

NUAR

National Underground Asset Register

Presentation to CECA Southern

NUAR
National Underground Asset Register

UK Government

Operated by Ordnance Survey

Darren Vaughan
3rd Nov 2026

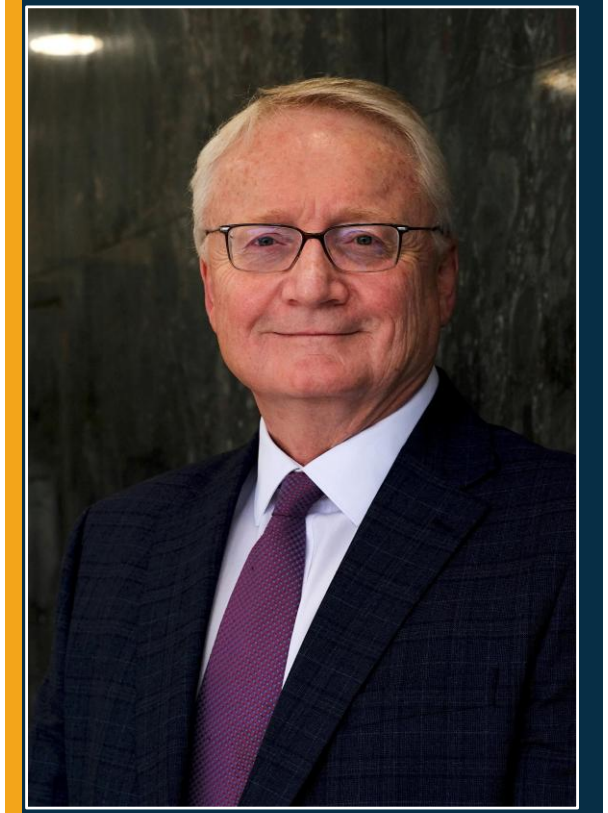
CECA strategic priorities

Refined focus areas for infrastructure contractors

01	**Sustainability & Social Value**	Creating a better environment for all
02	**Skills & Training**	Creating a skilled workforce
03	**Careers & Recruitment**	Creating a talent pipeline
04	**Clients, Policy & Workload**	Creating work opportunities
05	**Health, Safety & Wellbeing**	Creating a safer workplace

ceca 30

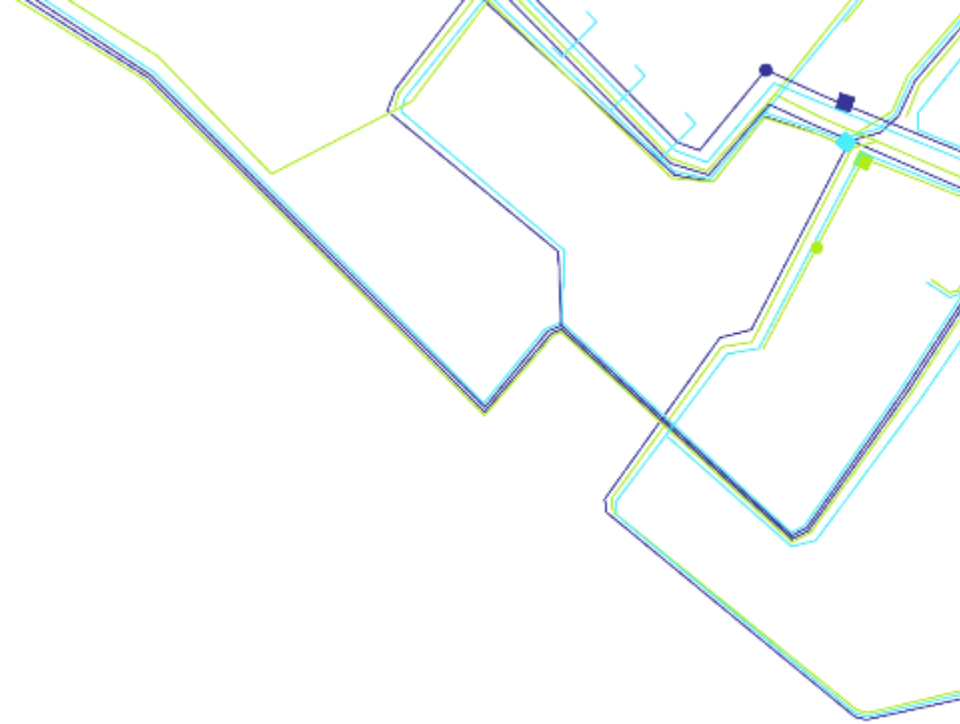
working for infrastructure



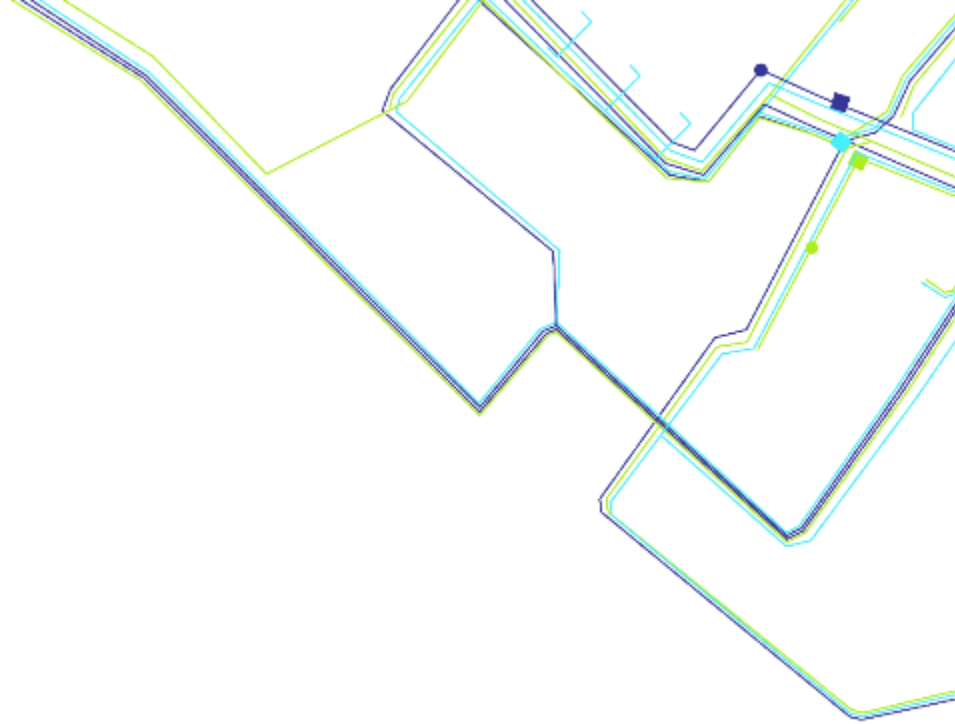
www.ceca.co.uk

DAVID ALLEN
Executive Director
CECA (Southern)

Agenda



- NUAR recap and current state
- Adoption & roll out
- Latest updates
- Platform demonstration
- Q&A



Darren Vaughan

NUAR Account Manager

London / East Midlands / Yorkshire & Humber / North East

geoplace

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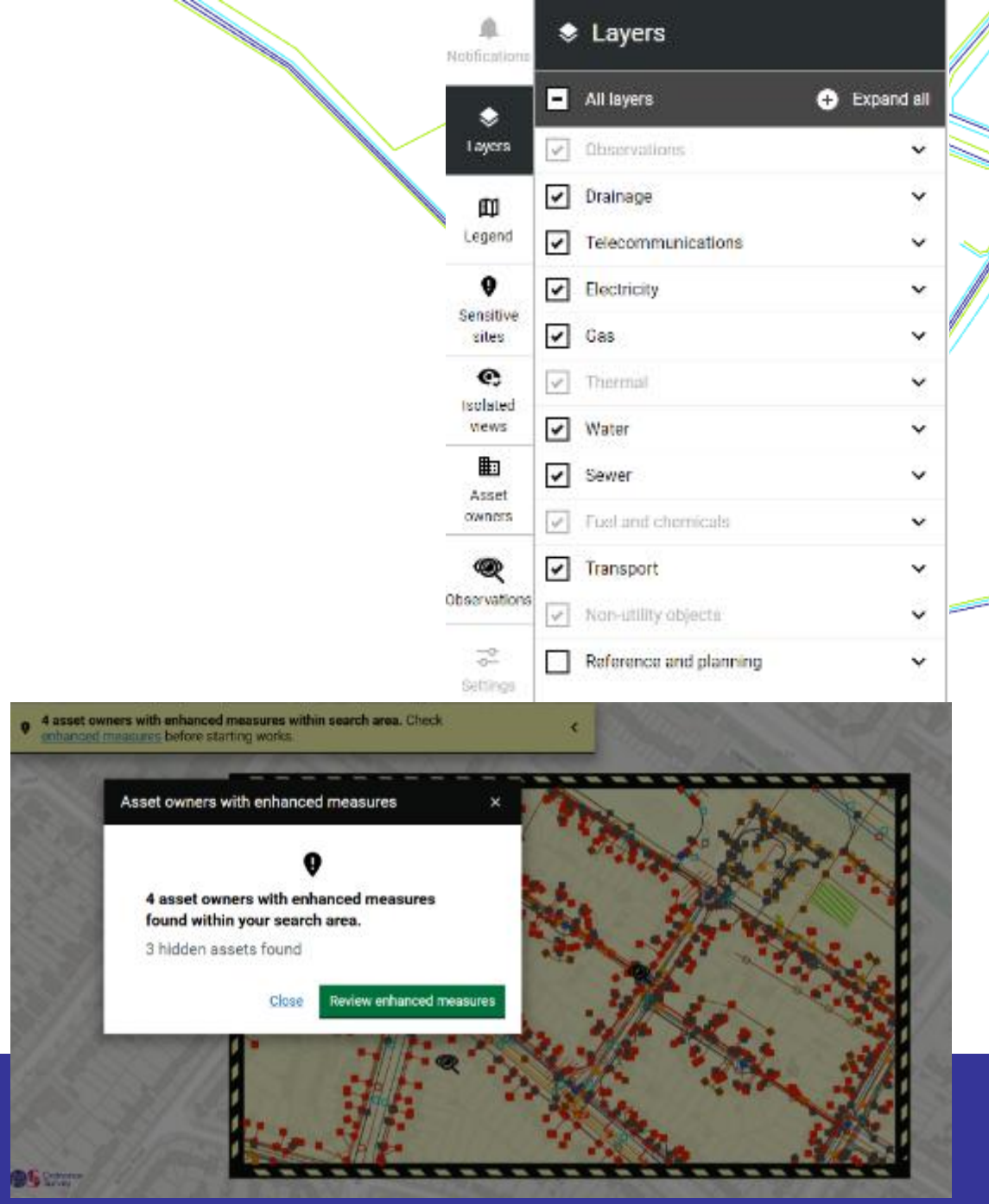
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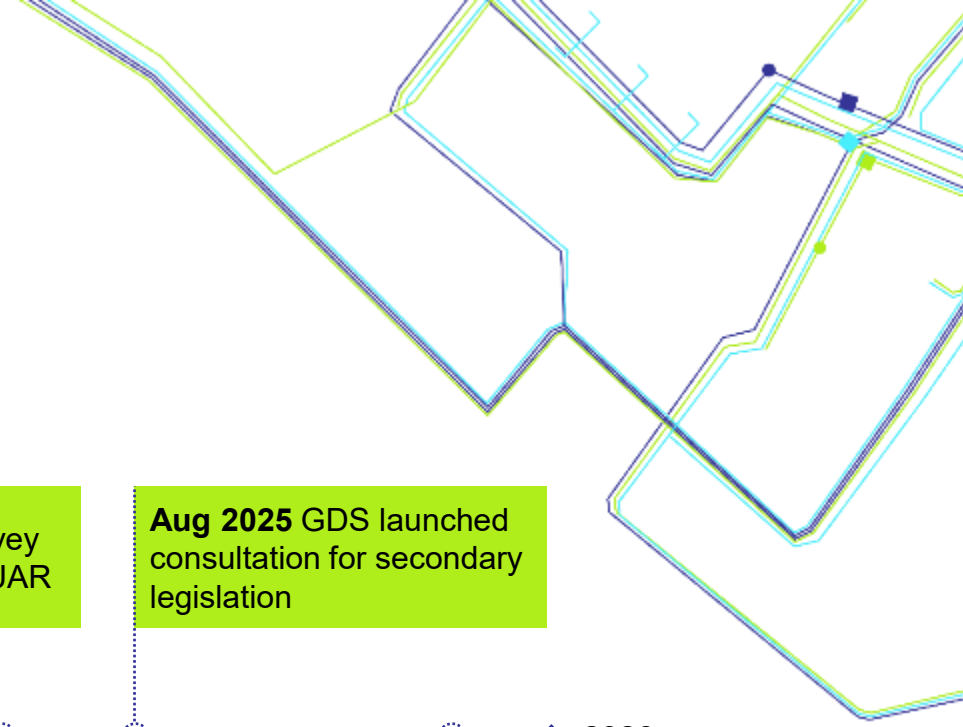
What is NUAR?

NUAR is a **government digital service** which provides **instant access** to a map of **the underground pipes and cables** for authorised users in **England, Wales** and **Northern Ireland**.

Improves the **efficiency** of the way we **install, maintain, operate and repair** our **buried infrastructure** by providing **secure access** to data from **public** and **private sector asset owners**.



Timeline



2018 NUAR Research phase started by Geospatial Commission (now Government Digital Service)

April 2023 Platform MVP operational in limited areas

Oct 2024 Ordnance Survey appointed operator of NUAR

Aug 2025 GDS launched consultation for secondary legislation

2018 — 2026

Sept 2021 NUAR build programme starts

April 2024 Platform MVP operational in England, Wales and Northern Ireland

June 2025 Platform moved from MVP to Public Beta, removing restrictions on user numbers. Data (Use and Access) Act achieved Royal Assent.

End 2025 Platform operational

What challenges is NUAR solving?

Challenge:	Solution
Over 4 million km's of buried pipes and cable in UK held by ~600 asset owners	**Data available in a secure service**
60,000 accidental strikes per year with estimated **annual cost of £2.4bn**	**Supports Safe Dig process**
Access to Asset Owner data take **more than 6 days**	**Instant access, anywhere**
Data is supplied in different formats and styles	**Standardised data and styling**



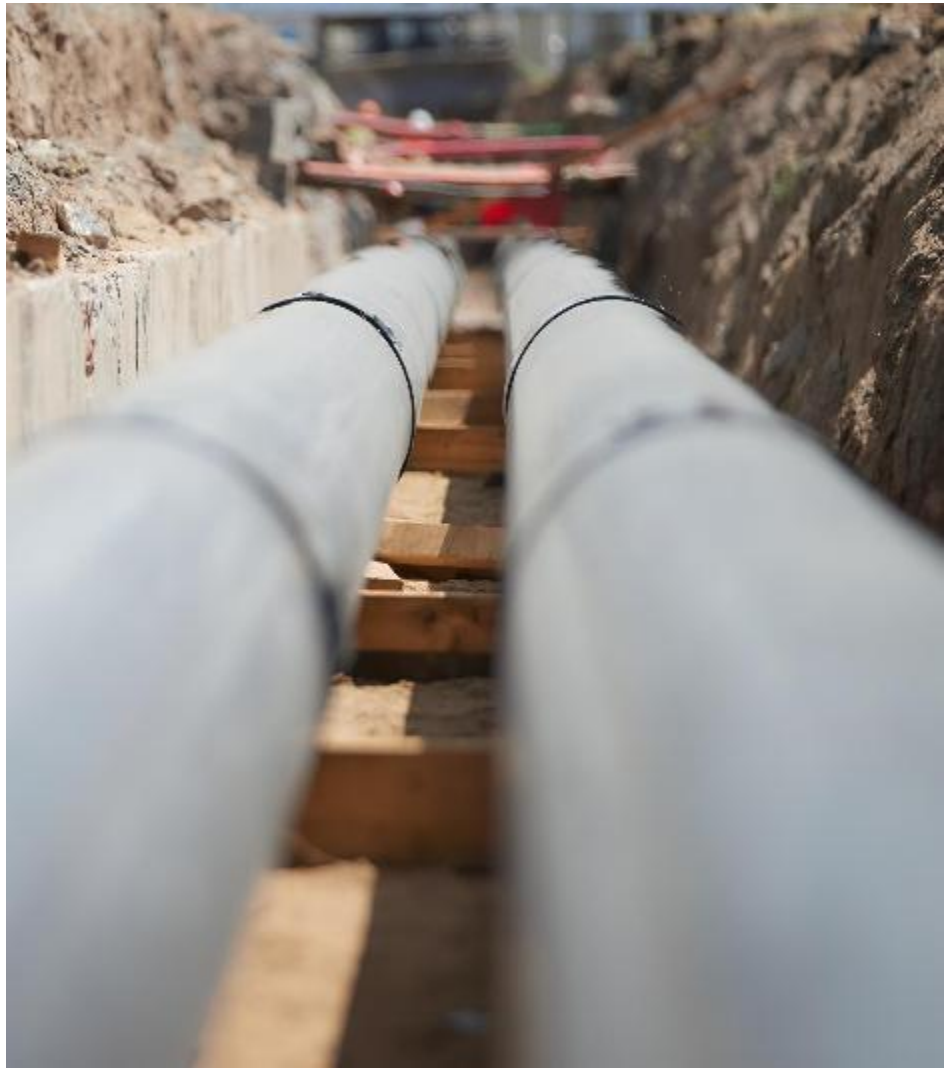




NUAR in numbers

So far:

- **Over 400** asset owners' data published
- **Over 3.2 million kms** of pipes and cables published
- **80%** of known underground assets mapped

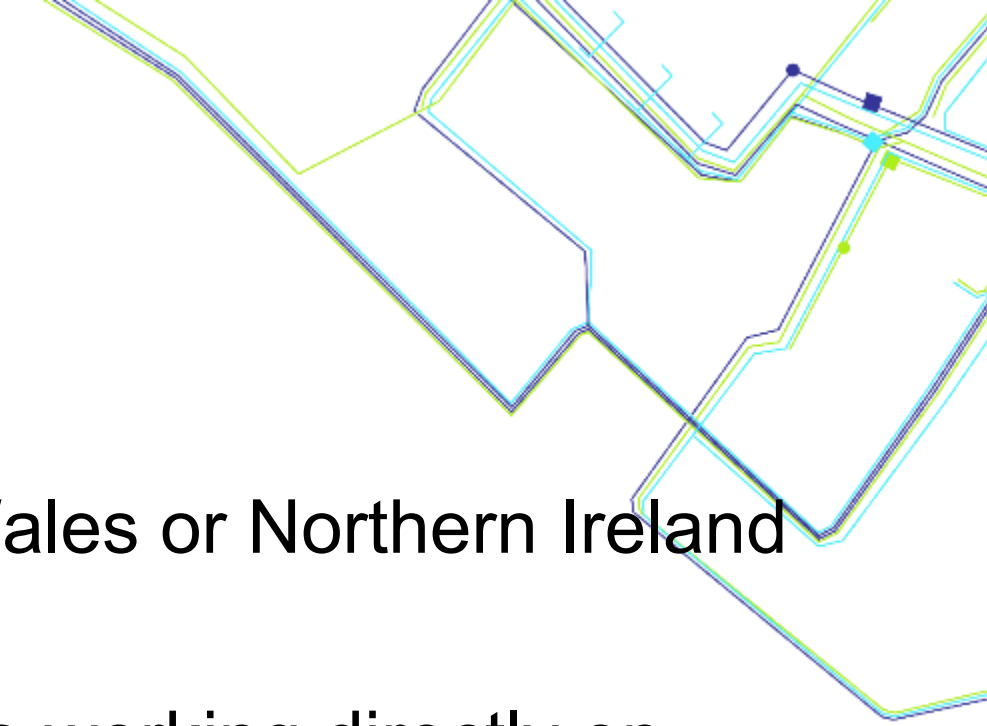


NUAR in numbers: why it matters

Why it matters:

- **Around 60,000** accidental utility strikes happen each year
- **Around 80%** of known underground pipes and cables are now covered
- **Better planning** helps avoid cost, delay and disruption before work starts
- **Strengthens early risk awareness** with better asset insight
- **Clear geographical visibility** of assets on one screen

Who can use NUAR

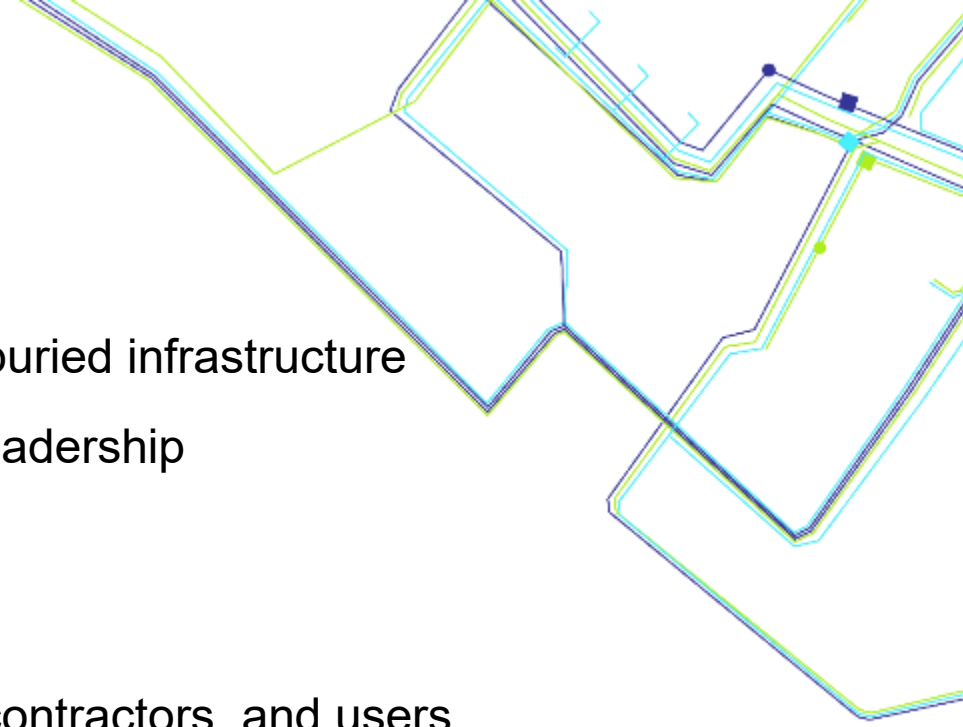


The NUAR service is currently accessible to:

1. **Asset owners** who operate in England, Wales or Northern Ireland and have shared their data into NUAR.
2. The **authorised street works contractors** working directly on behalf of these asset owners.

MYTH Buster: NUAR is a nationwide platform **BUT**
You can ONLY view the ***area of interest for your own assets*** / the asset owner you are working on behalf of.

Where NUAR stands today



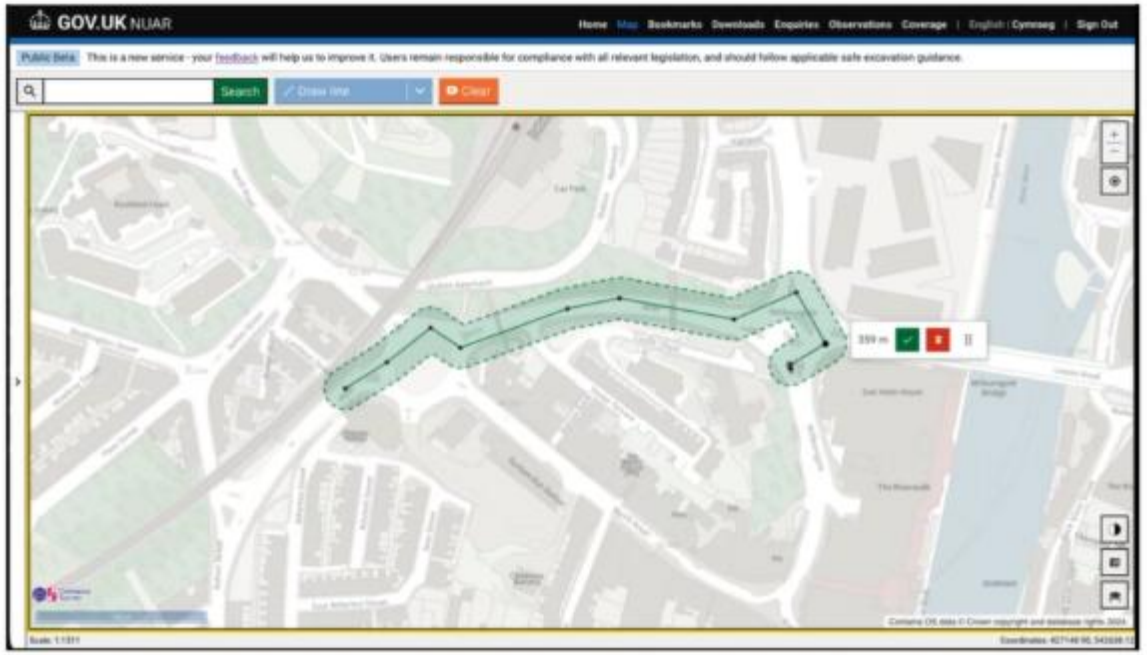
- **Royal Assent** secured and mandates the creation of a Register of buried infrastructure
- **Enhancement work** continues under Government Digital Service leadership
- **Adoption is underway** across all sectors
- **The service** is ready to support planning **at scale**
- **Access** is controlled for asset owners and authorised street works contractors, and users must still follow HSG47 and asset-owner guidance
- **NUAR** is here to strengthen current safe dig practices, not replace them.
- It is **a powerful extra data layer** to augment what is already used. To improve planning, early risk awareness and site reconnaissance.

Linear Tool

In June 2026 a new line drawing tool was introduced.
This was in response to feedback from users that when planning work around highways, railways and pipelines, being able to draw a longer, thinner Area of Interest (AOI) better aligns with the data they require.

This linear search tool enables:

- Planners to draw a 3250m x 50m AOI
- Excavators to draw a 200m x 25m AOI





Voltage colour coding beta

In October 2026 the voltage colour coding beta was introduced.

Following customer feedback that voltage information is critical to planning and risk awareness processes, this new feature makes voltage levels easier to identify by displaying electricity assets using a **new voltage-based colour-coding scheme**.
It has been carefully developed using industry feedback and testing and we are requesting feedback from user to further refine it before it becomes the default view for isolated views in the web portal and in the exported PDF site maps.

Resulting in electricity map views going from this





To this:





Gas Symbology updates

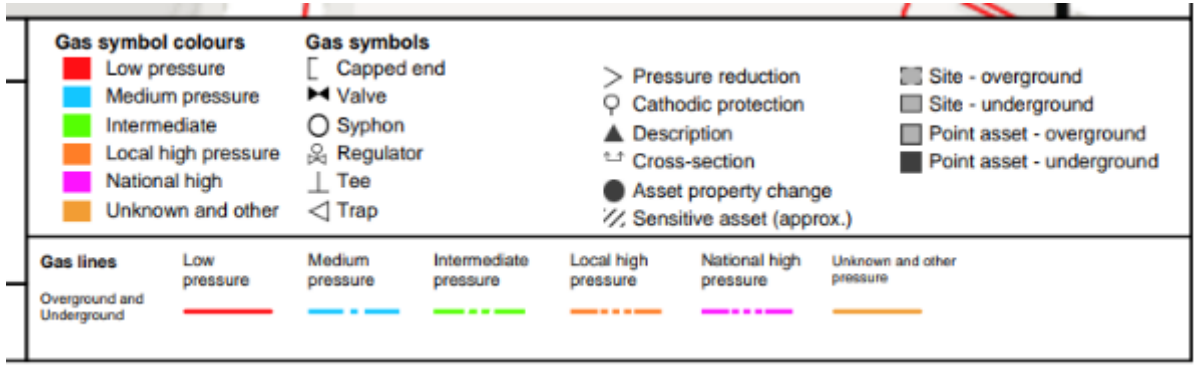
The updates to display voltage colour coding have led to improvements in the way gas symbology is enabled.

For some time now, you've been able to utilise gas symbology and colour coding in isolated views, and the PDF maps have similarly had this feature enabled on all the site maps, by default. This isn't changing, we've just **simplified how to enable gas symbology** in the isolated views on the web and **improved how the gas asset legend is displayed in the web and PDF map view**.

Resulting in the PDF map gas legend going from



To this:







Notifications

This capability to enable asset owners to be notified about planned works near their assets, to invoke risk and protection actions is in development.

Companies using NUAR



Thames Water

niwater
Delivering what matters

NWG
living water

Northern Ireland Electricity Networks

Northern Gas Networks

SGN

WALES&WEST UTILITIES

Cadent
Your Gas Network

Virgin media O2

openreach

Gigaclear

Lincolnshire COUNTY COUNCIL
Working for a better future

Durham County Council

Coventry City Council

TRAFNIDIAETH CYMRU
TRANSPORT FOR WALES

Alpha Construction Ltd

Balfour Beatty

ESH CONSTRUCTION

ESH CONSTRUCTION



Norman Barnett
Framework Director

"The benefits NUAR could offer were quickly apparent and were bought into by the field teams during the trials; NUAR now makes the old process look very outdated and the flexibility it offers is hugely beneficial.
This needs to be the industry norm going forward."



John Hopper
Project Supervisor

"I have been working with and using NUAR since Esh were introduced to it and have been part of the development process by attending meetings and providing feedback at the early stages. NUAR has proven to be a huge asset to our reactive contract and helps with speeding up works and provides ease of assessing underground services for emergency and planned works."

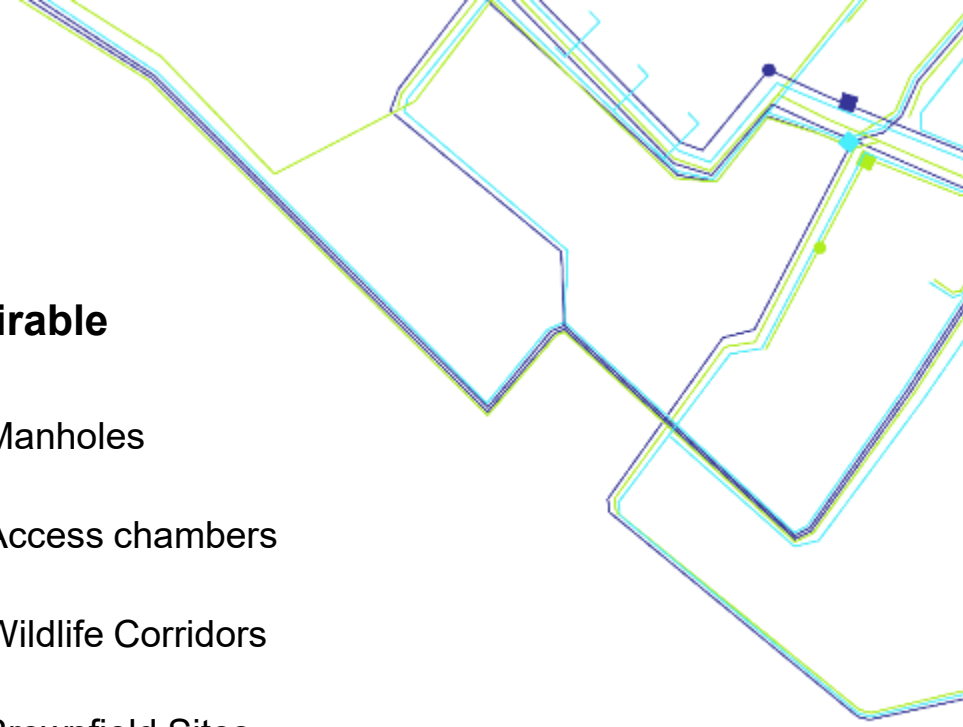


John Ridley
Foreman

"This provides more safety on site but as said today while out late at night on call outs I can bring up my own NUAR drawings and don't need to wait around for them to be sent to me.

I think this benefits every single person who can gain access to it across all sectors of civil engineering and construction."

Local Authority Data Ask



Critical assets

- [ ] Illuminated signs
- [ ] Traffic lights/ signals
- [ ] Street lighting
- [ ] EV charging points
- [ ] Parking meters
- [ ] CCTV
- [ ] District Heating Systems
- [ ] Buried cables

Highly desirable (Damage prevention)

- [ ] Gullies/ culvers
- [ ] Conservation areas
- [ ] Sustainable Drainage Systems (SuDS)
- [ ] Section 50s (NRSWA)
- [ ] Ducting
- [ ] Tree Preservation Orders (TPOs)
- [ ] Drainage Lines/ Highway Drainage
- [ ] Highways Structures / SEDs

Desirable

- [ ] Manholes
- [ ] Access chambers
- [ ] Wildlife Corridors
- [ ] Brownfield Sites
- [ ] Archeological sites
- [ ] Historical sites
- [ ] Section 58s (NRSWA)

Driving adoption across the sector

- Roadshows and sector outreach
- Practical training to build confidence
- Regular workshops and best-practice sessions
- Learning from users to improve the service
- Online resources to support rollout
- Helping supply-chain partners get on board



How can you help?



- Get involved in industry consultation
- Make data available within the NUAR platform – take advantage of free data onboarding service
- On board supply chain or request supply chain access
- Use the platform and provide feedback through the community
- Support roll-out across your organisation and use the NUAR Adoption team resource



Any questions?

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