



# Growing Mid Wales Newsletter

January

## Happy New Year!

We're ready to get our teeth stuck into all the projects we have lined up this year. With the Regional Skills & Employment plan, Sites & Premises Programme Contract and a Spring event all being finalised we're preparing for a bumper year ahead – are you?

Just before we jump into 2023 news, did you get the opportunity to read the Business News Wales 2022 Regional Review we were featured in? If not, here's a link to the [Wales Regional Growth and City Deals 2022 Highlights](#).

This month we're focusing on all things Digital; Mid Wales' current connectivity, what initiatives are available right now and the aims of our Digital Programme.

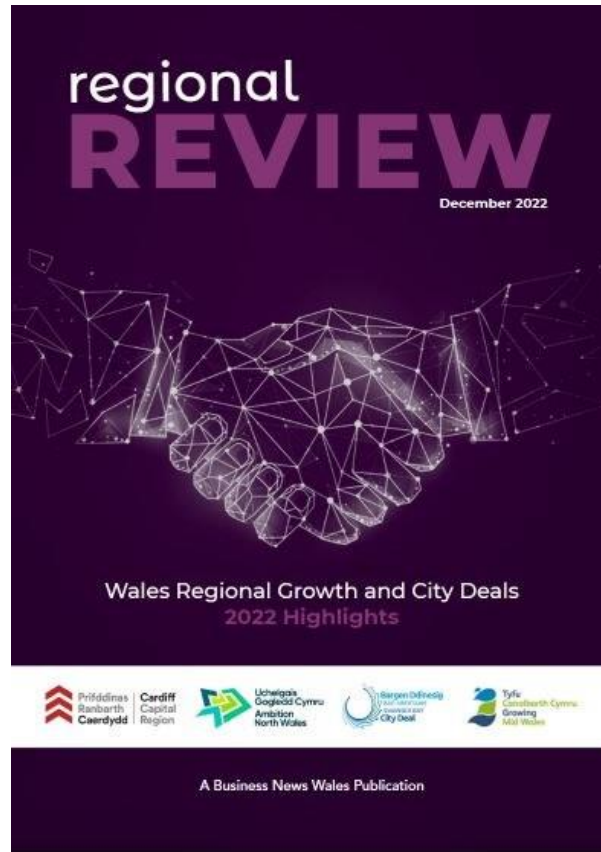
We also have a brand new feature starting this month - Meet the Team: each month we'll be shining the spotlight on a different member of our team. Read on to learn more about the role of our Digital Programme Manager, Dave Owen.

Is your organisation part of the Growing Mid Wales partnership? Or, are you a member of a group that's benefitted from European Regional Development Funding? If so, we'd love to share some of your news in future newsletters. Get in touch!

This newsletter is now our regular way to communicate with our stakeholders and we will always be looking at ways to improve the way we deliver our news. So, if you have any feedback, comments or relevant content to feature here, let us know.

Helping to grow opportunity in Mid Wales,

***The Growing Mid Wales team***



**Read on for:**

- Fact of the month
- Mid Wales' current connectivity
- The Digital Programme
- Digital Initiatives
- Meet the Team
- Keep up to date

## Fact of the month: Repurposing Powys' kiosks

The red telephone kiosk is iconic and were a lifeline to many before mobile phones took residence in everyone's pockets.

Since 2008, almost 4,000 communities and charitable bodies have adopted more than 5,800 iconic red telephone kiosks from BT. For just £1, community groups have been able to transform kiosks into practical, cultural, and inspiring assets, such as using the space to house a defibrillator.

51 kiosks have been adopted by community groups in Powys including: Llangunllo Community, Montgomery Town Council, and Dwyriw Community Council.

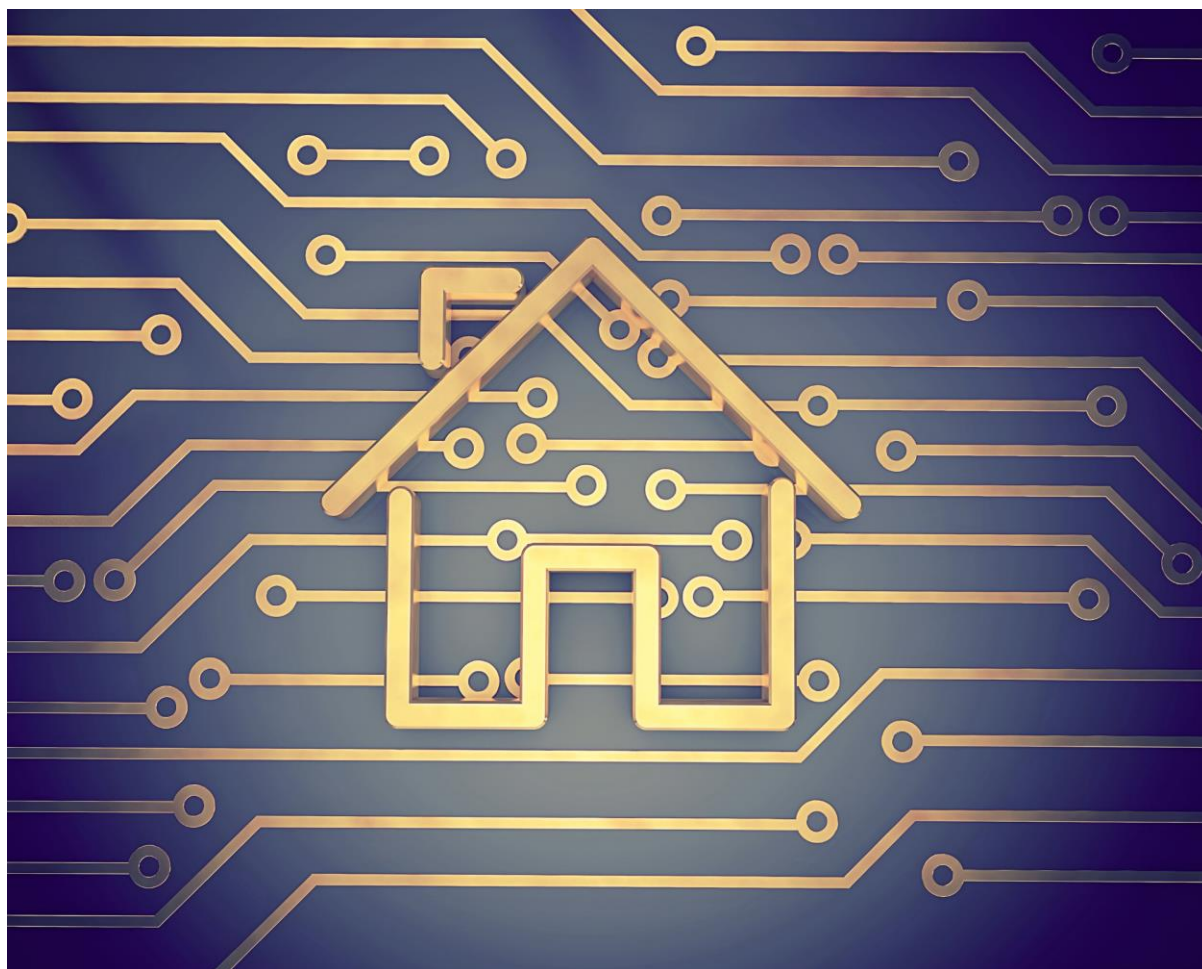
In 2011, a kiosk in Llanfrynach, near Brecon even got turned into a pop-up art gallery!

For further details on how to apply to Adopt a Kiosk, simply go to [www.bt.com/adopt](http://www.bt.com/adopt) where application forms and information can be found.



1 - Image taken from [BBC Source](#).

## Mid Wales' current connectivity



Access to good quality broadband and mobile phone service is essential to 21st-century living. From keeping in touch with family and friends to accessing critical services such as online medical consultations and online shopping particularly for those in a rural community; broadband and mobile phone service can be an important determinant of well-being.

Historically, levels of digital connectivity in Mid Wales lag behind some parts of Wales and the UK. The state of digital connectivity varies widely across the region.

### **Broadband**

Approximately 88% of premises in Mid Wales have the capability to connect to Superfast Broadband (30Mbps+), lower than that for Wales (97%) and the UK (97%) average.

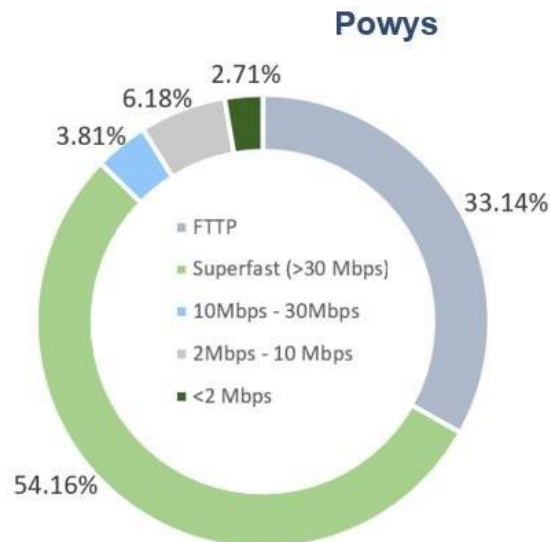
This equates to approximately 1 in every 7 properties across Ceredigion and Powys that are considered 'white premises', where 30Mbps cannot currently be received and where there is currently no planned intervention over the course of the next 3 years.

33% of the region currently has access to Fibre to the Property (FTTP) service, allowing download speeds of 1gbps (1000Mbps), this is lower than the average levels for Wales and the UK.

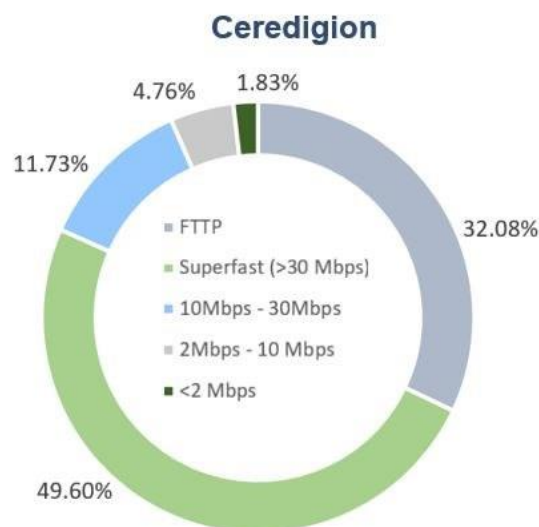
Whilst 7.5% of premises across Mid Wales cannot access a connection of more than 10Mbps compared to only 1.8% for Wales and 2.2% for the UK experiencing this issue.

However, it is an improving picture in some areas. Through the deployment of the Superfast Cymru programme, which is scheduled to be completed by March 2023, it has been suggested by Openreach that 90% of properties will be able to receive Superfast broadband (<30 Mbps) once the programme has been completed.

### Broadband Statistics (December 2022)



2 - [www.thinkbroadband.com](http://www.thinkbroadband.com)



3 - [www.thinkbroadband.com](http://www.thinkbroadband.com)

### Case Study: First Ceredigion town to establish Wi-Fi across centre

Cardigan was the first town in Ceredigion to institute Wi-Fi across an entire town centre. Two years in the planning, with the help of Superfast Business Wales, the network went live in May of 2018, offering free connectivity to both locals and visitors.

Ceredigion County Councillor Clive Davies explains that the idea to create town-wide analytics came from the systems adopted by large supermarkets, which regularly measure the most popular areas of their stores, including levels of footfall and the busiest shopping periods: “We just scaled it up to a

market town,” Davies explains. “[The system] uses Cisco external Wi-Fi equipment, which also captures analytical information such as dwell time, footfall numbers, plus new and returning town visitors.”

The data can track car parking too, including how long people stay, what time of day is the busiest, and which days are the busiest. It can also reveal the effect that the weather or a local event has had on visitor figures, as well as how often people visit the town, whether they’re newcomers or they return daily, weekly, and so on. A monthly report is distributed to all the town's businesses.

Read the full case study on how the town Wi-fi benefits the town businesses, dwellers and visitors. on the [Superfast Business Wales website](#).

Superfast Business Wales/Business Wales service is part-funded by the European Regional Development Fund and the Welsh Government.



4 - Cardigan

### Welsh Government’s Local Broadband Fund

In December 2021, it was announced that Powys would benefit from a Welsh Government initiative that addresses connectivity issues in its communities through the Local Broadband Fund.

The £900,000 project will connect 13 ‘hard to reach properties’ in Powys with incidental benefits provided to an additional 139 properties across the county.

The connection will be fibre to premises, which will use fibre run from the exchange direct to the hard to reach properties. The fibre will be split along the route at junctions such as fibre nodes where it will be run to the properties.

More information can be found on the Welsh Government's [site](#).

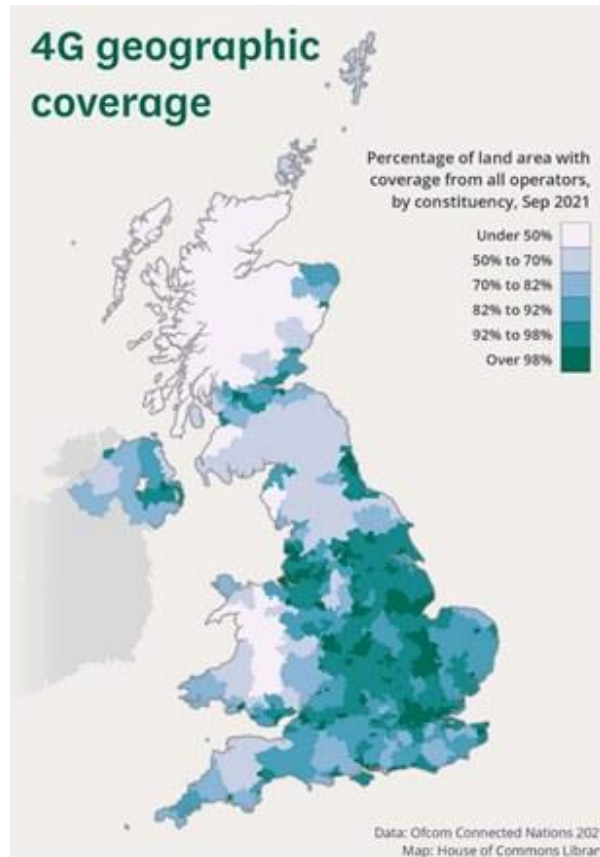
### Mobile

As with broadband, mobile coverage also falls behind the Wales and UK average with topography and the lower density of population posing particular challenges in improving mobile coverage across the Mid Wales Region.

86% of Mid Wales receives 4G coverage from at least one operator, while only 54% of premises have 4G coverage from all four operators, this in comparison to on average 73% in Wales and 80% across the UK. Approximately 9% of premises across the region have no indoor 4G services.

Over recent years both Ceredigion and Powys have seen several new 4G masts deployed and activated which has seen improvements in mobile coverage with many new masts planned through

the [Extended Area Service \(EAS\) programme](#) to provide improved coverage for the Emergency Services Network in remote and rural parts of both counties. It is hoped that these additional masts will become commercialised to provide services to residents and businesses through the [Shared Rural Network Programme](#) which is being implemented by the Home Office in conjunction with the four main Mobile Network Operators (MNO's), namely EE, Vodafone, Three and O2.



5 - 4G Geographic Coverage. Date: Ofcom Connected Nations 2021

Map: House of Commons Library

### **Case Study:** Using broadband to reach out to more in need

Key to getting Mid Wales connected are the Welsh Government's Superfast Broadband and Ultrafast Broadband Programmes, which have received a combined total of £29.6 million funding under the current European Structural and Investment Funds (ESIF) programme. These projects build on activity funded in the previous programme, aiming to connect 40,000 'harder to reach' premises to fit-for-the-future broadband infrastructure.

One Ceredigion charity that has utilised this programme to make its services more accessible is Area 43. [Area 43](#) runs a drop-in centre and counselling services and has contact with 1,800 vulnerable youngsters a year, many of whom are referred from other services such as education, child and adolescent mental health services, GPs, food banks and youth justice.

With the help of SuperFast Business Wales, Area 43 has made the organisation more accessible to the young people in Ceredigion by improving its website, increasing its presence on social media and establishing a *Here for You* online counselling service.

Read the full case study on how the charity has improved its services for young people on the [Superfast Business Wales website](#).

Superfast Business Wales/Business Wales service is part-funded by the European Regional Development Fund and the Welsh Government.



6 - Lisa Head, Service Manager at Area 43. Image courtesy of Superfast Business Wales.

## LoRaWAN

LoRaWAN (Long Range Wide Area Network) is a Low Power Wide Area Network (LPWAN) made for the Internet of Things (IoT). It is designed to allow low-powered devices and sensors to communicate with Internet-connected applications over long range wireless connections.

These sensors or devices require very low power consumption and work off batteries or energy-harvesting devices (typically solar), which means that they can be in place in remote areas for up to 10 years without the need to replace them.

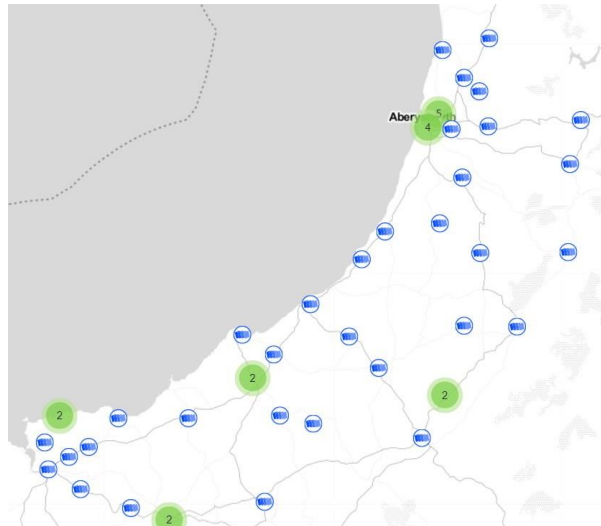
The use of LoRaWAN can have applications in transportation, agriculture, tourism, environmental management, social care and housing.

Further details upon LoRaWAN can be found in this video presented by [The Things Network](#).

 <p><b>Cattle health</b> Sensors monitor cattle health, detect diseases and forecast calves delivery time.</p>	<h3>Benefits of LoRaWAN technology</h3>	 <p><b>Food safety</b> Temperature monitoring ensures food quality maintenance.</p>
 <p><b>Dementia patients</b> Wristband sensors provide fall detection and medication tracking.</p>		 <p><b>Smart farms</b> Real time insights into crop soil moisture and optimized irrigation schedule.</p>

LoRaWAN Gateways



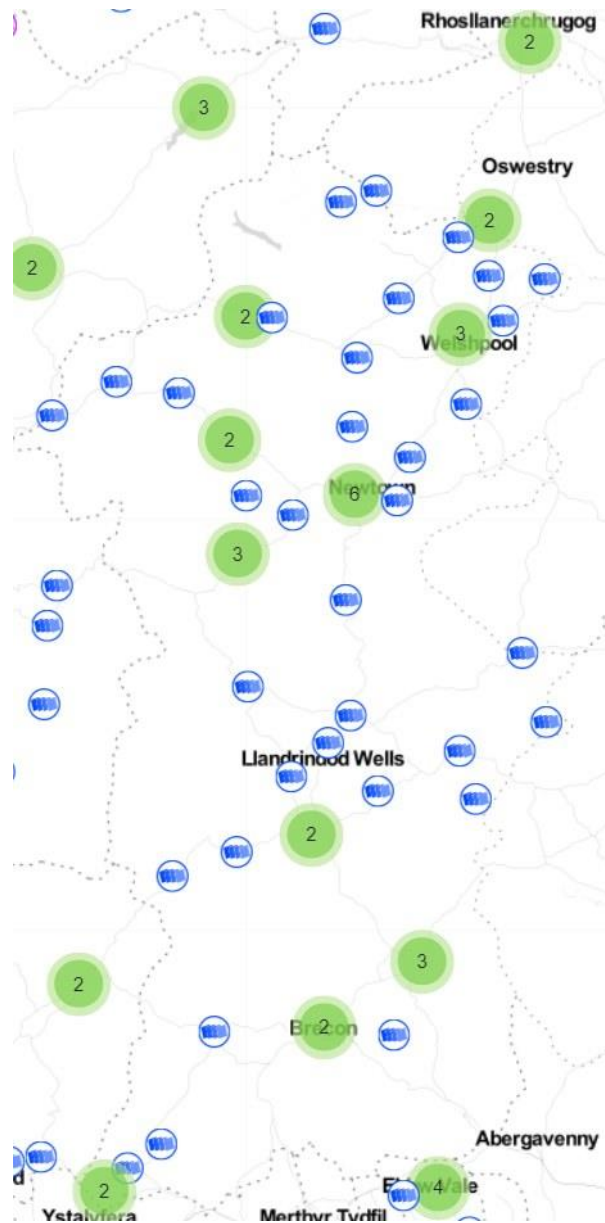


7 - Ceredigion LoRaWAN Gateways

Over the past 2 years, [Ceredigion County Council](#) and [Powys County Council](#) have been completing a project to install LoRaWAN Gateways upon several council assets in order to create a LoRaWAN network across Mid Wales. This being the most extensive network across other parts of Wales.

As well as the councils having access, the network will also be available and accessible to all businesses, organisations, and residents. Allowing public usage of gateways ensures that the platform will grow more readily (meaning it is more likely to be supported into the future) and, as a popular growing platform, it means more people will develop sensors for LoRaWAN, creating more hardware and more software in the marketplace.

As the network of gateways increases, it also adds capacity and resilience where areas may be covered by multiple gateways. This means that if a gateway fails, connectivity will be maintained via another gateway in range.



8 - Powys LoRaWAN Gateways

Through the provision of free access to the Ceredigion LoRaWAN network and collaboration between internal council departments, business owners and other local organisations such as Aberystwyth University and Farming Connect, Ceredigion County Council are offering developers, adopters, and end-users the opportunity to trial and deploy solutions to address a wide range of challenges that are facing local people, businesses, and institutions.

These use cases, which include environment monitoring and developments in 'Agritech', will be shared and highlighted with the aim to inspire businesses and other organisation to make use of the LoRaWAN network to bring about cost savings and improved efficiencies. The possible use of sensors is currently being explored with council departments to decide upon their effective use and how they can be deployed.

Collaborations with public sector bodies and some businesses are currently being established to enable access to gateways which these organisations can make use of to develop their own projects

and use cases. By doing so it will be possible to diversify the use of the network that the region has put in place and drive innovation.

**Case Study: Innovative IoT project making Mid Wales social housing more proactive**

Barcud (formerly known separately as Tai Ceredigion and Mid-Wales Housing Association before merging) - the Mid Wales social housing association was able to use Internet of Things (IoT) to transform its way from being reactive in its way of addressing issues to being proactive. By establishing a range of sensors within its properties to gather essential problem-solving data the organisation have been able to reduce costs and deliver a better service for tenants.

Read the full case study on how Mid-Wales Housing Association made its services more efficient on the [Superfast Business Wales website](#).

Superfast Business Wales/Business Wales service is part-funded by the European Regional Development Fund and the Welsh Government.



## The Digital Programme



The Growing Mid Wales Digital Programme aims to capitalise on the economic opportunities that can be unlocked by investing in digital infrastructure in order to address deficits in digital connectivity, drive the uptake of new technologies amongst the regions businesses and to improve the services that already exist.

This will be achieved through accelerating the provision of digital infrastructure across Mid Wales through a diverse range of fixed and wireless infrastructure deployments, complemented with innovative platforms, business support and policy reforms that directly provide or facilitate greater investment, stimulate demand, and accelerate digital build and exploitation across the Mid Wales region.

The programme will consider and progress projects that complement and provide additionality to those initiatives already in place or planned through UK and Welsh Governments, and to not duplicate commercial investment and deployments across the region in order to maximise return on investment.

For this reason, the Programme has identified a long list of possible opportunities and interventions to be further considered and developed, recognising that the programme and potential projects will need to be highly adaptable in order to effectively respond to the ever-changing environment in which the Programme operates (With consumer and market behaviour, Government plans, and existing and planned initiatives continuing to evolve).

## Growing Mid Wales Digital Initiatives



### Connectivity Mapping

Our digital projects will rely heavily on a detailed understanding of where exactly digital infrastructure is weakest, where other interventions are planned, and where further intervention is required.

The objective of our mapping project is to collect and map data to provide a complete picture of the status of existing and fixed, mobile and LoRaWAN connectivity across Ceredigion and Powys.

The collated data will allow us to identify problems that exist, the location of those problems, which existing interventions will address them, and which problems will remain unless there is further intervention. The data will provide the means to estimate in detail the cost of such potential interventions. This will allow us to determine how much action to take, avoiding duplicated activity and spend, through our Digital Infrastructure Programme projects.

The project is anticipated to commence Spring 2023 and is a fundamental building block for the identification and delivery of effective targeted interventions. It will act as an important enabler of all our other Digital Programme projects as it is crucial that we have a clear and complete understanding of the level of connectivity in each location.

## Other digital initiatives we're involved in

### Project Gigabit



Initially announced in the Spring 2020 Budget but held back by delays and revisions, [Project Gigabit](#) is a £5bn UK Government programme aimed at reaching more than one million 'hard to reach' homes and business to provide gigabit capable broadband to at least 85% of UK premises by the end of 2025 and 100% by 2030.

There are many network providers already building their own full fibre broadband infrastructure and expanding them across the region. However, since these rollouts rely greatly on a provider's own budgets and 'commercial builds', there is a limit to the areas where they can afford to supply and install fibre infrastructure. Some areas, such as some in Ceredigion and Powys, would cost more for a provider to deploy fibre than they could make back in revenue, even with the use of the Gigabit Voucher.

To combat this, Project Gigabit's funding will go directly towards helping providers perform these very rural installations, through breaking down areas and procurement exercises being carried out to connect the properties within these areas to fibre. This will allow providers to expand their networks to all possible homes, regardless of commercial interests or economic viability.

UK Government's Department for Digital, Culture, Media and Sport of the United Kingdom (DCMS) has identified that 234,000 premises in Wales will be in scope of the Project Gigabit Programme – meaning they won't benefit from other commercial build and thus require public subsidy to go further. The government will set out the timetable for the delivery of these connections within the region once it has agreed on the procurement process with the Welsh Government, which is believed to take place in the coming months.

### Shared Rural Network



The [Shared Rural Network](#) (SRN) is a collaboration between Mobile Network Operators (MNO's) and UK Government to improve 4G coverage for people living, working, and travelling in poorly served rural areas.

EE, O2, Three and Vodafone are collectively investing £532 million to extend their coverage by upgrading their existing networks, working together on shared infrastructure, and building new sites. In addition to this, the UK Government will also invest a further £500 million to build new masts in areas with no 4G coverage from any operator.

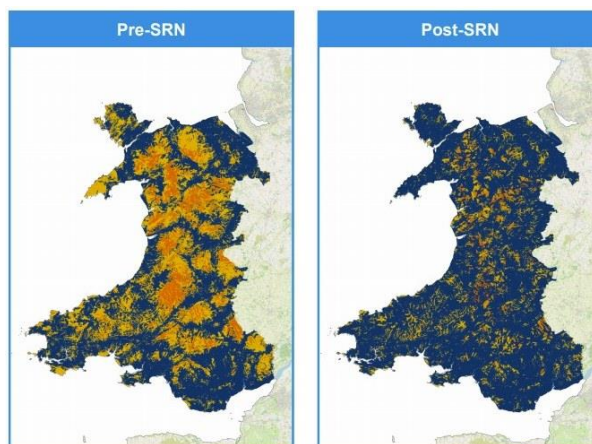
The legally binding coverage commitments will be enforced by Ofcom and will see coverage across Mid Wales improve to 97% from at least one operator and 78% from all four operators. This compares to the current levels of 86% and 51% respectively.

The Growing Mid Wales team and both Local Authorities are involved with continued consultations with those delivering the scheme and have committed to providing support where and as possible.

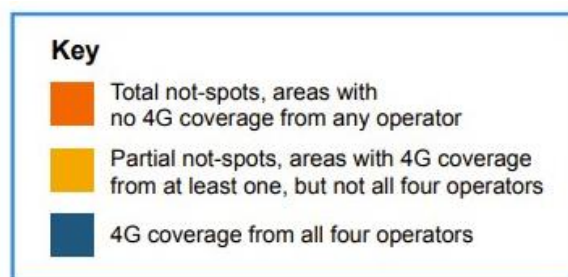
Senedd Region	4G Coverage from all MNOs		4G Coverage from at least one MNO	
	Pre-SRN	Forecast post-SRN	Pre-SRN	Forecast post-SRN
Mid and West Wales	51%	78%	86%	97%
North Wales	63%	83%	93%	98%
South Wales Central	82%	90%	98%	99%
South Wales East	71%	89%	95%	99%
South Wales West	79%	88%	97%	99%

9 - Mobile coverage from Mobile Network Operators (MNO's) in Wales, broken down by region.

The SRN will deliver reliable 4G mobile connectivity allowing rural business to prosper and rural communities to thrive. The new infrastructure is guaranteed to bring significant improvement to mobile coverage to the region, and in turn will deliver economic benefits and address the urban rural digital divide, delivering improved digital infrastructure to the areas that need it most.



10 - Two maps to compare 4G mobile connectivity before and after Shared Rural Network activity



**Notes**

Forecast improvements subject to availability of EAS sites.  
 Coverage improvements subject to finding suitable sites, obtaining power supply and backhaul and securing the necessary permissions through the planning system.

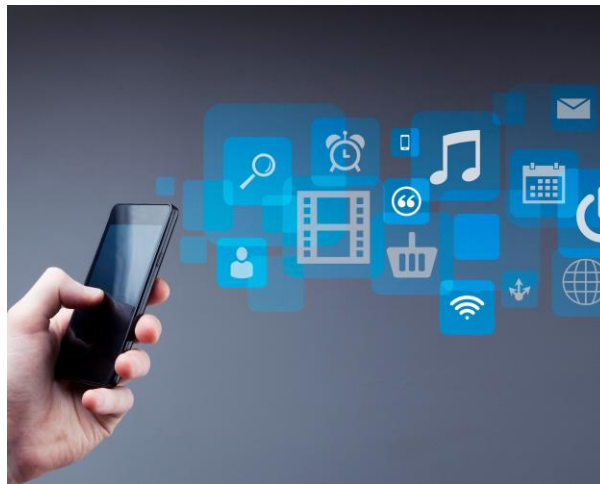
## The Final Few %

Ceredigion and Powys have over 18,000 'white premises' as defined by the Welsh Governments 2021 Open Market Review (OMR). These properties are those who currently cannot access Superfast broadband (defined as greater than 30Mbps download speed) or are not within any plan through any form of publicly funded or commercial build plans within the next 3 years. With the ever-increasing dependency on the Internet for both businesses and home users, this problem has to be resolved as quickly as possible.

Though it is hoped that the UK Governments Project Gigabit will positively impact the number of white premises following procurement exercises, there will remain a significant number of premises, both residential and commercial, that may not have access to Superfast Broadband for several years without intervention.

This project will consider how connectivity can reach the last of the region's premises currently without sufficient broadband services. It will aim to provide sustainable and affordable broadband connectivity to benefit Mid Wales communities and businesses for the foreseeable future, with fibre to the property broadband not expected to reach a significant number of properties for perhaps several years.

## Mobile Not Spots



The Digital Programme recognises that despite improvements in mobile coverage expected in over the next couple years there will still be areas across both Ceredigion and Powys that will be left without mobile coverage. This may affect several communities and will negatively impact businesses, the ability of some to maintain contact with services and in some cases with the Public Switched Telephone Network (PSTN - The network that provides infrastructure and services for public telecommunication) switch off taking place it could cause safety concerns.

We are currently exploring what interventions can be developed to ensure and improve the mobile coverage of areas that are and will continue to be considered 'not spots'. Options around the most suitable technology are currently being explored to ensure that communities and businesses can receive the greatest benefit from the proposed project.



## Meet the Team

As a new feature, each month we will be asking a few questions to a member of the team. They will share their insights into their role and the work they're part of. This month it's Dave Owen, our Digital Programme Manager.



*11 - Dave Owen, Growing Mid Wales Digital Programme Manager*

- **When did you start with the team?**

I joined the team back in July 2021, prior to this I held the role of Digital Development Officer at Ceredigion County Council, which provided me with a thorough understanding of the 'digital landscape' across the region and what issues need to be addressed to ensure the success of the Digital Programme.

- **What are your current priorities?**

It is essential for the success of the programme and for the region that the Digital Programme focuses on connectivity in the communities and areas that others aren't; where publicly funded builds such as the Welsh Governments Superfast Cymru and Project Gigabit aren't going to intervene or where there are no plans for commercial investments from digital infrastructure providers. This will ensure that the programme complements the plans that are already in place and that that the maximum number of properties across the region can access futureproofed levels of connectivity, and that Growth Deal Funds and efforts are used as effectively as possible without duplication.

- **What developments have you seen over the years?**

The nature of digital technology means that there are always new developments and initiatives being introduced to support communities and individuals improve both their broadband and mobile connectivity. There have been several Welsh Government and UK Government programmes that have had a big impact upon the levels of connectivity across the region since I started, bringing about a 15% increase in Fibre to the Property (FTTP) services across the Region in the past 2 years, this equates to almost an additional 19,000 properties being able to receive FTTP services across Mid Wales.

With the implementation of Project Gigabit expected to start in Spring 2023 and the Shared Rural Network making progress, businesses and residents will see big improvements in the levels of connectivity across the Mid Wales Region over the next couple of years and hopefully this will positively benefit not only the local economy but also the lives of those who reside across Powys and Ceredigion.

- **What's been your biggest achievement?**

I feel that reaching the point in which the Programme is currently at can be considered the biggest achievement. It has taken a great deal of collaboration and process to get to the point in which we have an approved Programme Business Case and have an established Programme Board with an effective mix of knowledge and expertise to ensure the programmes success. We are now at the exiting point where, as a Programme Board we are discussing which projects to progress to delivery.

- **What is your greatest hope for the programme?**

It is hoped that through the Digital Programme that the 'digital divide' between rural and urban areas can be minimised so that residents and businesses across Mid Wales can access connectivity suitable to meet current and future needs. With the ever-increasing reliance upon fixed and wireless technology, the programme aims to enable the success of other programmes and projects being implementing and assist in ensuring the economic prosperity of the region, by ensuring there are excellent opportunities for education, employment, and services across the region.

- **One word that sums up the Growing Mid Wales Team:**

Synergistic.

## News

- Louise Grove-White and Lily Else have recently joined the Regional Skills Partnership team. Louise, as a Project Officer who will be leading the work around the Young Person's Guarantee, and Lily as a Project Support Officer.
- Elected Members from both Ceredigion and Powys local authorities, representatives from Welsh and UK Government and the Growth Deal's Economic Advisory Group recently attended the first of a series of stakeholder engagement workshops which featured presentations from funding applicants. This gave the opportunity to have a discussion on the proposals with the project sponsors and provide feedback to help strengthen the business cases.



*12 - Stakeholder engagement workshop*

## Keep up to Date

Need to catch up on what's been discussed in our meetings? Here's a reminder of where you can find the minutes for the following meetings:

- All minutes relating to the Growing Mid Wales Board are hosted on Powys County Council [website](#).
- Papers relating to the Growing Mid Wales Partnership can be found on our [website](#).

Keep up to date with Growing Mid Wales news, developments on activity and organisations we support by following our Twitter and Linked In pages:

<https://twitter.com/growingmidwales>

[www.linkedin.com/company/growing-mid-wales](http://www.linkedin.com/company/growing-mid-wales)

We're eager to reach out to as many organisations and businesses across Mid Wales as possible. You can make this possible by following, liking and sharing our pages.

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