Superfast Fibre Broadband rollout for Argyll and Bute

Nov 2015

Next Generation Broadband Rollout Objectives

- Scottish Government's target is for Scotland to be a world class digital nation by 2020

- National aim to deliver fibre broadband to 85% of premises by end of 2015 and 95% of premises by end of 2017.

  - Argyll and Bute coverage reaches 85% by end of 2017 (combination of H&I Project and SG)

- Across Scotland £410m of public and private investment by Scottish Government, BDUK, HIE & BT

- Communities not set to benefit from fibre deployment can seek support and help from Community Broadband Scotland (CBS)and/or BT Community Fibre Partnerships.

- Range of assistance to ensure we maximise the opportunities that superfast broadband brings

- Current project is focussed on maximising coverage based on the available funding

Lighting up the H&I

- **20,000** homes and businesses are now able to access fibre broadband through the Digital Scotland Programme and commercial rollout from BT

- Deployment commenced in 10 exchange areas with a further 22 scoped for deployment over the next 6 months.

- More than 200 km of backhaul and subsea cabling completed.

- Deployment in 2016 will be extensive and address coverage to smaller population centres.
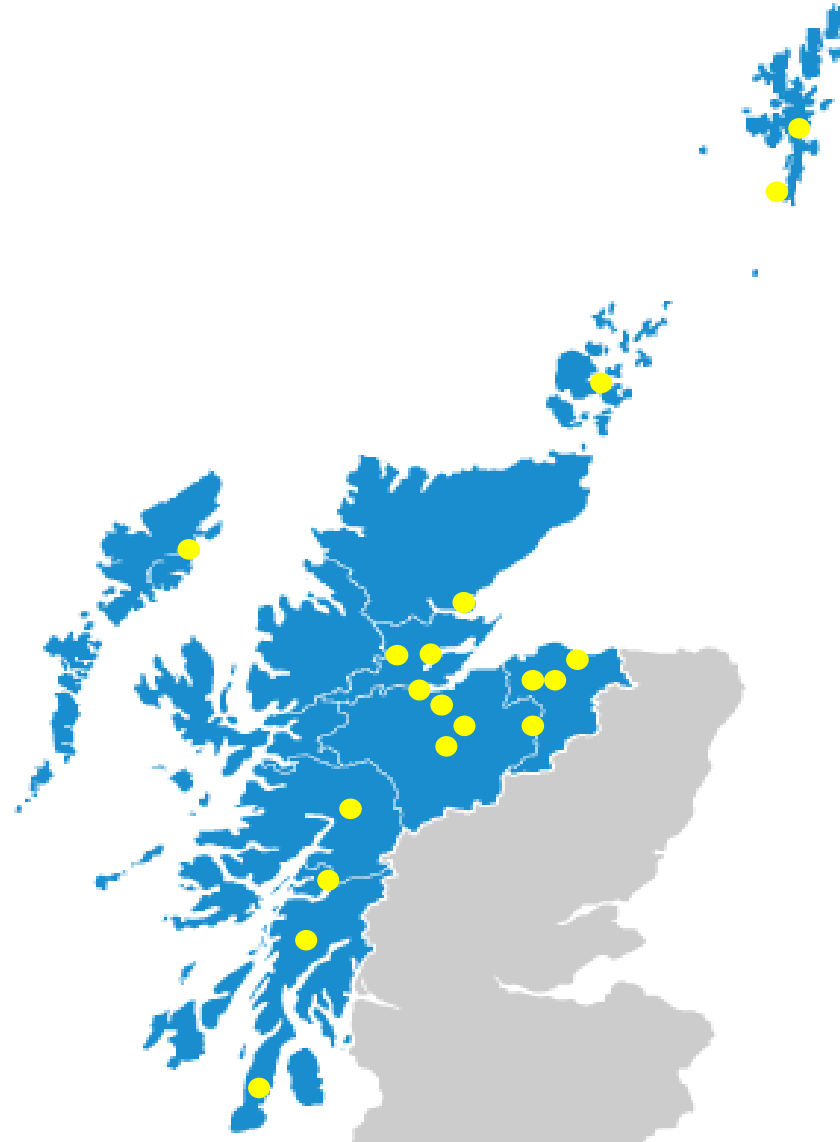
There are 77 Exchanges across the region serving circa 50K homes that form part of the Digital Scotland programmes – current plans including BT's commercial deployment would deliver circa 85% coverage across the region by the end of 2017.

Exchanges Accepting Orders, with additional coverage on a % expected during 2015 and 2016

| Campbeltown |
| Cardross |
| Dalmally |
| Dunoon |
| Helensburgh |
| Innellan |
| Lochgilphead |
| Oban |
| Rothesay |
| Taynuilt |

NB – Dunoon, Oban, &Helensburgh are predominantly delivered by the BT commercial rollout, although not exclusive.

The Following Exchange areas are now "Coming Soon" and anticipated to see a level of coverage commence over the next 6 months.

Ardentinny	Kilmelford
Balvicar	Kilmun
Carradale	Ledaig
Clachan	Machrihanish
Clynder	Port Charlotte
Connel	Rhu
Craignure	Scarinish
Ford	Tarbert
Furnace	Tighnabruaich
Inveraray	Tobermory
Kilchattan Bay	Toward

The Following Exchange areas are planned and in scope for a level of coverage phased through 2016 and into 2017 subject to survey

Appin	Kilfinan
Aros	Kilmartin
Barbreck	Kilmore
Bowmore	Lochgoilhead
Cairndow	Luss
Colintraive	Minard
Coll	Port Askaig
Crinan	Port Ellen
Dervaig	Portnahaven
Garelochead	Southend
Glenbarr	Strachur
Jura	Tayvallich
Kilchenzie	

The Following Exchanges areas remain under evaluation but we are positively reviewing detailed plans to determine what coverage is possible, within existing budgets or with new funds..
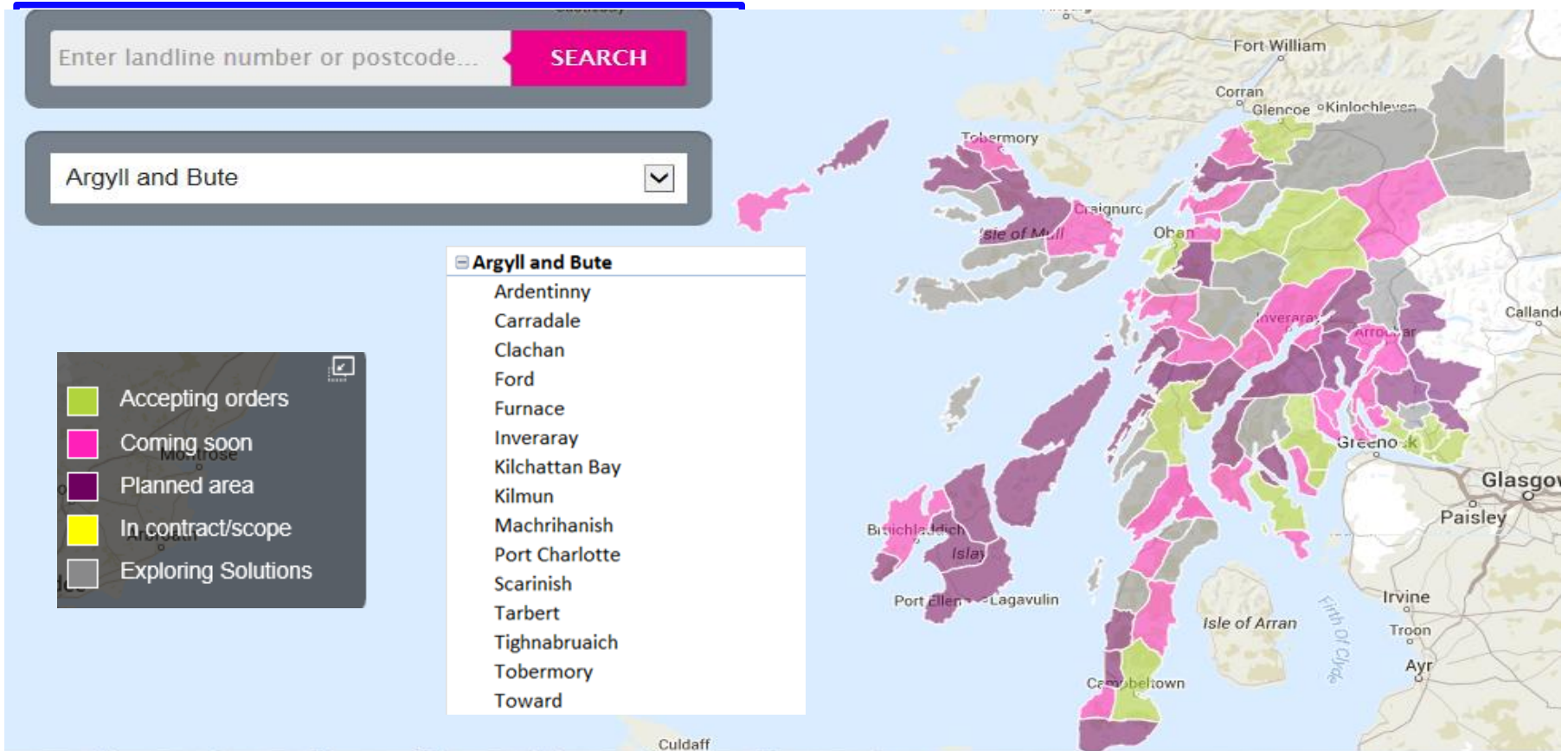
Achnamara	Kilninver
Bonawe	Lochavich
Gigha	Ormsary
Glendaurel	Skipness
Inveruglas	Tayinloan
Kilchrenan	Whitehouse

A % of Premises within the following island communities form part of a the GigaPlus Argyll wireless project.

| Colonsay |
| Iona |
| Islay |
| Jura |
| Lismore |
| Luing |
| Mull |
| Penninsula of Craignish |

*** - please note – our intention in any exchange area is to maximise the level of coverage to as many homes and businesses as is possible. The plans shown above are subject to continued survey and update.*

Digital Scotland Website

The interactive postcode/telephone line checker allows more detailed clarity of exchange area rollout plans – latest announcement shown below.

www.digitalscotland.org/whereandwhen

Communications Objectives

awareness ▶ **demand stimulation** ▶ **business development**

Provide clear and consistent information on how broadband is changing in the Highlands and Islands.

Encourage those with access to next generation broadband to adopt it.
Highlight the benefits.

Inspire businesses and communities to make the best use of the broadband and technologies available to them.

Open Access Network

Customer (End User)

Solutions Provider /
Communications Provider

Openreach

Equivalence of input
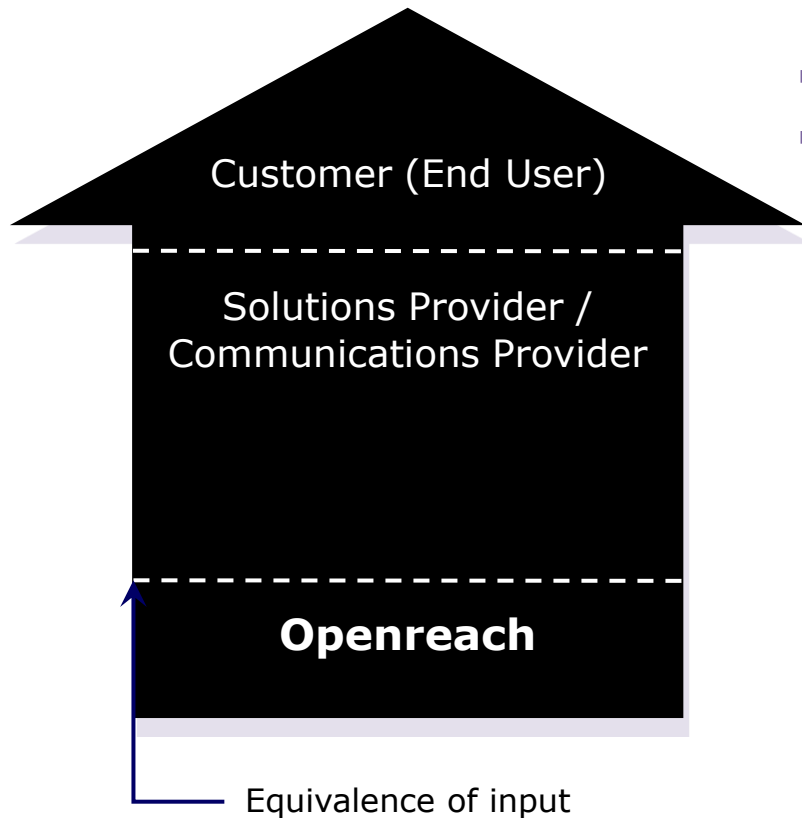
The UK supply chain

- Growth in demands for speed.
- We deliver Superfast Fibre Access capability to Communications Providers (CPs) at lowest practical economical point
  – Enable CP innovation & differentiation

Going further and faster

BT will "never say no" to providing faster broadband to communities

- In September 2015 Gavin Patterson announced BT's desire to go **further and faster** on fibre broadband

- **Innovative funding and technical solutions** will be explored

- **90 communities** are already benefitting from this approach

- A **greater proportion of premises** will have access to fibre broadband than can access mains gas

September 22, 2015

BT CEO delivers vision for Britain's digital future

BT Chief Executive Gavin Patterson today unveiled the company's ambition to deliver Britain's digital future, cementing the nation's future prosperity as the G20's leading digital economy.

Universal Minimum Speed

He committed BT to supporting government in delivering a new universal minimum broadband speed of 5-10Mbps, enough for everyone in the UK to enjoy popular internet services like high definition video. Patterson also cited new technologies developed at BT's Adastral Park research laboratories, which should help boost slow speeds for many hard-to-reach premises. Industry-leading research there includes tests on promising new technologies such as "wireless to the cabinet" and "long reach VDSL", to help bring higher speed broadband to hard-to-reach communities.

Patterson also pledged the company would introduce a satellite broadband service for some of the UK's more remote premises by the end of the year.

From Superfast to Ultrafast speeds, reaching 10m premises by end of 2020

Patterson stressed the potential benefit to homes and smaller businesses from Ultrafast broadband technology. He went beyond his January statement on ultrafast broadband, to say BT's new services of 300-500Mbps would reach 10m homes and smaller businesses by the end of 2020, and the majority of premises within a decade. A 1Gbps service will be provided for those that want even faster speeds. The connections on offer would be a combination of FTTP technology, as well as new G.fast technology, which uses existing FTTC technology.

www.communityfibre.bt.com

BT

Summary : How does rollout impact Argyll and Bute?

✓ Anticipated to reach circa 85% coverage by Mar 2017*

    ✓ *driven by Digital Scotland programmes managed by HIE, SG and BT commercial deployment.*

✓ Rollout has already commenced with more than 20,000 homes and businesses now able to access fibre based broadband.

✓ Thousands more anticipated by the end of 2015.

✓ Take up encouraging at >15% but support and focus required to deliver the 30%+ opportunity.

✓ The majority of Exchange areas across the region will have access to fibre coverage during 2016 – due to the backhaul and subsea programmes.

✓ Points of Ppresence (PoP) are live in Oban, Campbeltown and Dunoon with additional extended reach coverage available in Rothesay and Lochgilphead. This will bring access to Ethernet type products driving opportunities for economic development & inward investment opportunities to a wide range of business customers.

✓ Additional funds through the gainshare & Superfast Extension Programme are currently under review with the aim of supporting improvement to fibre coverage right across the Highlands and Islands where possible.

✓ New technologies will be considered to address remaining gaps and deployed where additional funding is available.

How do I stay up to date

- ✓ If you already have Broadband – visit your ISP website using their line checker to determine availability –
  - ✓ To get Fibre Broadband you will need to order it from your ISP.
- ✓ If you do not have Broadband, but don't know where to start – visit www.scotlandsuperfast.com or www.hie.co.uk/digital and find out more by registering to be kept in the loop.
- ✓ Information will be released via both the Scot Government and HIE social media accounts and additionally in the local press as further areas go live.

Twitter: @HIEScotland / @digitalscots

Facebook:www.facebook.com/highlandsandislandsenterprise

Websites: www.hie.co.uk/digital
              www.digitalscotland.org
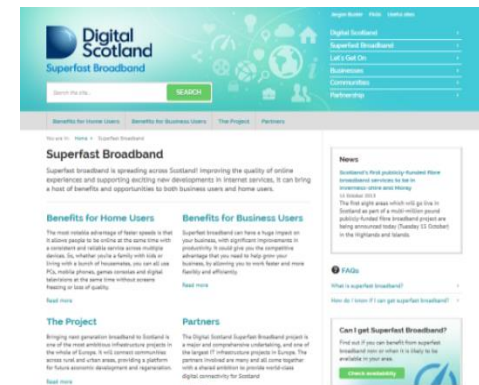
Where are the backhaul routes.

Moleplough of 4 way direct in ground sub duct on Jura

- **10 Subsea** Cables in the Argyll & Bute area are as follows, 91km subsea
  .

A end exchange name	B end exchange name	Total Sheath KM
Campbeltown	Shiskine	12.1
Jura	Port Askaig	28.1
Rothesay	Toward	6.8
Kilfinan	Lochgilphead	12
Kilchattan Bay	Millport	2.6
Glenbarr	Port Ellen	3.7
Jura	Ormsary	1.6
Craignure	Oban	9.3
Kilchoan	Tobermory	5.5
Dervaig	Scarinish	9.1

- **8 Land Based** cables in the Argyll & Bute area are as follows, 112km
  .

A end exchange name	B end exchange name	Total Sheath KM
Lochgilphead	Tarbert	22.3
Kilfinan	Tighnabruaich	16.9
Glendaruel	Tighnabruaich	15.99
Innellan	Toward	4.09
Clachan	Tayinloan	12.26
Bowmore	Port Askaig	13.72
Glenbarr	Tayinloan	9.52
Aros	Tobermory	17