# Cross Sector Plant Protection Interactions

Annual Report 2024

WALES&WEST UTILITIES

# Introduction

Every day our skilled and dedicated colleagues do their very best to keep our 7.5 million customers safe and warm, with a gas network they can rely on and a level of service they can trust. Our prime role is to safely operate and maintain our network of pipes and above ground assets to transport gas to homes and businesses throughout Wales and the south west of England.

We respond to gas emergencies, and we invest £2 million every day across our network, connecting new properties and upgrading old metal pipes to new long-lasting plastic pipes, to make sure the communities we serve receive a safe and reliable gas supply for generations to come. It's a vital service, and one we are extremely proud to deliver. We supply 2.5 million customer meter points on behalf of gas shippers.

Our network consists of 2,500 km of high-pressure pipes known as the Local Transmission System (LTS) operating at pressures between 7-70barg, and 31,000 km of distribution pipes that transport gas to homes and businesses operating at pressures up to 7barg. In addition, there are around 4,000 above ground installations which control pressures or allow inspection and maintenance of our pipelines. Our company priorities and values play a central role in guiding our key business decisions and are reflected in our day-to-day work.

This report details how we have supported the safety of third parties in our region through efficient engagement, sharing of data between relevant approved parties and delivery of works.

## Our Obligations

We produce a Safety Case to demonstrate compliance with the Gas Safety (Management) Regulations 1996 (GS(M)R). This is supported by a set of Plant Protection Management procedures and work instructions which are designed to ensure compliance with the New Roads and Streetworks Act 1991, Construction Design and Management Regulations 2015, and the Health & Safety Executive (HSE) publication HS(G)47 'Avoiding Danger from Underground Services'.

## Putting Customers First

To promote safe digging, we look to make it as easy as possible for third parties to access our asset records for the location where they are working. However, we do also need to balance that with cyber and physical security as the gas network is a critical UK infrastructure asset.

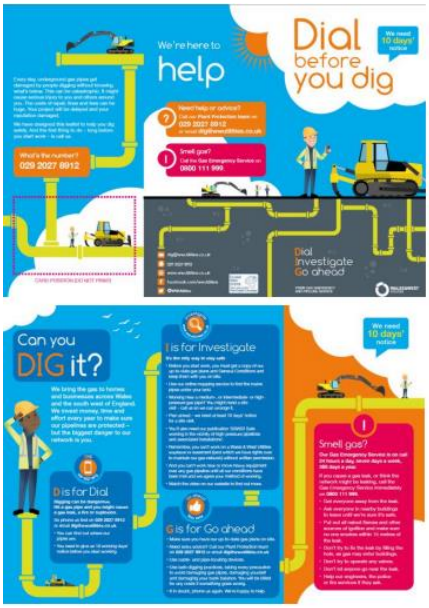
We partner with LSBUD (Linesearch Dial before U Dig) LSBUD - Home sharing daily updates to our asset records which LSBUD make available to approved third parties alongside electricity, telecoms and other pipeline information. Customers receive plans and safe working guidance within minutes of their search.

We ask to be contacted for work close to our higher risk assets: all work near any asset operating at 2barg and above should have a site visit prior to work commencing on site. The plans and information provided to third parties requires customers to contact us at least 10 days ahead of any works to arrange a site visit. However, a more reactive service is provided for unplanned emergency works.

Where our assets are likely to be impacted by third party works, physical protection may need to be installed on site, such as a concrete slab to protect our network. Where a pipeline cannot be protected, and the customer wishes to proceed with the works, the pipeline will require an alteration or diversion.

We are proud that we take a proactive approach with customers and other stakeholders. We provide Geographic Information System (GIS) shapefiles to local authorities as part of their planning processes and work with other utilities and developers presenting at their safety days on the risks and controls required when working near our assets.

During 2024 we continued to promote the DIG (Dial, Investigate, Go Ahead) plant protection safety message, as well as continuing to issue our safety business cards.






As our aim is to reduce the number of 3rd party damages and infringements that occur across our network each year, we are always looking for ways in which we can improve the service we provide. Guaranteeing our asset data as readily available as possible through approved data sharing platforms is one way we have ensured those carrying out works have sufficient access to information to facilitate safe working. Throughout 2024, we continued our involvement with the government led National Underground Asset Register (NUAR)* development, which currently remains as a minimum viable product. We have a designated NUAR 'Champion' to promote the system internally, whilst also attending monthly workshops to ensure the final system has the functionality to meet not only our needs, but also those of our customers who will be using it. The final 'live' version of the NUAR system is planned to be launched before the end of 2025.

## Local Authority Engagement

We continually engage with the 42 local authorities in our geographical area on local development plan consultations. These take the form of consultation responses and workshops to review the potential impact on our assets. In addition, our planners attend local authority coordination meetings to minimise the impact of our works on the communities that we serve.

We also held a stakeholder workshop aimed at seeking feedback from Local Authority Representatives and others involved in safety. The main purpose

of this workshop was to obtain feedback on our approach and efforts to ensure safety in emergency situations and pipe replacement operations.

***For more information please visit: National Underground Asset Register (NUAR) - GOV.UK (www.gov.uk)**

# Our Performance

This section details our performance in working with third parties during 2024. Our mapping performance standards are:

| Team | Enquiry type / service | Standard of Service | Regulatory/ voluntary | Cost of service |
|---|---|---|---|---|
| **Plant Protection** | Initial enquiry for plans | 10 working days | Voluntary | Free – except for *£57+VAT* for companies* who charge their customers for the service |

*Price increase to £61+VAT from March 3rd 2025

## Plant Protection Enquiries

We are committed to continue with our proactive approach to damage prevention, by reducing the risk to our network, through greater interaction with customers and stakeholders who require our asset information to work safely.

During 2024, WWU continued to issue our asset plans and safety advice through the LSBUD system to approved users. This resulted in over 71,000 searches being reviewed directly by the Plant Protection Team, where additional work proposal information was requested to confirm how work could proceed safely or following a site visit with WWU.

| | 2024 |
|---|---|
| **Plant Protection Requests Raised** | 3,230 |
| **Self-serve via LSBUD** | 616,335 |
| **LSBUD Searches Reviewed by WWU** | 71,236 |
| **Number of approved users to self-serve** | 51,539 |

## Plant Protection Site Visits

We completed 2,253 Plant Protection site visits in 2024, of which 2,055 were completed within our agreed SLA of 10 working days.

| | LTS Network | Intermediate Pressure | Medium Pressure | Low Pressure | Total |
|---|---|---|---|---|---|
| **Number of site visits** | 650 | 845 | 755 | 3 | 2,713 |
| **Number completed within 10 days** | 608 | 777 | 667 | 3 | 2,317 |
| **% responded to within 10 days** | 94% | 92% | 88% | 100% | 93.5% |

*Published SLA: 10 working-days.*

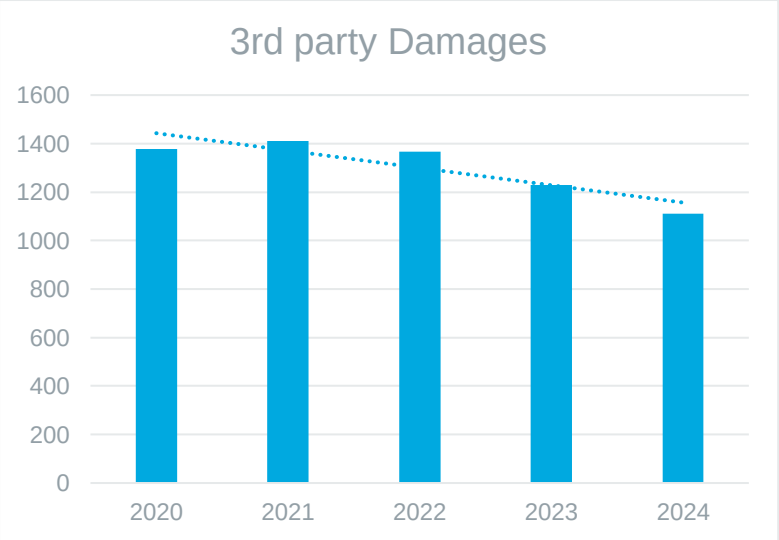
## Aerial Surveillance

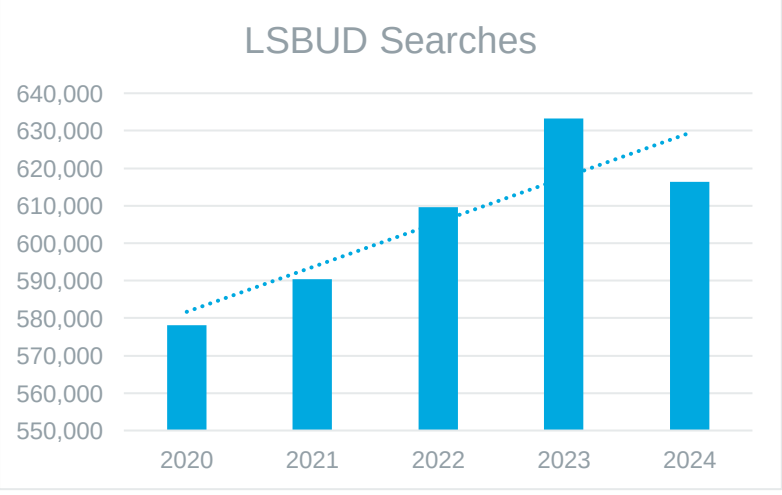
Throughout 2024, we continued to complete aerial surveillance of all >7bar pipelines and critical 2-7 bar pipelines, every two weeks in line with T/PM/MAINT/5 – Maintenance of Steel Pipelines and Associated Installations Operating Above 2 Barg. The surveys were undertaken to identify any ground activities that might affect the integrity of the pipeline. Ground activity, including mechanical excavation, within the area of interest (35m either side of a pipeline) or the Right of Way (10m either side of the pipeline), was reported and investigated, with follow up site visits raised to assess the impact of the work, if required.

## Always more we can do

Despite the service we provide, we had 1,112 instances of damage or related incidents caused to our assets in 2024, which was a reduction of 117 compared to 2023. All but 5 of these were to low and medium pressure pipelines, with 49% of damages caused by mechanical excavators.

2024 once again saw our lowest ever recorded number of 3rd party damages in a calendar year, which surpassed the lowest figure previously achieved in 2023. Although 2024 did see a slight reduction in our overall LSBUD search volumes, our number of users continues to grow, meaning our asset plans and safe digging guidelines are now reaching a wider audience than ever before.



We have also used our membership with LSBUD to promote our safe digging message to a wider audience through their publications and newsletters, along with promoting our damage reduction performance through an agreed case study.

We also attended their annual Damage Prevention Day held at St George's Park, Burton on Trent, a day which is aimed at promotion of safe digging and the prevention of damage to the utility networks across the UK. During the day, LSBUD hosted their annual awards issued across 5 different safety categories. WWU were nominated and the proud winners of the Best Damage Reporting Process Award based on our proactive prioritisation of the highest risk planned works around our network, combined with the collection, measurement and analysis of the damage data we record.

As a continued LSBUD member, WWU also hold a position on their Governance Board Group and Gas Distribution Forum Group. The aim of these groups is to assist LSBUD in keeping people and its members assets safe, by helping to ensure that the service is used to the highest possible level across the industry by all stakeholders with consistent approaches to safety by each of the GDN's. The groups also provide a key stakeholder forum to promote the sharing of best practices, along with providing a clear direction for LSBUD.

We have continued to work in conjunction with our Corporate Affairs Team, to maintain a proactive approach to damage prevention. We regularly post updates across our social media platforms to promote safe digging and contact with WWU prior to commencing works on site. Along with our external communication, we also ensured the promotion of safe digging practices internally through our Pipeline Platform with posts and blogs aimed at reminding colleagues of their role in pipeline safety.

A key focus is to continue to progress stakeholder engagement to continually improve plant protection and cross sector interactions. We maintain good contact information for landowners with local transmission pipelines running through their land and make annual contact to ensure our records are accurate.

Our ongoing aim is to keep the general public safe and drive down the number of unnecessary damage and infringement occurrences to our assets each year through engagement with those undertaken works.

## Future of Energy

With the global energy sector facing significant challenges in its efforts to reach the strict decarbonisation targets, we need to not only continue to deliver reliable energy at affordable costs but also engage with those who's projects are aimed at meeting these targets. In 2024, we saw a significant increase in the number of enquiries received relating to renewable energy projects that had potential interactions with existing WWU pipelines.

The UK Government has stated that by 2030 it wants to increase solar generation in the UK from 16.6 gigawatts to between 45 and 47 gigawatts. This has resulted in a high number of solar farm proposals being granted planning permission contributing to the Government target. During 2024, collaborative engagement meetings were held between WWU and numerous developers regarding large scale solar farm projects.

Due to the nature of these projects, engagement was needed with our Plant Protection, Asset Management and Estates Teams to ensure all the required aspects of the project were agreed by WWU prior to any final site designs being approved. Not only do these projects bring a direct risk to our pipelines through the physical construction of the site and the installation of new underground/overground infrastructure, they also bring an indirect risk to our existing cathodic protection (CP) systems. Through advanced engagement with WWU, CP monitoring is set up prior to the site being energised. Once the site becomes live and energised, any impact of the additional electrical charge can be identified and mitigation measures agreed with the Developers.

As well as generating renewable energy, these sites often have the capacity for the storage of energy through Battery Energy Storage Systems (BESS). These systems allow for excess energy generated to be stored and then released later when the power is most needed. Due to risk of fire and explosion these sites pose, their design must be considered with WWU assets in mind, and their position within the site agreed, to minimise this risk.

Along with providing our specifications and guidelines for the design and construction of renewable energy sites, we also provide the good practice guidelines published by the United Kingdom Onshore Pipeline Operators Association (UKOPA). These guidelines have been produced by the pipeline operators, who are members of UKOPA, in consultation with the Health & Safety Executive. In addition, we also engage with other asset operators to drive best practice and to ensure consistency across the industry when providing guidance relating to these types of developments and the interactions with existing pipelines.

We will continue to work collaboratively with Designers and Developers to ensure the safe delivery of renewable energy projects within our network.

## Case Study

We meet the good practice principles in all our infrastructure interactions, and example case study of recent interactions demonstrate our clear process in dealing with cross sector interactions.

**Cox Brook Solar Farm**

- We held collaborative meetings with PS Renewables regarding a proposed solar farm development located on a 66-acre plot of land in Twigworth, Gloucestershire. The development received full planning permission from Tewkesbury Borough Council in June 2024.

- Cox Brook Solar Farm once fully complete will generate clean renewable energy, with a potential 20000-kilowatt peak power output, that could power almost 5,000 homes each year.

- The proposed locations for the site in Twigworth has potential significant interaction with a WWU 300mm steel high pressure pipeline. As result, discussions were held regarding the pre and post construction survey report requirements including Close Interval Potential (CIP), Direct Current Voltage Gradient (DVCG) and Data Logging for AC and DC interaction. Pre-construction surveys were completed which identified one pipeline defect, that was located outside of the red-line boundary, and rectified by WWU.

- In addition, supervised trial holes were required to confirm the depth and location of the HP pipeline within the site. The information from the trial holes was used to determine any necessary protection measures required as part of the construction of the permanent roads and access tracks.

- WWU will continue to liaise with PS Renewables and their contractors throughout the final construction phases and through the post construction surveys to identify any further mitigation required to ensure the integrity of our pipeline whilst the solar farm is fully operational.

- **For more information visit https://psrenewables.com/ps-renewables-planning-permission-solar-farm-gloucestershire/**

## Further Information

**Website**: www.wwutilities.co.uk/services/dial-before-you-dig/

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