ARGYLL AND BUTE COUNCIL

POLICY AND RESOURCES COMMITTEE

Development and Infrastructure

12 NOVEMBER 2015

Digital Infrastructure Update

1.0 EXECUTIVE SUMMARY

- 1.1 This report provides an update on the various digital infrastructure projects including:
 - Next Generation Broadband
 - o BT commercial programme
 - o Highlands and Islands Programme
 - Rest of Scotland Programme
 - o Community Broadband Scotland
 - New Technology
 - Extension of Funding
 - Mobile Communications
 - Mobile Infrastructure Project
 - o Scottish Government Pilot on Coll
 - Vodafone Rural
 - Commercial upgrades
 - Public Wi-Fi
- 1.2 It also includes details of consultation responses which have been submitted over the past 2 months:
 - Emergency Services Mobile Communications Programme (ESMCP) Public consultation on additional telecommunications coverage to be provided for the Emergency Services Network (ESN)
 - Inquiry into establishing world-class connectivity throughout the UK
 - Ofcom Strategic Review of Digital Communications Discussion document

RECOMMENDATIONS

It is recommended that Environment, Development and Infrastructure Committee

- 1. Note the content of this report; and
- 2. Note the consultation responses contained at Appendices 2-4.

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POLICY AND RESOURCES COMMITTEE

Development and Infrastructure

12 NOVEMBER 2015

Digital Infrastructure Update

2.0 INTRODUCTION

2.1 Work has commenced on a number of programmes which aim to improve the digital infrastructure across Argyll. This report provides an update on the various projects and also information in relation to consultation responses which have been submitted over the past 2 months.

3.0 RECOMMENDATIONS

- 3.1 It is recommended that Environment, Development and Infrastructure Committee
 - 1. Note the content of this report; and
 - 2. Note the consultation responses contained at Appendices 2-4.

4.0 DETAIL

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

4.1 Next Generation Broadband

Next generation broadband within Argyll is being delivered through one of four programmes – the commercial programme by BT (parts of Dunoon, Helensburgh and Oban), the Highlands and Islands project (BC, MAKI and OLI), the Rest of Scotland (HL) project and Community Broadband Scotland supported community projects.

- 4.2 Work continues on building the new infrastructure network to support next generation broadband. Having completed the subsea cable links in 2014, 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.
- 4.3 During 2015, we have seen new connections which mean that all of our towns now have some coverage, work continues in many of these locations to extend the fibre services to as many premises as possible within the budget of the project. A summary of all exchanges across Argyll and Bute is contained at

Appendix 1.

4.4 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.

4.5 BT commercial programme

The commercial rollout by BT has connected some premises in Helensburgh, Oban and Dunoon. The commercial rollout is still ongoing in some locations.

4.6 <u>Highlands and Islands Programme</u>

The Highlands and Islands (H&I) programme in Argyll is currently expected to connect 83% of premises when taken with the commercial rollout.

- 4.7 The first live premises through the H&I programme were in Oban in September 2014 and during 2015 additional connections have been made within Campbeltown, Dalmally, Innellan, Lochgilphead, Rothesay and Taynuilt exchange areas. With the exception of Dalmally and Taynuilt exchange areas, these connections have been delivered earlier than the 2016 dates estimated in the initial planned rollout plans.
- 4.8 There have however been some delays which mean that deployment has been delayed to the Ledaig, Balvicar, Connel, Craignure and Kilmelford exchange areas. It is not uncommon for issues associated with deployment of the new infrastructure e.g. blockages in cable ducting etc. to cause delays and it is hoped that live coverage will be provided by the end of 2015.

4.9 Rest of Scotland Programme

The Rest of Scotland (RoS) Programme in Argyll expects connections to around 92% of premises when the commercial coverage is included.

4.10 Cardross exchange area was the first area to receive connections through the RoS programme in October 2014 (initial build date was 2016). During 2015, works have continued to extend coverage and although new connections haven't been made it is expected that Clynder, Helensburgh (where not covered by the commercial rollout), Kilcreggan and Rhu exchange areas could see additional coverage before the end of the year.

4.11 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.

4.12 During 2015, CBS announced that a contractor has been appointed for the Giga Plus Argyll project which is seeking to provide superfast broadband to all premises on Colonsay, Iona, Lismore, Luing and parts of Mull, Jura, Islay and the

Craignish Peninsula - approximately 1,400 properties. The project will receive £988,000 funding from CBS to assist with capital costs. It is expected that coverage will be rolled out to premises within the Giga Plus project area from 2016.

4.13 Other broadband issues

New Technology

Work is ongoing testing new technology which may help to extend the rollout of superfast broadband through the commercial, H&I and RoS programmes including:

- Fibre to the Remote Node which will work in the same way as fibre to the cabinet but is suitable for deployment in smaller communities.
- Wireless to the cabinet which seeks to connect remote cabinets by wireless rather than fibre infrastructure.

4.14 Extension of Funding

Additional funding has been received from Broadband Delivery UK (BDUK) and the Scottish Government which will provide a further £42 million to extend the rollout into Phase 2. It has not yet been confirmed as to how the additional funds will be allocated or the implications it could have for coverage in Argyll.

- 4.15 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. In August 2015 it was announced that BT would make a payment of £17.8 million which will be used to extend coverage.
- 4.16 In order to better understand how the additional funding could be utilised, a modelling exercise is currently being undertaken. It is expected that this will be completed by the end of 2015 and will confirm those locations which cannot be covered by the fibre rollout.

4.17 Mobile Communications

Mobile Infrastructure Project

Our previous update which went to the Policy and Resources Committee in February 2015 detailed work associated with the Mobile Infrastructure Project. This project is due to be completed by March 2016 and unfortunately will not deliver any new masts within Argyll. Potential sites had been identified however the transmission links into the mobile operators' networks were not available.

4.18 Scottish Government Pilot on Coll

In March 2015, a new mobile mast funded by the Scottish Government went live on the Island of Coll. The Scottish Government led the development stages of the project and provided the capital for the mast with Vodafone providing their equipment. Development Coll now owns the mast and will pay for its maintenance, the Council has agreed to make a contribution for the first 5 years.

4.19 The new mast provides 4G, 3G and 2G coverage with improvements in signal being reported not only on Coll but also on parts of Tiree and Mull. We are

working with Scottish Futures Trust to confirm whether there is potential for any similar pilots elsewhere in Argyll.

4.20 Vodafone Rural

Vodafone has announced that seven communities in Argyll are included in a programme to receive their Open Sure Signal product. Open Sure Signal boxes connect to the internet (minimum 4mbps required) and provide a 3G mobile coverage for Vodafone users within approximately 500m radius (reducing where trees, buildings etc. block the signal). The first live location was Ormsary on the Knapdale peninsula. Vodafone are also hoping to make installations at Seil/Easdale, Luing, Crossapol (Tiree), Dunbeg, Ardfern and Port Askaig.

4.21 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 Argyll for some mobile operators (although it is currently focused on those parts closest to the central belt). It is understood that further 4G deployments are planned but it is not yet known which locations within Argyll will benefit.

4.22 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. Again it is not known what impact this will have on Argyll or whether it will result in more widely available mobile signal.

4.23 Other activities

We met with the Scottish Government and Scottish Futures Trust at the beginning of September to identify activities which can assist with improved mobile and broadband connectivity. We continue to work with them to develop opportunities within Argyll. We are also working with businesses including through the Economic Forum to lobby for improved mobile coverage. The issue of poor mobile coverage has also been raised by the fish farming industry and we are working together to lobby for improvements.

4.24 Our hilly landscape is one reason why mobile coverage can be intermittent. To try to assist mobile operators in building new masts, our Development Management Team has indicated an in principal agreement to trial larger masts within suitable locations. Detailed discussions will need to be undertaken to identify those locations which might be suitable. This proactive approach reinforces the point that planning has not been a barrier to the development of mobile masts across Argyll and Bute.

4.25 **Public Wi-Fi**

In October 2014, Policy and Resources Committee agreed to progress a pilot for public town centre Wi-Fi in Helensburgh. We have been working closely with procurement to seek a way of delivering this service whilst minimising ongoing costs for the Council. We have now agreed a contract and the first phase of the installation has begun which will seek to see the delivery of public Wi-Fi in

Colquhoun Square in time for the Winter Festival on 28-29 November 2015 and the second phase being delivered first quarter of 2016.

4.26 The Scottish Government has also launch a £1.5 million programme to provide more public Wi-Fi availability. The initial phase of the programme will be the provision of Wi-Fi in public buildings such as libraries. We are working with the Scottish Government to establish which locations across Argyll might be eligible to receive funding.

4.27 Consultations

Over the past few months there have been a number of consultations in relation to digital connectivity. Due to the limited time available to respond we have not be able to report the consultation to committee proper to submitting a response. We have therefore submitted comments from officers following approval from our Policy Lead. Responses have been submitted to:

- Emergency Services Mobile Communications Programme (ESMCP) Public consultation on additional telecommunications coverage to be provided for the Emergency Services Network (ESN) – see Appendix 2 for a copy of our comments.
- Inquiry into establishing world-class connectivity throughout the UK see Appendix 3 for a copy of our comments.
- Ofcom Strategic Review of Digital Communications Discussion document see Appendix 4 for a copy of our comments.

5.0 CONCLUSION

5.1 Digital connectivity across Argyll is improving with the biggest change during 2015 being the increased availability of superfast broadband, it is expected that this will continue during 2016. Progress on mobile coverage is less certain although we will continue to press for improved coverage for Argyll through both commercial and publically funded programmes.

6.0 IMPLICATIONS

- 6.1 Policy the Single Outcome Agreement (SOA) and Economic Development Action Plan support improvements in the digital infrastructure.
- 6.2 Financial Across Scotland funding of £410m has been committed to the Phase 1 next generation broadband project across Scotland (including a contribution from COSLA on behalf of all local authorities). A further £42m is confirmed for phase 2. No direct financial implications to the Council at the present time.
- 6.3 Legal none.
- 6.4 HR None.
- 6.5 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.
- 6.6 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.
- 6.7 Customer Service improvements in broadband and mobile technology improve the opportunities for digital based customer services.

Appendices

- 1 Exchange overview
- 2 Emergency Services Mobile Communications Programme (ESMCP) Public consultation on additional telecommunications coverage to be provided for the Emergency Services Network (ESN)
- 3 Inquiry into establishing world-class connectivity throughout the UK
- 4 Ofcom Strategic Review of Digital Communications Discussion document
- Broadband leaflet (correct at October 2015, updates will be available from http://www.argyll-bute.gov.uk/superfast-broadband#leaflet)

See also http://www.argyll-bute.gov.uk/superfast-broadband

Executive Director of Development and Infrastructure Services Pippa Milne Policy Lead Councillor Aileen Morton

For further information contact: Anna Watkiss, Senior Development Officer (01546 604344, Anna.Watkiss@argyll-bute.gov.uk)

APPENDIX 1 EXCHANGE OVERVIEW

Exchange Area	Initial Programme Date	Date for 1st connections
Bute & Cowal		
Ardentinny	Jan-Jun 2016	Jan-Jun 2016
Cairndow	Exploring solutions	Jul-Dec 2016
Colintraive	Exploring solutions	Jul-Dec 2016
Dunoon	Commercial – Sum 2014	Commercial – LIVE
	H&I - Jan-Jun 2016	H&I – Jul-Dec 2015
Glendaruel	Exploring solutions	Exploring solutions
Innellan	Jan-Jun 2016	LIVE
Inveraray	Jul-Dec 2016	Jul-Dec 2016
Kilchattan Bay	Jan-Jun 2016	Jan-Jun 2016
Kilfinnan	Exploring solutions	Jul-Dec 2016
Kilmun	Jan-Jun 2016	Jan-Jun 2016
Lochgoilhead	Jul-Dec 2016	Jul-Dec 2016
Rothesay	Jan-Jun 2016	LIVE
Strachur	Jan-Jun 2016	Jan-Jun 2016
Tighnabruaich	Jan-Jun 2016	Jan-Jun 2016
Toward	Jan-Jun 2016	Jan-Jun 2016
Helensburgh & Lomor	nd	
Arden	Exploring solutions	Exploring solutions
Arrochar	Jul-Dec 2016	Jan-Jun 2016
Cardross	Jan-Jun 2016	LIVE
Clynder	Jul-Dec 2016	Jul-Dec 2015
Coulport	Exploring solutions	Exploring solutions
Garelochhead	Jul-Dec 2016	Jan-Jun 2016
Helensburgh	Commercial – spring 2015	Commercial – LIVE work continuing
	RoS – Jan-Jun 2016	RoS - Jul-Dec 2015
Inveruglas	Exploring solutions	Exploring solutions
Kilcreggan	Jul-Dec 2016	Jul-Dec 2015
Luss	Jul-Dec 2016	Jan-Jun 2016
Rhu	Jan-Jun 2016	Jul-Dec 2015
Mid Argyll, Kintyre &	Islands	
Achnamara	Exploring solutions	Exploring solutions
Barbreck (Ardfern)	Exploring solutions	Jul-Dec 2016 & Giga Plus Argyll –2016
Bowmore	Jul-Dec 2016	Jul-Dec 2016
Campbeltown	Jan-Jun 2016	LIVE – work continuing
Carradale	Jan-Jun 2016	Jan-Jun 2016
Clachan	Jan-Jun 2016	Jan-Jun 2016
Colonsay	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Crinan	Exploring solutions	Jul-Dec 2016
Ford	Jan-Jun 2016	Jan-Jun 2016
Furnace	Jan-Jun 2016	Jan-Jun 2016
Gigha	Exploring solutions	Exploring solutions
Glenbarr	Jan-Jun 2016	Jan-Jun 2016
Inveraray	Jul-Dec 2016	Jul-Dec 2016
Jura	Exploring solutions	Jul-Dec 2016 & Giga Plus Argyll –2016
Kilchenzie	Jan-Jun 2016	Jan-Jun 2016
Kilmartin	Jan-Jun 2016	Jan-Jun 2016

Exchange Area	Initial Programme Date	Date for 1st connections
Lochgilphead	Jan-Jun 2016	LIVE – work continuing
Machrihanish	Jan-Jun 2016	Jan-Jun 2016
Minard	Jan-Jun 2016	Jan-Jun 2016
Ormsary	Exploring solutions	Exploring solutions
Port Askaig	Exploring solutions	Jul-Dec 2016 & Giga Plus Argyll –2016
Port Charlotte	Jul-Dec 2016	Jul-Dec 2016 & Giga Plus Argyll –2016
Port Ellen	Jul-Dec 2016	Jul-Dec 2016
Portnahaven	Exploring solutions	Jul-Dec 2016 & Giga Plus Argyll –2016
Skipness	Exploring solutions	Exploring solutions
Southend	Jan-Jun 2016	Jan-Jun 2016
Tarbert	Jan-Jun 2016	Jan-Jun 2016
Tayinloan	Exploring solutions	Exploring solutions
Tayvallich	Jan-Jun 2016	Jan-Jun 2016
Whitehouse	Exploring solutions	Exploring solutions
Oban, Lorn & the Isles		
Appin	Exploring solutions	Jul-Dec 2016
Aros	Jul-Dec 2016	Jul-Dec 2016 & Giga Plus Argyll –2016
Balvicar	Jul-Dec 2014	Jul-Dec 2015
Bonawe	Exploring solutions	Exploring solutions
Coll	Jul-Dec 2016	Jul-Dec 2016
Connel	Jul-Dec 2014	Jul-Dec 2015
Craignure	Jul-Dec 2014	Jan-Jun 2015 & Giga Plus Argyll –2016
Dalmally	Jul-Dec 2014	LIVE
Dervaig	Jul-Dec 2016	Jul-Dec 2016 & Giga Plus Argyll –2016
Fionnphort	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Kilchrenan	Exploring solutions	Exploring solutions
Kilmelford	Jul-Dec 2014	Jul-Dec 2015
Kilmore	Exploring solutions	Jul-Dec 2016
Kilninver	Exploring solutions	Exploring solutions
Kinlochspelve	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Ledaig (Benderloch)	Jul-Dec 2014	Jul-Dec 2015
Lismore	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Lochavich	Exploring solutions	Exploring solutions
Luing	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Oban	Commercial – Sum 2014	LIVE – work continuing
	H&I – Jul-Dec 2014	
Pennyghael	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Scarinish (Tiree)	Jul-Dec 2016	Jul-Dec 2016
Taynuilt	Jul-Dec 2014	LIVE
Tiroran	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016
Tobermory	Jul-Dec 2016	Jul-Dec 2016
Tyndrum	Exploring solutions	Jan-Jun 2016
Ulva Ferry	Exploring solutions	Exploring solutions & Giga Plus Argyll –2016

APPENDIX 2 EMERGENCY SERVICES MOBILE COMMUNICATIONS PROGRAMME (ESMCP) PUBLIC CONSULTATION ON ADDITIONAL TELECOMMUNICATIONS COVERAGE TO BE PROVIDED FOR THE EMERGENCY SERVICES NETWORK (ESN)

Question 1

If you are a provider of mobile infrastructure services, do you have any current or planned (next 3 years) investments in the target areas indicated on the maps? N/A

Question 2

If you are an interested party regarding mobile infrastructure services, do you have any current or planned (next 3 years) investments in the target areas indicated on the maps?

Argyll and Bute Council is keen to see improved mobile services across the whole of its area for the benefit of the general public as well as in relation to safety concerns associated with lack of mobile signal. There are particular concerns regarding those working in remote rural areas and often alone, which is a common occurrence in the agriculture, fishery and forestry industries, as well as along the strategic road and transport corridors where accidents and incidents can often occur.

We are pleased to see that there are a number of target areas across Argyll. The Council is both a local landowner and the owner of a large proportion of street furniture across the area; we are currently upgrading street lighting across the Argyll area. We would welcome the opportunity to discuss in more detail the opportunity to work with the Government to ensure that mobile coverage is improved in all of the target areas shown on the map.

We are however concerned that a number of locations do not appear to be within the target areas:

- Of our larger inhabited islands there appears to be no target areas on Tiree, Iona, Colonsay, Luing, Gigha, Lismore, Bute, Ulva or Kerrera. Communication links on the islands are crucial and particularly so in emergency situations. Most of these locations currently have poor mobile coverage and none have a comprehensive 4G service. In addition, there is a reliance of aquaculture and fishing industries to use mobile for business and statutory reporting when no alternative is available.
- In relation to our key settlements, there does not appear to be target areas close to Dunoon, Helensburgh, Lochgilphead/Ardrishaig, Rothesay, Ardentinny, Blairmore, Cardross, Bowmore (Islay), Sandbank (Dunoon), Tobermory (Mull), Ardfern/Craobh Haven, Ardminish (Gigha), Clachan (Kintyre), Craighouse (Jura), Crossapol (Tiree), Dalmally, Furnace, Kilcreggan/Cove, Luss, Port Ellen (Islay), Rosneath/Clynder and Tayvallich. Very few of these settlements benefit from a 4G service and some lack reliable 2G coverage.
- Strategic transport corridors across Argyll follow the routes of the A82, A83, A819, A816, A815, A814 and A886 and it is imperative that mobile communications are available along the entirety of these routes. We have concerns about the limited number of target areas along these routes particularly the A82 between Dumbarton and Crianlarich, the A83 from Cairndow south, A819 south of Cladich, A816 between Kilmartin and Kilmelford, A815 south of Glenbranter and A886 south of Dunans. In many cases these routes are the only means of moving around the area however they are fragile and vulnerable to landslips and other closures such as accidents (on occasion cumulative impacts can close a number of routes causing severe disruption). A number of accident blackspots exist along these routes and a continuous, good quality mobile signal is vital to ensure that contact can be

made with the emergency services and also that those held up or diverted by closures can get accurate and up to date information.

Where new infrastructure is being provided we would request that this is available to all mobile operators to enable them to extend their networks for the benefit of both emergency communication and general mobile connectivity. Any investment in additional mobile infrastructure is an opportunity to ensure that mobile services are improved and the benefits of the investment are maximised. Argyll currently has some of the poorest levels of mobile coverage of all areas across the UK and poor mobile coverage has been identified by business as key barrier to investment. A recent report, Compelling Argyll and Bute and its Administrative Areas (August 2015), highlighted that poor mobile and broadband services are amongst the top three factors which impact on running a business in Argyll and Bute with 90% of respondents indicating it as a key factor affecting future business growth. It is also a key area for attracting and retaining residents. Any works which can support improvements in mobile coverage for both emergency and general use would be welcomed.

Question 3

If you provide emergency services in England, Scotland and or Wales, and are connected with the provision of mobile infrastructure services, do you have or are you aware of any current or planned (next 3 years) investments in the target areas indicated on the maps?

N/A

Question 4

If you are a member of the public, do you have or are you aware of any current or planned (next 3 years) investments in the target areas indicated on the maps? N/A

Question 5

If you have answered yes to any of the questions above, please provide information concerning current or planned (next 3 years) investments in the target areas indicated on the maps.

We are currently upgrading street lighting across the Argyll area; please contact us if you require further detail regarding a particular target area.

APPENDIX 3 INQUIRY INTO ESTABLISHING WORLD-CLASS CONNECTIVITY THROUGHOUT THE UK

Written evidence submitted by Argyll and Bute Council

1. We would like to make the following comments in relation to the forthcoming inquiry regarding digital connectivity throughout the UK.

2. Summary of comments:

- The Government, Ofcom and the industry should ensure that superfast broadband reaches all premises including those which are hard-to-reach, with as many premises as technically possible connected to the fibre broadband infrastructure.
- A Universal Service Obligation should ensure that all premises are able to access a minimum level of broadband at a standard cost.
- 3. Argyll and Bute covers almost 9% of the total Scottish land area with a population of approximately 89,600. 52% of Argyll and Bute's population live in areas classified by the Scottish Government as "rural" 45% in areas classified as "remote rural" and 7% live in areas classified as "accessible rural". "Remote rural" areas account for over 96% of Argyll and Bute's total land area whilst 79.7% of Argyll and Bute's population live within 1 km of the coast including on our 23 inhabited islands.
- 4. Between the 2001 and 2011 census Argyll and Bute was one of only 4 local authority areas in Scotland to show a decrease in population, a reduction of 3.4%. Future population projections suggest a reduction in total population of 7.2% from 2010 to 2035. With this context, the overall objective of the Single Outcome Agreement for the 10 years to 2023 is "Argyll and Bute's economic success is built on a growing population".
- 5. Given the proportion of our population living in rural areas and the pattern of population decline, the need for digital connectivity is vital, it offers an important opportunity to provide access to services and facilities to all as well as being essential for economic growth. Argyll is currently poorly served by both broadband and mobile connections and the Council, together with other Community Planning Partners, is keen to see improvements across the Local Authority area. It is for this reason that we are submitting this evidence seeking world class connectivity throughout the UK including across Argyll.

What role should Government, Ofcom and industry play in extending superfast broadband to hard-to-reach premises?

- 6. The Government, Ofcom and the industry should ensure that superfast broadband reaches all premises including those which are hard-to-reach, with as many premises as technically possible connected to the fibre broadband infrastructure.
- 7. The power of digital connectivity, both broadband and mobile communications, to support and revitalise rural areas is widely recognised. The 2013 UK Broadband Impact

- Study identified that interventions are projected to return approximately £20 in net economic impact for every £1 of public investment.
- 8. Argyll and Bute is the second largest local authority area in the UK. Our mostly rural area has a number of important economic sectors including food and drink, tourism, forestry and renewables however our economic growth and prosperity is hampered by poor digital connectivity. A recent report Compelling Argyll and Bute Stakeholder Research Report (August 2015) identified the lack of availability of broadband and mobile phone coverage as the main weakness when running a business in the area (82% considered this a weakness) whilst 83% agreed that improved coverage would be a significant benefit to businesses and 90% indicated that improved broadband was important to business growth.
- 9. Where improved broadband is being made available this is welcomed by both residents and businesses with good levels of take up. We expect the Highlands and Islands and Rest of Scotland projects to make significant improvements to many areas of Argyll however with just 85% of premises expected to be connected the coverage is uneven. This exacerbates issues in those areas where there is poor broadband coverage or even no broadband coverage.
- 10. Our businesses and residents are located across the Argyll area including on our 23 inhabited islands and numerous peninsulas. The rural nature of businesses and settlements means that it is imperative that superfast fibre broadband reaches as many locations as possible including those which are hard-to-reach, we cannot have some premises left behind whilst others see ever increasing superfast and even in the future ultrafast broadband connections. Digital connectivity is essential to ensure the economic and population growth required across the area.
- 11. We believe that sufficient Government funding should be made available to ensure that all areas of the UK, including those which are hard-to-reach, can benefit from superfast broadband and the resulting economic benefits. To fail to ensure that all areas of the UK benefit from next generation broadband would lead to increasing inequalities in terms of access to services and facilities.
- 12. Ofcom and the industry should seek to ensure that consumers are offered a choice of suppliers across the whole of the UK, including in those areas which are hard-to-reach, and the same value for money as consumers elsewhere.

Given that in practice a Universal Service Obligation could not capture 100% of households, what should a USO for broadband look like?

13. A Universal Service Obligation should ensure that all premises are able to access a minimum level of broadband at a standard cost.

14. Many areas of Argyll, both within settlements and in the rural areas, do not currently have a broadband service which meets the standard of 2 mbps. Other areas are unable to access broadband at all and are reliant upon satellite connections which are expensive and have limitations in terms of their usability. This poor broadband infrastructure impacts on economic growth, our ability to retain and attract new residents and limits the opportunities for modern working practices. Compelling Argyll and Bute and its Administrative Areas Strategic Overview Report (August 2015) cited better broadband and mobile coverage as one of the key areas for retaining and attracting residents. Whilst the accompanying Compelling Argyll and Bute Addressing Rural Depopulation Good Practice Report (August 2015) states

"Broadband speeds are a crucial factor in rural quality of life and the ability of a rural area to progress economically. Broadband speed represents a crucial facet in developing businesses and fostering economic growth without which no perceivable development can be maintained in any sector anymore. Only good provision enables people to work remotely thereby also attracting incomers to set-up business, self- employed, small businesses, etc. to the area. There are various articles over recent years covering the detrimental effects of low broadband speeds in rural areas."

- 15. For Argyll to realise its full potential, good quality digital connectivity is essential. Connections through improved mobile and broadband services would help to create equality with other central parts of the UK enabling business to access services, online learning to become available and ensure e-health services are accessible. These are all essential if rural areas such as Argyll are to retain and grow their residential populations and businesses.
- 16. The growth in the delivery of public services online offers significant benefits for both the communities and the service delivery agency. Already we are seeing agricultural payments services delivered online whilst the Council is also developing the range of digital services for its customers. The Council and NHS under Health and Social Care Integration are also working to deliver enhancement to telehealth and telecare services which are able to monitor patient conditions remotely and deliver medical consultations online. Once fully developed telehealth would be beneficial in both time and cost savings for the patient and medical professionals. However the full benefits of these services can only be realised if the digital infrastructure is in place to support these and to enable reliable, effective connections to be made. It is typically in those locations which are classed as hardest-to-reach that the benefits can be maximised however insufficient broadband speeds (minimum of 2 mbps currently required) impacts on the ability to deliver services in this way.
- 17. We must not allow a situation where some parts of the UK are left behind without the infrastructure which has now become an essential part of daily life. Ofcom recommends that 10 mbps is required for an "effective quality of service," and we would support a Universal Service Obligation which guaranteed this service to all premises.
- 18. If you would like to discuss the issues surrounding digital connectivity within Argyll and Bute further we would be happy to discuss this further.

19. Please note that these views are an officer response on behalf of Argyll and Bute Council but have not been ratified by Council or Council committee.	⁄e

APPENDIX 4 OFCOM STRATEGIC REVIEW OF DIGITAL COMMUNICATIONS **DISCUSSION DOCUMENT**

Please note that these views are an officer response on behalf of Argyll and Bute Council but have not been ratified by Council or Council committee.

Questions

Question 1: Do stakeholders agree that promoting effective and sustainable competition remains an appropriate strategy to deliver efficient investment and widespread availability of services for the majority of consumers, whilst noting the need for complementary public policy action for harder to reach areas across the UK?

Competition has to date proved ineffective in delivering good quality digital communications across large parts of Argyll and Bute. Left to the private market, only parts of 3 of our towns would have benefited from the rollout of next generation broadband leaving large numbers of premises (approximately ¾) without access to next generation broadband. As it stands, in many locations there is essentially no choice in broadband provider as only BT has their equipment in numerous exchanges. Even where there is choice of ISP additional charges are sometimes levied where premises are not within "low cost areas" which means that users are unable to access the advertised prices. In relation to mobile communications, competition has resulted in some of the poorest levels of mobile coverage across the UK with many communities having either non-existent or partial coverage and very few being able to access 3G services. In reality there is little choice of mobile provider as there is often only one provider which offers the best level of coverage for a location. The limited services also mean that some consumers across Argyll are unable to take advantage of

savings resulting from bundling services together.

The need for continued public policy to address these market failures is supported, as is appropriate public funding allocated to ensure that the whole of the UK can access the digital services that have become an essential part of day-to-day life (and even more important in the remote and isolated locations such as Argyll and Bute where it can provide access to business, education and health facilities and services).

Public policy and funding should continue to support improved digital infrastructure, both fixed and mobile, across Argyll in all those areas where competition is failing to provide a reliable and effective service for consumers.

Question 2: Would alternative models deliver better outcomes for consumers in terms of investment, availability and price?

Any alternative model considered should ensure that investment continues even in those locations which are less attractive to cover but where fixed and mobile services remain vital, as acknowledged in the Strategic Review - "Connectivity has become critical to the day to day lives of consumers and businesses". Timely provision of the infrastructure to support this connectivity is essential to ensure universal access.

Any model used to ensure delivery of fixed and mobile services should ensure that these services are available to all within a maximum price and that consumers in those areas which are not commercially viable are not penalised.

Question 3: We are interested in stakeholders' views on the likely future challenges for fixed and mobile service availability. Can a 'good' level of availability for particular services be defined? What options are there for policy makers to do more to extend availability to areas that may otherwise not be commercially viable or take longer to cover?

We would support the maintenance of universal service obligations for telephone services and would

support an extension of this to cover broadband. We note that Ofcom identifies 10 mbps as a minimum for effective broadband and we would support universal access which guaranteed this service level. We would also request that this service level is reviewed on a regular basis in order to ensure that this stays current as technology progresses.

We have significant concerns about the growing digital divide between communities and the impacts that this will have in terms of attracting residents and businesses, providing services demanded by consumers and facilitating public service delivery. A recent report Compelling Argyll and Bute Stakeholder Research Report (August 2015) identified the current lack of availability of broadband and mobile phone coverage as the main weakness when running a business in the area (82% considered this a weakness) whilst 83% agreed that improved coverage would be a significant benefit to businesses and 90% indicated that improved broadband was important to business growth. Whilst the accompanying Compelling Argyll and Bute Addressing Rural Depopulation Good Practice Report (August 2015) states

"Broadband speeds are a crucial factor in rural quality of life and the ability of a rural area to progress economically. Broadband speed represents a crucial facet in developing businesses and fostering economic growth without which no perceivable development can be maintained in any sector anymore. Only good provision enables people to work remotely thereby also attracting incomers to setup business, self- employed, small businesses, etc. to the area. There are various articles over recent years covering the detrimental effects of low broadband speeds in rural areas."

The ability of innovative service delivery solutions to reach all customers is also compromised by the current poor quality of infrastructure available. For example, the Council and NHS under Health and Social Care Integration are working to deliver enhancement to telehealth and telecare services which are able to monitor patient conditions remotely and deliver medical consultations online. Once fully developed telehealth would be beneficial in both time and cost savings for the patient and medical professionals. However the full benefits of these services can only be realised if the digital infrastructure is in place to support these and to enable reliable, effective connections to be made. It is typically in those locations which are classed as hardest-to-reach that the benefits can be maximised however insufficient broadband speeds impacts on the ability to deliver services in this way. Actions which provide universal access for both broadband and mobile technology should be encouraged and will be essential to ensure that large parts of the Country do not fall behind in relation to available technology. Digital connectivity is recognised as critical in day-to-day life and will become more so as digital service delivery grows.

The definition of a "good" level of service is not one that can easily be established as it will change as technology improves and expectations grow. For fixed broadband we would support the 10 mbps minimum but would suggest that superfast broadband could currently be classified as a good level of service. In relation to mobile connectivity, we would as a minimum seek 2G coverage to all of our settlements and strategic transport infrastructure and would see 4G coverage in these areas as a good level of coverage.

To ensure universal access and equality of service delivery, public intervention should seek to provide upgraded infrastructure to those locations which are not commercially viable either in line with or ahead of commercial rollout wherever possible. This level of intervention can help to ensure that the most rural parts of the UK remain viable and attractive locations for people to work and live in.

Question 17: What do stakeholders think are the greatest risks to continuing effective consumer engagement and empowerment?

It is essential, from a protecting consumers perspective and one of supporting communities, that communities are not penalised for living in remote areas in terms of the level of service they receive, the choice of service provider or the cost of obtaining that service. There should be clear and accurate information provided to consumers in terms of the services which are available to them and the full cost of these including any often hidden costs which might result from being outside of a low cost area.

Question 20: Are there examples in competitive or uncompetitive sections of the market where providers are not currently delivering adequate quality of services to consumers? What might be causing such outcomes?

Reliability of service is an important issue across Argyll for both fixed and mobile services. Previously concerns have been raised about the length of time associated with fixing infrastructure and the resulting issues this causes for those reliant on the service, including in some cases where it could be classed as a lifeline service to vulnerable people and those without alternative forms of communication.

In particular mobile services can be subject to disruption and with a limited number of masts across the area loss of signal from one can leave large areas without signal for sometimes a number of weeks. Whilst it is recognised that the relatively remote locations of masts and poor weather conditions can hamper repairs, the loss of service can also cause significant issues. Consumers should be able to see that everything possible is being done to repair the fault at the earliest opportunity with realistic resolution dates identified and widely publicised.

Question 23: Where might future network evolutions, including network retirement, offer opportunities for deregulation whilst still supporting good consumer outcomes?

We note that the Strategic Review refers to PSTN being switch off and the implications this could have for contact to the emergency services during power cuts. Given the remote nature of much of Argyll as well as exposed location of many communities, power cuts can occur regularly and can take some time to resolve. We would have concerns that a 1 hour battery backup would not be adequate. As an example of extreme weather, when snow and gales hit the Kintyre peninsula in March 2013 approximately 20,000 properties across Western Scotland lost their power, for the majority the power remained off for several hours while a significant number of premises remained without power for several days.

Argyll and Bute Council— October 2015

Next Generation Broadband in Argyll and Bute



Connections now in Campbeltown, Cardross, Dalmally, Dunoon,

Helensburgh, Innellan, Lochgilphead, Oban, Rothesay and Taynuilt



£145.8 million for Highlands and Islands

£264 million for Rest of Scotland

Coming soon...

Arrochar, Balvicar, Benderloch, Clynder, Connel, Craignure, Kilcreggan, Kilmelford and Rhu Exchange

Areas

Keep up to date by registering



2014

First properties within Argyll connected Better connected for business, online

learning and social

Delivered by BTOPENreach







www.digital

scotland.org

85%

of properties expected to be connected by 2017



supporting communities to develop their own solution www.oommunitybroadbandsootland.



Community superfast for 1,400 premises



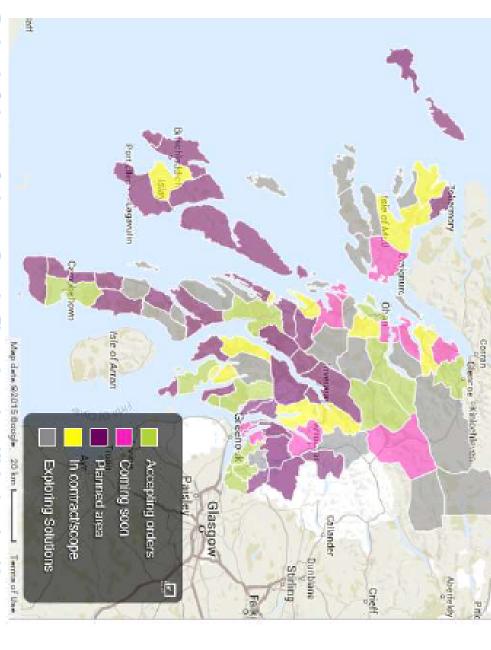
Interactive map at www.digitalscotland.org

www.argyll-bute.gov.uk/superfast-broadband



Visit www.digitalscotland.org/whereandwhen and click on your exchange for

further details



For premises in Aros, Barbreck, Colonsay, Craignure, Dervaig, Fionnphort, Jura, Kinlochspelve, Lismore, http://gigaplusargyll.co.uk/post_code Luing, Pennyghael, Port Askaig, Port Charlotte , Portnahaven , Tiroran and Ulva Ferry exchange areas see also