

# Denbighshire County Connectivity Status Update

## *Internet Status (March 2026)*

Denbighshire has approximately 52,756 Premises:

5,681 premises do not have Full Fibre internet

1,545 premises cannot receive 30Mbps

902 premises cannot receive 10Mbps

611 premises cannot receive 2Mbps

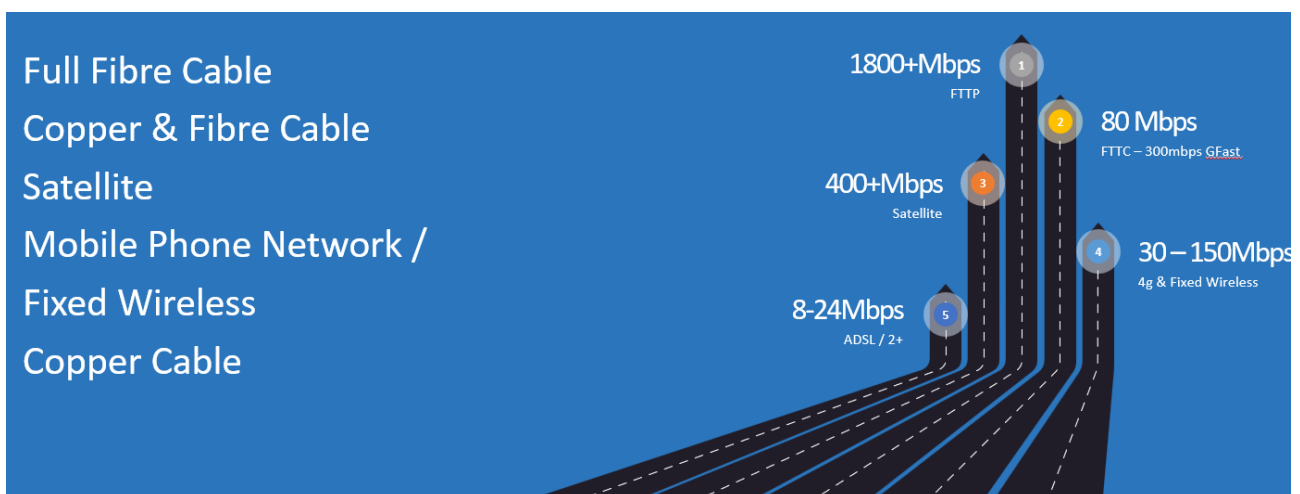
*Note: The 30/10/2 Mbps statistics are based on an algorithm and are lower than the real-world figures. The Digital Officer has dealt with many residents where OFCOM state they should receive 30Mbps or more and they are in fact struggling with less than 10Mbps.*

## **Recommended Speeds:**

30Mbps is the UK and WG Government’s minimum objective for every property.

100Mbps is the industry recommended speed for modern demands.

The Minimum Digital Living Standard for UK Households Contents states that the connection should provide sufficient reliability and speed to support all household members to access the internet at the same time. Whilst the MDLS does not specify a minimum Mbps speed, we acknowledge that some premises in Denbighshire do not meet this criteria.



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Please note: The UK Government classes telephony as an Open Market. This means it is not Openreach's sole responsibility to connect every to premise. There are dozens of telephony/internet providers in the UK, such as Virgin and CityFibre. All of whom, have the same opportunity to connect Denbighshire's premises. They choose not to do so, because of the expense.

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## The UK Government is running a scheme called 'Project Gigabit'

This scheme should upgrade 3157 Denbighshire premises to full fibre by December 2030, leaving 2164 properties on the older less reliable and slower copper cabled technology.

The original tender contained 3,667 premises; 510 premises were pruned due to the cost of connecting to them. Being on the list does not guarantee connection.

The premises left out of the upgrade are the expensive hard to reach rural properties that also missed out on the FTTC (2009 – 2017) upgrade and are struggling on vintage ADSL.

### *Property numbers being installed by Project Gigabit by Ward*

<b>Exchange Name</b>	<b>Number of Premises being Upgraded</b>
Bodfari	97
Bryneglwys	107
Clawdd	
Newydd	65
Corwen	27
Cyffylliog	140
Denbigh	28
Dyserth	285
Glyndyfrdwy	19
Llanarmon Yn Ial	55
Llandegla	25
Llandyrnog	31
Llanferres	117
Llangollen	532
Llanynys	246
Nantglyn	79
Prestatyn	13
Rhuddlan	29
Rhyl	1
Ruthin	495
St Asaph	430
Trefnant	275

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## Welsh Government will be running a scheme called ‘Extending High Speed Broadband Reach in Wales;

It is a £70m project that is looking at upgrading 30,000 premises across Wales.

It is aimed at the premises that cannot currently receive 30Mbps (Denbighshire has 1,545 of these).

Full details and a list of property in this scheme should be announced after the Welsh elections.

It does not guarantee to provide fibre, only a 30Mbps connection.

It is expected to rely heavily on 4g/5g, fixed wireless and Satellite services.

## Openreach Exchange upgrade

Openreach have been upgrading 12 Denbighshire Exchanges areas over the past couple of years.

They promise to upgrade a minimum of 75% of the premises that connect to the exchanges in the scheme, to full fibre by December 2026.

They have hit 80-95% in the completed areas in Denbighshire.

### *Current status of the eligible exchanges:*

Exchange	Total Premises	% Upgraded	Upgraded	Not upgraded
Corwen	1313	78.70%	1033	280
Denbigh	5367	97.30%	5222	145
Dyserth	1935	91.80%	1776	159
Llanarmon Yn Ial	553	80.50%	445	108
Llangollen	2432	29.20%	710	1722
Prestatyn	11317	98.00%	11091	226
Rhuddlan	2172	95.40%	2072	100
Rhyl	18520	96.20%	17816	704
Ruthin	4859	74.70%	3630	1229
St Asaph	3535	86.10%	3044	491
Trefnant	776	87.90%	682	94

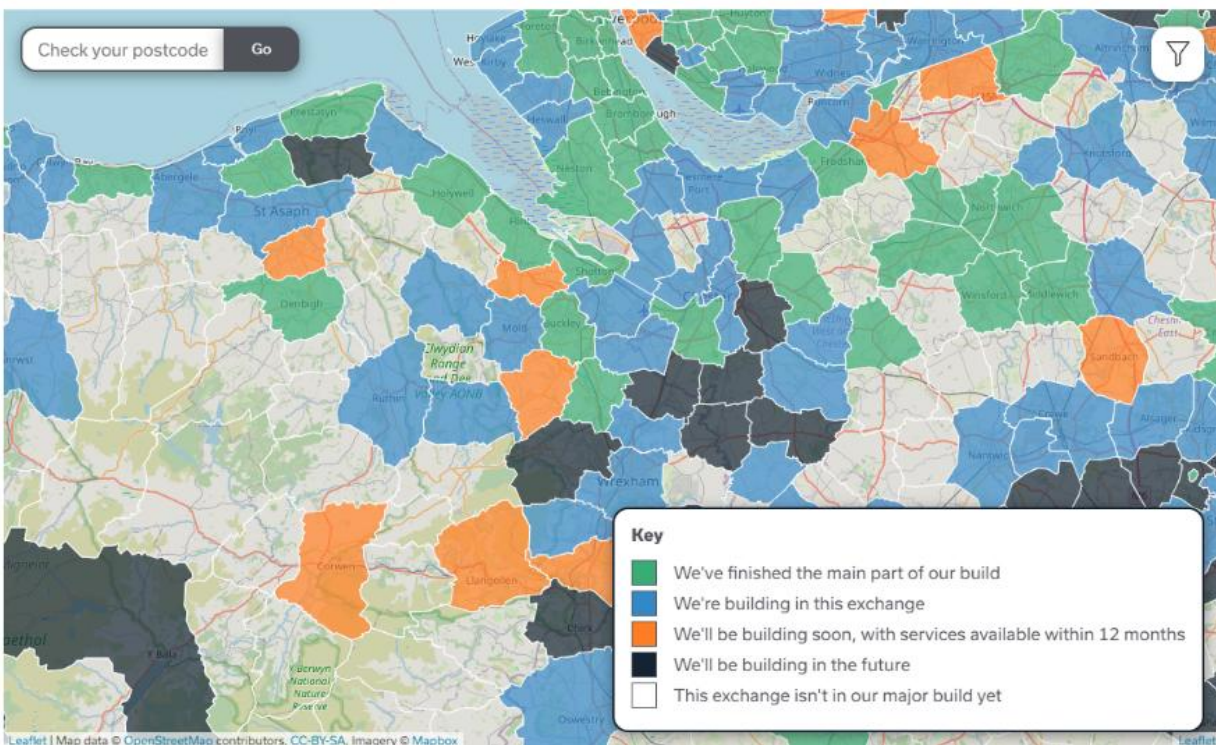
### *The Exchanges that are not in the scheme are:*

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Bodfari  
Bryneglwys  
Clawdd Newydd  
Cyffylliog  
Glyndyfrdwy  
Llandegla  
Llandyrnog  
Llanferres  
Llanynys  
Nantglyn

Please note: *Many properties around the county border connect to exchanges outside of the county*

***The coloured areas on the map below indicate the exchange upgrade areas in the scheme.***



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## 4g Mast Clocaenog

Utilising the Brenig Wind Farm Fund, and working with WG, Clocaenog Community Council and EE, we managed to arrange to have a 4g small cell installed in the village of Clocaenog. Due to the concave topography that the village is located within, there was no mobile phone signal prior to this.

New mast schemes will be funded via the Ambition North Wales [4G+ Project](#)

## Fibre Community Partnerships

Historically Openreach allowed us to run Fibre Community Partnership (FCP) schemes using Government Vouchers to pay for areas to be upgraded. The last four of these schemes started in 2024 They have fallen a year behind schedule. They should be completed next month. Because of Project Gigabit, Openreach have expressed a lack of interest in running more FCPs.

### ***Premise Count in the 4 Fibre Community Partnership:***

Clawdd Newydd - 138 premises

Glyndyfrdwy to Carrog – 294 premises

Tremeirchion – 134 premises

Llandyrnog – 240 premises

## Grants

The Welsh Government Access Broadband Cymru grant offers up to £800 to purchase and install a 4g/5g, fixed wireless or satellite solution. The grant is only available for premises that cannot currently receive 30Mbps.

## PSTN Switch Off

The copper telephone exchanges will be turned off by January 2027.

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For the majority of premises, phones will plug into the internet router and calls will be converted to internet traffic, the technology is called Voice over IP (VOIP). Some companies like BT and Vodafone are calling it 'Digital Voice'.

If a premise does not have an internet connection, or the internet is too slow to provide voice calls, a resident can ask for a dedicated phone line from their provider. This retains the copper cables to the property and it should remain powered during a power-cut. Reputable telephony providers should be signed up to the 'Charter of Commitments' and this is one of the services it insists upon.

The old style phones are powered by the copper phone cables and so will work during a power cut. The phones using VOIP via the router will not work if there is a power cut as the router requires power.

Vulnerable people can ask their telephony provider for a battery back-up which should power the router for up to 4 hours.

These backs-up can also be bought from computer shops.

If a resident does not have a cabled internet service, but uses 4g, fixed wireless or a satellite connection, they can either ask a telephony provider for a dedicated phone line or utilise a VOIP phone provider and make calls over their non-cabled internet solution.

4g/ Fixed wireless and satellite equipment will stop working during a power cut. A battery back may be required for emergency calls.

## Telecare

Denbighshire Telecare have been busy upgrading the telecare equipment over the couple of years to ensure compatibility with VOIP and the lack of copper-based telephony. There shouldn't be any issues with people who upgrade to VOIP.

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## Smart Meters in Rural Areas

Poor internet connection in rural areas often coincide with poor 4g. The lack of both means electric smart meters cannot report usage statistics to the electricity companies and therefore hampers the use of smart tariffs, therefore running a higher risk of households experiencing fuel poverty. Without a smart meter it is impossible to use tariffs designed for EV charging, heat pumps and cheap night rates. Solar systems will on the property will not be allowed to export.

## Digital Officer

The Digital and New Technologies Officer is happy to create a connectivity report for any Denbighshire business and resident. The report will outline if they are in any known schemes and what alternatives are available.

## Jargon:

**Mbps** – (Megabit per second) It is the standard unit used to measure your internet speed, telling you how fast data travels from the internet to your devices (phone, computer, TV).

Example: A photo from a 48-megapixel iPhone camera is approximately 24MB in size. The figure below shows how long it would take to upload 1 photo at different internet speeds.

<u>Internet Connection</u>	<u>Time for file transfer</u>
1Mbps	3 minutes
10Mbps	19-24 seconds
30Mbps	6-10 seconds
100Mbps	2-3 seconds
1000Mbps	0.1 seconds

**ADSL** - Maximum speed of 24Mbps. The signal degrades the further a premise is from the exchange. The decrease in speed relates to the length of the copper cable. Rollout began in 1998.

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**FTTC** - (Fibre to the Cabinet.) Uses copper cables from the roadside cabinet to the premise. Maximum speed of 80Mbps. The further a premise is from the roadside cabinet, the slower the connection. Rollout between 2009 – 2017.

**FTTP** - (Fibre to the Premise) Maximum speed of 1800Mbps. Initial rollout started in Denbighshire in 2018. Basic package price averages at £25 for 50Mbps

**4g/5g Internet** - Uses the mobile phone network. Most masts in Denbighshire offer speeds between 150-35Mbps, 35Mbps is the most common. There are many areas with poor coverage where 4g is not an option. Average price £45 per month

**Starlink** – Uses low earth orbit satellites. 40Mbps – 400Mbps. Starlink reduced the tariff this year and now offer three residential speed options and free equipment: £35 for 100Mbps, £55 for 100-200Mbps and £75 for 400Mbps+ per month.

**Fixed Wireless** – There are wireless internet providers in Denbighshire. They install antenna on a mountain or tall structure and connect that to then internet via fibre. A wireless antenna is then installed on a premise to connect to the mast. The mountainous topography of Denbighshire has reduced popularity of this option. Prices start at £30-40 for 30Mbps