

Wednesday 7th February 2018

Digital Infrastructure – Area Update

Summary

The following report provides an update on the various digital infrastructure projects which are ongoing in the area including Superfast Broadband, other Broadband issues and mobile communications.

1.0 Purpose

- 1.1 Work has continued on a number of programmes which aim to improve the digital infrastructure across Argyll. This report provides an update on the various projects within the Mid Argyll, Kintyre and the Islands area.

2.0 Recommendations

- 2.1 The Area Community Planning Group is asked to note the contents of the report.

3.0 Detail

The work being undertaken in relation to digital infrastructure relates to broadband or mobile communications.

3.1 Next Generation Broadband

Next generation broadband within Mid Argyll, Kintyre and the Islands is all being delivered through the Highlands and Islands project and Community Broadband Scotland supported community projects. No BT commercial deployment is being progressed in the Mid Argyll, Kintyre and the Islands area

- 3.2 Work continues on building the new infrastructure network to support next generation broadband. Having completed the subsea cable links in 2014/15, land based backhaul and local access fibre cables are required to connect communities. Whilst telephone exchanges will continue to provide a service in relation to telephone calls only a handful of exchanges will handle next generation

broadband services, new access cables running from these “headend” exchanges directly to new communication cabinets within communities will ensure that the superfast speeds reach the local cabinets.

- 3.3 During 2017, we saw further new connections which meant that next generation broadband was available to a large number of premises in the Mid Argyll, Kintyre and the Islands area many for the first time. Work continues in many of these locations to extend the fibre services to as many premises as possible within the initial budget of the project. This initial budget has made more connections than originally expected through technological advancements and efficiency savings. Additional funds have also been made available through the Gainshare or Clawback mechanism that was written into the initial contract with BT. A summary of all Cabinets across Mid Argyll, Kintyre and the Islands is contained at Appendix 1.
- 3.4 Once the new fibre cabinets are live, customers who want access to superfast broadband must order the upgraded fibre service from their internet service provider. Members of the public can check whether they are able to order a next generation service at www.digitalscotland.org/whereandwhen. If they are not able to order a next generation broadband service they will be given an indication of whether the service is likely to be available within their exchange area and if so when the first premises are expected to be connected.
- 3.5 BT Long Reach-Very High Speed Digital Subscriber Line (LR-VDSL)
BT have been conducting a trial from the Whitehouse and Clachan exchanges into the use of LR-VDSL. This is an extension of the initial trial in North Tolsta on the Isle of Lewis. LR-VDSL is the revectoring of the broadband signal which allows it to travel further along the old copper network, harnessing higher signal power and wider frequency ranges in order to deliver faster speeds. We are waiting on the results and outcome of the trial.
- 3.6 Highlands and Islands Programme
The Highlands and Islands (H&I) programme in Argyll is currently expected to connect 82% of premises when taken with the commercial rollout.
- 3.7 The first live premises through the HI programme in Mid Argyll, Kintyre and the Islands were made during the summer 2015 when the first premises in the area were connected and local exchanges went live. Further fibre connections have since been made available in the most exchange areas across Mid Argyll, Kintyre and the Islands, many of these areas have received a fibre service ahead of the initial timescales within the first rollout plans. There has been some unforeseen technical difficulties in some exchange areas which has seen major delays and caused distress to expected customers.
- 3.8 Work is continuing across Mid Argyll, Kintyre and the Islands with the initial contract was due to end Dec17 however a contract extension has been given due to additional funds being made available, this will see continued deployment during 2018.

3.9 Community Broadband Scotland

Community Broadband Scotland (CBS) operates to support communities in taking forward their own broadband solution where coverage through the above programmes is not expected.

- 3.10 During 2017, unfortunately the ABInternet who were building the wireless network entered administration. The GPA board tried everything to try and keep the project alive however state aid regulations ultimately deemed this impossible, CBS have been working with communities in the Gigaplus Argyll intervention area with an update provided by Campbell Cameron from CBS is expected

Other broadband issues

3.11 Extension of Funding

Additional funding was received from Broadband Delivery UK (BDUK) and the Scottish Government which will extend the rollout.

- 3.12 In addition to government funding, the Phase 1 contracts provide for a “gain share” clause to clawback funding if the project reached agreed take up levels. This saw BT make a payment of £17.8 million which will be used to extend coverage. It must be stressed that take-up of the new upgraded service could be better, it currently standing at around 40%. To assist with raising awareness of the access to SFB and increase take-up I have some cards which can be distributed across the area for people to take away with them.

3.13 Reaching 100% (R100)

A Scottish Government (SG) commitment is that every premise in Scotland is to have access to Superfast Broadband with broadband speeds >30Mbps by 2021. The R100 has split Scotland into 3 Lots North (Lot1), Central (lot2) and South (Lot3). This has now entered the procurement stage with Invite to Tender (ITT) being published. Most of Argyll and Bute is in Lot1 which has been allocated £384M of the £600M fund committed by the SG. The procurement exercise is expected to last around 9 months with the expected contract commencement date of late 2018/beginning of 2019. Very little information will be available during this period due to commercial sensitivities.

Mobile Communications

3.14 Commercial upgrades

When Ofcom awarded the contract for delivering 4G across the UK it included a stipulation that 95% of premises within Scotland receive coverage. 4G coverage is available to some parts of Mid Argyll, Kintyre and the Islands, with coverage improvements changing on a regular bases for some mobile operators. Further 4G deployments are planned as numerous planning applications have been approved however it is still not clear when full network activation will be complete. Appendix 2 outlines all the current mast locations and the proposed new masts sites.

- 3.15 Alongside the 4G licence, amendments have been made to the licences issued by Ofcom to the mobile operators to implement 90 percent geographic voice coverage throughout the UK by no later than 31 December 2017. Significant movements have been made towards this target. I have provided a wide frame coverage maps in Appendix 3. These are taken from Ofcom's coverage data and show coverage for Vodafone (map1 voice), (map2 data) and EE coverage (map3 voice) and (map4 data). As you can see data coverage from EE is slightly better. This is mainly down to the new Emergency Service Network contract (ESN) that EE were award. This is to provide 4G coverage for the blue light services (Fire, Police and Ambulance)
- 3.16 Credit must be given to the Councils planning teams for their continued efforts in seeing these numerous planning applications progress through the system, with a considerable number of these being quite contentious sites in designated and sensitive areas. In the last two years there has been just under 200 applications for new mast sites or mast upgrades across Argyll and Bute from various network operators.
- 3.17 Other activities
As well as MNO commercial upgrades and the ESN program there are other programs currently being progressed. There is the Emergency Service Mobile Communication Program Extended Area Sites, these are site that are being progressed by the Home Office to provide additional coverage in areas that are not commercially viable. There is also the 4G infill program which is being progressed by Scottish Futures Trust which is building robust masts that are suitable for holding multi operator equipment, with adequate power and fibre backhaul capabilities. This is also aimed at areas that are not commercial viable
- 3.18 One of the main reasons to the historic bad mobile coverage is the general topography of Argyll and Bute. Due to the licence obligations placed on some operators by Ofcom and government agreement by the other MNO's to provide similar coverage, this is why we require such a large number of mast sites. Additionally the ESN is mainly targeted at the road network and data connections require a general direct line of site for data transfer.

4.0 Conclusion

- 4.1 Digital connectivity across the Mid Argyll, Kintyre and the Islands area is constantly improving with the continuation of the fibre rollout programmes and the upcoming R100. Digital Scotland has outlined that it is possible that further funds may be required to meet the government's commitment to the R100 and that further procurements may be required to achieve this milestone target of 100%. Rollout is expected to continue during 2018 with coverage extending across more of the rural exchange areas. Progress on mobile coverage is although slow, we will continue to press for improved coverage through both commercial and publically funded programmes.

5.0 IMPLICATIONS

- 5.1 Policy – the Single Outcome Agreement (SOA) and Economic Development Action Plan support improvements in the digital infrastructure.
- 5.2 Financial – Across Scotland funding of £600m has been committed to the R100 programme across Scotland. No direct financial implications to the Council at the present time.
- 5.3 Legal – none.
- 5.4 HR – None.
- 5.5 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.
- 5.6 Risk – there is an overall risk that the economic benefits arising from modern digital infrastructure are not fully realised. 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. 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.
- 5.7 Customer Service – improvements in broadband and mobile technology improve the opportunities for digital based customer services.

6.0 SOA Outcomes

- 6.1 This report links to Outcome 2 – We have infrastructure that supports sustainable growth.

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Appendices

- 1 Exchange/Cabinet overview
- 2 Map of current and proposed mast sites
- 3 Ofcom mobile coverage maps

Appendix 1

Exchange Location	Cabinet No.	Exchange Location	Cabinet No.
Achnamara	In progress	Kilmartin	2
Aros	1	Lochgilphead	12
Barbreck	1	Machrihanish	2
Bowmore	2	Minard	2
Campbeltown	10	Port Askaig	2
Carradale	1	Port Charlotte	2
Clachan	1	Port Ellen	3
Crinan	1	Portnahaven	In progress
Colonsay	R100	Skipness	R100
Gigha	R100	Southend	1
Glenbarr	In progress	Tarbert	2
Ford	1	Tayinloan	R100
Furnace	2	Tayvallich	1
Jura	1+1	Whitehouse	1
Inveraray	2		
Kilkenzie	R100		

Achnamara and Glenbarr exchanges: Work on roll-out has started, but it's taking a little longer than expected to reach. Delivery timescales depend on many factors and can be subject to change. BT will have services to this exchange area as soon as they can.

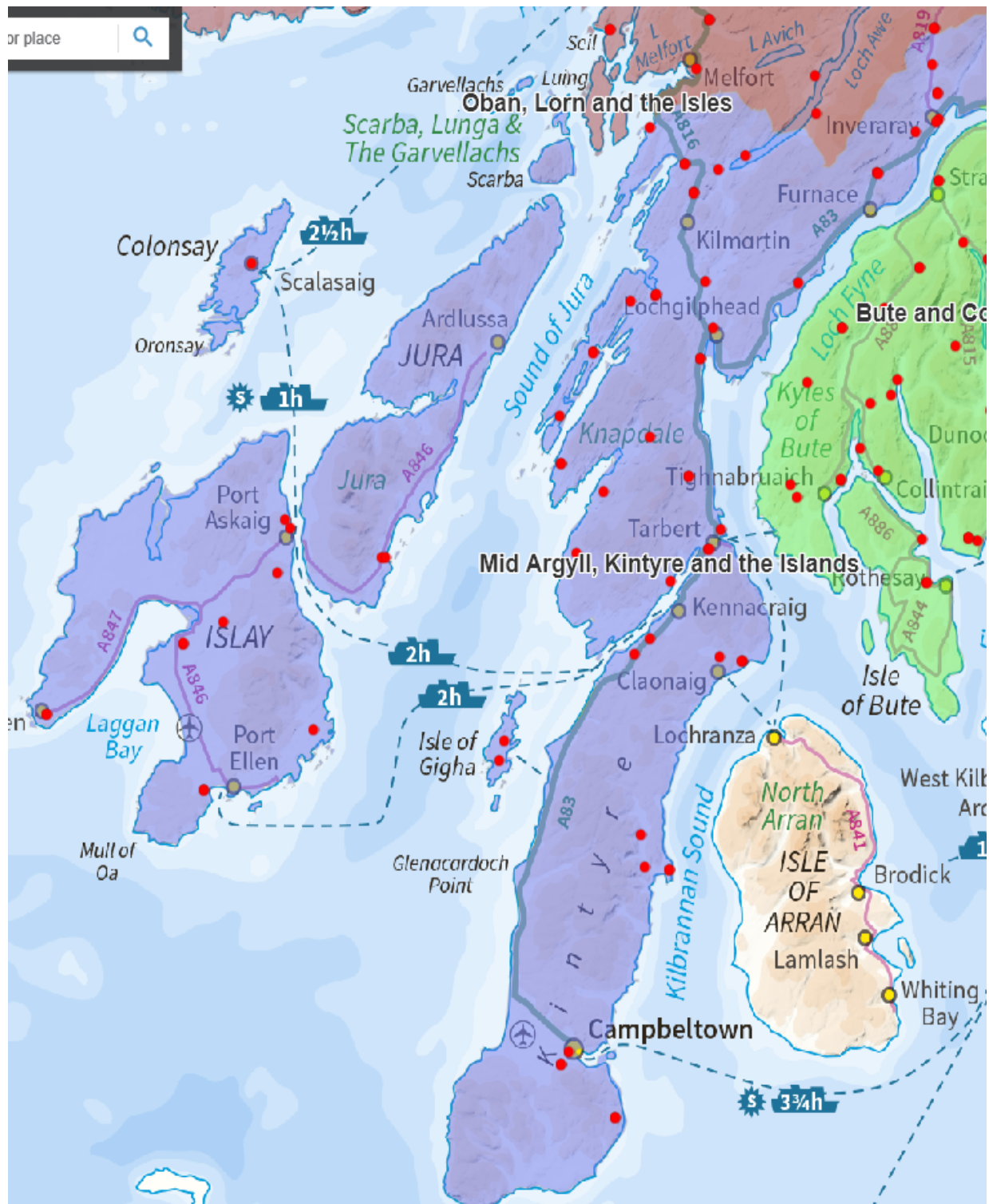
Portnahaven: Work on roll-out has started, but it's taking a little longer than expected to reach you. A cabinet has been built and is going through the process. Delivery timescales depend on many factors and can be subject to change. We will have services to your area as soon as we can.

Jura exchange: 1 cabinet is live and the other is currently going through the process.

Currently there are no plans for Gigha, Kilkenzie, Skipness or Tayinloan exchange areas. These will be part of the R100 programme.

Colonsay was part of the GPA programme and was de-scoped from BT/HIE programme for the purposes of state aid regulation.

Appendix 2



Appendix 3

This map shows mobile availability in your area. Please select your network to view availability from your provider.

Vodafone

Voice

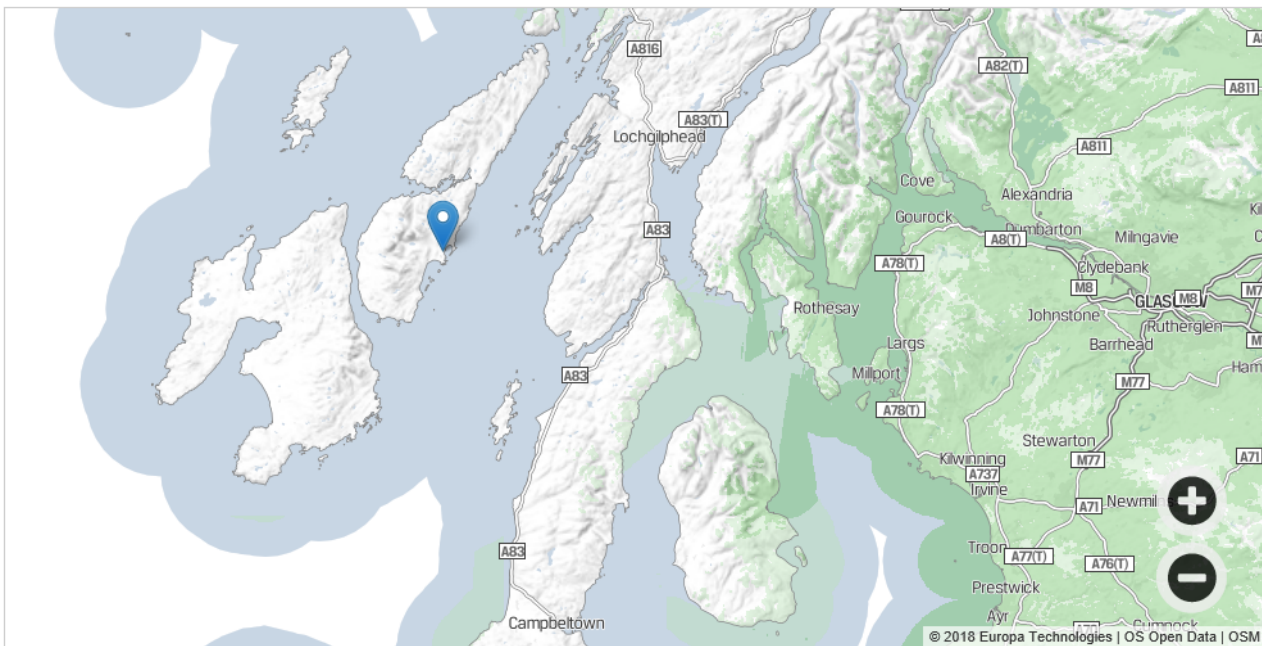
Data



Vodafone

Voice

Data

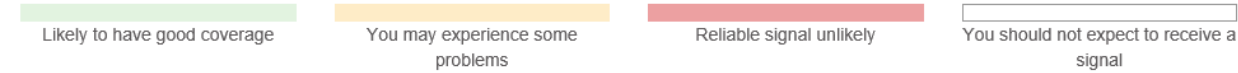


This map shows mobile availability in your area. Please select your network to view availability from your provider.

EE

Voice

Data



EE

Voice

Data

