# Presenting Next,
the highly versatile
field-based information
management system
for utilities.

The pursuit of operational excellence against the backdrop of limited resources is demanding, so what is Next?

Next is trusted world-wide by gas, water and electricity distributors. Leverage your existing GIS for real-time collaborative field-based data capture even without internet connection!

Interruption management support quickly simulates network and service disruptions. Augmented reality delivers on-street view to aid asset location, inventory management, utility strike avoidance and more.

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INNOVATIONS FOR UTILITIES

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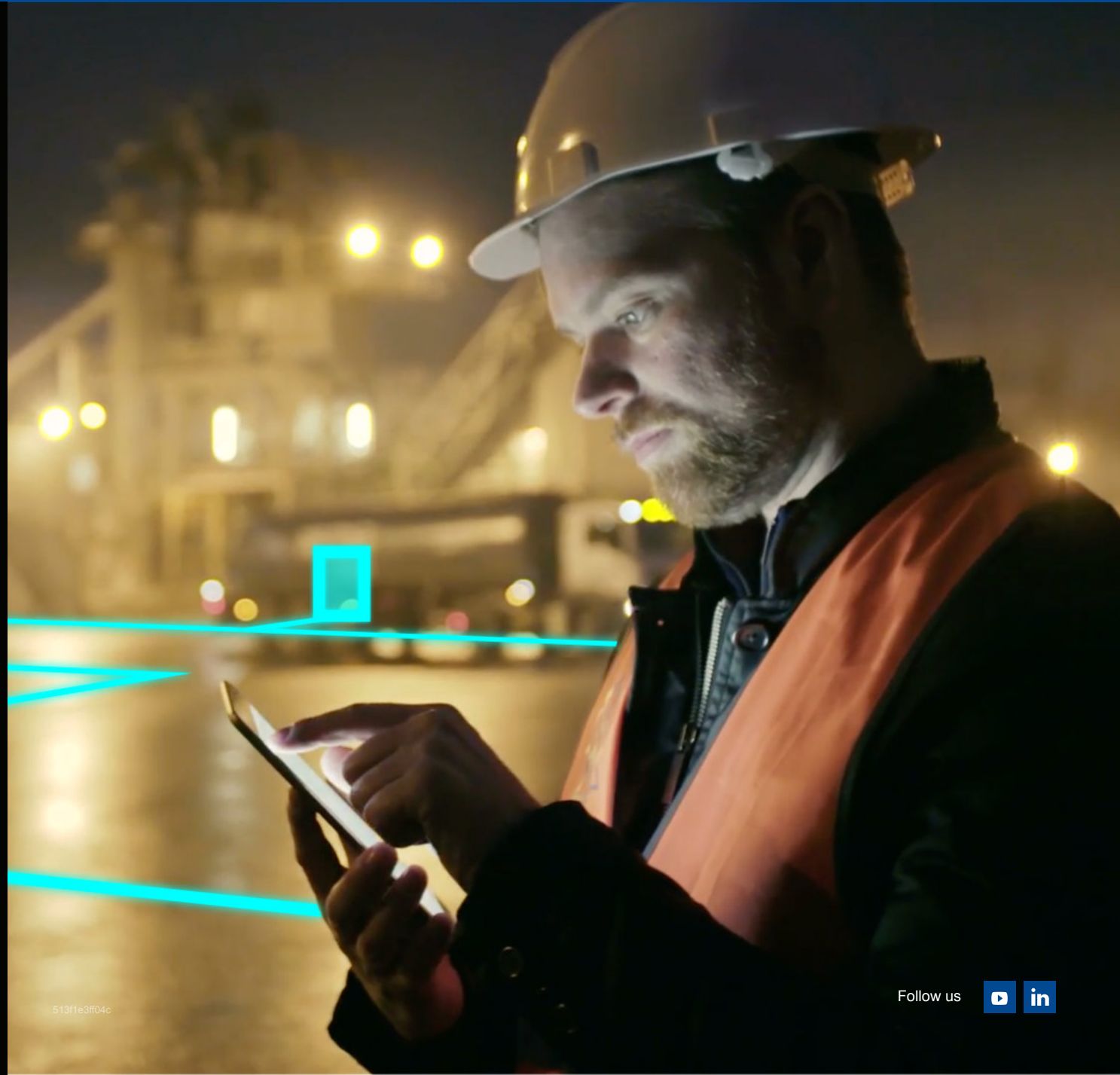
Electrical Networks

Gas Networks

Water Networks

Public Lighting

Fibre Optic Networks

District Heating

An indispensable application specially designed for those working on distribution networks and field-based activities.

Arcoda Next is the highly versatile app designed to **support distribution network operators and field-based operatives.** Use Next to streamline your business processes and accelerate digital transformation. Decarbonise operations with **better resource allocation,** increase impact with more focused on-site intervention, and improve quality of service delivery.

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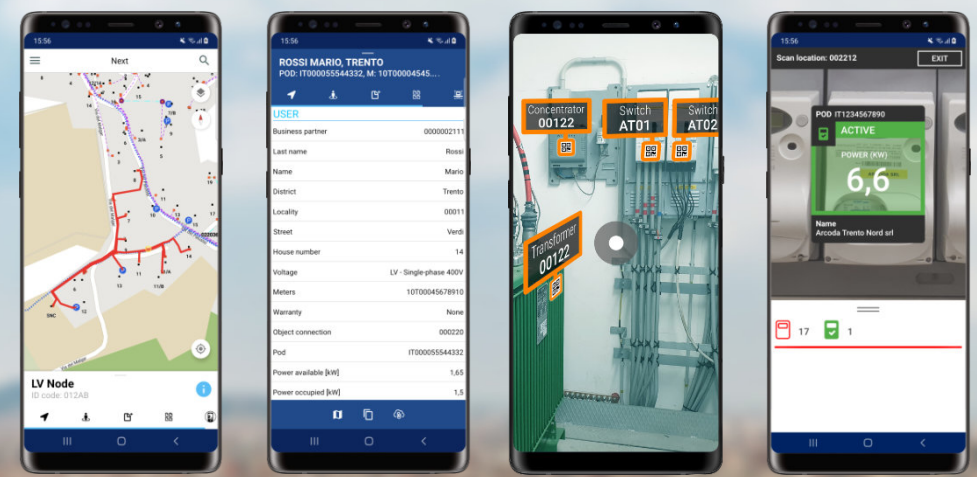
ARCODA NEXT

Your GIS, naturally evolved.

Our customers know Arcoda Next as the feature rich **app that takes their company's GIS on the move** with incredible performance, even when off-line. Next is packed with **an array of powerful functions designed to** **support field-based operators with their daily tasks.** Right now our customers are experiencing positive and lasting results with Next and we invite you to learn more and share in this success story.

The digital revolution for field-based teams.

Next is the perfect solution for **sharing company data between field-based teams and back-office colleagues.** Our intuitive app provides **all the necessary maps, data and documentation right to the palm of your hand.**

Say goodbye to paper documents and keep on working, whatever the weather, and **even without an internet connection!** Next offers a multitude of innovative features to help assess the state of networks, collect data, and send feedback from the field to inform decision-making.

Now with augmented reality technology, Next takes your GIS to new heights by superimposing virtual network assets onto real world environments to make light work of even the most complex tasks.

1.

The latest technological frontier: use augmented reality to revolutionise on-site operations.

Arcoda Next is a modular business enablement platform that **combines classic GIS tools with an array of extremely innovative functions.** Our modules have been specially engineered to revolutionise the execution of field-based activities all from the palm of your hand. **Use your smart device to experience previously unimagined immersive views of your distribution network and associated assets.** Discover how our latest generation of augmented reality technologies can profoundly change the way you work, **making everything simpler and faster.**
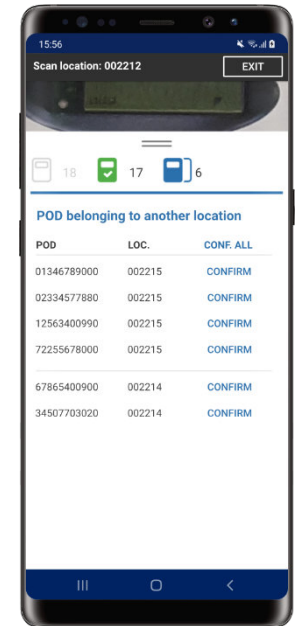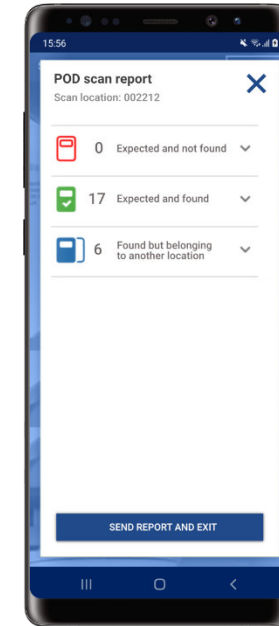
AR-Onsite provides you a comprehensive and realistic view of distribution networks.

This new feature is set to significantly improve the impact of field-based staff operations within the distribution network space. **Now operators can visualise and naturally interact with all network assets in augmented reality via their smart devices.** Thanks to Next's AR-Onsite capability, networks can simply be superimposed onto the real world environment resulting in **immediate productivity gains.** Perfect for networks that are **above or below ground, under the road surface, concealed by obstacles, or other out-of-sight locations.** AR-Onsite simply adds the network assets to the images received by the operator's smart device camera. Suddenly, all network and related information becomes clearly visible, delivering **a clear, complete, accurate, and safe view of on-site networks!**

AR-Inventory, the quick meter scan for immediate data reconciliation.

The Utility sector are still investing large amounts of resources when collecting and **reconciling metering data in the field with back-office systems.** Maintaining accurate records is challenging and productivity gains are often missed as current activities are prone to human error and unnecessary IT overheads. The good news is that Arcoda Next's AR-Inventory module reduces this time consuming activity into **a simple point-and-shoot exercise.** Now on-site technicians simply use the smart device camera to quickly frame the meter's barcode or QR Code. The augmented reality function then displays this information superimposed on the meter whilst **generating an automatic inventory.** Unlike barcode and QR scanners, AR-Inventory can complete this process even without an internet connection. This means that **operators remain productive even when connectivity is limited.**
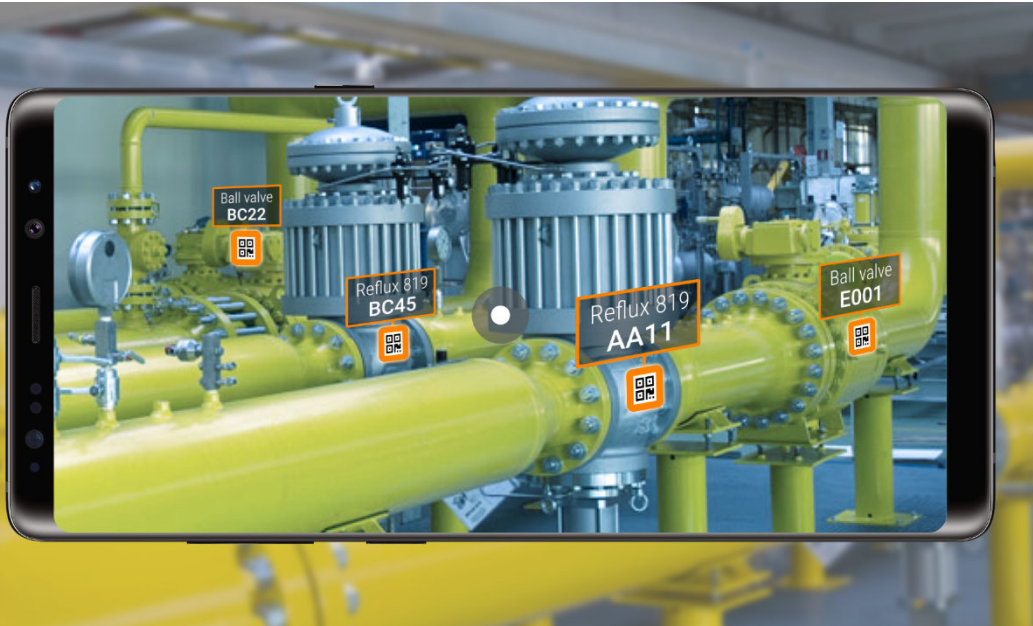
AR-Identifier, a new way of interacting with network assets using a smartphone and barcodes.

The AR-Identifier module radically transforms the way users on the ground interact with assets in the network. **Information is immediately superimposed on the object itself** without the need to search the database. **Simply point-and-shoot** to frame the object's QR code to view the data in real time, **even indoors, without an internet connection.** The user can check the operating status of an asset, the work carried out, the power rating, information on end users. **The possibilities are endless.**
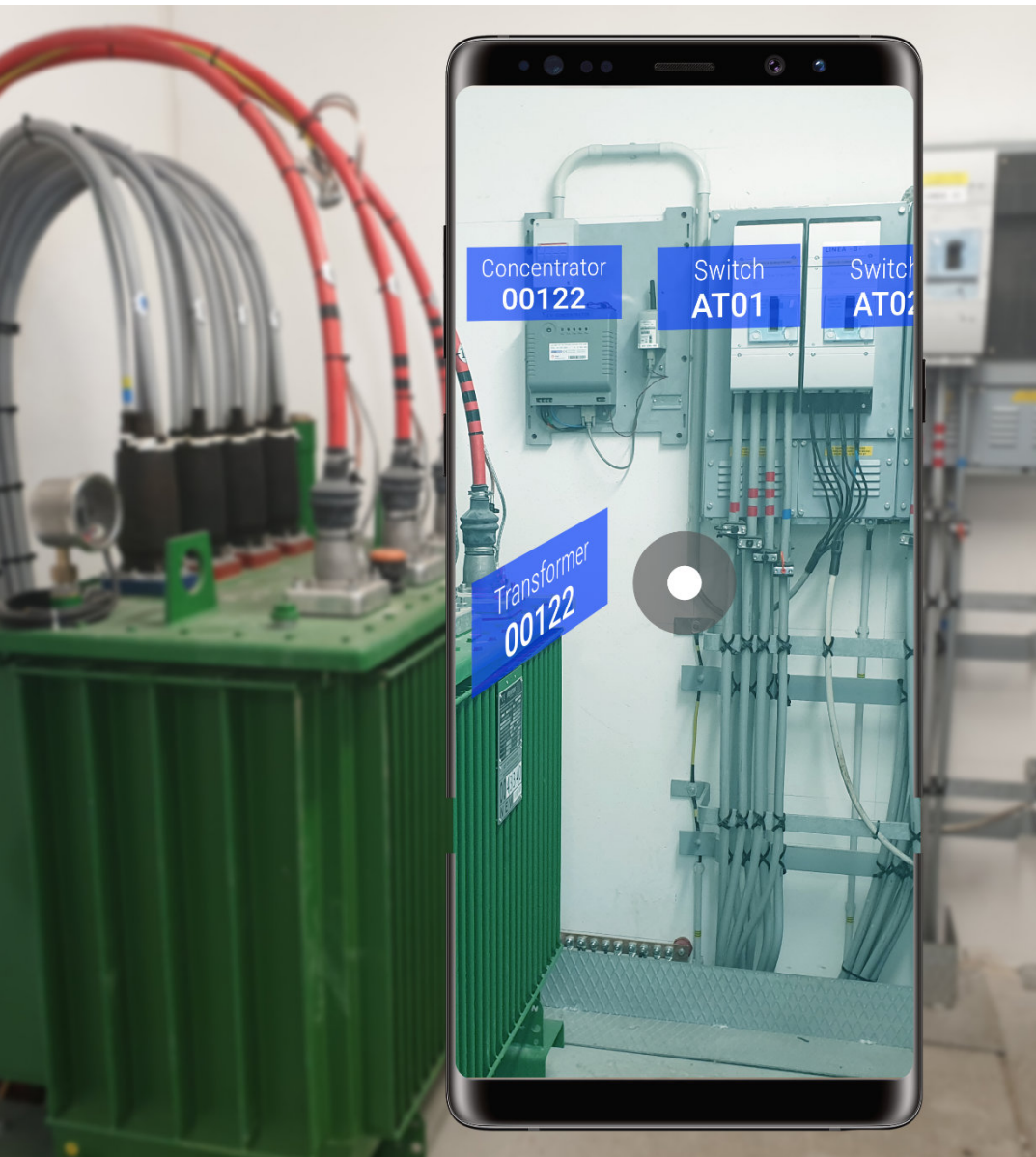
AR-Inview, the virtual labels that redefine asset information management within enclosed spaces.

AR-Inview overcomes the challenges of asset management within cabins or other enclosed spaces. With Next, **just pointing your smart device directly at an asset reveals superimposed virtual digital labels** that display important object information. Now the user simply pans with their smart device to enable **reading, editing or creation of new information labels over respective assets.** With this module, paper documentation is eliminated, intervention times significantly reduced, and updates are made in real time. AR-Inview is also an invaluable tool to support learning processes, helping new team members to instantly recognise and identify network assets.

The technology behind our AR modules.

At Arcoda our engineers continually push back the boundaries of innovation, and Next is no exception. Next has been developed using special data fusion techniques that combine SLAM algorithms (typically used in robotics) with absolute GPS positioning. SLAM (Simultaneous Localisation and Mapping) algorithms have allowed us to rapidly build and update, on-the-fly, compelling three-dimensional maps of unknown environments, whilst simultaneously providing us with accurate smartdevice positioning.

Our unique approach merges the information from these algorithms and global positioning systems, resulting in an innovative product that is easy to use and invaluable for field-based operatives who manage distribution networks.
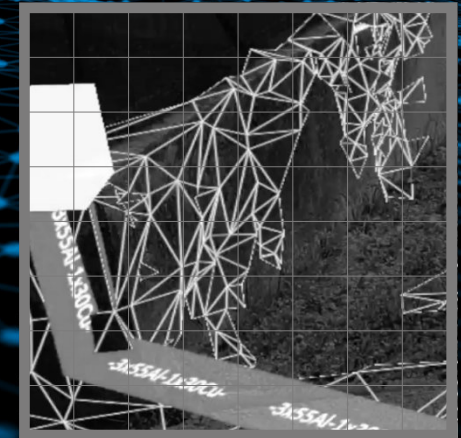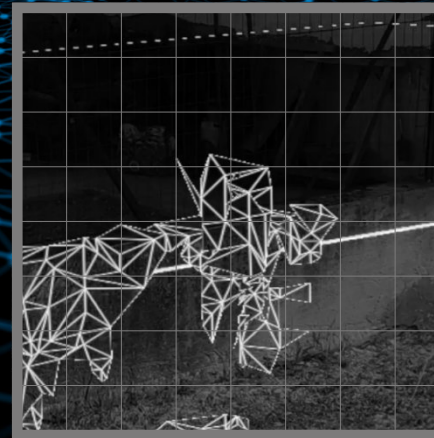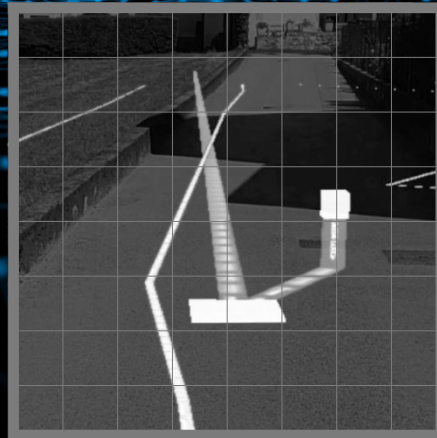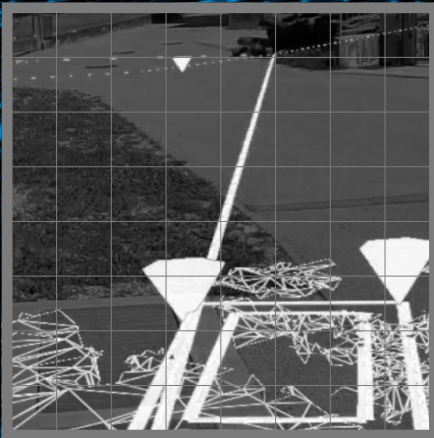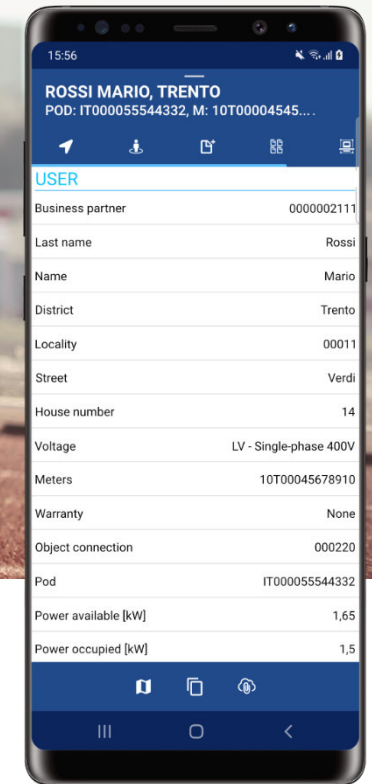
2.

Keeping your enterprise GIS on the move, fast, always available, and with additional functional enhancements.

Arcoda Next is far more than augmented reality. It is about helping your organisation to **deliver positive and lasting results. Move your enterprise GIS, to literally, the 'Next' level.** Now you can take traditional office-based GIS capabilities, complemented with our innovative functionality, into the field. Whether on smartphones and/or tablets, field-based operations will now be executed with far greater accuracy, efficiency, and impact. Stay ahead of the curve with enhanced collaboration and the right GIS **tools to help your field operatives get the job done, even without an internet connection!**
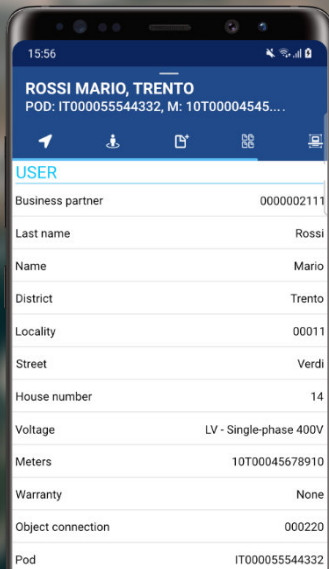
From map zooms, map pans, data searches, and much more. Everything is incredibly fast, even over Millions of records. Performance without compromise!

Next is incredibly fast. We have designed everything for **maximum responsiveness,** from algorithms used to the way data is accessed and processed. This is made possible via localised data storage and processing on the smart device to eliminate unnecessary delays caused by constant remote server requests. Take for example, the data of an electricity distribution network with more than 2 million unique supply point identifiers. The response time for queries by name or surname is typically less than a second. Even the use of the cartography is 'breathtakingly' fast. **Now you can interrogate, zoom and pan, displaying all HV, MV and LV network elements with infrastructures and elevations in real-time!**

Instant access to business data and documents with just a tap on the map. Just what the operator needs.

Next does more than just aggregate data from your company's information systems and replicate it on operators' smart devices. **Information from different systems are combined and harmonised into a simple and intuitive interface.** Now remote operatives can easily access all the information they need to support field-based activities. Accessing commercial information and documentation directly from the map **with a simple touch** is now a reality. These items can also be viewed via clear summary or search screens, allowing quick and easy accessibility without unnecessary complexity!

Light, fast and carefree updates.

Arcoda Next is specially designed to **optimise bi-directional data updates on a field operative's smart device.** These updates are fully schedulable using powerful algorithms to **transfer only changes to data and spatial diversity.** This results in dramatically reduced data traffic and download times. More importantly, this occurs in the background with **no impact on app performance or disruption to user productivity.**
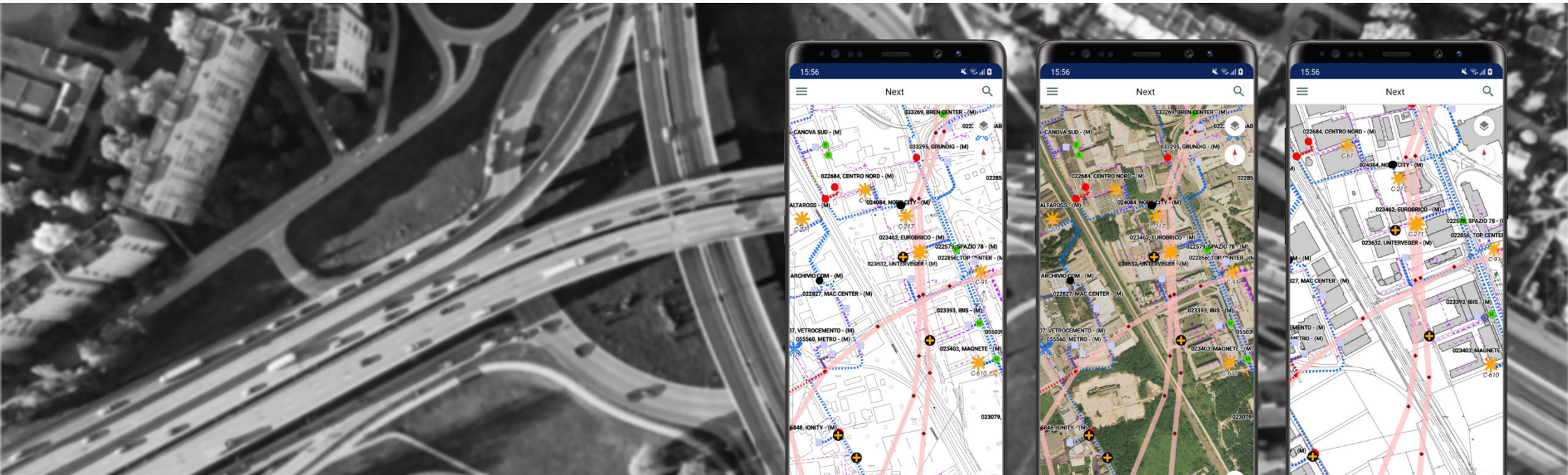
With your maps on a smart device, switching from technical to cadastral maps is just a touch away.

Arcoda Next allows you to **customise the background maps** on which your company's assets are represented. For example, switching from standard maps to **orthophotos, a road map or a cadastral map** is now easier than ever. The way in which each map is accessed (online or offline) can also be selected at any time, so as to optimise the operation of the application according to file weight and conditions of use.

Network routing representation for a complete view of fault impacts.

For distributors, a **rapid and robust response to network disruptions** caused by localised faults is essential to maintaining supply continuity. Our Interruption Management Support (IMS) capability is unique to Next and sets us apart from the competition. IMS uses our powerful algorithms to describes the flow of gas, electricity or water throughout the network. This novel feature is also invaluable in **highlighting asset relationships and interdependencies on the network.** This means that the arrangement of assets on the network can now be quickly referenced **to simulate or**

manage network and service disruptions. In the event of service disruption, **Next identifies parts of the network that have been disconnected by immediately highlighting this on a map. Also, field-based operatives have instant access to address and related data.** This paves the way for better consumer engagement improving the public perception of the overall management of service disruptions. Just another example of how Next can help your organisation keep your customers at the heart of your business activities.

3.

A unique technology that makes Next the ideal choice for supporting field-based teams.

Whether it's the latest augmented reality capabilities or more traditional grid mapping, **Next offers completely unique and distinctive features.** We are dedicated to helping advance our customers' digitalisation ambitions through innovative tools that support field-base teams. Our research and development associates constantly push back technological barriers **to bring our customers tomorrows technology, today.** That's why we have been able to build lasting partnerships with forward thinking Utilities, global energy distributors, and leading international technology companies.

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One app to rule them all: all data needed to support on-site interventions, securely on the operator's smart device, and always available even when off-line.

Imagine a brave new world where remote operatives have **easy access to all relevant company data to support field-based activities.** Finally, your GIS, business data, maps and elements from your document management systems are all **automatically combined and securely stored directly on the operator's smart device.** Suddenly remote operatives are enabled to take decisive action with **just one single application!** Next brings the office into the field with **data processing managed directly from the device to deliver enormous speed advantages.** Also, it has the ability to work even offline so **dependence on network connections and servers are reduced.** With **data immediately available anywhere, anytime, offline or online,** choose Next for increased reliability and productivity gains.

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Next easily integrates into your existing business systems without disruption or having to redesign IT systems.

Arcoda Next works alongside your company systems such as GIS, document management systems, geo databases, customer databases, and much more. **Next automatically extracts useful information to support technical activities in the field.** This data is integrated into a special data structure and then presented on the operator's smart device, **all within a single application.**

Essentially, all relevant company data is consolidated into the palm of the field operative's hand **without the need to redesign your IT processes.** Now, complete, accurate and meaningful data can be used to powerfully inform field-based decision making and support operator workflow.

In short, **Next leverages your company data to enable autonomous working that delivers greater field operator impact,** increased productivity and reduced intervention costs.
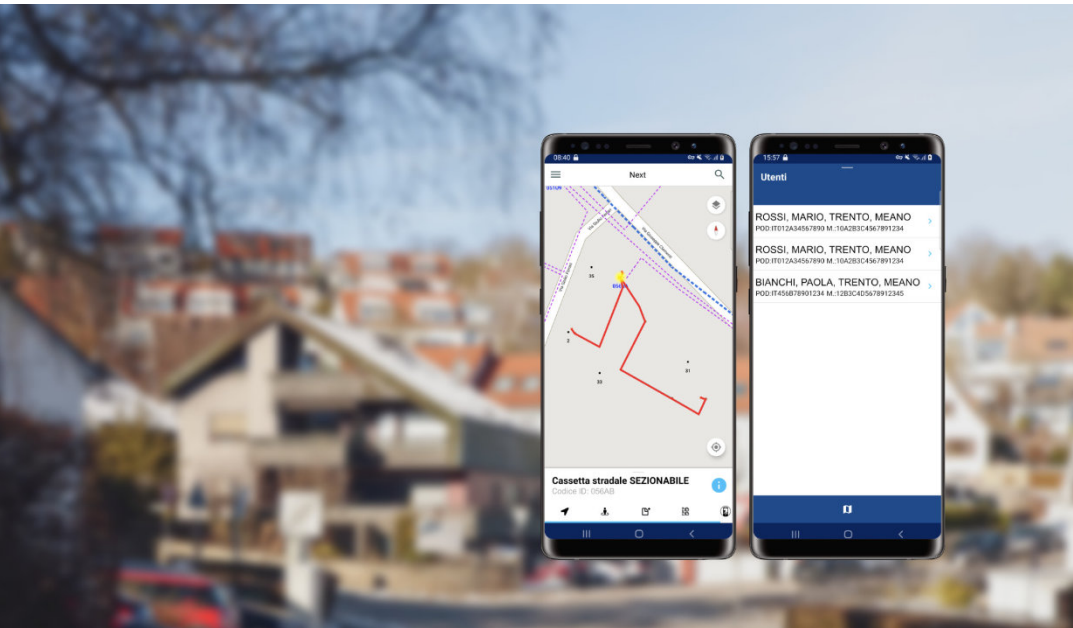
Fast, easy-to-use and reliable technology. Just what you need for an emergency response.

When it comes to emergency intervention on networks, Next is simply indispensable, because **it speeds up operations and reduces costs.** Network assets are **rapidly located on the map, and all you need to do is point-and-touch to view all relevant information.** Also, getting to site is now easier than ever with clear turn-by-turn guidance from the smart device's built in navigation features. Once on site, you can choose how to rapidly locate the problem. One option is to use **Next's augmented reality** capability to precisely superimpose the network on your smart device

display against a real-world background. Alternatively, use augmented reality against a map background to deliver an instant, clear and complete view of the network **regardless of environmental conditions or asset visibility.** Either way, all information is easily available without having to wait for it. Next offers comprehensive and innovative digital support that quickly puts the field operative in the picture whilst minimising errors, even without internet connection. Choose Next for **complete confidence when dealing with emergency responses** and stay in control of your network.

Extraordinary technology that makes a difference in extraordinary circumstances.

Emergencies can happen anytime and now often during increasingly frequent severe weather events. Compromised network assets must be restored even if they are **obscured by snow, debris, vegetation, mud, and more.** This can be further compounded by **loss of internet connectivity due to blackouts and interruptions. Even in these difficult circumstances the Next app continues to provide field operatives with**

rapid, frequent, and unhampered information support. Now field-based teams can quickly and accurately locate and visualise network assets on their smart devices, even when hidden, for improved intervention. Arcoda Next also supports operators when working offline. This reduces the burden on company IT infrastructures as **data and processing are completely managed by the device with no server requests needed.**
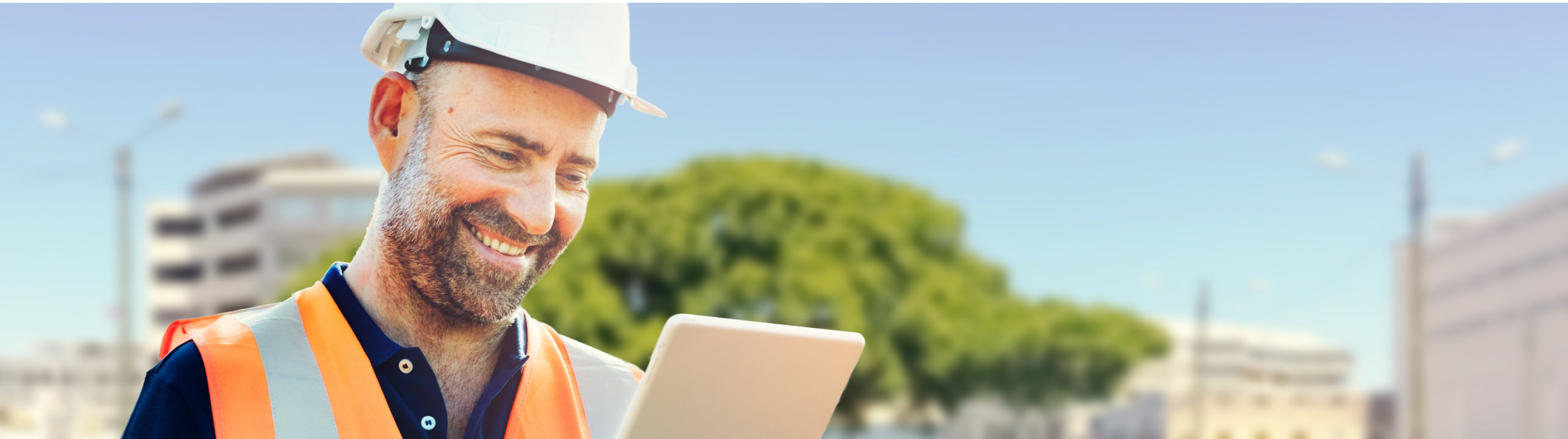
Technology that transforms, using field operators as active participants in the company's digital transformation journey.

Your organisation's digitalisation journey is important. Unfortunately, many Utility companies are still missing out on the valuable contribution of field-based teams in this process. Next is a real game changer as **it facilitates collaboration** between teams working on distribution networks and the back-office. Now, by just using a smart device an operator can **propose changes** to maps and GIS data directly from the field and report inconsistencies, anomalies, and critical issues. For example, leaking connections, assets in need of urgent repair, incorrect diameters, missing or additional assets, and much more. These are all important details that are often missed by back-office, but not when using Next. Now operatives can **report back directly from the field** to back-office in a digital format, with images and map cuttings that directly link network asset information to geographical coordinates. Therefore, on-site technicians help to drive the digitalisation process by **actively contributing to rapid database updates.** This results in cleaner data that informs improved data driven decision making and unlocks new revenue streams for distribution companies.

A modular architecture perfectly tailored to your specific business aspirations.

Next combines core functionality with a series of modules, which enhance its capabilities without the need for changes to your IT systems. This means that **you can choose exactly what you need now and over time scale up Next to support your business processes and future aspirations of**

your organisation. At Arcoda, we believe in lasting partnerships and **our modular approach ensures that our customers always get the best returns** on their investment in our products and services.
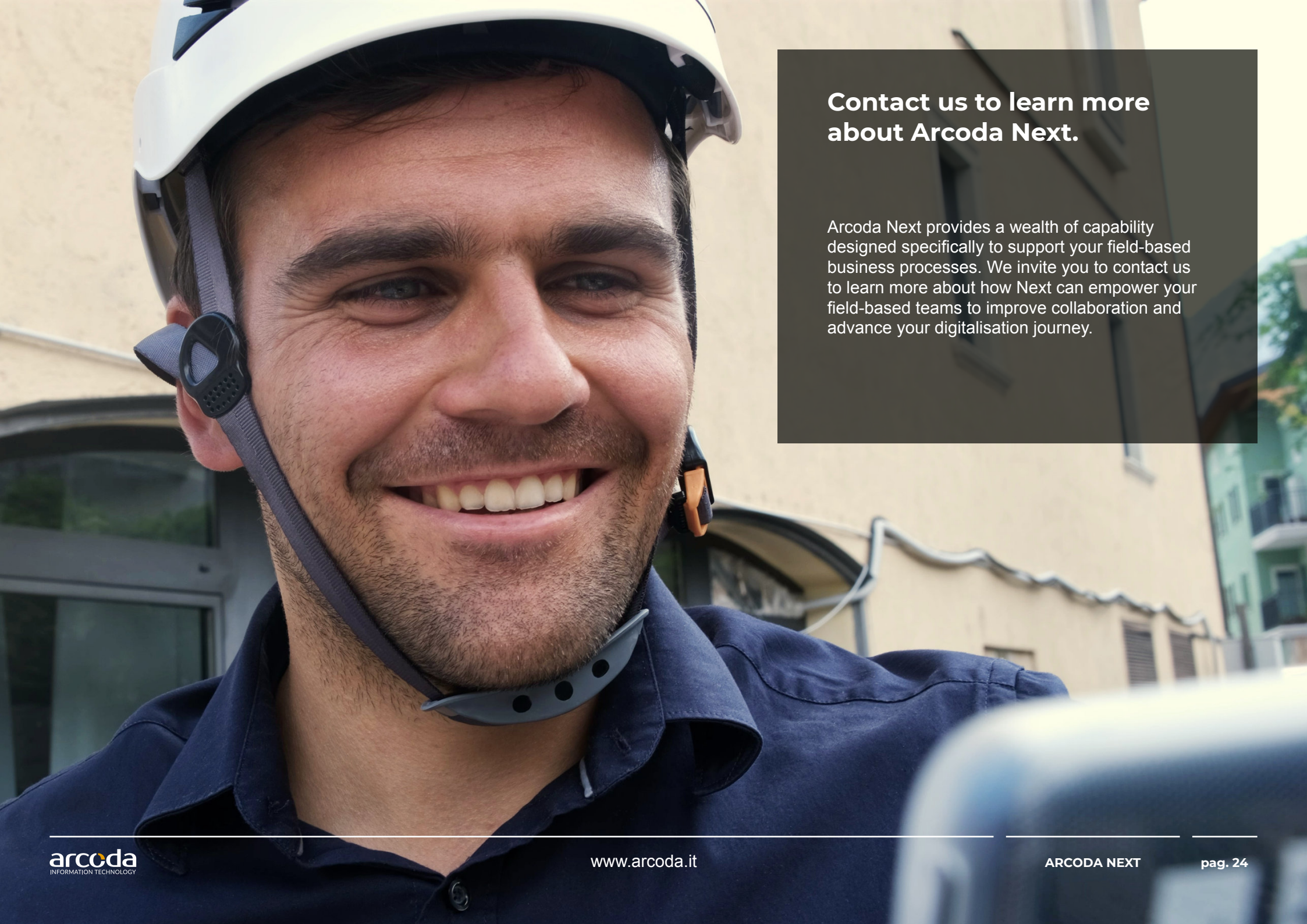
Contact us to learn more about Arcoda Next.

Arcoda Next provides a wealth of capability designed specifically to support your field-based business processes. We invite you to contact us to learn more about how Next can empower your field-based teams to improve collaboration and advance your digitalisation journey.

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Arcoda is part of the Terranova family

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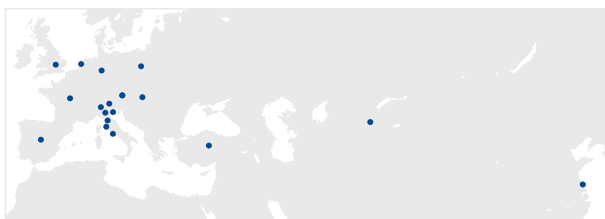
Our office locations

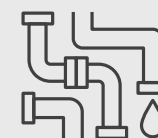|	
United Kingdom	Italy
Austria	Netherlands
China	Poland
France	Spain
Germany	Turkey
Hungary	Uzbekistan

Next at a glance

27 000+
trusted worldwide
by operators 24/7/365

75 000 000+
electricity, gas & water
consumers served

8 500+
km of water networks
managed

19 000+
km of gas grids
managed

2 500 000+
km of electricity grids
managed

700 000+
street lighting
assets managed

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