

## NUAR FAQs

### What is the Geospatial Commission?

The [Geospatial Commission](#) (GC) was established in 2018 as an independent, expert committee, responsible for setting the [UK's geospatial strategy](#) and coordinating public sector geospatial activity. Its aim is to unlock the significant economic, social and environmental opportunities offered by location data and to boost the UK's global geospatial expertise. It is part of the [Department for Science, Innovation and Technology](#).

### What is the National Underground Asset Register or NUAR?

The Geospatial Commission is building an interactive digital map of underground pipes and cables - the National Underground Asset Register (NUAR). NUAR will revolutionise the way we install, maintain, operate and repair our buried infrastructure by improving the way data is shared and accessed. The map will cover England, Wales and Northern Ireland in 2024/25, with incremental releases of areas as the programme progresses (Scotland currently benefits from a system similar to NUAR, known as VAULT).

NUAR standardises, centralises and makes available privately and publicly owned data from hundreds of organisations about the location of underground utilities assets. NUAR is a secure, auditable, trusted and sustainable platform. It will provide a consistent, interactive digital map of buried asset data, accessible when, where and how it is needed by those planning and executing excavations

### Why do we need NUAR?

There are estimated to be 4 million kilometres of pipes and cables buried underground across the UK, and a hole is dug every 7 seconds to install, fix and maintain these assets that are critical in keeping the water running, gas and electricity flowing and our communications with the outside world connected. There are believed to be around 60,000 accidental strikes on these pipes and cables every year - putting workers' safety and lives at risk, as well as causing disruption to the public and businesses.

Each of the 650+ asset owners across the public and private sectors (incl. energy, water and telcos) hold data about their own assets, which they are required by law to share for the purposes of 'safe digging' (i.e. installing, maintaining, operating and repairing buried assets). However, currently there is no standardised method to do this with multiple organisations having to be contacted for each dig, providing information in varied formats, scales, quality, and on different timelines resulting in a complex process for sourcing and using this information.

The fundamental purpose of NUAR is to streamline the data-sharing process, reduce the risk of potentially lethal utility asset strikes and promote more efficient management and maintenance of underground assets. It will also lead to enhanced communication between parties and improve data quality.

## What are the benefits of NUAR?

Accidental strikes put workers' safety and lives at risk, as well as cause disruption to the public and businesses - costing the UK economy £2.4 billion a year. The economic benefits of NUAR are estimated to be £350m per year. This consists of benefits in efficiencies, reduced asset strikes (and improved worker safety), and reduced delays to the public and businesses. [We have published the approach taken to estimate the relevant benefits on our GOV.UK page.](#)

## Who is involved in the design and build of NUAR?

We've been working alongside asset owners and other stakeholders since 2019 to develop the NUAR service, security measures, data model and legal frameworks, and have been ably supported by a supply chain of world leading experts in their fields. We appointed Atkins who are working with Ordnance Survey, 1Spatial, GeoPlace and the Greater London Authority.

We have also been learning from previous projects such as VISTA, Mapping the Underworld, Project Iceberg and HADES, as well as from those who have created similar services such as the Scottish Roadworks Commissioner VAULT system and operational systems in Belgium, Germany and the Netherlands.

## What is the NUAR 'minimum viable product' or MVP?

As set out in its [2022-23 Annual Plan](#) and in line with the [Government Service Standard](#), the GC is committed to iterative delivery where users are placed at the centre of product and service design and are given access to core functionality early and often to help ensure the service best meets user needs and expectations. This commitment was delivered with the release of the NUAR minimum viable product or MVP which gives the first cohort of users access to the emerging platform as part of an exciting stage of development and service refinement.

The MVP includes data for London, North East England and Wales from energy, water and telecommunication companies, local authorities and other public sector bodies. Following this release, the platform will be enhanced, both in terms of its features and data, based on feedback. All core functionality to meet the 'safe dig' use case is currently available but ancillary features, like the ability for end users to report "observations", will come later.

## When was the NUAR MVP launched?

The NUAR MVP was launched by Viscount Camrose on 5 April 2023 in Newcastle. [Read our press release on the launch.](#)

## Who is currently able to access the MVP?

The MVP is initially accessible to asset owners who operate in London, North East England and Wales and have signed the NUAR Data Distribution Agreement (DDA) and agreed a Data Ingestion Specification (DIS), and those authorised street works contractors working on behalf of these asset owners. Access to the data is granted in accordance with the agreed use cases and legally enforceable data access agreements. All access is subject to protective monitoring.

Access to the platform is by invitation only (based upon the above criteria), and the NUAR Administration Portal allows designated administrators within asset owner organisations to invite and manage their direct users (constrained by email domain) and to manage the supply chain organisations who work on their behalf. Initially these administrators are our current primary points of contact, but asset owners are able to determine within their organisation who they would like to be their administrator going forward - it is possible for these to change, and many organisations will have multiple administrators who will be able to set up standard users.

## What are some of the key MVP features?

The NUAR MVP is a secure platform with comprehensive production security controls in place to ensure that data is protected while allowing appropriate role-based access to data required to work safely.

Functionality includes an interactive map, so that each asset and site displayed can be selected and queried to view detailed attribute information (such as voltage level/pressure tier, but also, if available information such as depth, quality level, location type etc). It also includes an 'Isolated View' such that a single asset owner's assets can be viewed in isolation. This is also the case for Work Pack PDF exports, with a 'page per asset owner' available which provides opportunities for further enhancements based on feedback such as more specialised symbology and colours going forward.

The platform also allows assets and sites to be flagged as 'sensitive' and to have 'enhanced measures' attached to them (e.g. additional guidance, or contact/permission requirements). Development of features (in conjunction with the Asset Owner community) to allow variable proximities to be applied to enhanced measures based on the type of work being undertaken or the type/role of user or organisation is also planned. The assignment of a 'sensitive' status, enhanced measures and proximity remains in the hands of the Asset Owner providing their data to the platform.

The NUAR platform logs all requests, including the User ID, and includes the list of Asset Owner IDs whose assets and sites are included in the Area of Interest. The delivery team are also logging where an 'Intention to Dig' enquiry is submitted, leading to production of a PDF Work Pack. Asset owners have access to usage reports via the Administration Portal. We are also working with our Asset Owner community to refine and extend the Management Information (MI) content available beyond the MVP release.

The MVP provides general messaging about the role and limitations of NUAR (and statutory records generally) within the context of the HSG47 guidance. This includes the assumption that not all assets and asset owners will be present. Where an Asset Owner, and their coverage area, is known to NUAR, this organisation's details are included in an Asset Owner list accessible from the map. In line with HSG47, information about the currency and reliability of plans in general, and the requirements to carry out ground investigation and safe digging practices, is also displayed.

Details of features are provided in training materials, by contacting your organisation's onboarding lead or by joining a regional or sector user group.

## How can I use the MVP?

The MVP is not a final end product, it is a key stage in the design and development of NUAR involving real users as part of an interactive learning process to refine functionality and processes in preparation for business use.

The MVP release can be used in business as usual practices, however, it is intended to complement rather than replace them, and will allow users to both plan for future adoption and provide valuable feedback to enhance the service further.

We also encourage users to be mindful that (as with existing practices around statutory records) NUAR will never replace requirements for ground investigation and safe digging practices as outlined in HSG47.

## What will happen post MVP launch?

From MVP launch until NUAR is fully operational, development of new features, and refinement of existing ones, will continue (informed and supported by our asset owner community). Additional asset owner datasets will be added in the three MVP areas (North East England, Wales and London), as well as improvements to data currency.

We will also be expanding the coverage of the service to include the remaining areas of England and Northern Ireland. Coverage will be increased in these areas iteratively - as and when we have a critical mass of data in each area. The sooner asset owners sign up to the service, the sooner their region will be included - and good progress has already been made on this.

We are also working with a cross-section of stakeholders to continue:

- Developing a charging framework so we can apply an proportionate charge to help maintain the service over the longer term;
- Exploring potential legislative reform; and
- Considering opportunities for the wider market to enhance the NUAR service.

## Will NUAR be available in Scotland?

The Office of the Scottish Roadworks Commissioner operates the Scottish Community Apparatus Data Vault (or Vault for short) which makes information about all underground pipes and cables available from one centralised location. Deployment is therefore planned for England, Wales and Northern Ireland, which together with Vault, will result in the entirety of the UK being covered by a service of this kind.

## Which asset owners have signed up?

Users are able to view a listing of organisations who have provided data in their area of interest, as well as information on data currency, when logging into the platform. We will also regularly publish information listing participating organisations on GOV.UK.

Whilst there are asset owners from across the entirety of England, Wales and Northern Ireland signed up and sharing data with NUAR, only data from those asset owners based in the three MVP regions (North East England, Wales and London) are displayed in the MVP.

## I am an asset owner, what do I need to do?

For now, asset owners in North East England, Wales and London who have already fully signed up for NUAR, and those working on their behalf, will be given details on how to create accounts. They will also be provided with training materials and access to a helpdesk.

Asset owners in other areas of England or Northern Ireland who have fully signed up for NUAR - we'll be rolling the service out to your area as soon as possible (when we have a critical mass of datasets).

If you are an asset owner operating in England, Wales or Northern Ireland and have not yet signed up to NUAR, please contact us by email [nuarcontact@atkinsglobal.com](mailto:nuarcontact@atkinsglobal.com) to ensure you have an opportunity to feed into the development and refinement of this new service.

## I am not an asset owner, what should I do?

If you are a contractor working on behalf of an asset owner, you may be able to access NUAR if they are fully signed up and you are carrying out works in North East England,

Wales and London. Please contact the asset owner you are working for directly who will be able to advise you of their status and whether they can grant you access at this time. If you carry out work on behalf of an asset owner in another area, unfortunately you'll have to wait until we have delivered NUAR in that area (once we have a critical mass of data).

As set out in our response to the public consultation we held in 2022, 75% of respondents stated it could be beneficial to expand the permitted use cases for NUAR beyond statutory undertaking, which would allow access to other user groups. We are committed to exploring these opportunities. If you would like to share your thoughts, please email us at [nuar@cabinetoffice.gov.uk](mailto:nuar@cabinetoffice.gov.uk).

### Who will pay for NUAR?

The current phase of the NUAR programme is publicly funded. However, as set out in our response to the public consultation we held in 2022, we have committed to developing a sustainable future charging framework that takes into account the comments raised by respondents and is fair and transparent to industry and taxpayers alike.