoing with the funds that are remaining. These final works are all Fibre to the Premise (FTTP) rather than the Fibre to the Cabinet (FTTC) solution that was adopted in the main contract. This initial contract was awarded to BT with a target to reach as many premises as possible with the funds available. This contract surpassed all expectations as it connected a far greater number of premises than was originally proposed due to efficiency and innovation savings that resulted in a number of gainshare pay-outs. Gainshare was the clause written into the contract stating that when connections to the new infrastructure reached a certain level BT would reinvest some of the public money that was initially paid to them in connecting additional premises.

- 4.3 The Highlands and Islands (HIE) project is valued at £162.1 million. (effectively the MAKI, Bute and Cowal and OLI areas of Argyll and Bute.)

- £115.6 million Scottish Government/UK Government/local authorities' contribution (share of the £40 million).
 - £11.4 million contributed by Highlands and Islands Enterprise.
 - £2.2 million Gainshare 1 funding.
 - £3 million Gainshare 2 funding.
 - £29.9 million contribution by BT
- 4.4 The Rest of Scotland project is valued at £300.9 million (effectively Helensburgh and Lomond area of Argyll and Bute):
- £167 million from public sources: Scottish Government, UK Government Department for Digital, Culture, Media & Sport (DCMS), and all 27 local authorities that form part of the Rest of Scotland area. European funding was used to specifically benefit Small to Medium sized Enterprises (SME's). The figure £167 million includes £15.6 million of Gainshare 1 funding, taken as income into the programme.
 - £17.9 million of Gainshare 2 funding.
 - £116 million from BT Group.
 - Scotland's 32 local authorities jointly contributed £40 million to the programme as a whole. In addition, 14 of the RoS authorities chose to further supplement their funding in the RoS project totalling £50.65million.
- 4.5 An independent evaluation of the socio-economic benefits that are likely to be realised from fibre broadband deployment under the DSSB Contract 1 programme was published in April 2019 by global consulting and research firm Analysys Mason. It concluded that the Scottish Government, HIE and the local authorities were justified in intervening to facilitate the deployment of fibre broadband to unserved areas. It found that the programme has been a success, helping to cement Scotland's digital future, and that the infrastructure that has been built will provide high-quality connectivity in Scotland for the foreseeable future. It further found that public funding has been used very effectively: every GBP1 of public funding is estimated to deliver ~ GBP12 of benefits to the Scottish economy.
- 4.6 The DSSB programme (RoS & HIE) has connected 34,964 premises in Argyll and Bute to fibre enabled infrastructure by the end of 2019. Of these 30,617 premises are capable of receiving speeds equal to or greater than 24Mbps. In addition the Argyll and Bute take-up figure is 69.55% of connected premises taking up the new service.
- 4.7 **Reaching 100% (R100)**
- 4.8 The Scottish Government (SG) has now made a commitment to ensure every home and business in Scotland will have access to superfast broadband – of speeds equal to, or greater than, 30Mbps. In December 2017 the SG committed £600 million to the procurement phase of the R100 which will help deliver a future proofed network. The R100 programmes has split Scotland into 3 bidding Lots - North (Lot1), Central (Lot2) and South (Lot3). Most of Argyll and Bute is in Lot1 which has been allocated £384M of the £600M fund committed by the SG.

Due to procurement laws SG could not specify which type of technology is to be used to deliver the contract, however SG included some mandated areas in the most remote areas, which stipulated to bidders that to have a compliant bid, 25% of the premises in each mandated area needed to have access to a gigabit (1000Mbps) capability.

- 4.9 The procurement process for the central and south lots of the R100 programme is now complete, and contracts with BT plc were signed in December 2019. These contracts will deliver beyond the initial superfast commitment, with the overwhelming majority of the build expected to be gigabit capable full fibre connectivity.
- 4.10 In November, the Minister also confirmed that BT plc had been selected as the preferred bidder for the north lot of the R100 programme. However, that decision has since been challenged and contract signature is, therefore, suspended until legal proceedings have concluded. Further Broadband delivery will therefore only continue to be built, during the first part of 2020, through either the DSSB programme or by commercial build. Unfortunately there is still no further details on the progress of the North Lot challenge at the time of writing this report.
- 4.11 **Universal Service Obligation (USO)**
- 4.12 On 20 March 2020 the UK Government launched the USO for broadband. This gives citizens a legal right to order a broadband connection at a minimum speed, currently set as 10Mbps download and 1Mbps upload speed, upon reasonable request. Many households may also find they can already upgrade to a faster connection through an existing fixed or wireless service. Growing availability of wireless broadband services has reduced the amount of properties that can't get fit for purpose broadband significantly in recent years.
- 4.13 If the cost of building or upgrading your share (aggregated) of the network connection is £3,400 or less, individuals won't have to pay for this work to be done. If it costs more than £3,400 to connect your home, and you still want a connection, you will have to pay the excess costs. If you want to do this, BT will conduct a survey and give you a quote within 60 days. You will then pay the same price for your new broadband service as anyone else on the same package, and no more than £46.10 a month.
- 4.14 BT have announced that most USO eligible premises can be reached over the (EEs (owned by BT)) 4G network. BT were initially going to send out letters to all eligible premises, however due to the Covid19 pandemic this has been delayed due to lack of available call centre staff. It is though currently available.
- 4.15 Argyll and Bute officers have contacted BT to request how they could assist in advertising the availability of the above service. A map of the eligible premises is going to be provided by BT and officers can advise respective ward elected members of the forthcoming notifications. This will enable us to spread the word across our communities of the availability of this new obligation.

4.16 It has been conveyed to Officers of the council that around 13% of premises across the council area are eligible for a USO service. BT stated that it only takes 1 eligible premise in any given community to request a USO connection triggering the aggregation, for example if there is 10 premises eligible in that community £34,000 can be used to upgrade that said community.

4.17 Due to the properties of the frequency bands used to provide a 4G signal, outdoor coverage is always better than indoor. So to meet the USO criteria it may be necessary to have an external aerial installed at the property. Prior to the USO this external aerial could have been purchased, but this is now free to premises that cannot meet the threshold of 10Mbps download and 1Mbps upload. Checks will have to be made by BT to establish if this is really essential.

4.18 **Rural Gigabit Connectivity Programme**

4.19 Over the last 18 months or so officers have been working closely with the DCMS in Westminster, towards securing funding to extend full fibre into some of our most rural and unconnected communities.

4.20 Through discussions it was agreed that the fastest route to market would be to work within an existing framework, namely the Scottish Wide Area Network (SWAN). Considerable work had previously been undertaken by the DCMS and Capita (SWAN providers) as part of the Highland Councils Local Full Fibre Network (LFFN) successful funding award.

4.21 12 primary school locations across Argyll and Bute were originally given clearance by DCMS to progress to a strategic outline business. This required Capita to get estimated costs from potential suppliers. An initial estimate indicated that it would cost in excess of £10 million to connect 4 of the pre-selected island locations. This high cost was due to the subsea element of the works.

4.22 It was only after Westminster announced their £5 billion UK Gigabit agenda that confidence in the market started to stabilise. Capita opened discussions with Fibrus who were awarded the Northern Ireland's LFFN contract. They submitted a partial cost estimate and sought permission to undertake a proof of concept (POC) with change requests being sought to extend the programme.

4.23 BT were next to re-open dialogue and provided a partial estimate with sites that were not part of the R100 intervention plan. The Scottish Government has stated that as the North Lot contract has not been signed the inclusion of all eligible premises could be included in the RGCP estimate, as it is unclear when the North Lots litigation process will conclude.

4.24 Capita have informed us that this estimate is expected to go through BT's governance process on 15th May 2020, after which this could be conveyed to us around the 18th May 2020. This is still to be received.

4.25 **Rural Gigabit Vouchers**

4.26 This is a voucher scheme that is provided by the DCMS where businesses and residents can apply for gigabit connections. These vouchers are to be aggregated

to make any infrastructure works more economically viable. As part of the Government's Rural Gigabit Connectivity programme business and residents in some of the hardest-to-reach places in the UK are eligible for additional funding towards the cost of installing gigabit-capable broadband to their premises when part of a group project.

4.27 Rural premises with broadband speeds of less than 100Mbps can use vouchers worth up to £3,500 for each small and medium-sized businesses (SMEs), and up to £1,500 per residential premise to support the cost of installing new gigabit-capable connections. This is subject to the eligibility rules found within the terms and conditions.

4.28 Group projects are when two or more residents and/or SMEs get together to combine their vouchers towards the shared cost of installation. Single connections are not eligible for additional funding.

4.29 **Mobile Connectivity**

4.30 As with broadband Covid19 has highlighted the need for better mobile coverage in rural Argyll and Bute. There are a number of ongoing Government and industry programmes that are working towards this shared goal.

4.31 **Current Picture**

4.32 According to Ofcom Rural coverage is improving specifically one mobile phone operator who has been aggressively building new infrastructure mainly from being awarded the Home Offices Emergency Service Network (ESN) contract. This has seen geographic 4G coverage reach 75% across Argyll and Bute, and will also be in part, to the USO which was mentioned earlier.

4.33 Not quite so good news is the coverage by all operators which drops to 19% geographic coverage, however the upcoming Shared Rural Network (SRN) will aim to address this.

4.34 Complete Not-spots has decreased significantly from 80% in June 2017 to currently 25%, The SRN and Scottish Government 4G Infill programme (S4GI) is aimed at this also.

4.35 The reasons behind poor rural coverage comes down to commercial economics. A mast in a rural location does not make a viable commercial return on the investment and ongoing operating expenditure (OPEX). OPEX with regards to mobile infrastructure is generally classed as ongoing site rentals over the duration of the lease (very often 10 to 15 years), power charges (powering equipment) and backhaul access (connection to the internet). This is being addressed as part of the SRN. It is understood that the UK Government are to accept Capital and Operating expenditure in a number of remote mast sites. The finer details are still being discussed by Westminster and the Mobile Operators.

4.36 **Mobile Infrastructure Investment**

The following is the current situation of Mobile Infrastructure Investment across Argyll and Bute

• The number of sites being upgraded to 4G by all operators =	133
• Number of sites in service =	114
• Number of new sites planned by all operators =	96
• Number of new sites in service (Vodafone) =	3
• Number of new sites in service (EE) =	44
• Number of Home Office EAS** =	16
• Number of SG4I site planned =	2

***Extended Area Sites (EAS) are sites the home office are building as they are not commercially viable for EE to finance*

4.37 **Scottish 4G Infill Programme (S4GI)**

4.38 The Scottish 4G Infill (S4GI) Programme is a £25 million (including £10 million ERDF for the Highlands & Islands) programme which aims to deliver future-proofed, 4G mobile infrastructure and services to selected 4G mobile notspots. There is currently two S4GI sites in Argyll and Bute that are in build phase located at Glenbarr and Bunnessan.

4.39 The site at Bunnessan on Mull is currently having a fibre connection built. Some local concerns were initially raised due to the Covid-19 pandemic, correspondence was sent to outline that telecoms engineers have been given key worker status to continue to keep the country connected and connect the unconnected. This essential fibre investment on the Ross of Mull will give access to further fibre connections in this underserved area of Mull.

4.40 Utilising a government voucher scheme Mull Fibre had proposed to aggregate vouchers to provide Gigabit connectivity on the Ross of Mull however this proved unfeasible with costs estimated in excess of £1M to build the spine not including the additional premise connections. Advice was given to wait for R100 as this area is one of the mandated areas mentioned earlier (4.8), after which any still unconnected premises could use the vouchers to connect onto this network.

4.41 Due to R100 delays another SG funded programme the S4GI is now installing most of this crucial infrastructure, extending the fibre network for other programmes is now more economically viable and a greater number of connections can be made with the funding that is available.

4.42 **Shared Rural Networks (SRN)**

The Shared Rural Network (SRN) is designed to transform mobile coverage, countrywide. The project has been developed by the UK's four mobile network operators (MNOs) with support from Government.

4.43 The programme will make 4G mobile broadband available to 95% of the UK. The operators expect this will extend mobile coverage to an additional 280,000 premises and for people in cars on an additional 16,000km of the UK's roads, boosting productivity and investment in rural areas.

4.44 The project consists of MNOs investing to extend their coverage. By upgrading their existing networks, working together on shared infrastructure and building

new sites, new government-funded masts will be built to target areas with no mobile coverage from any operator.

4.45 Through its work, the SRN will increase the parts of the UK that get a mobile service from all operators from 66% to 84%, improving consumer choice.

4.46 Each of the MNOs' individual networks will cover 90% of the UK, enabling rural businesses and communities to thrive.

4.47 The SRN will be funded jointly by the mobile network operators (MNOs) and the Government. Collectively, the MNOs will contribute £532 million to the SRN, in order to address partial not-spots, a geographic area with 4G coverage from least one, but not all four mobile network operators. The Government will invest an additional £500m to provide new mobile masts in areas with no 4G coverage.

4.48 A brief will be submitted when more on-site locations across Argyll and Bute is received. It is anticipated that a number of sites will be required and integration with the council's planning service will be paramount to the success of this challenging much needed programme.

4.49 **4G Broadband**

Fixed and mobile infrastructure goes hand in hand, one technology relies on the other. Utilising the growing 4G network is one of the fastest ways to connect the unconnected, even if it is only on a temporary basis until a fixed solution is available.

4.50 **5G**

Work is underway with officers submitting Argyll and Bute, as part of a bigger Local Authority consortia, to a funding bid to the DCMS 5G Create. 5G Create is an open competition within the 5G Testbeds and Trials Programme. Up to £30 million of government funding will be available, aiming to explore and develop new use-cases and 5G technical capabilities. The path that officers are currently targeting is Agri-tec and Health and Social Care (care in the community). Officers have highlighted the latter as critically important due to the Covid19 pandemic that seen the vulnerable in a shielded category.

4.51 Broadway Partners one of the consortia members are currently having discussions with SAMS in Oban to establish an 'elevator scheme' bringing proposals to a similar level as existing bid use cases, enabling them to join the consortia. The aims are to include offshore fish farming and water monitoring.

4.52 **Rural Growth Deal**

Feedback has been received from the Scottish Government regarding our Strategic Outline Business Case (SOC) on our proposed Digital project. Discussions are ongoing with the Scottish Government and Scottish Future Trust (SFT) with regards to this project proposals. In addition key contacts have been request within the DCMS with regards to the SRN as outlined in the feedback.

5.0 CONCLUSION

- 5.1 Improving digital connectivity both broadband and mobile signal across Argyll and Bute is critical to our economic future and also for our way of life as a region. The importance of digital connectivity has been re-emphasised by our experiences both good and bad through responding to the Covid-19 pandemic. The delivery of fibre infrastructure to premises is the key to digital connectivity and officers will continue to progress with current ongoing infrastructure funding applications to extend the fibre footprint in Argyll and Bute. Council Officers will also continue to work with the private sector, local communities and with the UK and Scottish Governments to progress ongoing commercial and public sector digital infrastructure programmes as quickly as possible. Members may wish to consider additional political lobbying activity at this time to assist in the recovery of the Covid-19 pandemic. It is intended to continue to bring forward updates to members on a regular basis as the scale of investment in broadband and mobile digital infrastructure is likely to accelerate.

6.0 IMPLICATIONS

- 6.1 Policy – the Single Outcome Agreement (SOA) and Economic Development Strategy and Action Plan support improvements in the digital infrastructure.
- 6.2 Financial – Across Scotland funding of £600M has been committed to the R100 programme across Scotland. No direct financial implications to the Council at this time.
- 6.3 Legal – None.
- 6.4 HR – None.
- 6.5 Fairer Scotland Duty:
- 6.5.1 Equalities – the differing nature of the deployment of new technology has the potential to lead to inequalities in terms of access to digital services including those which support business and personal development.
- 6.5.2 Socio-economic Duty- there is an overall risk that the economic and social benefits rising from modern digital infrastructure are not fully realised
- 6.5.3 Islands - There are risks that those areas which do not benefit from digital infrastructure could become less attractive locations within which to live and work which could have implications in relation to the SOA objective of growing the population.
- 6.6. Risk - The various programmes are reliant on new technology and innovation which is developing rapidly. Some projects are reliant on commercial operator decisions to invest whilst grant funding is necessary for many aspects of digital infrastructure improvement in Argyll. These aspects all create a level of uncertainty around the extent of infrastructure improvements.

6.7 Customer Service - improvements in broadband and mobile technology improve the opportunities for digital based customer services.

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