

UKOPA

United Kingdom Onshore Pipeline Operators' Association

UKOPA Report

2024 Infringement database report

UKOPA/RP/25/01 v1

June 2025

REPORT ISSUED BY UKOPA:

This report has been prepared by the UKOPA Infringement Working Group and approved for publication by the UKOPA Board

Comments, questions and enquiries about this publication should be directed to:

UK Onshore Pipeline Operators' Association
Pipeline Maintenance Centre
Ripley Road
Ambergate
Derbyshire
DE56 2FZ

E-mail: enquiries@ukopa.co.uk

Website: www.UKOPA.co.uk

Disclaimer

This document is protected by copyright and may not be reproduced in whole or in part, by any means without the prior approval in writing of UKOPA. The information contained in this document is provided as guidance only and while every reasonable care has been taken to ensure the accuracy of its contents, UKOPA cannot accept any responsibility for any action taken, or not taken, on the basis of this information. UKOPA shall not be liable to any person for any loss or damage which may arise from the use of any of the information contained in any of its publications. The document must be read in its entirety and is subject to any assumptions and qualifications expressed therein. UKOPA documents may contain detailed technical data which is intended for analysis only by persons possessing requisite expertise in its subject matter.

Copyright ©2025, UKOPA. All rights reserved

Revision and change control history

Planned revision: N/A

Edition	Date	No. of pages	Summary of changes
Draft 1	June 2024	21	First drafted

CONTENTS

Executive Summary	1
1. Introduction	3
2. Update on Actions from the 2023 Infringement Report	4
3. Main Findings	6
3.1 Infringements by Category	6
3.2 Infringements by Activity Type	8
3.3 Infringements by Location	10
3.4 Infringements by Third Party Type	12
3.5 Third Party Infringement Performance	13
4. Conclusions and Recommendations	15
4.1 Specific actions regarding infringements for IWG	16
5. Acknowledgements	17
Appendix A: Current Status and Management of Database	18
Appendix B: IWG Objectives and Targets	19
B.1 Data Collection	20
Appendix C: IWG membership 2024	21
Appendix D: Guidance on Infringement Categories	22

EXECUTIVE SUMMARY

The Infringement Working Group (IWG) is one of six working groups of UKOPA and it is responsible for collecting and collating incidents (accidental or malicious) where cross country pipelines have been damaged and near misses where there was a potential for damage (Infringements) to have occurred. The IWG produces an annual report that identifies the number of Infringements recorded by UKOPA members in the UKOPA infringement database and provides some statistical analysis regarding, the type of infringement, where it occurred and how it happened.

In 2024, there were 881 infringements recorded, up from 662 in 2023, one of which was categorised as malicious damage associated with theft of product from a pipeline. The malicious damage infringement has been removed from the statistical analysis in the report thus the number of infringements used is 880.

There were three A1 category (actual damage) infringements in 2024, 0.3% of infringements recorded, up from zero in 2023. An overview of those infringements is provided below:

- A 50mm / 24bar pipeline serving a pressure reduction installation was damaged by a third-party. The landowner had dug a drainage ditch alongside the pipe with a mini-excavator over a weekend, damaging the coating and bending the pipe. The damage was reported by a pipeline operator member of staff who visited site. The work had been carried out without any consultation with the pipeline operator or a line search being carried out. There was no loss of fluid but the pipeline is going to be replaced.
- Utility company excavated within the HP Pipeline Hazard Zone before any RAMS approval or supervised excavation. Boring machine used and resistance felt so pipeline uncovered by hand and backfilled by utility company. A DCVG survey indicated small coating defect, pipeline pressure was reduced by 15% in line with company procedures, then excavation was hand dug allowing inspection of pipeline which confirmed coating damage. A repair shell was fitted to cover the affected area.
- This infringement is currently undergoing investigation and when able, the relevant pipeline operator will provide more details and share the learnings.

Those infringements that have serious potential to cause damage, i.e. B category (B1 and B2) total 138 of the 880 reports (15.7%) compared with 113 of the 662 reports (17.1%) in 2023 and 20.6% in 2022. In 2024, Category C infringements (C1+C2), those with limited potential to cause damage, accounted for 739 reports (84%) compared with 549 of the 662 reports (82.9%).

UKOPA members, and particularly the IWG, will continue to raise awareness of working safely within pipeline easements, particularly with contractors, utilities, landowners and tenants. The IWG supported the 2024 Farm Safety Foundations Yellow Wellies campaign, as part of the farm safety week and is intending to do the same in 2025. Work is also ongoing to produce more working safely videos, and an article is scheduled for inclusion in the constructor's magazine.

The UKOPA pipeline awareness course, available via the UKOPA website, is due to be promoted more widely in 2025, to further raise awareness of safe working in the vicinity of high pressure pipelines to the farming and contracting community.

Members of IWG should continue to ensure that data is collected and submitted in a timely manner and engage with their companies to encourage completion of all fields within the infringement database. Consistency of reporting terminology and structured approaches to reporting are being further developed, with IWG members being pivotal to ensuring these are enacted within their own companies.

The IWG will continue to engage with the Health & Safety Executive (HSE) to obtain their support and discuss ways of raising awareness of pipeline infringements across all sectors.

IWG action plan for 2025/26

The specific actions for 2025/26 for the IWG from this report are:

- Action 1: All A infringements are to be turned into Learning Briefs and shared with UKOPA members
- Action 2: Include a discussion in September 2025 IWG meeting to discuss the number of 'operator aware' of work taking place when infringements occur and if required develop an action plan for reducing these numbers.
- Action 3 (2023 ongoing): UKOPA non-Linewatch Members are to attend a workshop aimed at improving data consistency and reporting and share with the rest of the IWG by end of Q1 2025
- Action 5 (2022 ongoing): Pipeline Operators are to review 'unknown' location types before data is submitted in 2026 to determine what type of location the infringement occurred and update data accordingly

And in 2025/26, the IWG (and member companies) will:

- Publish the updated versions of GPG015 Managing Pipeline Infringements and GPG029 Local Authority Planners information regarding On Shore Pipelines and Associated Installations.
- Share learnings of incidents, infringements and good practice for the benefit of all members.
- Review, update and re-issue the contractors and land owners guides to working safely near high pressure pipelines.

1. INTRODUCTION

Since 2002 UKOPA members have shared information following investigation of 'near miss' and damage incidents ('infringements') on their buried pipeline assets to ensure that:

- Any information, analysis and learning from near miss incidents benefits all member companies.
- The Association exploits its collective experience to establish a national data set and trends.
- The pipelines industry is co-ordinated and has national coherence.

The UKOPA infringement database provides a framework for recording industrywide statistics in order that the Association can develop effective improvement plans as well as ensuring its UK wide experience is fully exploited to reduce the potential for damage to high hazard pipeline assets in order to protect people and property and to influence regulatory processes.

The Infringement Working Group (IWG) members share experiences and manage the infringement database to allow this report to be produced. More information on the IWG members and tasks can be found in Appendix B and C.

2. UPDATE ON ACTIONS FROM THE 2023 INFRINGEMENT REPORT

This section provides an update on the specific actions from the 2023 infringement report to be carried out during 2024/25:

- Action 1: The action to follow up on the 15 infringements from 2022 was not completed. Therefore during 2024-25 IWG should review the 22 infringements where pipeline operators were aware of work taking place before they occurred, and learnings shared across UKOPA.
 - Operators do share information and learnings from infringements, but as yet there is no plan in place to try and reduce the number of infringements that occur where the pipeline operator is aware of work taking place. This action is to be closed and a new action raised from the 2024 report given the large increase in infringements where the pipeline operator was already aware that the work was taking place. **CLOSED.**
- Action 2: IWG to identify initiatives that might help reduce the number of fencing infringements.
 - UKOPA has shared the video produced by Linewatch (a link is available from the UKOPA website) regarding an incident that occurred when a contractor was injured whilst installing fence post.
 - IWG has had articles regarding safe practices as part of farm safety week.
 - Plans are currently being developed to produce a video regarding safe working.
 - **CLOSED.**
- Action 3: UKOPA non-Linewatch Members are to attend a workshop aimed at improving data consistency and reporting and share with the rest of the IWG by end of Q1 2025
 - Discussions have taken place regarding data consistency and a workshop is scheduled to further develop guidance in June 2025 – **Ongoing.**
- Action 4: IWG to enable access to the UKOPA agricultural working safely near high pressure pipelines course by the end of 2024
 - The course is now available via a link on the UKOPA work safely website page <https://www.ukopa.co.uk/working-safely/> and a course certificate is produced and provide to participants following successful completion. **CLOSED.**
- Action 5: Pipeline Operators are to review 'unknown' location types before data is submitted in 2025 to determine what type of location the infringement occurred and update data accordingly
 - Unfortunately this has not happened and in 2024, and there are 17 recorded unknown locations types in the report. Further guidance is to be given for 2025 with the aim of preventing this. **Ongoing.**
- Action 6: IWG to consider ways of engaging with the contracting community (as well as reissuing the Contractor Guidance document) with the aim of reducing the percentage of contractor infringements

- IWG is scheduled to review the Contractor Guidance document in the second half of 2025 and will be reissued, with the Comms team providing support to getting a greater reach for the document.
- An article is scheduled to be published in the July 2025 edition of 'Professional Builder' magazine with a focus on safe working and sharing of information with contractors.
- **CLOSED.**

And in 2024/25, the IWG (and member companies) will:

- Publish the updated versions of GPG015 Managing Pipeline Infringements and GPG029 Local Authority Planners information regarding On Shore Pipelines and Associated Installations.
 - At the time of publication of this report, the two guidance documents are with the UKOPA governance group for approval to publish. **Ongoing.**
- Assist the UKOPA Comms group to establish where NFU and SNFU fit within the UKOPA engagement plan.
 - The Comms group is preparing a stakeholder engagement plan. IWG continues to support the farm safety week initiative. **CLOSED.**
- Share learnings of incidents, infringements and good practice for the benefit of all members.
 - IWG has an agenda item at each meeting for members to share learnings.
 - UKOPA members meeting also has an agenda item covering safety alerts and sharing of learnings – members regularly engage with this session.
 - **This item will remain Ongoing as is the basis for the IWG existing.**

3. MAIN FINDINGS

Appendix D provides the definition of infringements as agreed by UKOPA members. In summary infringements are categorised based on a Risk Index (A – pipeline damage or leak, B – serious potential for damage, or C – limited potential for damage) and a Location Index (1 – within operators’ wayleave or easement or 2 – within operators’ notification zone).

3.1 Infringements by Category

Figure 3-1 below presents the overall combined UKOPA data by infringement category. Analysis of the 2024 infringements by category shows the distribution of infringements is generally consistent with a proportional relationship between learning events, near-misses and more serious incidents (the so-called ‘Heinrich’s triangle’).

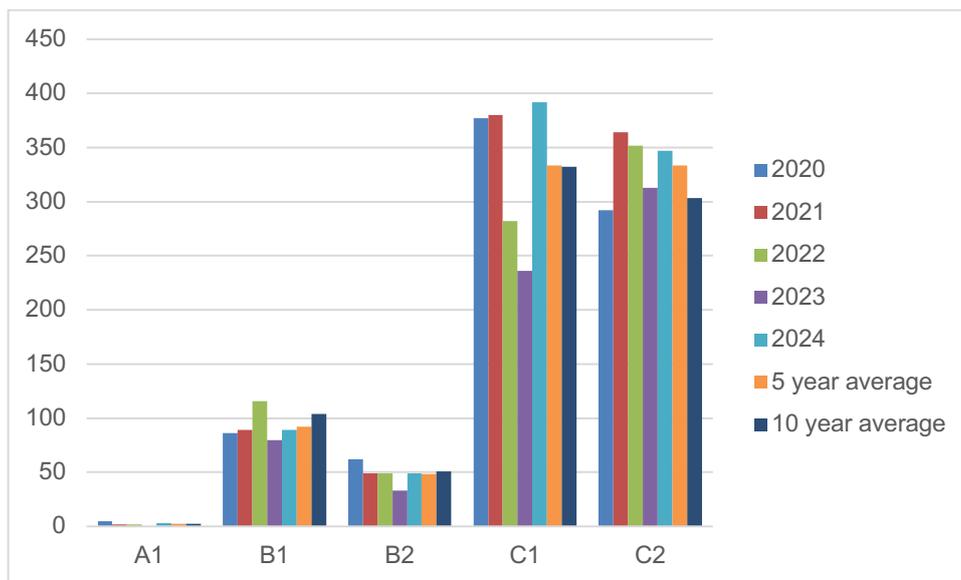


Figure 3-1 2024 Infringements by category

	2020	2021	2022	2023	2024	5 year rolling average	10 year rolling average
A1	5	2	2	0	3	2.4	2.5
B1	86	89	116	80	89	92	103.7
B2	62	49	49	33	49	48.4	50.6
C1	377	380	282	236	392	333.4	332.4
C2	292	364	352	313	347	333.6	303.4
Total	822	884	801	662	880	809.8	792.6

Table 3-1 Rolling average by category

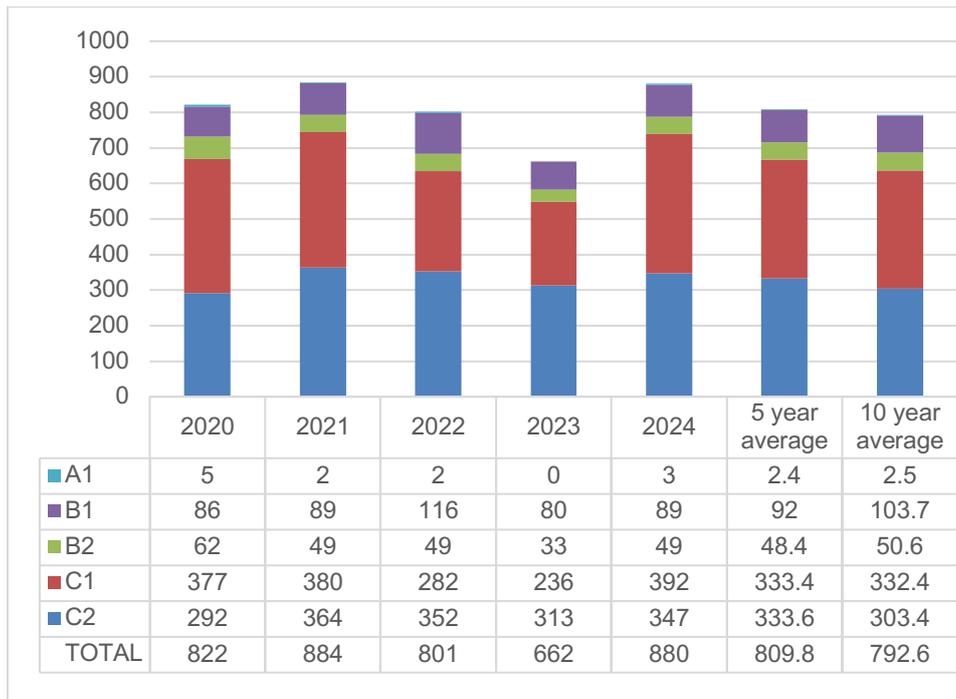


Figure 3-2 2024 Annual Total Number of Infringements

In 2024 there were a total of 880 infringements recorded in the database this is 218 more than in 2023, when 662 infringements were recorded, which is equivalent to 32.9% increase. Changes have occurred in a number of members recording systems, which may account for the increase. However, this will be reviewed in coming years to see if this level of recording continues.

There were three A1 category (actual damage) infringements in 2024, 0.3% of infringements recorded, up from zero in 2023 and 2 in each of the previous two years. An overview of those infringements is provided below:

- A 50mm / 24bar pipeline serving a pressure reduction installation was damaged by a third-party. The landowner had dug a drainage ditch alongside the pipe with a mini-excavator over a weekend, damaging the coating and bending the pipe. The damage was reported by a pipeline operator member of staff who visited site. The work had been carried out without any consultation with the pipeline operator or a line search being carried out. There was no loss of fluid but the pipeline is going to be replaced.
- Utility company excavated within the HP Pipeline Hazard Zone before any RAMS approval or supervised excavation. Boring machine used and resistance felt so pipeline uncovered by hand and backfilled by utility company. A DCVG survey indicated small coating defect, pipeline pressure was reduced by 15% in line with company procedures, then excavation was hand dug allowing inspection of pipeline which confirmed coating damage. A repair shell was fitted to cover the affected area.
- This infringement is currently undergoing investigation and when able, the relevant pipeline operator will provide more details and share the learnings.

Action 1: All A infringements are to be turned into learning briefs and shared with UKOPA members.

There was a 2% decrease in the number of B1 infringements in 2024 compared with 2023 (10.1% compared with 12.1% respectively), and a 0.5% increase in B2 infringements (5.6% compared with 5.0% respectively). Overall, the number of category 'B' Infringements (B1+ B2), i.e. those infringements with a serious potential to cause harm, decreased to 15.7% of all infringements, compared with 17.1% in 2023. Learnings from these infringements should still be shared throughout UKOPA with the aim of reducing the overall percentage figure again.

Category C infringements, those with limited potential to cause damage, accounted for 739 of the 880 infringements or 84%, This is an increase from the 82.9% in 2023 and correlates to the decrease in B infringements in 2024

Not all recorded data is indicating whether the pipeline operator was 'aware' that the work was taking place before an infringement occurred. However, in 2024, there were 112 infringements recorded where the pipeline operator was aware of the work taking place prior to the infringement taking place. It is suggested that an agenda item is added into the September 2025 IWG meeting to discuss the number of 'aware' reports and identify what additional work can be done to assist pipeline operators with this issue. Learnings from these discussions should be shared across UKOPA.

Action 1: Include a discussion in September 2025 IWG meeting to discuss the number of 'operator aware' of work taking place when infringements occur and if required develop an action plan for reducing these numbers.

3.2 Infringements by Activity Type

Understanding the types of activity contributing to infringement statistics provides important information for:

- Targeting awareness training and communication.
- Relating to infringement location and vulnerable areas.

Figure 3-3 shows the distribution of infringements across reported activity types.

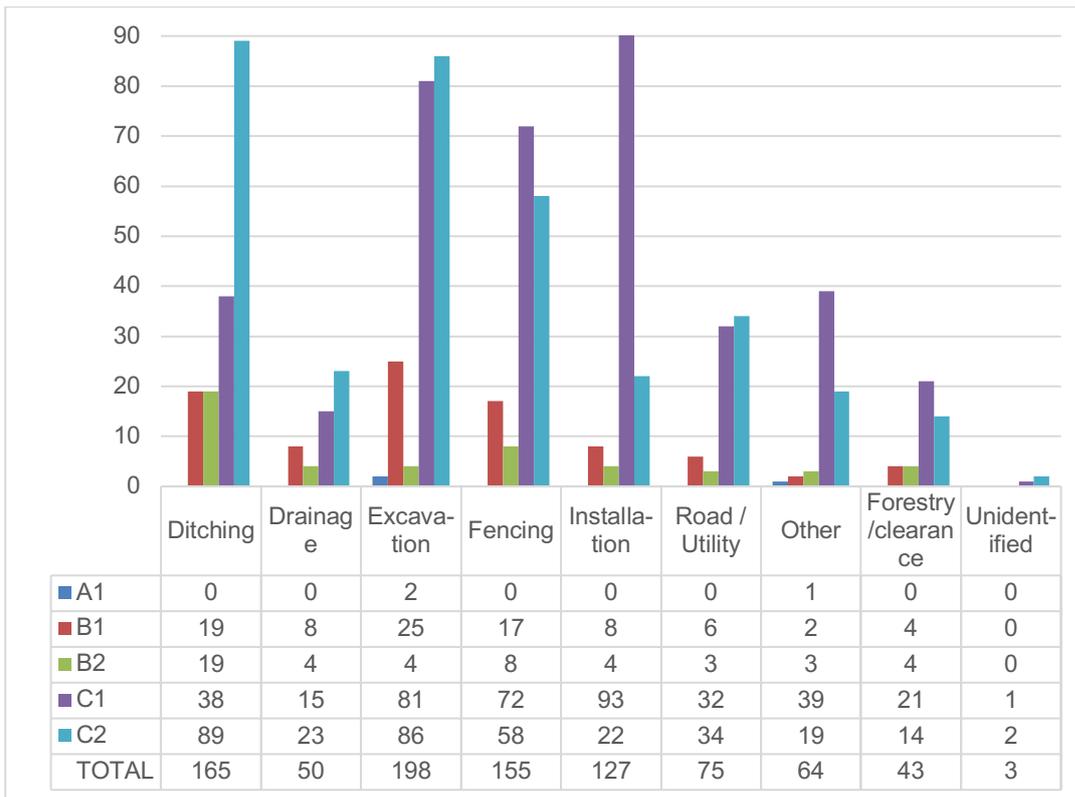


Figure 3-3 Infringements by activity type 2024

During the last few years, members had been encouraged to ensure that activities taking place when an infringement were recorded correctly and although we had zero ‘unidentified’ activities taking place during 2023, there were 3 recorded in 2024.

Excavation works (including earthmoving/trenching, excavation/digging, piling, marker post renewal and subsoiling/topsoil renewal) had the greatest number of infringements recorded in 2024 at 22.5%, this was followed by ditching with 18.8%, fencing with 17.6% and Installation with 14.4% (which includes building works, bar hole drilling, installations of signs and structures and buildings on or around the pipeline / easement). This year some operators have been doing work to identify buildings in and around pipeline easements that have not been recorded before. There has been a large increase in the number of C1 infringements in this activity type 93 compared with 36 in 2023 (or a 152% increase).

Following the increase in fencing infringements in 2023 to 21.6%, this figure has reduced to 17.6% in 2024, as more people became aware of the incident in 2022 where a fencing contractor was injured when the fence post he was installing punctured a medium pressure gas main, there was a lot of publicity regarding how to work safely when installing fencing. UKOPA also published GPG043 Installation of Fencing Near High Pressure Pipelines in July 2023. It is hoped that this downward trend will continue.

There has been a decrease in the number of ‘other’ infringement types, 64 (of the 880 infringements) in 2024, compared with 106 (of the 662 infringements) in 2023. Those activities grouped together as “other” are made up of 11 activity types – archaeology (0) crossing by heaving vehicles/machinery (11), flooding (0), landscaping (5), machinery parked (9), caravan parks/travellers (0), ground movement/landslips (2), storage/loading on pipelines (12), Waste Burning/Fire (9), Waste Dumping (7) and Waterway repairs/Riverbank Erosion (4) - which individually are low in the number of events but total 59 infringements. There is however, also a specific activity type in the infringement database entitled ‘other’

which accounts for 5 infringements (up from 1 in 2023) – giving the overall total of 64. This is how members record infringements that do not specifically fit into one of the categories in the data base.

The combined total of all the ‘other’ infringements is 54, compared with 106 in 2023. This is a reduction to 7.3% of all infringements in 2024, compared with 16% in 2023.

There were no reported flooding infringements in 2024 and just 4 waterway infringements down from a total of 13 (for both) in 2023. Although flooding may not be classed as an infringement, recording this information, along with waterway repairs/river bank erosion may allow for preventative interventions to be made if work is required to remediate the damage caused from them. The cross working group UKOPA project to develop guidance for membership regarding these issues has been developed and in June 2025 was with the governance group for approval to publish.

In preparing this and previous reports, it has been identified that there can be a lack of consistency among pipeline operators in the way data is being recorded and collated. As per action 3 from the 2022 report, UKOPA and Linewatch have reviewed and updated their guidance for collecting infringement data, and following a final review in November 2024, this guidance will be published for use for collecting data from 2025 onwards.

Those UKOPA members who are not members of Linewatch, have also agreed to attend a review workshop to identify internal good practice and processes that may assist others with data collection.

Action 3 (2023 ongoing): UKOPA non-Linewatch Members are to attend a workshop aimed at improving data consistency and reporting and share with the rest of the IWG by end of Q1 2025

3.3 Infringements by Location

Locations where infringements take place may provide key information for:

- The main areas of pipeline vulnerability.
- Areas where marking is critical.
- Areas where excavator vigilance is particularly important.

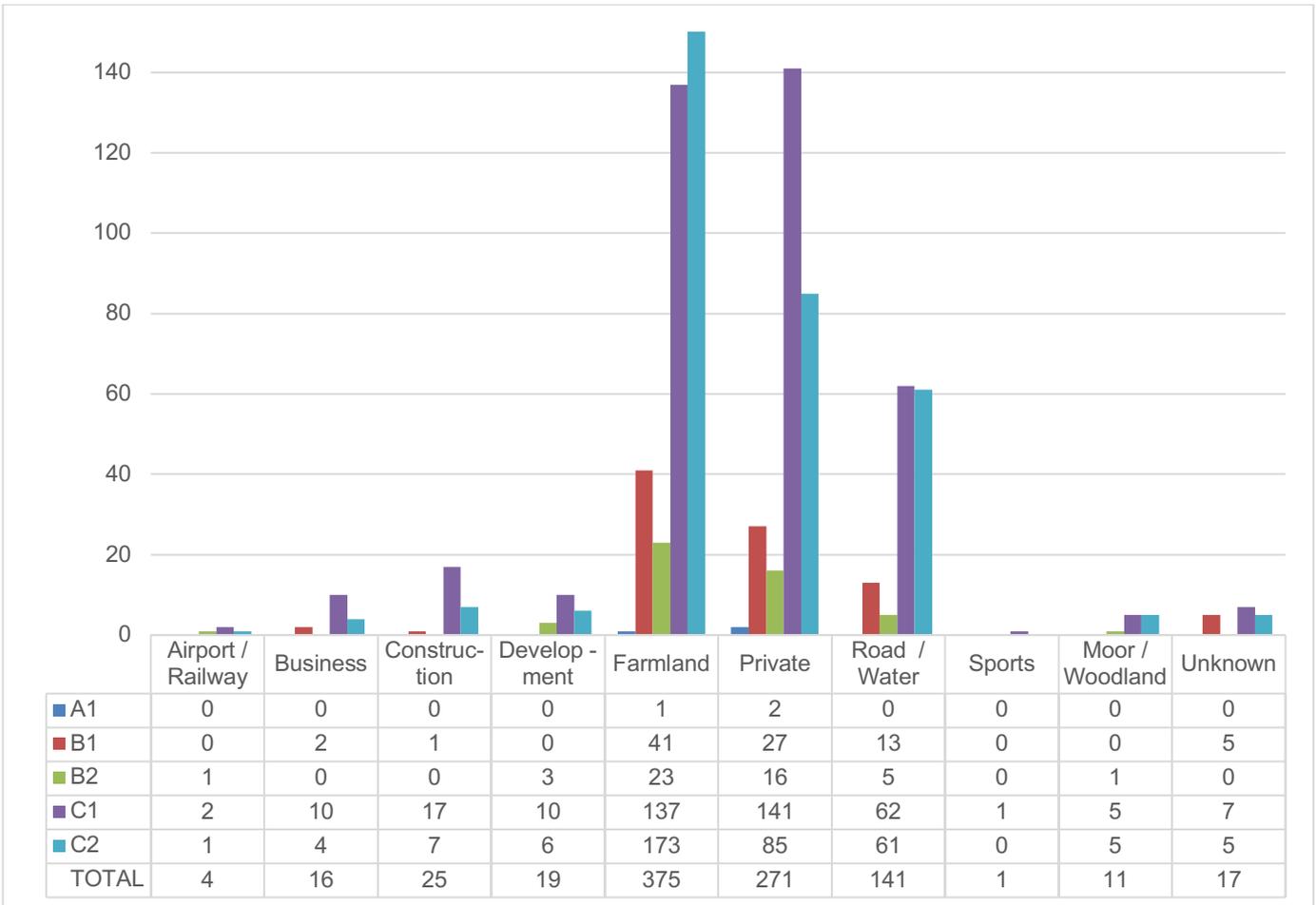


Figure 3-4 Infringements by location type 2024

Incidents in 'Farmland' continues to provide the largest number of records in the database. In 2024 these accounted for 375 infringements or 42.61.1% of all records. This is a reduction from 47.1% of all records in 2023. After the increase to 47.1% in 2023, it is positive to see a downward trend again in 2024. Most of the incidents that occurred in farmland in 2024 was for category C infringements 82.7%., but that does not mean that the infringer or the pipeline operator should be complacent.

It should be noted that there is possibly an overlap between those records reported as being in Farmland and those recorded in Private Land (another 271 of the 880 records), thus a total of 73.4% but the infringement reports themselves do not provide enough detail to draw any further conclusions.

Since the UKOPA agricultural college course hosted by Landex Agricultural College platform went live in September 2022, more than 5000 people have completed the course. At the beginning of 2025, the course is now available for none, Landex students to complete the course and can be taken by anyone via the following link <https://www.ukopa.co.uk/working-safely/>

Work in Farmland (375), Private Land (217), Roads/Waterways (141) and Business Land (16) continues to provide the greatest number of incident reports recorded, accounting for 85.1% of all recorded infringements.

Despite action 5 from the 2022 report, to reduce the number of ‘unknown’ location type records in member infringement systems, there were 17 ‘2024 in addition to the 12 records from 2023 that had ‘unknown’ as the location type. Of more concern is that 5 of those infringements were classed a B1’s. The action from the 2022 report is therefore to remain open.

Action 5 (2022 ongoing): Pipeline Operators are to review ‘unknown’ location types before data is submitted in 2026 to determine what type of location the infringement occurred and update data accordingly

3.4 Infringements by Third Party Type

UKOPA is interested in which types of third parties are infringing:

- Are there any patterns?
- What does it tell us about potential weaknesses in the sub-contracting ‘chain’?
- Who is responsible for checks and searches in each case?
- What does it tell us about the ‘pipeline awareness’ of those actually doing the digging?

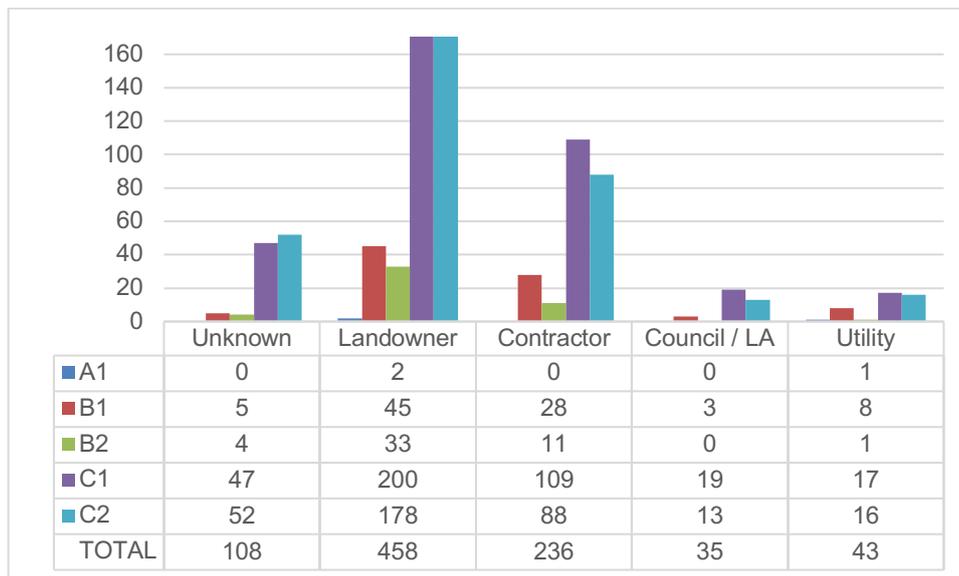


Figure 3-5 Infringements by infringer type 2024

Figure 3-5 describes the current position of infringements by infringer type. Landowners continue to be the largest single infringing group with 62.3% off all infringements in this category up from 50.3% in 2023.

Contractor infringer type is virtually stable at 26.8% in 2023 compared with 26% in 2023. But is still higher than it had been for the previous 4 years. One of the key focuses for the IWG during 2025 will be to identify ways of engaging with the contracting community to drive a reduction in infringements. Work continues to look for ways of better engagement with the contracting community.

It is acknowledged that the Contractor figure will include both rural (for example agricultural activities) and urban activities (for example on development land). It should be noted, however, that the distinction between ‘Contractor’, ‘Utility’ and ‘Council/Local Authority’ work can be seen as a very fine one and is masked by the significant level of contractor-delivered utility and council services in the UK. Utility infringements accounted for 4.9% (down from 9.2% in 2023) and Council/Local Authority infringement accounted for 4% (up from 3.8% in 2023) of all infringements.

The downward trend in ‘unknown’ infringer type which had plateaued in 2023 at around 10.5% of all recorded infringements saw an upturn in 2024 to 12.3% (108 infringements). This figure will include infringements where parties have left the site between the sighting being reported and a site visit taking place, hence being recorded as unknown. However, 9 of the 108 ‘unknown’ reports were classed a B infringement, and potentially should be investigated further by members to try and establish the root cause of the infringement.

3.5 Third Party Infringement Performance

UKOPA are interested in identifying and working with anyone who has, or has the potential, to infringe. Those third parties who, via the database, are identified as having made multiple infringements are a particular concern, but also give a focus to where member awareness raising could be targeted.

A summary of the main activity groups is presented at the top of the Table 3-3 to give a flavour of the overall numbers of infringers and as an indicator of how much improvement there has been in reducing potential risk or consequence.

In 2023 the weighted score for the 662 infringements totalled 1251. In 2024 the weighted score for the 880 infringements totalled 1704. In 2024, the unknown infringer type, contractor and council/local authority/government weighted average percentages remained relative stable at around 10.5%, 27.5% and 3.6% respectively. The landowner (including farmland) increased to 52.2% from 48.8% whilst the utility/infrastructure companies infringer type reduced from 9.8% to 6%.

In an effort to rank repeat infringers, more “weight” is given to the raw count of infringements based on the seriousness of the infringement by applying a multiplier to each risk category, included in Table 3-3 as an adjacent column. The multiplier “risk” values are based upon the model developed in consultation between the IWG, Linewatch and UKOPA, as below in Table 3-2.

A1	10
B1	5
B2	2
C1	2
C2	1

Table 3-2 Risk Multiplier Matrix

UKOPA remains very aware that the infringement performance of particular companies or agencies is a very sensitive issue. Data is provided by individual operators for use in the database on the understanding that individual records are, in the first instance, confidential. Hence names of the work promoters (identified as company A, utility B, etc.) in Table 3-3 are not published and remain confidential to UKOPA secretariat.

However, as an invited member of UKOPA, the HSE has access to the list of ‘repeat infringers’. The database output in the form shown in Table 3-3 has been previously used by HSE to inform their

operational strategy. There is no doubt that to date, this is the area where the database has had its greatest impact. For companies that operate on a region-by-region basis, there is some evidence to suggest that through UKOPA's activities, they have become aware of their overall infringement behaviour. HSE's feedback is that this data has received serious attention at senior levels within each company when brought to their attention.

Identifier/Category	Number of infringements	A1	Weight X10	B1	Weight X5	B2	Weight X2	C1	Weight X2	C2	Total weighted score
Unknown		0	0	5	25	4	8	47	94	52	179
Land/Farm		2	20	45	225	33	66	200	400	178	889
Contractor total		0	0	28	140	11	22	109	218	88	468
Council/LA/Government		0	0	3	15	0	0	19	38	13	66
Utility/Infrastructure		1	10	8	40	1	2	17	34	16	102
Company A	3	0	-	2	10		-	1	2		12
Utility A	2	1	10		-		-	1	1		12
Utility B	6	0	-		-		-	4	8	2	10
Utility C	2	0	-	2	10		-		-		10
Utility D	3	0	-	1	5	1	2		-	1	8
Utility E	4	0	-	1	5		-		-	3	8
Company B	3	0	-		-		-	3	6		6
Utility F	4	0	-		-		-	2	4	2	6
Local Authority A	2	0	-		-		-	2	4		4

Table 3-3 Significant Infringers 2024

A further point to note regarding this data is that it currently makes no attempt to analyse numbers of infringements per third party with their national excavation activity rate. Such a measure, if it were to be developed in future, may provide an alternative expression of each third party's effectiveness in managing activities adjacent to hazardous pipelines.

As in the previous eight years, the records for 2024 show no infringer with more than 10 infringements recorded against them. Many of the contractor companies in table 3.3 were working on behalf by a variety of Utilities/Infrastructure companies and Local Authorities and generally indicate those operating at a national level and across a number of work sectors. This year there is one housing developer included in the list of repeat offenders. IWG are intending to have an article in 'Professional House Builder' magazine to reinforce the need for working safely near HP pipelines and early engagement with pipeline operators. There are 6 utility companies listed in the repeat offenders list. It is recommended that the IWG consider how to engage with utility companies to raise awareness of HP pipelines and working safely in the vicinity.

Despite the low incident of overall number (and weighted averages) of infringements by any one organisation, those companies who are UKOPA members, or a companies who have contracts with UKOPA members will continue to be engaged with and ways of reducing the number of infringements explored.

4. CONCLUSIONS AND RECOMMENDATIONS

In 2025 there was a 33% increase in the number of infringements recorded in the database, 880 compared with 662 in 2023. The 1 infringement recorded as 'malicious damage', which was a fuel theft attempt, was removed from the statistical analysis in the report.

There were three A1 category (actual damage) infringements in 2024, 0.3% of infringements recorded, up from zero in 2023 and 2 in each of the previous two years. An overview of those infringements is provided below:

- A 50mm / 24bar pipeline serving a pressure reduction installation was damaged by a third-party. The landowner had dug a drainage ditch alongside the pipe with a mini-excavator over a weekend, damaging the coating and bending the pipe. The damage was reported by a pipeline operator member of staff who visited site. The work had been carried out without any consultation with the pipeline operator or a line search being carried out. There was no loss of fluid but the pipeline is going to be replaced.
- Utility company excavated within the HP Pipeline Hazard Zone before any RAMS approval or supervised excavation. Boring machine used and resistance felt so pipeline uncovered by hand and backfilled but utility company. A DCVG survey indicated small coating defect, pipeline pressure was reduced by 15% in line with company procedures, then excavation was hand dug allowing inspection of pipeline which confirmed coating damage. A repair shell was fitted to cover the affected area.
- This infringement is currently undergoing investigation and when able, the relevant pipeline operator will provide more details and share the learnings.

Those infringements that have serious potential to cause damage, i.e. B category (B1 and B2) total 138 of the 880 reports (15.7%) compared with 113 of the 662 reports (17.1%) in 2023 and 20.6% in 2022. In 2024, Category C infringements (C1+C2), those with limited potential to cause damage, accounted for 739 reports (84%) compared with 549 of the 662 reports (82.9%).

In 2024, the number of B1 and C1 findings (within the pipeline easement) was 481 or 54.7%, which is an upturn from the previous year of 47.7%. This therefore means that the number of B2 and C2 (within the pipeline operator's zone of interest) accounted for 45% and A infringements at 0.3%. Operator companies should, however, investigate all types of infringements and are encouraged to share the findings across the UKOPA membership.

UKOPA members, and particularly the IWG, will continue to raise awareness of working safely within pipeline easements, particularly with contractors, utilities, landowners and tenants. The IWG supported the 2024 Farm Safety Foundations Yellow Wellies campaign, as part of the farm safety week and is intending to do the same in 2025. Work is also ongoing to produce more working safely videos, and an article is scheduled for inclusion in the constructors magazine.

The UKOPA pipeline awareness course, available via the UKOPA website, is due to be promoted more widely in 2025, to further raise awareness of safe working in the vicinity of high pressure pipelines to the farming and contracting community. This can be accessed via the UKOPA website <https://www.ukopa.co.uk/working-safely/>.

Members of IWG should continue to ensure that data is collected and submitted in a timely manner and engage with their companies to encourage completion of all fields within the infringement database. Consistency of reporting terminology and structured approaches to reporting are being further developed, with IWG members being pivotal to ensuring these are enacted within their own companies.

The IWG will continue to engage with the HSE to obtain their support and discuss ways of raising awareness of pipeline infringements across all sectors.

4.1 Specific actions regarding infringements for IWG

The specific actions for 2025/26 for the IWG from this report are:

- Action 1: All A infringements are to be turned into Learning Briefs and shared with UKOPA members
- Action 2: Include a discussion in September 2025 IWG meeting to discuss the number of 'operator aware' of work taking place when infringements occur and if required develop an action plan for reducing these numbers.
- Action 3 (2023 ongoing): UKOPA non-Linewatch Members are to attend a workshop aimed at improving data consistency and reporting and share with the rest of the IWG by end of Q1 2025
- Action 5 (2022 ongoing): Pipeline Operators are to review 'unknown' location types before data is submitted in 2026 to determine what type of location the infringement occurred and update data accordingly.

5. ACKNOWLEDGEMENTS

The development and current success of the infringement database would not have been possible without the support of UKOPA members. Their trust in providing the infringement records and the resources necessary to make the input to UKOPA should not be underestimated.

It is also important to recognise the role played by HSE's Energy Division Unit 3 – Onshore and Offshore Gas & Pipelines, Offshore Oil and Gas Inspection Management Team. They have shown faith in UKOPA's excavation safety activities, providing a valuable member to the IWG, who in turn has worked very effectively with UKOPA colleagues in pursuit of improved awareness of excavation safety in the vicinity of hazardous pipelines.

APPENDIX A: CURRENT STATUS AND MANAGEMENT OF DATABASE

The following operating companies should provide a submission (including nil reports) for the UKOPA infringement database for 2024:

- BPA
- CATS*
- EP Langage*
- Esso
- Humbly Grove Energy*
- Ineos FPS
- Manchester Jetline*
- National Gas
- Oikos Storage
- Perenco
- SABIC UK Petrochemicals
- Shell
- Wales & West Utilities
- TATA Chemicals
- Cadent
- Conoco Philips*
- Essar
- Exolum
- Ineos
- Mainline Pipelines Ltd
- Marchwood Power**
- Northern Gas Networks
- Prax
- Petrolneos**
- SGN
- Star Energy
- Uniper**

A number of these organisations provided their data via a single route, by means of their participation in Linewatch.

Those companies indicated with * provided a response indicating they had zero infringements during the year, whilst those indicated with ** did not report in 2024.

APPENDIX B: IWG OBJECTIVES AND TARGETS

The IWG strategy sets out a number of objectives and these are reviewed regularly to ensure that they are still relevant.

Currently, these are to:

- Engage with companies identified as the “most frequent infringers” from annual Infringement review to improve pipeline safety awareness.
- Continue to collect 3rd party pipeline infringement data and publish an annual report.
- Raise the profile of the UKOPA and the management of pipeline safety in the general contractor community.
- Raise awareness of working safely within cross-country pipeline easements in the general contractor community.
- Improve awareness of working safely within cross-country pipeline easements with landowners and tenants.
- Work with all operators, particularly gas operators, to ensure standardisation of data submitted, utilising the selection criteria already developed.
- Identify ways of engaging with the landowner / farming community to reduce the number of infringements that occur on farming land.

Good progress continues to be made against many of the objectives and the IWG will continue to develop on the work done to date.

IWG achievements from 2024:

- Making the UKOPA working safely agricultural course available to everyone via the UKOPA website
- Articles published in Farmers Weekly and supported the Yellow Wellies Farm Safety Campaign.

And in 2025/26, the IWG (and member companies) will:

- Publish the updated versions of GPG015 Managing Pipeline Infringements and GPG029 Local Authority Planners information regarding On Shore Pipelines and Associated Installations.
- Share learnings of incidents, infringements and good practice for the benefit of all members.

B.1 Data Collection

IWG is committed to the continued improvements of data and working to reduce the number of infringements that take place on an annual basis. To this aim, the following areas continue to be the focus for the group.

- Work to further improve the quality of the reported data.

Members will continue to work to improve the quality of the data submissions, with all members provided with a template of the information required for the UKOPA report.

As with any mass collation of data, data quality is an issue and there remains a wide variety in how third parties or, in the case of contractors, “who they are working for” are named, this is also true of the “unknown” records. The IWG continues to engage with members to ensure that fields are completed as fully as possible.

- Review the database content to ensure that only relevant data is collected.

The IWG will continue to consult with UKOPA members to ensure that the data fields within the database appropriately represent the findings from operator’s investigations of infringements. In doing so the challenge for the IWG is to ensure that there is due regard for the evolutionary nature of development of data collection by the large volume of gas contributors. These operators use large scale integrated databases which exist for purposes much wider than support of the infringement database, and so addition of new fields will be subjected to critical value and timing assessments.

- Ensure data is collected in a timely and efficient manner.

Pipeline operators are requested to provide data annually, although encourage to report throughout the year. Gas operator data is subject to a review in the first quarter of each year prior to submission for inclusion in the IWG infringement report. All data is then critically reviewed for apparent errors and to ensure that appropriate data field entries are consistent with agreed standards. The Linewatch members and other authorised operators utilise the Linewatch Infringement database (LIDB) for recording all events; records are submitted via this system on a daily basis. IWG is to liaise with Linewatch to try to ensure that those UKOPA members who are also members of Linewatch submit data. Even if no infringements have occurred, members should still return a ‘nil report’ submission.

- Greater use of statistical techniques to reveal trends.

As the infringement database continues to increase, so its statistical significance as a source of data for UK excavation safety will follow. The size of the dataset will enable the use of statistical analysis techniques to reveal trends and outputs. Critical to this will be to improve the quality of the report dataset to encourage greater consistency in terminology and reporting against all the UKOPA data fields.

APPENDIX C: IWG MEMBERSHIP 2024

Although it has proved difficult to formally confirm the total number of oil, petrochemical and gas pipeline operators in the UK, UKOPA membership (and hence database representation) is considered to exceed 95% of operators by underground pipeline length. As a result, it provides an authoritative view on the third-party threat to hazardous pipelines in the UK.

The database is managed on behalf of UKOPA incorporating input from the Linewatch Infringement reporting database where authorised member contributions are provided in a uniform format.

Activities relating to the operation of the database and development of excavation safety strategy are managed by UKOPA's Infringement Working Group (IWG), whose membership during 2024 was constituted as follows:

- IWG Secretary
- BPA
- GNI
- Cadent
- CATS
- Essar
- Esso
- Exolum
- HSE (invited member)
- Ineos
- Ineos FPS
- National Gas
- NGN
- Mutual Energy
- Perenco
- Petrolneos
- SABIC
- SGN
- Shell
- Valero (IWG Chair)
- Wales & West Utilities

The 2024 report includes data imported from several sources of aerial surveillance databases. The gas network data has been subject to an extensive filtering exercise to retain only those events which are relevant for the infringement report. Details of the filtering process are published in the guidance to UKOPA members on the population of the infringement data by IWG. Linewatch member data is imported directly from the Linewatch database.

APPENDIX D: GUIDANCE ON INFRINGEMENT CATEGORIES

The UKOPA database categorises infringements on the basis of risk and location indices as follows:

Risk index can be one of three levels:

Risk Index	Infringement Type	Infringement Description
A	Pipeline Damage or Leak	Includes damage to wrap or protective sleeve
B	Serious Potential for Damage	Methods or equipment used could have resulted in significant damage had excavation taken place at pipeline
C	Limited Potential for Damage	Methods or equipment would not have resulted in serious damage

Table D-1 Risk index

Location index can be in two forms:

Location Index	Location Description
1	Within the pipeline wayleave or easement. Typically, this is the zone within which the pipeline operator has legal rights, including a requirement by the landowner to notify planned work (although may be different for non-Pipelines Act lines laid by Statutory Undertakers).
2	Within the pipeline operators zone of interest, but outside the pipeline wayleave or easement. It is the area within which the operator would have reasonably expected a competent third party to have given notification in the prevailing circumstances.

Table D-2 Location index

So that infringement categories can be summarised as follows:

	Actual Damage	Serious Potential for Damage	Limited Potential for Damage
Within Wayleave or Easement	A1	B1	C1
Within Operators Notification Zone	-	B2	C2

Table D-3 Infringement categories