



From mountain to sea

Digital Engagement Team Presentation to Meldrum, Bourtie & Daviot Community Council

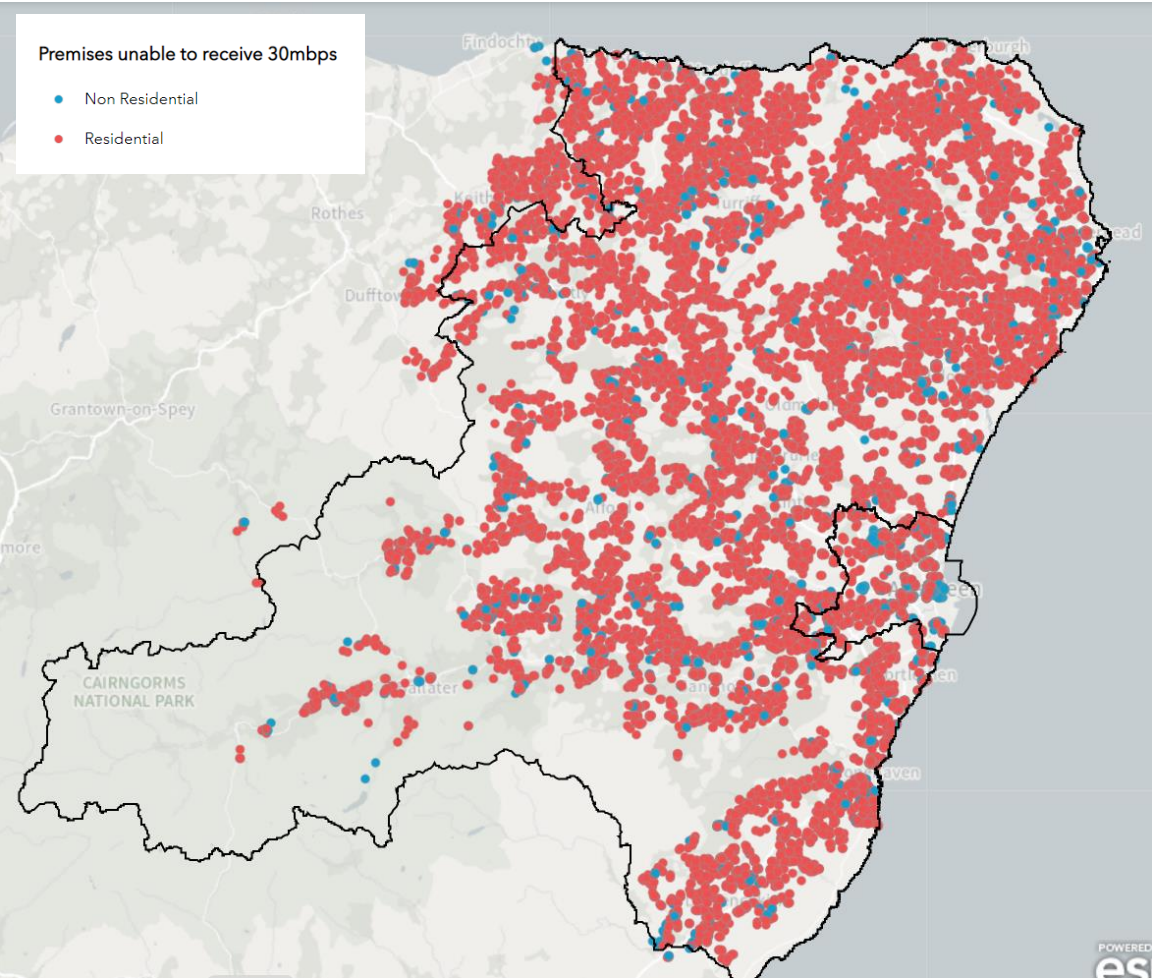
26th September 2023

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From mountain to sea

Aberdeenshire’s Current Connectivity Landscape - Superfast Broadband Availability (30Mbps +)



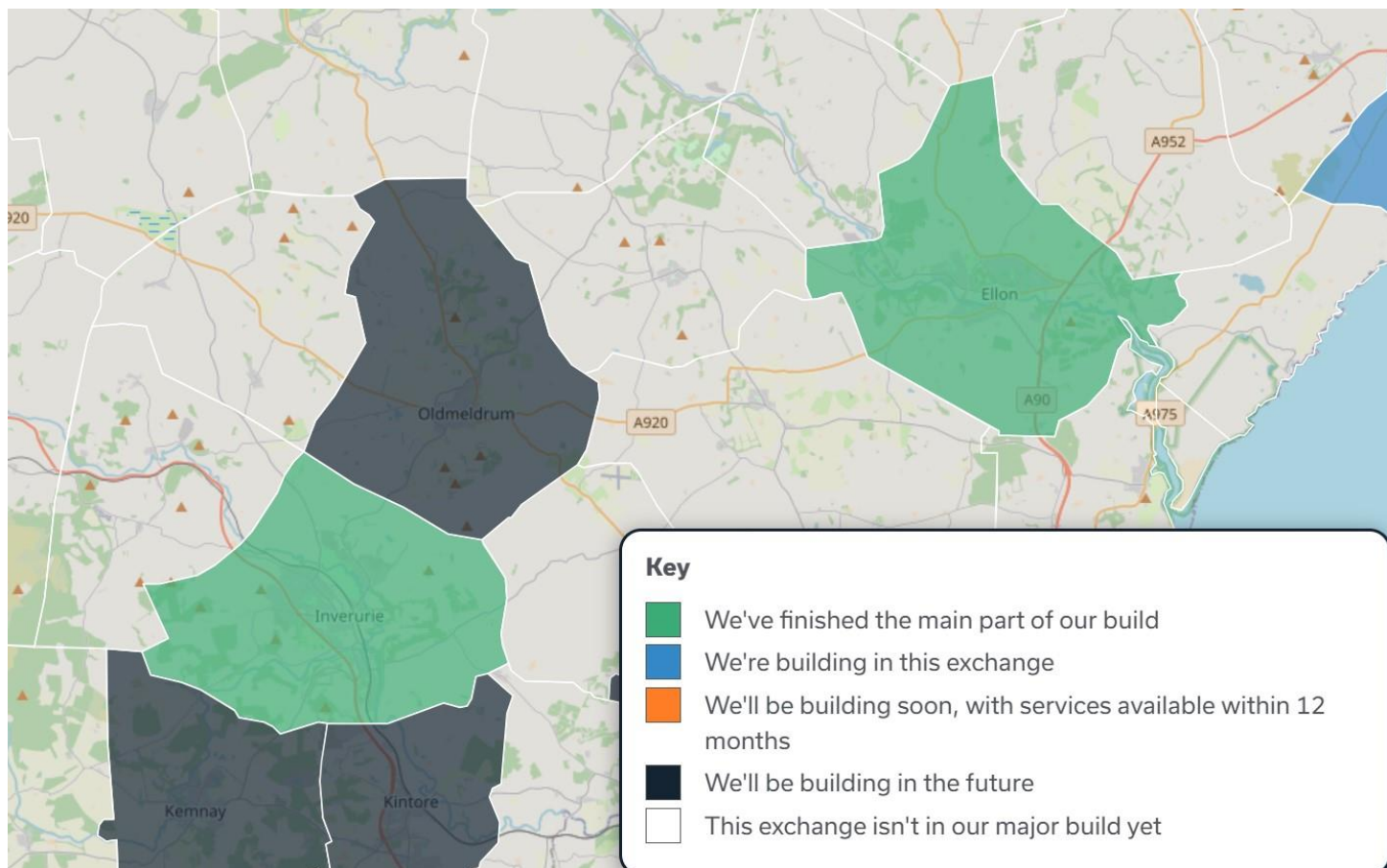
Aberdeenshire Stats	
# Premises Total	128,408
# Premises with SFBB	110,296
% Premises with SFBB	86%
# Premises without SFBB	17,774
% Premises without SFBB	14%

Scotland Stats	
# Premises Total	2,860,096
# Premises with SFBB	2,705,289
% Premises with SFBB	95%
# Premises without SFBB	145,750
% Premises without SFBB	5%



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Commercial Broadband Expansion – Meldrum, Bourtie & Daviot CC Area



Aberdeenshire only has one wholesale broadband network provider – Openreach.

Other wholesale Fibre operators (Virgin Media; Borderlink; Axione; CityFibre; Hyperoptic etc) do not have any spine infrastructure in Aberdeenshire, making any commercial deployment highly unlikely.

Openreach's current commercial plans for full-fibre expansion is called 'Fibre First,' and targets Market Town exchanges, with commercial improvements expected in Aberdeenshire by April 2026.

Exchange areas included in Fibre-First upgrades in MB&D CC area:

- Inverurie (completed by 2024)
- Oldmeldrum (completed by 2026)

Reaching 100% (R100) – Scottish Government's Superfast Broadband Programme

The Reaching 100% commitment

The R100 project commits to providing access to Superfast Broadband to 100% of homes and business in Scotland. The R100 programme aims to close the gaps left by the previous Digital Scotland Superfast Broadband (DSSB) programme, by targeting the most rural premises first. The commitments of R100 will be achieved through three strands of activity:

- **R100 Contracts** – **BT**, and their supply partner **Openreach**, were the successful contractor, funded to deploy full-fibre infrastructure as part of the R100 programme. This will directly benefit nearly **16,000** properties in Aberdeenshire.
- **Commercial Coverage Contracts** – Scottish Government are committed to working closely with National Telecoms Operators, to encourage further commercial expansion across Scotland, and to monitor closely all connectivity work being completed. This work aims to benefit around **1,200** properties in Aberdeenshire.
- **Scottish Broadband Voucher Scheme (SBVS)** – Approximately **7,000** properties in Aberdeenshire will not benefit from the other two work streams. For these properties, support is made available to residents to obtain an alternative superfast broadband solution, through a **£5,000** voucher subsidy.

The R100 [online postcode tracker](https://www.scotlandsuperfast.com) is live now:

www.scotlandsuperfast.com

*Decent Broadband (USO) =
> 10 Mbps*

**Superfast Broadband =
> 30 Mbps**

*Ultrafast Broadband =
> 300 Mbps*

*Gigabit Broadband =
> 1Gbps / > 1000Mbps*

Check you broadband speeds on
www.broadbandspeedchecker.co.uk

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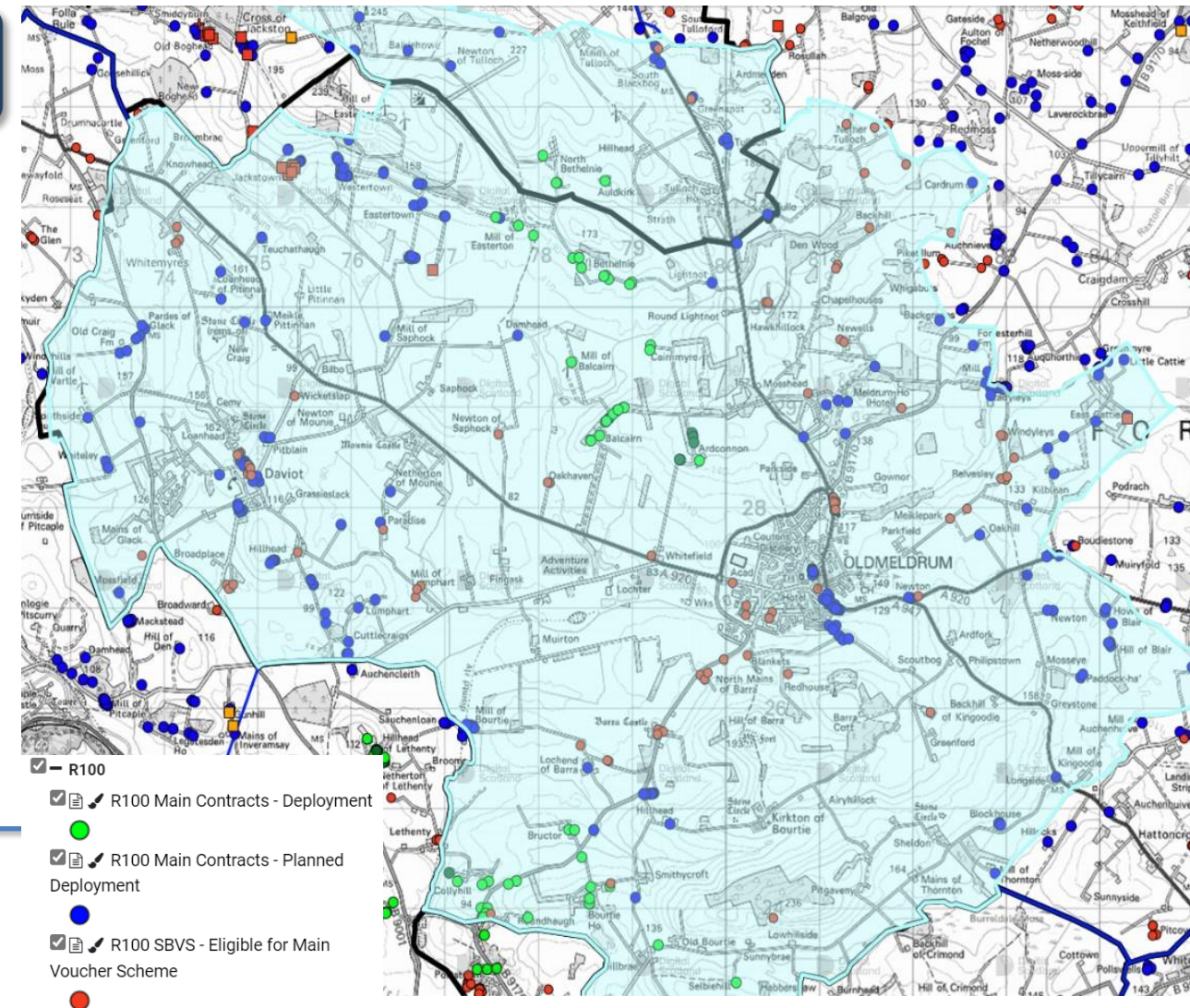
Reaching 100% (R100) – Meldrum, Bourtie & Daviot CC Area

For the **MB&D CC Area**, the Reaching 100% (R100) Programme and associated Scottish Broadband Voucher Scheme (SBVS), will result in the following:

- **263** properties will be connected to Full-Fibre broadband infrastructure by Openreach
 - **58** properties have now been connected to FTTP
 - **205** properties will be connected by the end of 2024
- **102** properties eligible for a **£5,000** voucher subsidy
 - **8** x New Build Premises
 - **9** x Out-of-Scope Premises
 - **60** x No-Build Premises
- **8** SBVS vouchers have already been utilised (8% of available vouchers)

Aberdeenshire Totals

3,160 connections to date against planned build of **15,283 (20.7% completed)**
741 SBVS Vouchers used against **6,024** available SBVS (**12.3% uptake**)





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Utilising the Voucher Schemes

Vouchers can be utilised by a range of local and national telecoms operators, all of which can be found on the R100 website (scotlandsuperfast.com)

Vouchers are Operator-led, meaning whichever operator chosen by a resident, will claim the vouchers on the residents behalf, to cover their costs. Vouchers can only be used for the costs of installation, and cannot be used against ongoing costs, and cannot be used to provide operators profit.

To claim any vouchers, the operator must install a solution that guarantees broadband speeds of 30Mbps.

In order for the installations to be live, residents would typically need to subscribe to the chosen operator for their internet services for a minimum of 12 months, and **monthly costs cannot exceed £48.90 per month**, for superfast speeds.

If residents opt for a package more than just 30Mbps, then operators can charge more for this.

With access to data and mapping tools, the Digital Engagement Team are here to support Residents to find the best Operator and solution for their property, regardless of location or rurality.



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Fibre Broadband Technologies

Fibre-to-the-Cabinet (FTTC)

The most common current broadband infrastructure across Scotland. Primarily expanded through the Digital Scotland Superfast Broadband (DSSB) Programme.

For residents within 600m of a Fibre Cabinet = Good connectivity up to 80Mbps

Beyond 600m, broadband speeds will degrade over distance

Copper cable may be served via overhead cable, underground ducting, or 'self-buried' cabling.



Fibre-to-the-Property (FTTP) / Full-Fibre

Full Fibre Broadband, means fibre-optic cable directly to the premises (FTTP)

Future-proof for speeds (> 1Gbps speeds possible)

Very low-latency connection – wider bandwidth

Monthly subscription costs can be very low / open competition

Unlimited data downloads common

Time-consuming and expensive to install (requires installation of new cabling). Must be served via insulated ducting, or via overhead cable.



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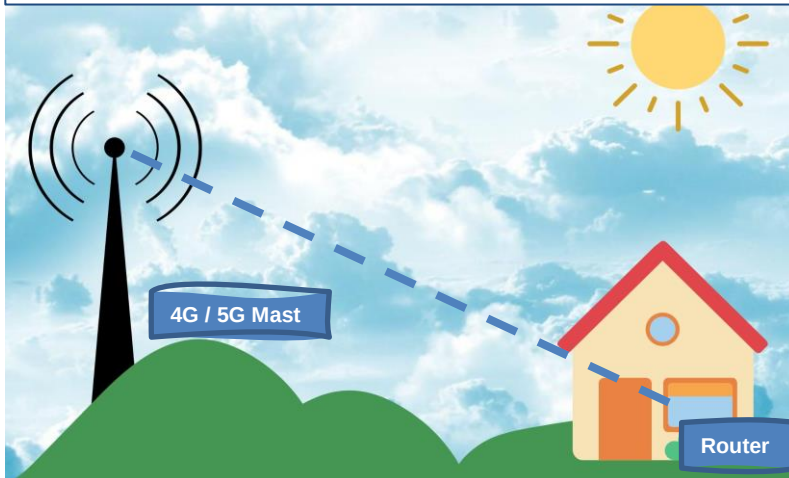
Alternative Broadband Solutions

Mobile Broadband

Provides high-speed internet using current mobile (4G / 5G) coverage
Uses existing network of mobile masts

Portable option – can be used anywhere there is signal
Same-day activation (little to no installation)
Low-cost subscription rates

Higher latency connections
Shared connection, affected by area usage
Reliant on mobile coverage
4G coverage unlikely to achieve speeds beyond Superfast
5G rollout to rural areas currently not planned

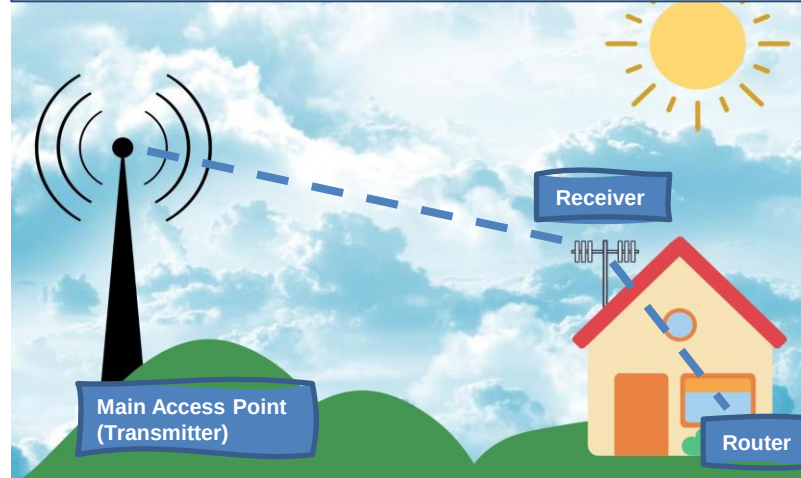


Fixed Wireless Broadband

Provides high-speed internet access using radio signals
Uses transmission masts or poles to send out the radio waves to the local area

Low-latency connections
Quick & easy installation
Dedicated connections
Local Operators

Requires line-of-sight between the mast and the premise
Affected by the landscape
Higher monthly rates

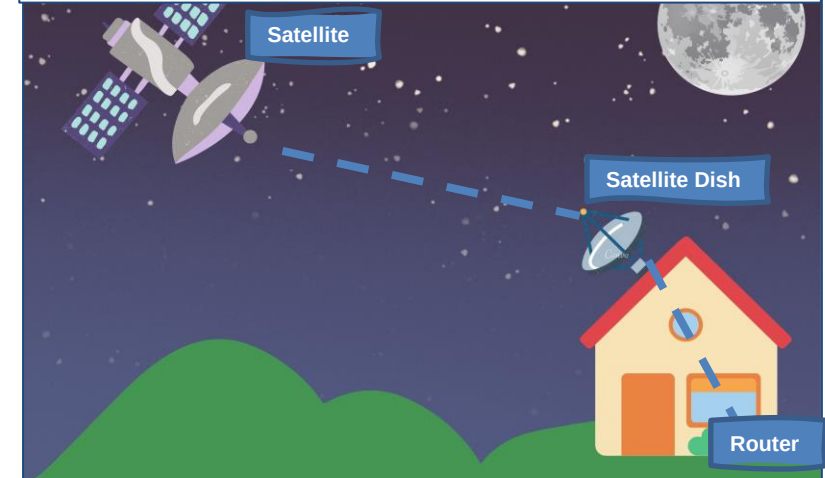


Satellite Broadband

Provides high-speed internet using satellite networks
Broadband signal transmitted from space, and picked up by satellite receiver on property

Available everywhere – not affected by landscape or geography
Quick installation
Stable connections

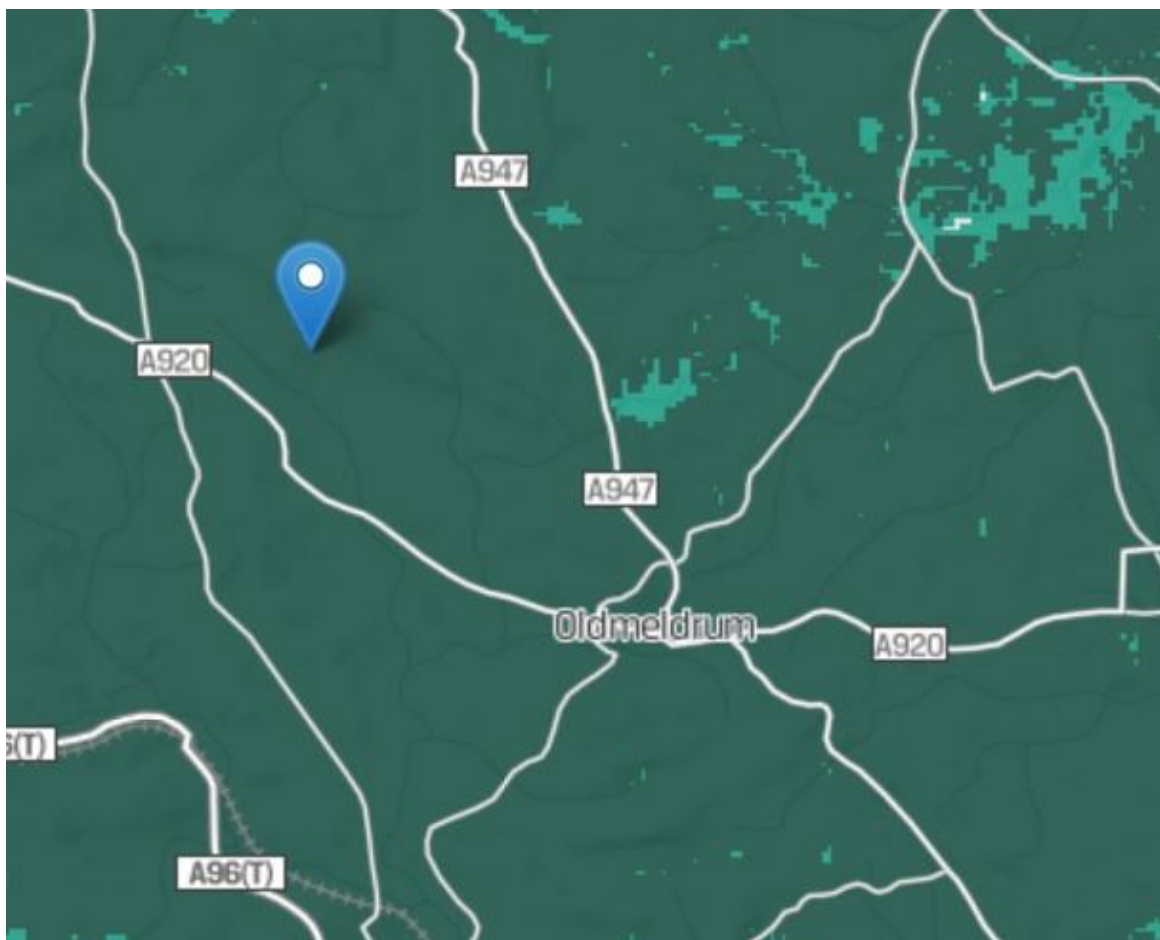
Higher latency service (due to distance of transmission)
Higher cost subscription rates
Priority data instead of data caps





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Aberdeenshire's Current Connectivity Landscape – 4G Mobile Coverage



4G Coverage in the Meldrum, Bourtie & Daviot CC area is very good, with total outdoor coverage available from all four Mobile Network Operators (EE, O2, Three & Vodafone)

O2 has the strongest network in the area, with almost ubiquitous outdoor & indoor 4G coverage.

Vodafone is next best, with EE a close third, and Three being the weakest, but still with very good 4G coverage across the CC area.

Due to the topographic nature of the region, and the type of buildings present in the area, although 4G coverage is decent, there may be inconsistencies experienced for indoor 4G usage.

Enhanced 4G solutions can rectify these inconsistencies.

Mobile Network Operators advertise their coverage online, however Ofcom as the industry regulator, also provides a more accurate coverage checker at:

<https://checker.ofcom.org.uk/en-gb/mobile-coverage>



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Public Switched Telephone Network (PSTN) Retiral

Background

In November 2017, the telecoms industry announced its intention to retire analogue telephone networks such as the Public Switched Telephone Network (PSTN) by the end of 2025. The industry will upgrade landline services to new digital technology using an internet connection, such as Voice over Internet Protocol (VoIP)

Current Timeline

Ahead of the network retirement in 2025, customers will notice that telecoms service providers will stop selling PSTN services from 2023, with new customers, or renewed contracts, being moved over to digital voice services.

What does this mean for you?

- Your landline phone number will be 'ported' to a digital service, and can be moved between providers as needed, similar to a mobile phone number
- Landline phones will be plugged into the wi-fi router in the home, instead of the phone socket in the wall
- Phonecalls will be made over the internet, using whatever connection is used for the property's broadband connection
- Calls require minimal broadband capacity, and will work on even the slowest broadband connections
- Most operators can and will provide phone-only services for residents who do not want a broadband connection
- Digital services will not work as standard in the event of a power cut. However, telecoms operators can provide free-of-charge solutions to allow residents to make calls in the event of a power cut.
- Phoneline reliant services (telecare devices; response alarms) will need to be moved over to digital services, and is the responsibility of the service providers.



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Our Ask / Q&A

Share information

Spread the word

Signpost to the Digital Engagement Team

Contact us for information & support

Q & A

Please feel free to ask any questions you may have

Email: digitalengagement@aberdeenshire.gov.uk

Landing Page: www.aberdeenshire.gov.uk/business/support-and-advice/communities/Digital-Connectivity/

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