## The Connectivity Challenge

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#### Highlands and Islands (HIE) Superfast and Fibre Coverage



Coverage percentages include both residential and business premises and is based around postcode level data. The speed available are determined by a model that reconstructs the Openreach exchange/cabinet based network, and takes into account the distance limitations of ADSL2+ and VDSL2/G.fast (FTTC) services.

Virgin Media Cable:

Full Fibre (FTTP or FTTH):

0.00%

0.67%

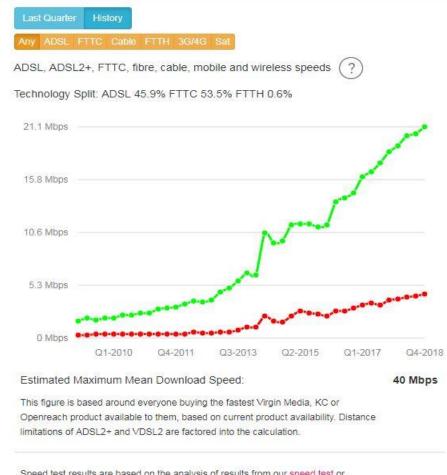
Openreach G.fast:

(FTTC/VDSL/G.fast/Cable/FTTP)

'Fibre' partial/full at any speed: 91.47%

The use of an independant model constructed and continually updated as the network roll-outs continue is different to the methodology used by Ofcom which is reliant on data provided by broadband providers. By running our model we are able to provide a verification for the Ofcom data and are not reliant on quarterly data releases but can update data on a daily or weekly basis as needed. The largest factor for any differences with the Ofcom analysis is down to the timing of publication.

#### Highlands and Islands (HIE) Speed Test Results (Mbps)



Speed test results are based on the analysis of results from our speed test or partners who use our speed test service. We believe this is the largest analysis of crowd sourced speed test data for the UK and the technology splits by area help to show what the public is experiencing for the different types of services across the UK.

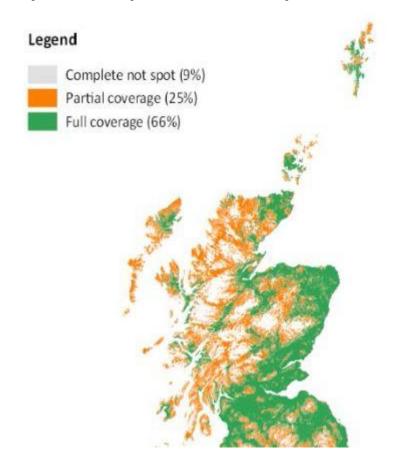
## Geographic 4G coverage from all operators across the UK

Nations	All	Rural	Urban
England	82%	79%	98%
Northern	79%	78%	93%
Ireland			
Scotland	38%	37%	96%
Wales	57%	53%	89%

Source: Ofcom analysis of operator data,

September 2018

### **Complete and partial 4G not-spots**



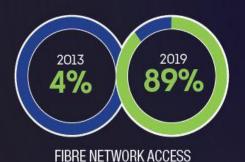
There are 12,000 premises in Scotland that do not have coverage from either decent fixed or good 4G mobile

## DIGITAL HIGHLANDS AND ISLANDS

























# Broadband Take-Up

Local Authority	% Take Up
Argyll and Bute	53.21%
Arran and Cumbrae	55.14%
Highland	54.56%
Moray	53.67%
Orkney Islands	48.59%
Shetland Islands	57.74%
Western Isles	62.53%
<b>Grand Total</b>	54.67%

# Reaching 100%

- Large scale, high value national procurement
- Complex, multiple bidders, variety of business models
- Exciting potential full fibre
- Extended implementation period inevitable

# Other Projects

- Private wireless providers
- BT's 21CN ADSL2+ (up to 20Mbps)
- Universal Service Obligation 10Mbps or better on request
- Mobile Infill S4GI
- Satellite Broadband
- Local Full Fibre Network Inverness, Fort William, Wick and Thurso
- Internet of Things (IoT)

## **The Connectivity Opportunity?**

