CONTROL TODAY.
SHAPE TOMORROW.

Turn dispersed information
into actionable intelligence

A GUIDE FOR UTILITIES
AND TELECOMS LEADERS

Ordnance
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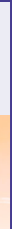
CONTROL TODAY.
SHAPE TOMORROW.

We exist in an age of change. Disruption has become a part of the business landscape – and utilities and telecoms providers are not exempt.

Unprecedented weather events, decarbonisation mandates, global supply issues, growing customer demand, and urgent modernisation initiatives combined with the need to attract top digital talent, all sit atop the strategic agenda. And time is of the essence. For utilities and telecoms leaders looking to turn today's adversity into tomorrow's opportunity, the work must begin now.

70%

UK companies vulnerable to future disruption.

Accenture

THE FUTURE STARTS HERE

Facing and conquering today's litany of challenges at speed is imperative for all utilities and telecoms leaders looking to gain an edge for tomorrow. In a world where disruption has become itself a 'New Normal', knowing where to focus key efforts is no small part of the equation. Resources, whether capital, infrastructure, or personnel, are limited – in fact, for many they're becoming tighter than ever. But there exists a huge opportunity to leapfrog the competition tomorrow by getting control of operational challenges today.

The path to success lies at the intersection of location data insights, point solutions and secure data sharing services. The effective combination of these three factors can unlock 'whole system' operational visibility, enabling leaders to make more informed decisions, faster. This is crucial to unlocking foresight that will not only help to stabilise today, but also lead tomorrow. And when you get it right, this combination can also help you address and solve the most pressing and complex sector challenges.

Read on to learn how to:

- Achieve future asset management goals
- Improve customer service operations
- Transform project delivery strategy
- Deliver flexibility in a net-zero future
- Support health, safety and wellbeing

"Telcos' financial fortunes have suffered as economic value has increasingly shifted towards tech titans."
McKinsey

"Without data, you're just another person with an opinion."
W. Edwards Deming

ACHIEVE FUTURE ASSET MANAGEMENT GOALS

Enhance the quality and completeness of
asset data to better predict growing demand

Transformation is a theme central to the heart of modern-day asset managers. A future is fast-approaching in which utilities and telecoms leaders must adapt to growing customer demands catalysed by technological innovations. Electric vehicles, 5G networks, sustainability programmes – all of these factors shine a light on the operational performance of assets and the importance of effective maintenance. This new world will be profoundly different to the one that exists today.

Transformation to 'whole system' thinking must occur to benefit from this detail tomorrow. But for this to happen, some major developments are required. While many firms have been working to digitalise asset information, the availability and quality of data is still patchy. Herein lies the challenge.

QUESTION:

How can location create a reliable blueprint of assets in the UK – making them easier to access and maintain – and in turn adapt to the growing demands of consumers?

ANSWER:

By using accurate, trustworthy location data that is easily consumable and sharable. t's already having a positive impact within he energy sector where companies are taking a proactive stance on asset management by predicting where vegetation will grow to limit its impact on overhead cables.

£1.8 trillion

Value of global telecom assets.
Kearney

£900 billion

Value of global utility assets.
Deloitte

Organisations will have to "manage hundreds of millions of actions and assets every year."
AWS

PREDICTIVE VEGETATION ENCROACHMENT

At least one in five power outages are caused by vegetation growing too close to power lines. Not proactively monitoring vegetation growth results in delayed maintenance which ultimately means costly and sometimes dangerous fixes. High voltage outages cost £2,500 per megawatt-hour. With more than 20,000km of High Voltage Cable in Rural Britain, disruption can spiral out of control without proper levels of foresight.

At OS, we are actively involved in better protecting assets with location data, data management knowledge and use of Artificial Intelligence (AI) technologies. We could use these to provide analytics and insight that monitors and predicts the encroachment of vegetation upon utility assets. Combining various feeds to automatically detect 'grow-in' and 'fall-in' risks by using AI to predict the growth of the trees around your asset without the need for an independent survey.

Automating the monitoring of vegetation could provide the ability to generate a line profile and clearance drawing for a span, which means there would be no need to commission a physical site survey.

KEY TAKEAWAY:

The value of solutions such as Predictive Vegetation Encroachment is that they help turn the reactive into the proactive. These solutions offer a quick and configurable way to help monitor risk to assets, help prevent costly outages, and improve health and safety. At a time when utilities and telecoms leaders must adapt to new asset management challenges, location provides the much-needed intelligence to plan and prepare for the future.

"Data on assets is going to become increasingly important as we drive toward a net zero carbon future."
Chris Tagg
Ordnance Survey

IMPROVE CUSTOMER SERVICE OPERATIONS

Unleash the power of location to know

more and serve better

Customer experience (CX) is the single biggest factor driving customer loyalty – and therefore revenue growth – today, according to Accenture. Experience is the battleground upon which customers are won and lost. In these crowded marketplaces, any advantage can make the difference between success and failure. So, what new advantage can sharable location data deliver that can move the needle toward greater customer satisfaction, lower levels of churn, and boosted bottom-line results?

Well, in an age of ever-increasing expectations for proactive and pre-emptive customer service, location intelligence and supporting point solutions can provide utilities and telecoms contact centres with accurate and rounded information about individual circumstances.

Intelligence such as an address, power grid, water network and nearest exchange, for example, can help better prepare staff for interactions and help quash issues before they develop into problems. In fact, organisations have already achieved success using this method – helping keep the most vulnerable of customers safe, secure and satisfied.

Data-driven organisations

outperform competitors in profitability, customer acquisition and retention.
Accenture

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GOOD DATA KEEPS CUSTOMERS

19%

of businesses admit to losing a customer due to inaccurate or incomplete information.
Dun & Bradstreet

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BAD DATA RUINS REPUTATIONS

PRIORITY SERVICES REGISTER (PSR)

13 million people live with mental or physical disability. 50-60% of people will experience vulnerability in their lives. Currently, each network operator or supplier has a requirement to maintain their own PSR of vulnerable customers. Differences in PSRs mean that vulnerable customers may be missing out on essential support services. Companies spend considerable time and money maintaining their PSR, and customers are asked to submit the same information to multiple companies.

Our expertise in building secure data sharing platforms provides a single, reliable and up-to-date view of customers. This drives positive outcomes for vulnerable customers and relieves them of the burden of supplying multiple organisations with the same information.

In the recent, second round of the Water Breakthrough Challenge Catalyst Stream competition, run by regulator Ofwat and innovation foundation Nesta, a project received funding to do just that. The "Support for All" project envisions a single, unified PSR, created by combining and adding updated information to the datasets of already existing PSRs. Run by Northumbrian Water, and its consortium, this is aimed at establishing a region-wide cross-utility Priority Services Register so that customers in vulnerable circumstances can receive help from all their utility companies when needed.

"Support for All" would create a consolidated view of the same customer. Relevant information would be shared with the appropriate utility providers of a customer, creating a single consistent and most up to date unified point of truth. An alignment of priority service registers can also enable these organisations, collectively, to provide a better service to their customers.

KEY TAKEAWAY:

Programmes such as a unified Priority Services Register highlight the many crucial benefits that can be attained by utilities and telecoms providers when they seek to supercharge their CX strategies. Empowering staff members with the intelligence they need to deliver enhanced CX not only ensures more promising service operations, but as a result also drives mployee satisfaction as combative conversations are reduced, further delivering key benefits to the business.

"If you don't start with your customer – then they won't end as yours."
Chris Tagg
Ordnance Survey

TRANSFORM PROJECT DELIVERY STRATEGY

Creating a data-sharing culture to

strengthen collaborative working practices

The modernisation of utilities and telecoms infrastructure has long since been a topic of intense debate for leaders in the respective spaces. Underinvestment remains a contentious talking point, one that regulators are pushing hard to rectify, and the current contention is that many of the most significant challenges facing utilities and telecoms today can be solved only through new infrastructure investment. But when research shows that most efforts to modernise infrastructure fail, how can the wider sharing of location intelligence foster deeper collaboration and give rise to preferential outcomes?

33%

Success rate of large construction and engineering projects in Europe.
Consultancy

The answer is one that enables leaders to transform the way they approach infrastructure project delivery. It is a process that champions the sharing of information fluidly across digital platforms with partners – delivering visibility across the entire supply spectrum to highlight where, when and how assets might be impacted by work – to forge a single source of data truth that is easily accessible and updated in real-time to maximise project visibility for all stakeholders while breaking down data silos.

This approach allows the creation of a common data environment that builds trust and collaboration between project leaders. It is a proven strategy, one that looks set to deliver further results for telecoms companies when seeking to rollout fibre to homes to improve internet speeds.

MULTIPLE DWELLING UNITS

Now often regarded as the fourth utility, many take an affordable, reliable, and speedy internet connection for granted. However, there still exists large numbers of the population who must make do with poor quality connections. To reduce this digital divide and provide a boost to the wider economy, the UK government has set out to ensure that 85% of UK premises get access to gigabit broadband.

While many know the plight of rural users and poor connectivity, there also exists millions of residents in flats and other such multiple dwelling units that suffer slow speeds. Often, this is because of the cost and difficulty of connecting-up buildings with complex layouts and the lack of accurate location intelligence for planning.

To help improve fibre rollout, OS is building new datasets for multiple dwelling units that can be used in the fibre planning process by major network providers, thereby helping them plan more cost-effectively and speed up the rollout to the millions of residents who live in flats and on complex sites.

"If everyone is moving forward together, then success takes care of itself."
Henry Ford

DELIVER FLEXIBILITY IN A NET-ZERO FUTURE

Putting data to work to create

a low-carbon tomorrow

We are in the midst of a climate emergency.

Climate change is the defining crisis of our time, according to the UN, and no corner of the globe is immune. From natural disasters to weather extremes and environmental degradation to economic disruption, the threat of climate change to utilities and telecoms providers is as prevalent as in any industry.

Today, while a growing number of organisations are focused on taking climate action and reaching a state of net-zero, the journey to a low-carbon tomorrow is no small feat – in fact, for processors and distributors of energy and water, the barriers are high. However, better collaboration through increased data sharing in a secure way represents a valuable weapon to fight back against the climate crisis and usher in a greener and cleaner future.

1.2 trillion tonnes

Volume of ice lost each year on earth.

Smithsonian

125,000 years

Since the last decade hotter than this one.

Science

NATIONAL ENERGY SYSTEMS MAP (NESM)

Data and digitalisation are crucial to help energy networks reach their net-zero climate change targets.

Network data from all of Britain's electricity and gas network operators was pulled into an integrated, digital energy system map covering the entirety of Great Britain. The pilot map provided the right decision makers with information about energy network assets, where those assets are located as well as who owns them.

Making this information available will significantly improve investment decisions, support growing markets like the UK's world-leading local flexibility markets, and help bring new renewable connections to the energy networks.

KEY TAKEAWAY:

The NESM project demonstrates the need for know-how when it comes to integrating, interpreting, and presenting data from multiple network operators at a national level. But, more crucially, it exemplifies that an approach exists for utilities to reach net-zero in a more flexible, joined-up way.

Today, organisations face an unprecedented challenge to reduce operational footprints and use resources more mindfully as technology evolves — from solar panels and 5G to electric vehicles. But with investment and collaboration using location intelligence, they will find themselves in the best position to tackle this challenge head-on.

"We do not inherit the earth from our ancestors, we borrow it from our children."
Native American Proverb

SUPPORT HEALTH, SAFETY AND WELLBEING

Safeguarding the workforce

through smarter planning

Good health is good business – so keeping your staff safe should be a number one priority for any leader. Notwithstanding the ethical and empathetical benefits of safeguarding a workforce – McKinsey estimate that poor health costs twice as much per year to the global economy as all of the effects of the pandemic combined. So, from a purely economic play, it also makes a great deal of sense.

Across the utilities and telecoms landscape, a great deal of critical work is conducted day in, day out by engineers responsible for maintaining and installing infrastructure or visiting customer homes for installation requests. All of these activities carry risks, and ensuring the health, safety and wellbeing of these key workers is one of your key responsibilities.

How then, can your company use location insights and technology to raise the bar on the way you safeguard your workforce and mitigate risk from employees?

The National Underground Asset Register (NUAR) may help to shed some light.

60,000

Number of asset strikes per year.
UK Gov

NATIONAL UNDERGROUND ASSET REGISTER

The Geospatial Commission is building a digital map of underground pipes and cables that will revolutionise construction and development in the UK – the National Underground Asset Register. Accidental utility strikes cost the UK economy £2.4 billion a year. But they also endanger the lives of key workers.

NUAR is an access-controlled data-sharing platform that enables owners of underground assets to share location intelligence for the purposes of excavation planning and safe digging. It enables planners and excavators to view the location of underground assets in a standardised format through an interactive user interface. It also allows excavators to report errors in data through the platform and to log unidentified buried objects.

NUAR will improve the efficiency and safety of underground works by creating a secure, trusted and sustainable platform which provides a consistent, interactive digital map of asset owners' buried asset data, accessible when, where and how it is needed by those planning and executing excavations on behalf of asset owners, and enabling enhanced communication between parties and improved data quality.

KEY TAKEAWAY:

Atkins has been appointed by the UK Government's Geospatial Commission to help create the digital map of underground pipes and cables. Atkins will be working with GeoPlace, Ordnance Survey, 1Spatial and other partners to deliver the build phase of the project.

The NUAR Pilot has proved that a secure data exchange platform to collate utilities and telecoms assets data with a location element from a wide network of providers is feasible. Working in a collaborative way to share asset data has the capacity to improve planning efficiencies and promote a safer working world for everyone.

"Safety doesn't happen by accident."
English Proverb

WHY UTILITIES AND TELECOMS PROVIDERS CHOOSE OS

At OS, we're committed to offering companies the tools
and know-how to unleash the value of their data.

We do this by providing the resources, platform and support you need to truly
transform. We give you the power to proactively address sector challenges – using point
solutions, advanced data analytics, and secure data sharing capabilities to get processes
under control for today, so you can prepare for innovation for tomorrow.

WHY OS?

Experienced supplier of trusted and comprehensive location intelligence

- We're driven by accuracy. We record and map 500 million location features across the UK to provide a complete picture for informed decisions and unlocked potential.

A global leader in secure data sharing services and frameworks

- We've proved we can share data with a location element in a secure way. We advise on best practice around the world and can help to ensure your insights stay safe. We are a trusted custodian for utility data.

World-renowned modelling and location data standards

- Our unparalleled modelling and standards are underpinning the decisions that are shaping a range of industries, in the UK and beyond. We know how to get the best from location insights, because we helped write the rule book.

A rich history of solving customer problems

- We are committed to our customers' success and are trusted by the government and private sector alike to achieve their objectives.

- Our unique makeup means we understand both commercial and public sector perspectives and priorities. We successfully bring together government stakeholders, regulators and commercial organisations to create solutions together.

Best of breed partner for UK industry

- Our partner network spans all major industries. We bring together collaborations to help entire sectors innovate.

- We are well-practised at building entire communities of users and succeed in finding the solution that is just right by listening to concerns, and matching that to our understanding of how location can help.

CONTROL TODAY.
SHAPE TOMORROW.

Learn how OS can help you unleash the power of location intelligence and usher in a more collaborative and successful future for your organisation.

Get in touch

🌐 www.os.uk/shapetomorrow

🐦 twitter.com/ordnancesurvey

in linkedin.com/company/ordnance-survey

Ordnance Survey

SEE ⊳ BETTER PLACE

OS Connect

OS Connect from Ordnance Survey helps utilities and telecoms companies solve the challenges they face. It combines our world-class location data, services and expertise, with data and technology from partner organisations to offer comprehensive solutions. All focused on helping our utilities and telcos customers achieve their business priorities, including:

• Better asset management

• Improved customer service

• Driving operational efficiency

• Achieving sustainability and net zero

• Ensuring health, safety and security

OS Connect provides a way of working that is committed to your success through the provision of:

• Professional Services

• Trusted Geospatial Data

• Location Solutions & Services

• Secure Data Sharing

Ordnance Survey's 230 years' experience facilitating collaboration and managing data and services means you can enjoy all the benefits of sharing information without any of the security concerns.

For more information on how OS Connect can help you, **www.os.uk/shapetomorrow**