



Utilities Guide

GEfield
Cloud

A geospatial mobile solution for field technicians

CONTENTS

Geofield Cloud..... 2

Features 3

Geofield by Numbers 4

Powering Change: Handling Ageing Assets 8

Interruption to Supply (ITS) Module 11

Mapping Modernisation..... 12

Find it. Fix it. Fast. 14

Testimony 17

Connected Around the Clock 18

Weathering the Storm..... 20

Our Partners..... 22

Contact Us..... 24

AMT-Sybex..... 25



What is Geofield Cloud?

Geofield Cloud is a powerful mobile spatial solution designed for field-based asset and work management that is optimised for tablets, smartphones and portable computers running Windows, iOS and Android.

Geofield Cloud helps organisations optimise their use of field technologies by effectively combining all aspects of the enterprise from a task, data and business perspective.

What it does

Geofield Cloud provides a map-based, task centric and supportive environment for the field technician. Through the use of digital workflows, data from multiple sources that is required for a particular task is presented to the user.

Interaction is enabled through mapping, graphics, intelligent forms, photographs and third-party devices, allowing full visualisation of selected assets from the organisation's GIS system in the field. Data captured, including urgent network changes, is automatically returned to back-office enterprise systems and can also be directly shared with other field staff in near-real time.

New functionalities

Geofield Cloud is the latest generation of our cloud-hosted product and the first to be built as cloud native. It delivers a new cloud-native back end, hosted on the Microsoft Azure platform and integrates seamlessly with our industry standard Geofield mobile application.

Geofield Cloud offers advanced features to manage groups of users with different configuration and data requirements, new metrics to visualise usage and support for federated Single Sign On (SSO) user authentication.

FEATURES

1



Cross-platform

Geofield Cloud provides the same user experience across all Android, iOS and Windows devices.

2



No signal, no problem

Full offline capability and near-real-time bi-directional updates when reconnected.

3

Cloud hosted

No additional IT overheads and ability to onboard new users and third-party contractors instantly.

4



GIS maps

Interactive maps make visualising, locating, identifying and querying utility assets faster and easier.

5



World switching

Create multiple map views for different user groups, asset types or utilities.

6



Asset search/gazetteer

Find assets by ID or attributes and sort by proximity for quick access.

7



Network tracing

Identify asset supply sources to trace connections and dependencies in the network.

8

Markup/data capture

Report data errors to enhance accuracy and improve network asset records.

9



Live layers

Display near-real-time asset status updates, including valve positions and work orders.

GEOFIELD BY NUMBERS ENERGY

We help our customers with...



109,000km
of gas pipes



418,000km
of underground cables



Bringing
electricity to over
43 million
people



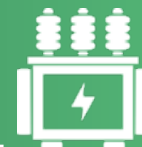
Bringing gas
to over
7.5 million
people



Over
218,000km
overhead lines



14.8
million
properties



Over
226,000
transformers

GEOFIELD BY NUMBERS WATER

The infographic depicts a stylized water supply network. A central horizontal blue pipe runs across the middle, with a red-handled valve in the center. Above this pipe, a network of blue pipes branches out to the right, featuring a pressure gauge and a red-handled valve. Below the central pipe, another network of blue pipes branches out to the left and right, also featuring red-handled valves. Green callout boxes with white text provide statistics for each section of the network.

Category	Value
139,300km of mains water pipes	139,300km
6,118 pumping stations	6,118
211,303km of sewer pipes	211,303km
10.733m households and businesses supplied	10.733m
4.314bn litres of water supplied daily	4.314bn
139 sludge treatment centres	139
4,056 wastewater treatment works	4,056
3.584bn litres of wastewater treated daily	3.584bn
500 water treatment works	500



6,118
pumping stations

211,303km
of sewer pipes

139,300km
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10.733m
households
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500
water treatment
works

POWERING CHANGE: HANDLING AGEING ASSETS

The UK's ageing water and energy infrastructure presents mounting challenges in maintenance, efficiency, and regulatory compliance. With underground water pipelines dating back to the Victorian era and electricity grids and gas networks built for outdated energy systems, utilities across both sectors face increasing vulnerabilities, frequent failures, and rising operational costs. These inefficiencies threaten supply security, service reliability, and sustainability goals, highlighting the urgent need for modern, long-term solutions.

Infrastructure vulnerabilities

From leaking water mains to overstretched electrical grids, ageing assets across both sectors are showing signs of strain. Water utilities lose over three billion litres daily due to leaks, while the energy sector contends with transmission constraints and equipment failures. Corrosion, structural weaknesses, and outdated designs leave both networks prone to disruption, safety risks, and customer dissatisfaction. As demand rises – driven by population growth, electric vehicles, and modern appliances – legacy systems are under increasing pressure, making proactive maintenance and strategic upgrades critical.

Outdated treatment and generation facilities

Whether it's water treatment plants or power generation and gas infrastructure, many facilities require frequent maintenance and are ill-equipped to meet today's demands. Without real-time monitoring and digital management tools, utilities often rely on reactive maintenance, increasing downtime and costs. Furthermore, older assets struggle to handle new challenges, from emerging water contaminants to integrating renewable energy, necessitating investment in modern, flexible technologies that can extend asset life and enhance performance.

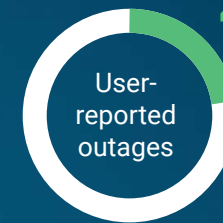
Regulatory and environmental pressures

Regulators such as Ofwat and Ofgem are setting increasingly strict targets for leakage reduction, decarbonisation, and service resilience. At the same time, climate change is intensifying asset vulnerabilities through extreme weather and rising temperatures. Failure to modernise can result in penalties, reputational harm, and operational setbacks. With public expectations and government policies demanding sustainable, low-carbon solutions, utilities must adopt smarter, more resilient infrastructure strategies to secure reliable water and energy services for the future.

£5-8bn

allocated for pre-purchasing critical equipment (cables, switchgear) to fast-track projects for 2026-2031.

23% experienced annually



2035

Target for a net zero electricity system

Storm Arwen
2021



1 million
homes lost power

4,000

homes disconnected for over a week



UK STATISTICS

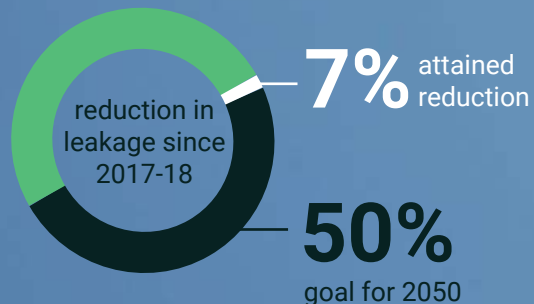
Based on latest Ofgem-reported metrics

88 %

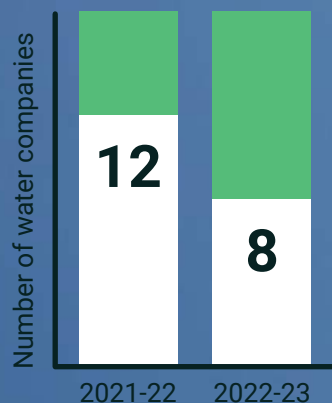
planned increase on spend, 2025-2030, to address infrastructure challenges in water utilities.

3 billion litres

approximate loss of water each day through leaky pipes.



Leakage performance commitment levels



Companies that reached the commitment level

INTERRUPTION TO SUPPLY (ITS) MODULE

Water companies face increasing regulatory pressure to reduce leakage, minimise service disruption, and ensure continuous supply. Addressing these challenges, the Interruption to Supply (ITS) module offered by AMT-Sybex is a powerful, intuitive solution for managing network interruptions and supporting field engineers in real time.

ITS enables users to trace the water network, pinpointing which assets and customers will be affected by planned or emergency repairs. The module provides a clear visualisation of the impacted area, quantifies the number of customers at risk, and records the actual duration of any supply interruption. This data-driven approach not only enhances operational transparency but also supports compliance with regulatory reporting requirements.

At the heart of ITS is a guided, step-by-step workflow that simplifies incident management. Field technicians are led through a linear process, which can be navigated forwards or backwards to review or adjust each stage.

Key features include:

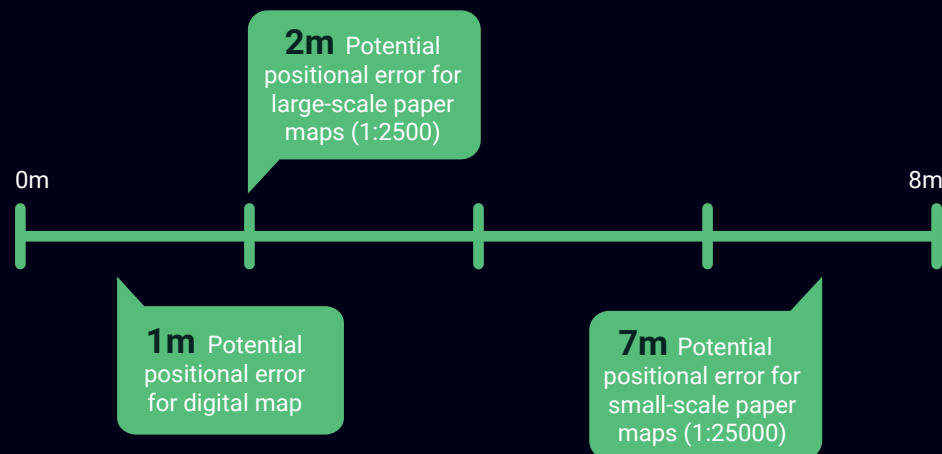
- Identifying the optimal way to isolate a faulted section of the network.
- Exploring backfeed options to restore supply from unaffected sections.
- Highlighting vulnerable customers to ensure placement of appropriate safeguards.
- Evaluating the risks associated with network isolation.
- Prompting users to obtain necessary authorisations before proceeding.

This structured workflow enables engineers to assess incidents efficiently, review mitigations, and make informed decisions. By tracing the network from the fault, ITS identifies equipment for isolation, runs backfeed traces to explore alternative supply routes, and evaluates broader network risks.

Ultimately, the ITS module transforms a complex, high-stakes process into a manageable, auditable sequence, helping water companies deliver reliable service and meet strict regulatory standards.

MAPPING MODERNISATION

Make the shift from static paper to intelligent, interactive network maps.



In an era of digital transformation, some UK water and energy utilities still rely on paper records to manage their vast networks. This outdated approach hampers efficiency and poses risks to operations and customer service.

The hidden costs of paper-based management

- **Slow data retrieval:** Paper maps make accessing information cumbersome, delaying emergency response and maintenance.
- **Inaccurate records:** Errors and outdated maps lead to poor decisions, wasted resources, and service disruptions.
- **Limited collaboration:** Paper records prevent real-time data sharing, reducing operational efficiency.
- **High costs:** Maintaining paper records is labour-intensive and diverts resources from critical tasks.

The power of geospatial asset management

Transitioning to digital geospatial solutions enhances efficiency, visibility, and decision-making.

Smarter operations with real-time insights

- **Faster decisions:** Track asset performance in real time for quicker responses.
- **Better resource allocation:** Ensure optimal use of staff and materials.
- **Improved planning:** Analyse asset patterns to guide investment strategies.

Cost and time savings

- **Lower labour costs:** Automate manual processes.
- **Quicker access to data:** Update and retrieve asset information instantly.
- **Extended asset lifespan:** Proactive maintenance reduces replacement costs.

Reliable data and compliance

- **Higher data accuracy:** Improve decision-making with up-to-date information.
- **Simplified compliance:** Maintain accurate records to meet regulatory standards.

Empowered workforce

- **Clear map-based navigation:** GIS data supports seamless spatial workflows.
- **Informed decision making:** Unified data layers enhance efficiency.

The path forward

The water and energy industries must prioritise long-term resilience. Digital asset management is more than a technology upgrade – it is a strategic investment in efficiency, cost savings, and service quality. The time to move beyond paper is now.

FIND IT. FIX IT. FAST.

Location precision and navigation with Google Maps and what3words integration

For field engineers working in the water and energy utility sectors, accurate and efficient access to locations is essential, particularly when assets are buried or situated in remote areas. Geofield Cloud enhances geospatial asset management in the field by integrating with leading location services, enabling teams to navigate directly to site, reduce downtime, and ensure precision when locating or recording underground infrastructure.

Google Maps navigation

The Geofield Cloud mobile app's external navigation plugin allows users to launch Google Maps directly from the app in order to navigate to a selected asset or feature. With turn-by-turn directions provided via Google Maps, engineers can easily reach job sites, whether in dense urban areas or rural environments, without the need for manual location entry. This streamlines access to hard-to-reach infrastructure and supports faster, more reliable field operations.

what3words plugin

For even greater precision in geolocation, Geofield Cloud includes optional support for the what3words addressing system. When enabled, this plugin adds a what3words button to the Add Bookmark control, accessible via a long press on the map interface. This converts traditional GPS coordinates into a simple, unique three-word address using your organisation's what3words API key.

When connected online, users can tap Get what3words to retrieve the three words associated with that location. Tapping again copies the address to the clipboard, allowing it to be pasted into reports, messaging apps, or work orders as needed.

These integrations are designed to remove the hassle from locating and sharing field positions, ensuring your team always knows where they're going, and exactly where they've been.

ADD BOOKMARK

Name

New Bookmark

Folder

(None)

Save

Easting/Northing

327524, 672942

OS Grid

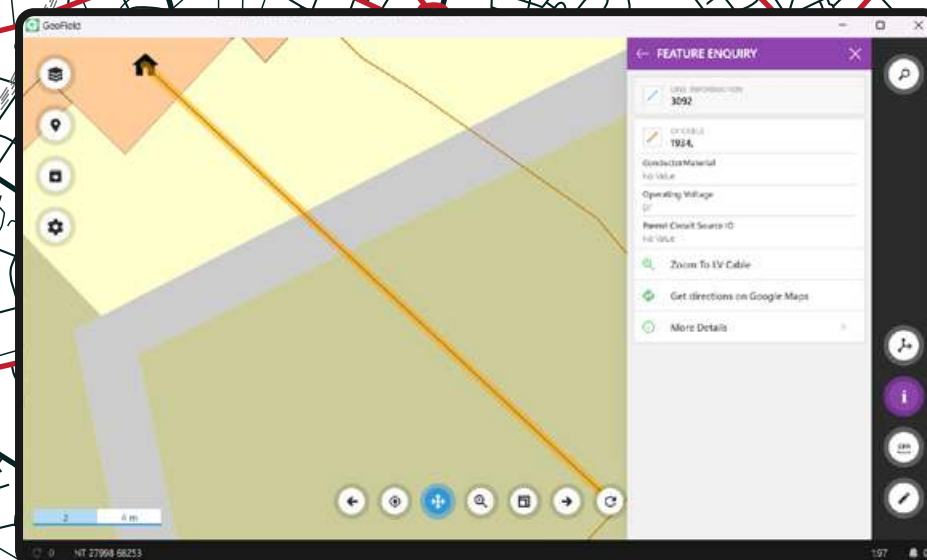
NT 27524 72942

Lat/Long

55° 56' 38.52", -3° 9' 43.06"

Get what3words

Arthur's Seat





“ [AMT-Sybex] have been - without exception - professional, helpful, knowledgeable, and forthcoming with advice/experience for the platform and service which has been of huge help for me and my team...

Everything we've asked of them has been actioned wonderfully and conscientiously... They are the reason that the service still holds up today and is rolling along with very few real issues, and those issues have been addressed wonderfully well, even though it's more than likely that the faults arise in other areas generally. ”

– Ian Harrop, Platform Manager
NGET (National Grid Electricity Transmission)

CONNECTED AROUND THE CLOCK

Real-time asset tracking for smarter, smoother operations.

In utility asset management, the accuracy and availability of data determine how efficiently teams can locate, maintain, and protect critical infrastructure. Inaccurate or outdated records lead to costly errors, delays in response times, and increased risks to network reliability.

That's where Geofield Cloud makes the difference. By providing real-time geospatial intelligence and seamless asset management, it ensures that utility companies have the most up-to-date, reliable, and actionable information at their fingertips, helping reduce errors, speed up response times and improve decision-making. Here's how Geofield Cloud's key features enhance data accuracy and operational efficiency:

Seamless access, anywhere

With cross-platform compatibility, field teams and office staff get a consistent user experience on Android, iOS, and Windows. This ensures that everyone – whether in the field or back office – has access to the same up-to-date asset data, reducing inconsistencies and miscommunications.

Ensuring data integrity in the field

With full offline capabilities, users can continue capturing asset data, even in remote areas with no connectivity. Once reconnected, bi-directional updates sync in near real-time, preventing data loss and ensuring that field updates accurately reflect network conditions.

Instant, scalable collaboration

Because Geofield Cloud is cloud-hosted, utilities can instantly onboard new users and third-party contractors without IT overheads. This means the right people always have the right data – keeping asset records current and reducing the risk of outdated or incorrect information being used.

Tools for smarter decision-making

- **GIS maps:** Interactive maps allow teams to quickly locate, identify and query utility assets, ensuring that maintenance crews have accurate asset locations before deploying.
- **World switching:** Different user groups can access custom map views for specific assets, reducing clutter and focusing on the important data.
- **Nested maps:** Internal views of an asset can be accessed from Geofield Cloud, such as a schematic view of a pumping station.
- **Asset search/gazetteer:** Users can find assets by ID or attributes, ensuring quick access to the most relevant and accurate asset information.

Proactive network management

- **Network tracing:** By accurately mapping supply sources and dependencies, teams can proactively trace potential issues, such as leaks or service disruptions, and prevent network failures before they occur.

Live layers and Web Feature Service (WFS)

Live layers provide real-time updates on valve positions, and work orders provide immediate visibility into network status, ensuring that any changes or tasks are based on current data. Similarly, WFS provides a completely real-time view of data directly from the GIS system.

Continuous data improvement

- **Markup/Data Capture:** Field teams can report errors and update records on the go, ensuring asset data remains accurate and reliable over time. This ongoing validation process helps utilities build a precise asset database.

WEATHERING THE STORM

Harness geospatial tech for better disaster preparation and response.

Utilities are also increasingly challenged by the growing impacts of climate change and extreme weather events, which are becoming more frequent and severe, causing widespread damage to infrastructure and disrupting operations. As utilities strive to maintain reliable services amidst these challenges, innovative solutions are proving essential.

The impact of climate change on utilities

Energy utilities face significant risks from extreme weather events that threaten critical infrastructure:

- **Heatwaves:** Rising temperatures increase electricity demand while straining infrastructure.
- **Flooding:** Substations and power plants are at risk of inundation, leading to prolonged outages.
- **Wildfires:** Droughts heighten wildfire risks, which can destroy transmission lines and disrupt services widely.

These not only cause physical damage but also complicate operational planning and resource allocation. Utilities must adapt quickly to minimise disruption and prepare for long-term climate challenges.

How Geofield Cloud supports energy utilities

Geofield Cloud is a geospatial mobile solution designed to help utilities respond effectively to extreme weather events while improving resilience and operational efficiency.

Real-time damage assessments

Extreme weather often leaves widespread damage that demands immediate attention. Geofield Cloud enables field crews to report hazards like downed lines or flooding via mobile GIS apps. This data is instantly mapped, providing decision-makers with a clear overview of the impact for faster action.

Smarter resource deployment

Efficient resource allocation is crucial during emergencies. Geofield Cloud allows utilities to prioritise repairs at critical sites and optimise crew routing to ensure swift restoration of services.

Proactive risk mitigation

Preparation is key to minimising disruption during extreme weather events. Geofield Cloud helps utilities map areas prone to faults or climate-related risks, enabling proactive maintenance strategies that reduce downtime.

Offline capabilities for field teams

Even in remote areas without connectivity, Geofield Cloud ensures field workers can access essential data through map-enabled workflows. Information captured offline syncs seamlessly with enterprise systems once connectivity is restored.

Enhanced collaboration across teams

Geofield Cloud integrates mapping tools with intelligent forms, photographs, and third-party devices to streamline communication between field crews and back-office teams. This improves data accuracy and overall coordination during high-pressure situations.

Building resilience in a changing climate

As climate change continues to reshape the energy utilities sector, solutions like Geofield Cloud are becoming indispensable. By enabling real-time damage assessments, smarter resource deployment, proactive risk mitigation, and seamless collaboration across teams, Geofield Cloud empowers utilities to navigate the complexities of extreme weather events with confidence. With its ability to enhance operational efficiency while prioritising resilience, Geofield Cloud provides a vital tool for ensuring reliable energy services in an increasingly unpredictable world.

OUR PARTNERS

At AMT-Sybex, we believe strong partnerships drive innovation, and we're thrilled to be able to work alongside highly regarded companies. Through strategic collaborations with Salesforce – a global leader in customer relationship management, and Ordnance Survey – Britain's national mapping agency, we've expanded Geofield Cloud's capabilities to offer more in-depth and connected services. These partnerships exemplify how combining strengths accelerates progress, unlocking greater value for our clients. By working closely with trusted industry leaders, we ensure Geofield Cloud remains cutting-edge and is adaptable to meeting the complex requirements of modern infrastructure and asset management.

Salesforce

Our partnership with Salesforce brings powerful integration between Geofield Cloud and Salesforce Field Service, delivering a seamless, app-level connection that enhances field operations. Available through the Salesforce AppExchange marketplace, this integration ensures Geofield Cloud works effortlessly within existing Salesforce environments.

Field engineers benefit from a unified, multi-application experience, accessing geospatial data and asset information alongside scheduling, work orders, and customer records without switching platforms.

This streamlined approach improves productivity, reduces errors, and empowers field teams with the tools they need, wherever they are.

available on
AppExchange



Ordnance Survey

Partnering with Ordnance Survey (OS) has transformed how we deliver geospatial solutions. Their extensive portfolio of accurate and trusted maps provides a strong foundation for our clients to build and customise their digital workspaces.

For utility companies, OS mapping enhances asset management by delivering clear, detailed location data that supports smarter planning and streamlined operations. Field teams benefit from improved navigation and a comprehensive understanding of their environment, enabling faster maintenance, reduced downtime, and increased confidence on the ground.

With OS, we're helping our clients stay connected, informed, and efficient, no matter where the job takes them.



CONTACT US



Enterprise Asset Management and mobile solutions

AMT-Sybex EAM and Mobile, part of Jonas Computing (UK) Limited, specialises in enterprise asset management (EAM) and mobile solutions. We help organisations streamline operations and optimise asset management with innovative technology.

Experts in Enterprise Asset Management

With over 30 years of experience, we have shaped EAM solutions and are a long-standing patron of the Institute of Asset Management.

Our solutions include leading asset and work management products, developed in-house and with trusted partners. We continuously refine our offerings to improve efficiency, shifting EAM from the office to the field while reducing costly software customisation.

Industry-leading implementation

Our implementation team is one of Europe's top EAM knowledge bases, with hands-on expertise in the water, energy, and transport sectors. Supported by our proven Support and Managed Services teams, we deliver tailored, real-world solutions.

Managed services and support

AMT-Sybex provides premium Managed Services, Hosting, and Support to maximise the value of EAM solutions. With over 30 years of trusted service, we maintain high customer retention rates.

Our services include:

Managed services – Ensuring smooth operations

Application support – Expert troubleshooting

Cloud hosting – Secure, scalable solutions

Backed by robust Service Level Agreements (SLAs) aligned with ITIL 4 standards, we are a trusted long-term technology partner for businesses.

Learn more and book a demo

To discover more about Geofield Cloud and how it can help with your asset management and geospatial needs, head to www.amt-sybex.com/geofield-cloud

Alternatively, book a no-obligation demo with one of our team, who can walk you through the on-boarding, usage and answer any questions.

AMT-Sybex

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www.amt-sybex.com/contact



AM
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 **Sybex**