

TELEMATICS JOURNAL

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In focus

Teltonika's international expansion

In-depth look

A tour into Teltonika's R&D division

Telematics in action

Testing trackers to the extreme





Dear reader,

Welcome to a new chapter at Teltonika, where we are taking innovation across borders even further than before. In this edition, we share how our latest initiatives are setting the pace for the future of telematics and IoT through informative articles, engaging conversations, and helpful insights.

You will find exclusive interviews with our regional CEOs, particularly exploring the opening of new offices in Italy and Japan, a testament to our belief in localised growth. On the same note, we talk to the head of development for Europe continent's offices about the strategic expansion to get closer to our business partners and deliver exceptional service.

Next, we take a look at our highly successful telematics summits that took place at Vilnius headquarters and Dubai office, with photos

vividly capturing the collaboration, knowledge sharing, and enthusiasm of our attendees. Hear directly from our customers as they reflect on the value these events have brought to their business operations.

Connectivity is an essential part of telematics, so turn to the 'IoT Insights' section to learn what benefits eSIM technology can offer for your projects. To ensure the reliability of our GPS trackers, we even tested them in extreme motor sports events – find out what our devices have been through recently in Morocco, Lithuania, and Italy.

Our team is not just opening new offices. We are creating new opportunities for our clients, business partners, and the industry. Dive in and let's shape the next frontier of telematics together.

Antanas Šegžda, CEO, Teltonika Telematics

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IMMENSE

TELEMATICS POTENTIAL IN ITALY

With Teltonika's largest international office expansion to date taking place in 2024, we make our stop in Milan, Italy to catch up with Stefano Nordio, the head of our recently established office in the country. From his personal professional background to the evolving local telematics scene, we cover it all.

The office in Italy is new and you are new to Teltonika as well. Could you briefly introduce yourself?

Having recently joined Teltonika, I bring extensive experience in the IT, Telco-ISP, and IoT industries. I am thrilled to be part of such an innovative and forward-thinking company. I hold a master's degree and an Executive Master in Business Administration, and I have dedicated the last three decades to the IT industry.

My career has spanned various facets of the IoT sector, leading to prominent European appointments. Joining Teltonika marks a significant milestone in my professional journey, and I am eager to contribute to the company's growth and success in Italy.

After opening the office, what are the nearest plans?

Our immediate plans focus on establishing a strong presence in the Italian market. This includes building a dedicated local team, fostering relationships with key stakeholders, and launching targeted marketing campaigns to raise awareness about Teltonika's innovative solutions.

We are also planning to host a series of events and webinars to engage with our clients and partners, providing them with insights into our latest products and technologies.

How about the long-term goals?

In the long term, our goal is to become a leading player in the Italian telematics market. We aim to achieve this by ▶



Stefano Nordio, CEO,
Teltonika Italy

continuously expanding our product portfolio, investing in research and development, and enhancing our customer service capabilities.

Additionally, we plan to collaborate with local universities and research institutions to drive innovation and stay ahead of industry trends. Our vision is to not only meet but exceed the expectations of our clients, delivering forefront solutions that drive efficiency and growth.

By selling GPS trackers and other products, Teltonika has already been present in Italy for years. What does the opening of the office mean for our local customers in the country?

One of Teltonika's main goals is to be closer to our business partners. This strategic move shows our commitment to fulfilling it as well as sends the message of how much we value the telematics market in Italy.

By being physically present, we will strive to provide our Italian business partners with a more tailored approach that caters to diverse market needs. Better understanding and responding to regional challenges will enable us to develop stronger, more dynamic partnerships in the country.

Could you tell us more about the local telematics market? One thing is for sure that Italy ranks among the countries with the highest number of vehicles in Europe.

That's true. With Italy ranking among the top European countries in terms of vehicle volume, the demand for advanced telematics solutions is substantial and continues to grow. Insurance telematics is one the key factors fuelling this growth, allowing insurers to assess driver behaviour, offer personalised premiums, and save costs for both insurance companies and drivers.

With an estimated 2.5 million vehicles being connected each year, the potential for telematics expansion is immense. Moreover, the increasing emphasis on vehicle safety,

efficiency, and environmental impact means that the demand for innovative telematics solutions will grow further.

What are the main business challenges that telematics helps companies to solve here?

In the already mentioned insurance sector, our tracking devices help insurers and clients by collecting and analysing crash data in real time. Even more, telematics can play a vital role in life-saving situations by instantly alerting emergency services in the event of an accident.

For logistics companies, we help address challenges around route optimisation, fuel consumption, and real-time tracking of goods. Meanwhile, in the car-sharing industry, our solutions enable operators to monitor vehicle locations, effectively manage their turnover, and assess fleet condition.

Across these and other sectors, telematics assists businesses with both immediate operational challenges and broader objectives, such as improving safety or reducing environmental impact.

How do Teltonika's telematics products stand out among competitors? What are our key selling points?

Teltonika's telematics products distinguish themselves from competitors through a combination of innovation, quality, and strategic control over the entire production process. We are a European company that completes every operational step in Lithuania, including product design, manufacturing, and quality assurance. This integrated approach allows us to uphold the highest standards and deliver reliable solutions.

In what ways do Teltonika's trackers and telematics overall contribute to Italy's shift towards greener and more sustainable transport?

A prime example is the MOVE-IN project, which aims to manage the environmental

impact of vehicles rated according to the European emission standards from Euro 0 to Euro 5. Teltonika's telematics devices track car movements within specific urban zones, recording mileage. Based on this information, drivers are required to pay environmental taxes aligned with the actual kilometres driven in the limited traffic zones.

In addition to providing accurate tracking and accountability, the system motivates vehicle owners to consider newer and environmentally more friendly options, thus, ultimately reducing the pollution produced by older cars.

Our vision is to not only meet but exceed the expectations of our clients



CONNECTING CARS & CULTURES IN JAPAN

Entering a new market is both exciting and challenging, especially when the case is Japan – a country known for its technological advancement and rich culture that harmoniously blends modernity with tradition. To know more about the lively local telematics landscape, we talk to Jeremy Cowx, the head of Teltonika's recently established office in Tokyo.

Could you please tell us more about yourself and your professional background?

I studied Japanese at university in my home province of British Columbia, Canada and first came to Japan as a participant on the JET Programme, a government sponsored programme that dispatches native English speakers to teach in the public-school systems. It was in this environment that I learned the language and, most importantly, the culture.

Starting at a small Japanese trading firm, my career has led me to every country in Asia, including stints living in China, Philippines

and Thailand, and across the globe with three years spent working in Munich, Germany. Along this professional path, I learned to work with Japanese companies, navigate their unique decision-making process and how to move them forward to a win/win solution for the non-Japanese companies at which I worked. It has been an amazing adventure that continues to unfold in always interesting ways!

Since joining Teltonika in July 2024, I am very excited to be here and eager to lead the team to commercial success.

What has already been done regarding

Teltonika's presence in Japan, and what's coming next?

Teltonika's telematics division has already established a footprint in Japan through strategic partnerships, localised product offerings, and by adhering to Japanese standards for technology and business practices. We have tailored our telematics solutions to meet the high expectations of this tech-savvy market, focusing on vehicle tracking, fleet management, and IoT devices.

The next steps include deepening these partnerships, expanding our product portfolio to address emerging needs such as electric vehicle telematics, and enhancing our local presence with more localised services and support teams to better serve Japanese clients.

Japan is known as a technologically advanced country. How does that translate into the telematics market?

The country's technological advancement is reflected in the high demand for precise, reliable, and innovative telematics solutions. In Japan, there is a growing interest in novel features like AI-powered analytics, IoT integration, and automation in fleet management. Local companies expect real-time, accurate data for decision-making and a seamless user experience.

I must say Japan's focus on reducing emissions and improving safety aligns with our telematics products, which can help companies achieve these goals through data-driven insights and vehicle monitoring.

How does the telematics industry in Japan differ from other countries in the region? Compared to the West?

The telematics market in Japan is highly specialised and places a strong emphasis on precision and compliance with strict regulations, especially in areas like data security and privacy. Compared to other countries in Asia, this market is more mature, and businesses expect more sophisticated solutions.

When compared to the West, there is a stronger focus on integration with existing systems, fuel efficiency, and the environmental impact of telematics solutions. In the West, the focus tends to be on fleet management and logistics ▶



Jeremy Cowx,
CEO, Teltonika Japan G.K.



optimisation, while Japan also prioritises advanced safety features and sustainability.

What are the challenges and opportunities for Teltonika's telematics products and solutions while entering the market?

Our strength in R&D allows us to adapt quickly to local needs



The primary challenges include navigating Japan's stringent regulatory environment and gaining the trust of local businesses, which often prefer domestic suppliers. Additionally, Japan has a strong focus on quality and precision, requiring us to continuously ensure that our products meet these high standards.

However, this also presents significant opportunities. Our strength in R&D allows us to adapt quickly to local needs, and our wide range of telematics solutions can offer Japanese companies cost-effective, highly customisable options that meet both current and emerging demands.

How can we effectively serve local needs? What features of our telematics products do you think will appeal to Japanese

companies most?

To serve local needs effectively, we need to continue focusing on product localisation and after-sales service. Offering support in Japanese, ensuring compliance with local data security laws, and understanding specific market demands like fuel efficiency and electric vehicle telematics are essential.

In addition, features such as our advanced GPS tracking, AI-powered fleet management tools, and driver behaviour monitoring will likely appeal to Japanese companies, especially those in logistics, public transportation, and construction industries, where efficiency and safety are critical.

In terms of cultural differences, what's important to keep in mind when doing business in Japan?

Building relationships in Japan is based on trust, long-term commitment, and attention to detail. It is important to keep in mind that business negotiations often take longer, and decisions may involve multiple stakeholders. Being patient, respectful, and well-prepared will be greatly appreciated.

Also, it is critical to maintain clear communication, especially regarding product reliability, after-sales service, and local support. Face-to-face meetings and proper introductions are often valued over digital communications.

How do you see telematics developing in Japan further?

Telematics in Japan is set to evolve with growing demand for electric vehicles, autonomous driving technologies, and smart city initiatives. As Japan aims for carbon neutrality, telematics solutions will play a key role in optimising energy efficiency, reducing emissions, and enhancing safety.

The integration of telematics with AI and IoT technologies will also grow, particularly in sectors like logistics, insurance, and public transport. Teltonika is well-positioned to be a part of this evolution by offering advanced, adaptable solutions that cater to the future of mobility and smart infrastructure.



The visit of His Excellency, Dr. Aurelijus Zykas, Ambassador of Lithuania in Japan (third from left), and other diplomats at the office

SCALING NEW HEIGHTS WITH TELEMATICS SUMMITS

In addition to opening offices around the globe, Teltonika initiated another exciting way to stay close to its clients – Telematics Summits. These flagship events bring industry professionals together to exchange ideas and uncover strategies to grow their businesses. Konstantin Kolmakov, Head of Europe continent sales at Teltonika’s telematics division, highlights the origins, achievements, and future plans behind the summits.

Why did Teltonika start hosting Telematics Summits? What were the main objectives of launching this initiative?

At first glance, it may seem that business is conducted between companies but it is actually people who are behind it. And when

it comes to people, there is no better way to communicate than face-to-face. Keeping this mind, we created a space to connect on a personal level and exchange ideas.

Through these summits, we inspire our clients and help them stay ahead in a rapidly changing industry by giving them

direct access to the latest knowledge, tools, and network opportunities. At the same time, our goal is to foster stronger and more meaningful relationships with our clients. Here, they can discuss their specific needs, challenges, and goals directly with Teltonika’s experts.

We inspire our clients and help them



In your view, what were the key achievements of these events? Did they meet or exceed your expectations?

The success of the summits can be measured by how much they benefit their participants. We invested lots of energy and effort to make these events as productive as possible. In the end, it totally exceeded ▶



Konstantin Kolmakov, Head of Europe continent sales, Teltonika Telematics

our expectations with the overwhelmingly positive feedback.

Based on the surveys, the absolute majority of our clients were satisfied and look forward to taking part at similar events in the future.

Why are these summits important in the telematics industry? What role do they play in shaping market trends and driving innovation across the sector?

Our summits are about working together and finding ways to accelerate business growth. In some cases, it can be only an inch of improvement, but that inch might be enough to outperform one's competitor. When there are dozens of industry professionals engaged in discussions at one place, ideas just flow in the air. Everyone can take away something that will make a lasting impact on one's business.

We provide a platform for new notions and perspectives that can effectively be translated into business expansion possibilities right after the event. Practical application is at the core of the information that we show and share.

Besides, our guests had a chance to get to know Teltonika's manufacturing process, visit the R&D department, and speak to our technical staff, such as embedded system programmers and IoT engineers. All this contributed to a knowledge-enriching experience.

Are there any plans to expand the Telematics Summit outside of Europe or to new locations globally in the future?

Being originally based in the EU, we started the summits in Europe – where our roots are. At the same time, we recognise the global demand for telematics solutions, so we took the same concept and organised a summit in Dubai. It proved to be a success as well drawing more than 100 visitors from the whole Middle East region.

Given the highly positive response, we are exploring various location options for our summits in the future.

What can attendees look forward in 2025? Are there going to be any new formats, topics, or interactive stands introduced?

Absolutely. Attendees can look forward to even more engaging experience in 2025. There will be upgraded workshops and new innovative presentations to inspire our guests. The telematics industry is constantly developing, so we are doing everything to help our clients expand their business verticals and grow.

Once the summit dates are set, we will start sending invitations to mark calendars. Our plan is to host more than 500 participants in 2025, creating unforgettable moments to each and every of them.

What was your EXPERIENCE?



Very nice event. Presentations as well as visits to Teltonika R&D and factory were at the highest level. Thank you very much for the invitation.



The summit exceeded my expectations. The hosts were very well prepared and welcoming.



We cannot thank you enough for hosting this summit. From start to finish, it exceeded our expectations in every way and we look forward to growing our business together with you.



Scan to watch a video

DELIVERING MEMORABLE SUMMITS

Impressive satisfaction rates across Telematics Summit Europe 2024 events

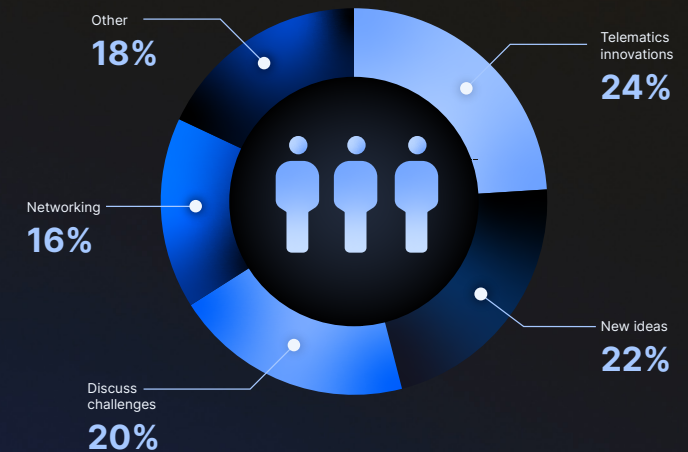
The series of events, held in June, September, and October, attracted almost **400** Teltonika clients from across Europe and beyond, offering a mix of the latest technology presentations, interactive workshops, and networking opportunities, as well as an unprecedented insight into Teltonika's R&D processes and factory operations.

Looking at the statistics, it is evident that Teltonika's telematics division has met and exceeded participants' expectations, consolidating its position as one of the leaders in the telematics industry.

17 INTERACTIVE STANDS



Key objectives of attendees



Top 3 stands by popularity

- Telematics without wires
- Asset monitoring with EYE Sensors
- New TACHO solution

R&D and factory tours

9.6/10

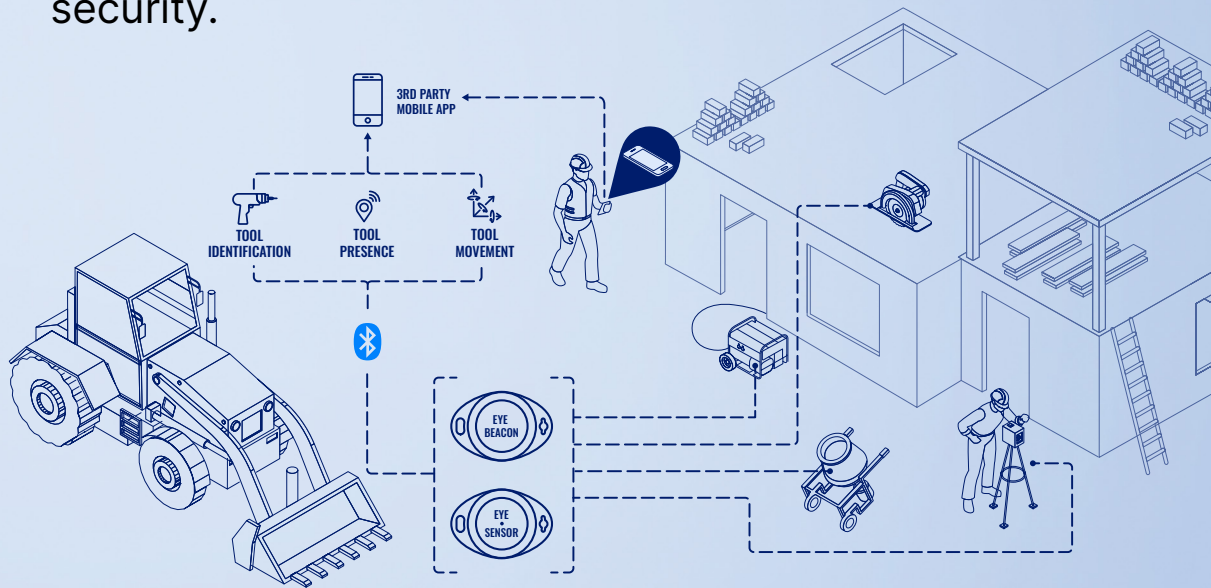
average satisfaction rating across all three events

Satisfaction ratings across summits



NAVIGATE SUCCESS IN MORE WAYS

Discover new possibilities and expand your ideas for IoT projects by exploring the latest use cases for tool and equipment tracking, EV battery monitoring, and ATM security.



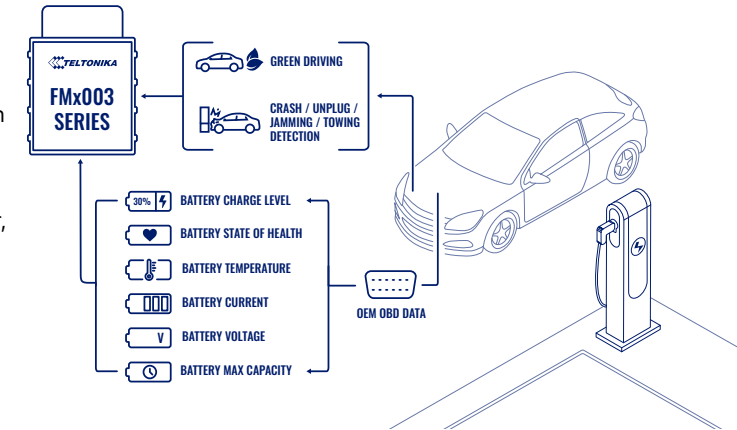
Tool and equipment tracking with EYE devices

In the construction industry, it is critical to always know where tools are – whether on-site, in a warehouse, or in transit between locations. Missing or misplaced items and equipment, which account for up to 30% of project delays, can cause operational inefficiencies and asset underutilisation. Teltonika EYE Beacons and EYE Sensors provide an effective solution for tracking tools and equipment on construction sites.



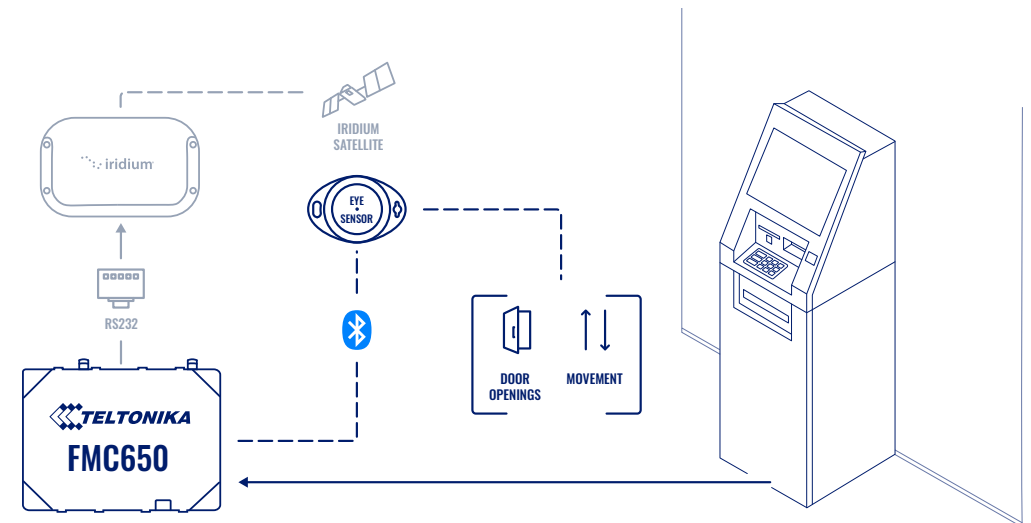
Advanced EV battery monitoring with OBD data reading devices

The electric vehicle market is experiencing unprecedented growth, with global sales increasing by over 40% annually, driven by technological advances, environmental concerns, and supportive government policies. However, managing such fleets presents complexities, particularly in monitoring and maintaining battery health. To address these challenges, Teltonika offers the FMx003 series of OBD-II data reading trackers with 2G or 4G LTE connectivity.



Advanced ATM security with FMC650 tracker

Automated teller machines (ATMs) are vulnerable to theft due to their public accessibility and the large amounts of cash they hold. While the wide accessibility of ATMs is certainly convenient, it also increases the risk of being targeted by criminals who seek quick financial gain. In recognition of this growing threat, Teltonika provides advanced GPS tracking solutions to enhance ATM security.



TESTED TO THE EXTREME

Teltonika's trackers are made sure to withstand rough and tough – by testing not only indoors in the laboratories but also outdoors at various racing events. Heat, water, mud... The more extreme, the better. Let's go!



A global testing ground

Recently, Teltonika devices were put to the ultimate challenge in the unpredictable conditions of motor sports events – from Lithuania to Morocco with the help of raceadmin.eu. The reason? There is no better way to prove their resilience, accuracy, and reliability.

In Morocco's Rat Race, 16 cars were equipped with Teltonika trackers to battle the desert terrain. When one team got lost in

the area with no internet access available on their mobile phones, our devices – thanks to Teltonika Connectivity Solution – became a lifeline. Race organisers were able to guide the team back on track via SMS by getting its precise location data from the vehicle tracker.

Meanwhile, Lithuania's Off-Road Championship brought an entirely distinct set of obstacles such as water crossings and mud pits. In one instance, a car plunged into a lake and remained submerged in 1.5 meters

of water for several hours before it was pulled to the surface. All that time FMB204 tracker kept transmitting information without interruption – an exceptional demonstration of water-resistance!

In Italy's Race to Hell, Teltonika trackers were mounted on quad bikes to experience the Tuscany's rugged landscape. High speed, intense vibrations, and constant dirt made it a formidable test. Our equipment endured it all including the thorough quad bike cleanings with high-pressure washers. ▶

Teltonika devices were put to the ultimate challenge at motor sports events



“Our goal is to deliver products that perform flawlessly, no matter the circumstances. That’s why we complement indoor testing with real-life trials that put our devices under extreme pressure. In 2023 alone, Teltonika trackers covered 177,000 kilometres racing through deserts and forests alike,” says Alvydas Petrošius, Teltonika’s employee, the founder of raceadmin.eu, and an avid fan of all things related to motor sports.

Real tests, real progress

Each race event is an opportunity to assess multiple aspects of Teltonika trackers: durability, connectivity, firmware performance, casing integrity, component stability, etc. This is a very practical way to confirm that our devices are resistant to shocks, smoothly switch between carriers when crossing country borders, properly operate in tunnels, securely keep internal parts in place despite strong external impact, and many other features.

On different occasions, the tested equipment included FMC125, FMC130, FMB204, FMB965, and FMx6 series trackers as well as the latest FT platform devices. It is an ongoing process with very tangible benefits.

“Real-world testing is essential for us,” says Sonata Andrikevičiūtė, Testing team manager at Teltonika’s telematics division. “We learn what works well and identify areas for improvement, thus, ensuring that our solutions are ready for challenges outside the racetrack. To put it differently, we make every effort to offer products that our clients can rely on in any situation.”

Trusted tracking companions

In addition to undergoing harsh tests, Teltonika devices perform important

functions at the racing contests. They are used for organisational purposes to provide real-time location, speed, and other data – every second or every three seconds, depending on official requirements. Absolute accuracy is a must as it relies on it who will step on the winner’s podium.

Teltonika trackers are equally indispensable for safety reasons. If a participant stops moving in the middle of a track and no contact is made within two minutes, a rescue team is dispatched.

In 2023 alone,
Teltonika trackers
covered 177,000
kilometres racing
through deserts
and forests alike



**TRACKERS
THAT ARE NOT
AFRAID TO GET
DIRTY**

eSIM: SIMPLE. INNOVATIVE. MONEY-SAVING

eSIM is quickly becoming the preferred choice for IoT connectivity. To understand why, let's explore an eSIM and its advantages in the IoT world, including the telematics industry.

We all know traditional plastic SIM cards – removable chips that can be transferred from one device to another to enable cellular connectivity. They come in various sizes, including Mini, Micro, and Nano, and are physically inserted into a device's SIM tray.

Meanwhile, an eSIM (embedded SIM or MFF2), is a small chip integrated directly into a device, eliminating the need for a physical SIM card. It provides the same functionality as traditional SIM cards, securely storing user credentials and connecting to mobile networks. This technology is ideal for various environments, as it withstands extreme conditions while saving space.

Unlike standard SIMs, eSIMs are reprogrammable, allowing users to switch carriers or update their network settings remotely without inserting a new card. The base profile or preferred network can be preloaded into the chip itself.

Nowadays, the term 'eSIM' is used to refer to

eUICC (embedded Universal Integrated Circuit Card) technology, which is the software package running on the SIM card. In this case, the SIM card can be of any form factor. We perceive eSIM as both technology and chip.

TOP BENEFITS IN TELEMATICS

Flexibility and scalability

eSIM creates additional value in telematics by allowing remote SIM provisioning and management of network profiles. A profile can be downloaded in tracking devices to switch to a different network provider without the need for a physical SIM change. Besides, eSIM can be easily embedded into a device during the manufacturing process.

Performance in harsh conditions

Traditional SIM cards, housed in external slots, are susceptible to damage from physical handling, temperature extremes, or moisture. These vulnerabilities can lead to

connectivity interruptions, particularly in telematics devices operating in demanding environments like construction sites or adverse weather conditions.

The integrated design of eSIM chips makes them highly resistant to environmental factors such as extreme temperature or vibration. Moreover, it is very convenient to have soldered eSIMs in tracking devices with completely waterproof enclosures as there is no need for SIM card replacement.

Optimised cost management

With eSIMs, telematics operators can reduce logistical expenses by eliminating the need for physical SIM card distribution and manual replacements. Remote updates and network management minimise downtime, making eSIM-enabled telematics devices a cost-effective solution for large-scale fleet operations.

Versatility and global connectivity

Telematics solutions often require uninterrupted connectivity across diverse geographic areas. eSIM supports virtual network profiles, allowing devices to change

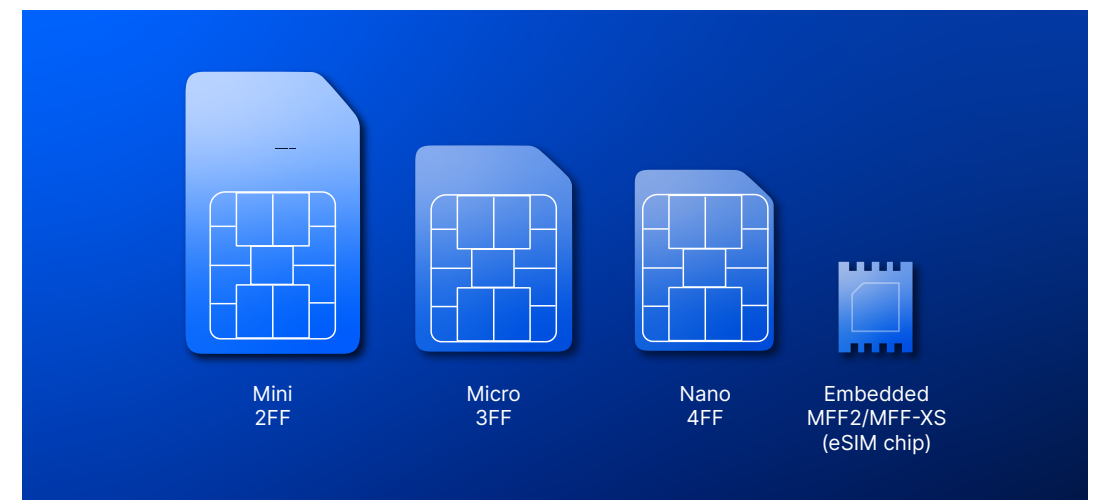
mobile network profiles in preferred locations by the need.

More to that, eSIM offers great flexibility as it allows both holding multiple cellular profiles (including local ones) and maintaining more than one mobile plan simultaneously. It gets much easier to manage connectivity in different regions, especially in countries like Turkey or Brazil where permanent roaming is not allowed.

Enhanced security

Security is a crucial consideration in telematics and IoT. Traditional SIM cards store user credentials but can be physically removed, posing a risk of theft or tampering. eSIMs, on the other hand, are integrated into the device, making unauthorised access more challenging.

Physical theft becomes less likely and attractive as devices equipped with an active eSIM are both simpler to locate and harder to deactivate. Even in the case of loss, fleet managers retain greater control over their tracking devices.



INSIDE INNOVATION: A TOUR INTO TELTONIKA'S R&D DIVISION

Behind every Teltonika product lies a team of experts, each playing a unique role in bringing our solutions to life. Let's look around our R&D division where creativity meets precision and technology takes shape.



Conducting an orchestra

Every great product begins with a spark of inspiration, but transforming it into a successful, market-ready device requires much more. It takes deep research, an understanding of customer challenges, and the ability to think outside the box.

This is where our product owners shine. They are responsible for defining roadmaps, prioritising features, and making crucial decisions about the product's direction based on market trends, client needs, and technical nuances. In many ways, a product owner is like a conductor leading an orchestra, bringing together business development, marketing, sales, R&D, and support to work in harmony. ▶

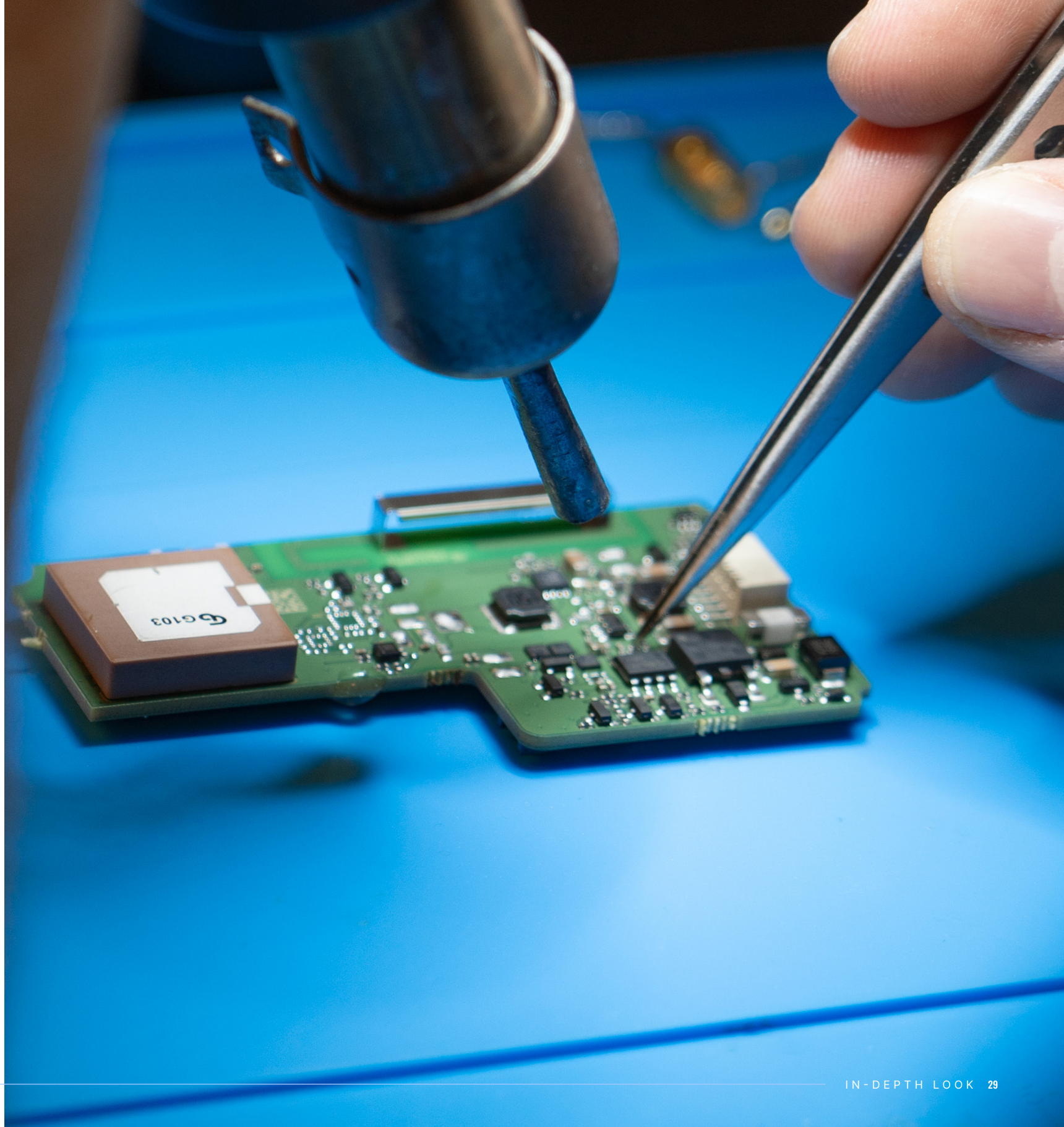


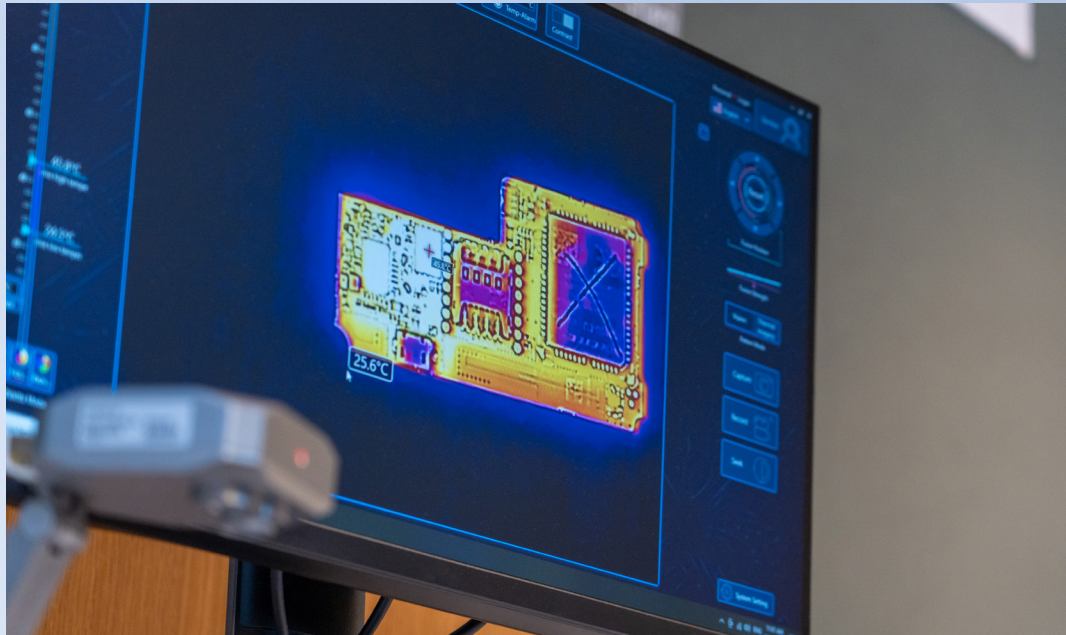
Building the foundation

While great ideas drive innovation, transforming them into reality requires a solid base. That is why the role of the Hardware department is essential in ensuring Teltonika's devices are durable, cost-effective, and built to last. The best way to understand how this happens is to take a closer look at the engineers' daily efforts and surroundings.

Our trackers are compact yet powerful as they rely on incredibly small components that are often difficult to see with the naked eye. Thus, our soldering stations are equipped with digital microscopes, allowing electronics engineers to work with precision and care. ▶

Our trackers are compact yet powerful as they rely on incredibly small components





Meanwhile, our mechanical engineers design various device models, test them through simulations, and use 3D printers to quickly bring concepts into accurate, functional prototypes. This way, we can see, improve, and test product designs before mass production.

What is more, we develop tracker antennas in-house by simulating them in specialised software, creating their prototypes, and conducting advanced radio frequency measurements. We send the devices with prototype antennas to partner laboratories for professional analysis and performance

We develop
tracker antennas
in-house by
simulating them in
specialised
software



reports. Also, our engineers ensure ingress protection ratings by simulating underwater pressure to make certain that devices withstand tough environments. By completing these and many other steps, our products are ready to tackle the challenges our clients face. ▶



Bringing hardware to life

If hardware is the foundation of our products, then embedded software developers are the ones who breathe life into it, transforming raw machinery into smart devices. This team writes secure and robust firmware that acts as the brain of each product, allowing it to perform all its functions.

The ESD department plays a key role throughout the entire product lifecycle, from initial development to ongoing updates and support. They make sure the firmware continuously aligns with hardware specifications while also meeting client needs and keeping our devices user-friendly.

Currently, their main focus is on developing Teltonika's 5th-generation FT platform under the flexible Teltonika Development Framework. An adaptable code gives us the

ability to respond quickly to new requirements keeping our products up-to-date with the latest technology.

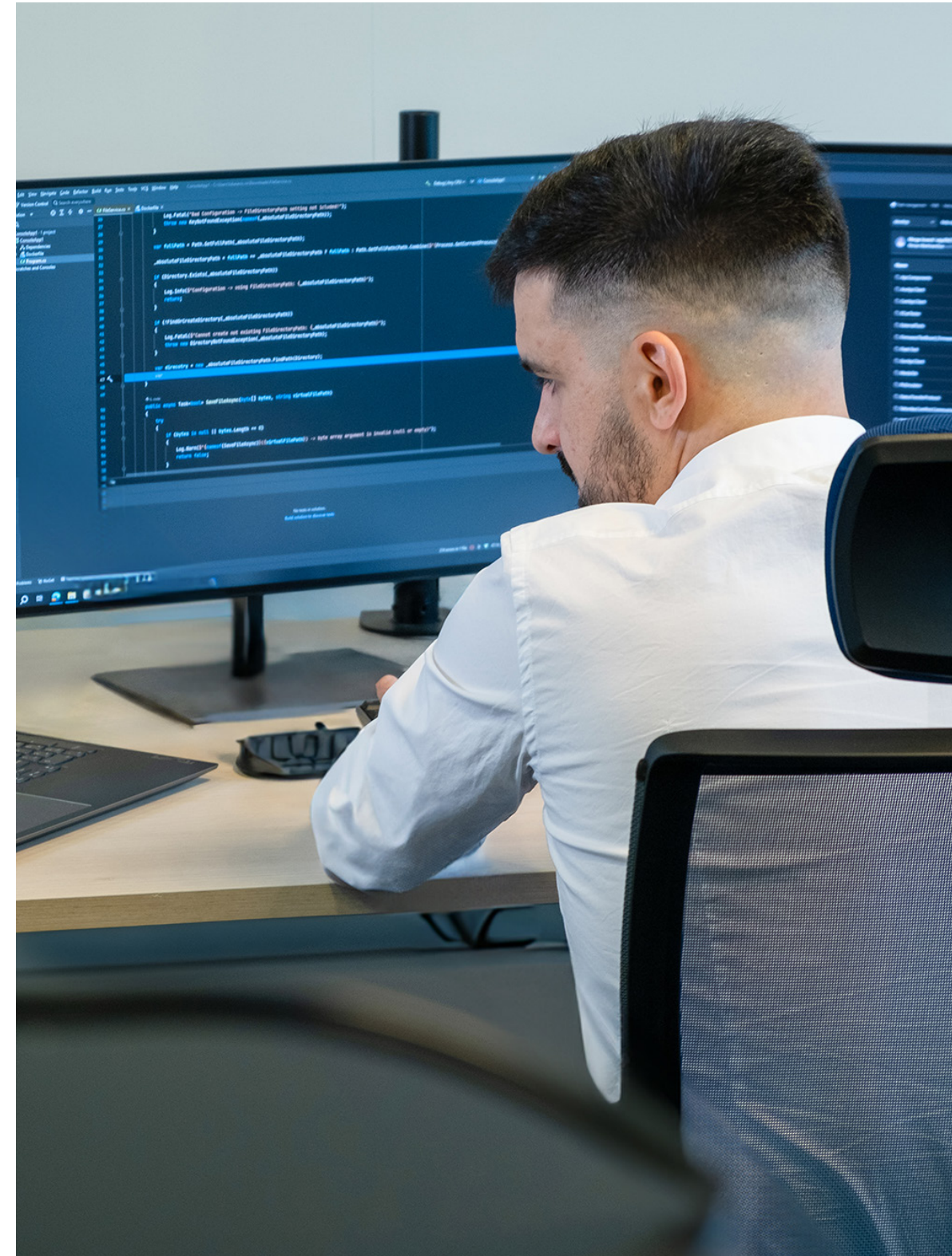
Connecting the dots

Our .NET developers can be called the connectors who build the bridges to link our products in the digital world. They create online services and software solutions making it easy for clients to update, configure, and manage their tracking devices. FOTA WEB, TCT, and other applications familiar to our clients were developed right here.

TCT web version is one of their latest works that allows users to configure FT platform devices via a web browser, eliminating the need for manual SMS commands. Together with FOTA WEB, which ensures remote updates and maintenance, these tools save time and enhance efficiency for our clients. ▶



FOTA WEB, TCT,
and other
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here



Quality first

When it comes to product quality, three things matter most: testing, testing, and testing. Thanks to Teltonika's Testing department, our products meet the highest standards before they reach customers. This team is involved at every stage, from prototypes to the final product, ensuring that hardware, firmware, and software are free of errors, defects, or weaknesses.

'Testing farm' is one of the most fascinating places in the department. This facility allows us to test all tracker's functionalities, even simulating real-world movements using a robotic arm. By automating these processes, we save over 8,000 working hours each month!

Stability testing station is another interesting area, where devices undergo non-stop checks until new firmware versions are fully developed and validated. This ensures that our products perform reliably over time.

Of course, this is just a glimpse. The department continuously updates and refines our testing scenarios to align with real-life challenges, new features and the latest market trends.

Innovation at Teltonika is a team effort as everyone plays a crucial role in creating products you know. Each step is thoughtfully crafted and rigorously tested. Together, R&D division delivers reliable and user-friendly solutions ready to help your business flourish.

Innovation at Teltonika is a team effort as everyone plays a crucial role in creating products you know



AROUND THE GLOBE

Take a journey through the ever-evolving field of telematics where unique and creative ways to use tracking devices abound. Let the stories from around the world be an inspiration for your next success case.



CONNECTING LOCALLY

The first Telematics Summit outside Lithuania took place in Dubai, a fitting choice as Teltonika's international expansion began years ago by opening an office in the UAE. Having a local team and hosting such events allow us to connect with clients more closely, understand their challenges, provide personalised attention, and focus on solutions tailored to their specific needs.

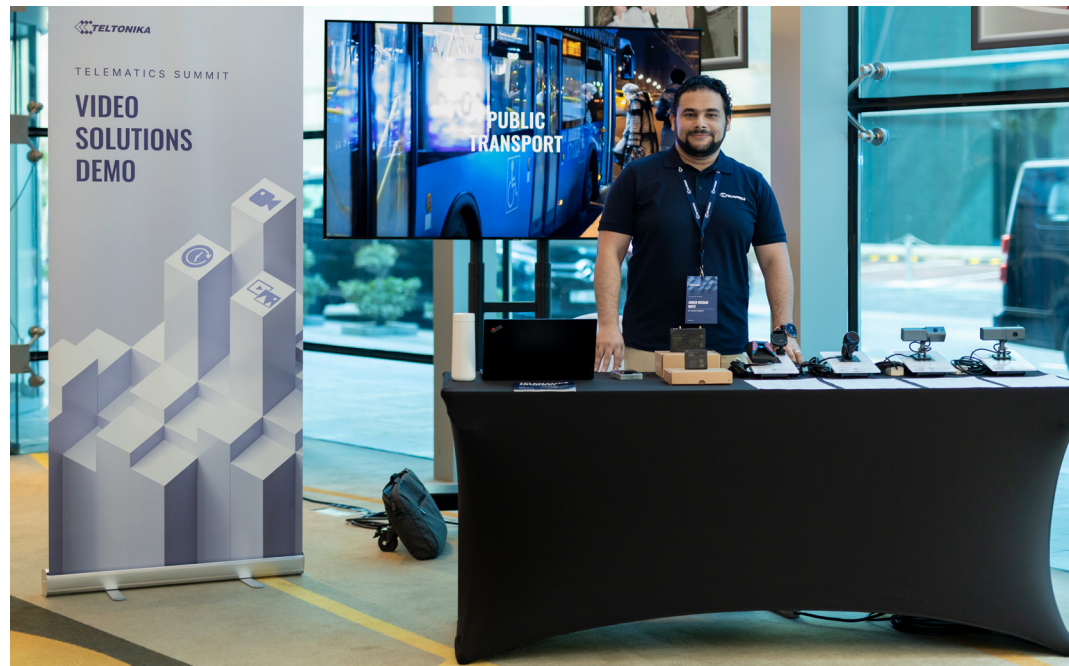
Moreover, we created the agenda with the Middle East problematics in mind, thus, we explored local market achievements, opportunities, and Teltonika's history in the region. Interactive workshops, such as OBD

and CAN reverse engineering, offered hands-on experience with our devices. The summit attendees got an exclusive glimpse at unreleased products while networking with peers from across the region.

It was truly an exciting day! Hoping to inspire new success stories, we cannot wait to see you at future events.



Kseniya Dolia, Chief of SCOPE operational marketing group



YOUR CHALLENGE, OUR SOLUTION

The APAC region is unique with its diverse culture, landscapes, and telematics challenges. Teltonika's local technical support team understands this deeply. Covering four time zones including Indonesia, Malaysia, Singapore, and Australia, our engineers are ready to assist you in getting the most out of telematics products.

In the Australian market, there are many challenges driven by the country's vast size and various industries. One of the biggest hurdles is connectivity, especially in remote regional areas, where network coverage is often spotty. This can cause disruptions in real-time tracking and data collection for sectors like logistics and agriculture.

Moreover, the country has strict transport and safety regulations, thus, clients need telematics solutions that can capture the right data and help ensure compliance with local laws, such as driver hours and vehicle inspections. Additionally, while the benefits of telematics are clear, the upfront cost and complexity of integrating these systems with existing operations can be a barrier for some businesses. Many smaller operations may be hesitant to invest in technology without understanding the full return on investment.

For connectivity challenges, especially in remote areas, we work closely with our clients to recommend and implement the right hardware and configurations. For example, in a recent case, a client in the mining industry was struggling with

maintaining consistent GPS tracking. Due to this, they could not provide emergency services in time. Now by using Iridium and the suggested configuration, the client is able to implement this solution and improve safety.

When it comes to regulatory compliance, we help clients select telematics devices that not only meet local standards but also simplify the process of data collection and reporting. Currently, one of our engineers is working closely with the regulatory commission and Teltonika's R&D team, so that we can have one of the professional trackers approved for the market. This will be an out-of-the-box solution for the client as the company will not spend time approving the device.

Looking into the future, the industry is rapidly advancing with IoT innovations and increasingly adapting to electric vehicle fleets. Predictive maintenance and real-time analytics are also becoming more crucial. To keep pace, our local support team regularly participates in advanced training and collaborates with Teltonika's HQ in testing new FT platform devices.



Wasiq Chaudhry, Head of technical support group

BEATING THE HEAT WITH FMC130

Teltonika's client from Italy created a solution that transforms vehicles into mobile weather stations, using a patented compact device to collect detailed microclimate data. Mounted externally with a secure magnetic base, it delivers fast and accurate measurements, which are geo-tagged and transmitted in real-time via Bluetooth to a server.

In this solution, FMC130 model plays a key role, acting as a gateway to the internet. The weather monitoring device, equipped with sensors to measure temperature,

pressure, and other parameters, connects seamlessly to the tracker via Bluetooth Low Energy. Then, FMC130 geo-tags the collected weather information and transmits it to a server using the UDP protocol, ensuring efficient data extraction and processing.

Together with Teltonika's tracker, our client's solution enables detailed mapping of weather patterns, making it possible to identify and address heat distribution issues in urban areas. With climate change increasing its impact, particularly in southern European cities, where summer temperatures often reach extreme levels, this technology allows better urban and energy distribution planning by providing useful databases for AI machine learning-based hyperlocal weather forecasts.



Aleksandr Ščiupakov,
Sales group manager



UNLOCKED VEHICLE DATA WITH TFT100

India's telematics industry is growing quickly as companies look for new ways to improve fleet performance. Teltonika's client recently partnered with a major car manufacturer to solve a specific request – monitoring battery health in electric cars.

Extracting data from the vehicles was not that simple because of locked OEM parameters and missing protocol documentation. Still, Teltonika's technical team worked closely with the client and overcame this challenge to ensure reliable data access and smooth integration. TFT100 was an ideal choice for the project. It supports a high voltage range (10-97 V) and features manual CAN functionality, allowing

raw CAN data to be read directly from a vehicle's ECU. This provided valuable insights into battery performance and efficiency.

The results speak for themselves – seamless data retrieval and integration into the fleet management system. So far, 4,000 tracking devices have been deployed, with plans to expand to 10,000 vehicles. This solution perfectly proves Teltonika's slogan: Easy Key to IoT!



Shauryadeep Mukherjee,
Sales group manager



LOOK UP! IT'S EYE BEACONS!



Electric forklifts play a crucial role in warehouse logistics, offering a cleaner and more energy-efficient alternative to traditional gas-powered equipment. They are ideal for indoor use, do not emit harmful fumes, and are much quieter. Moreover, monitoring battery operation mode can significantly extend the service life of e-forklifts and, thus, reduce company costs.

Teltonika's business partner in Ukraine used Teltonika TFT100 trackers, RFID readers, and EYE Beacons in a project involving a huge warehouse and production areas. Designed for the e-mobility sector, water-resistant and dustproof TFT100 model supports a high voltage supply range of 10-97 V. It provides valuable information such as distance driven, exact location coordinates in real time, speed, battery status, and together with RFID readers – working time logs.

The end customer did their research to find that route optimisation could boost efficiency

by at least 20%. This made tracking vehicle movements a top priority. However, in large closed warehouses, satellite signals can become weaker, making data less reliable. To solve this challenge, hundreds of EYE Beacons were installed on the ceiling to create a grid. Installed in a forklift, TFT100 provides the exact location by communicating with EYE devices and detecting the strength of their signals.

This solution ensured full control of the e-forklift fleet, provided accurate data for the best routes, and improved personnel performance and safety. Most importantly, it helped the end customer quickly recover their investment, proving its value and long-term effectiveness.



Oleg Kabanov, Sales group manager



Learn more



COOL & PROFITABLE

DATA FOR SOLAR POWERED MOBILITY

Public transport faces increasing pressure to cut costs, reduce pollution, and meet high energy demands. One company in Germany found an innovative solution – they integrate solar panels into vehicles to save around 1,500 litres of diesel per bus annually.

Teltonika FMC650 tracker plays a crucial role here. Using the manual CAN feature, our device reads specific data, such as energy captured by solar panels, battery performance, and in what positions panels yield the best results. The collected information is sent to a software platform, where operators can analyse solar energy efficiency, identify underperforming routes, and even suggest adjustments to maximise sunlight exposure.

Beyond improving energy use, this solution empowers operators to optimise fleet performance, lower costs, and make data-driven decisions for a more sustainable future. With FMC650 already in use, expanding to additional telematics applications, such as tachograph management, becomes an easy next step – making vehicles smarter, cleaner, and more efficient.



Antanas Gustaitis, Sales group manager



EXPERIENCE & QUALITY – THAT'S TELTONIKA!



The North American telematics market is highly competitive, with many companies seeking opportunities in this continent, making it difficult for newcomers to stand out. Teltonika faced these challenges with a clear strategy – delivering high-quality devices, exceptional service, and over 25 years of experience in the industry.

When we entered the region, Teltonika was not well-known to local businesses. Building recognition required significant effort through targeted marketing, direct client outreach, and strategic partnerships. Over time, our dedication paid off, and more companies began to trust our solutions. For example, OBD data reading trackers, EYE Beacons, and EYE Sensors became our portfolio's most popular products, as they solved key industry challenges.

What makes Teltonika stand out is the combination of experience and quality. Innovative solutions and advanced device capabilities allowed clients to manage fleets efficiently and access a wide range of vehicle data. It helped our business partners streamline operations, reduce costs, and enhance productivity.

With a strong foundation, Teltonika continues to grow, offering advanced fleet management tools that help companies operate more efficiently across the continent.



Simón Alonso Contreras del Río, Sales manager

LEARN, CONNECT, INNOVATE

Looking to gain new insights and knowledge? Join Teltonika's workshops! In 2024, we hosted events in South Africa, Namibia, and Tanzania, bringing together our business partners, telematics service providers, and government representatives from across the continent.

These workshops addressed key telematics challenges in Africa, such as limited access to advanced solutions and localised expertise. Through hands-on training, discussions on industry trends, and live demonstrations of our products, participants gained practical tools to optimise their business operations and drive growth.

For example, we showcased tracker installation processes, explained fuel

management systems, and introduced the latest telematics solutions. It was a place for attendees to share ideas, learn from one another, and build lasting partnerships.

Looking ahead, we plan more similar initiatives to meet Africa's evolving market needs. Together, we are shaping the future of telematics in the continent – one workshop at a time. So, keep an eye out for upcoming events!



Jonas Brazionis, Head of AFRICA sales region



1.4x

increased position accuracy



The results presented are based on the thorough testing carried out by Teltonika's R&D team.

THIS IS YOUR SIGN TO USE TAT TRACKER



Temporary road signs play a critical role in keeping construction zones safe, however, it is a challenge to ensure they remain in place and visible due to strong winds, accidental impacts, or vibrations caused by passing vehicles. With Teltonika TAT100, TAT140, and TAT141 devices, monitoring these objects has become more efficient, eco-friendly, and safer.

The solution involves installing a TAT series tracker, housed in a custom casing, on each temporary road sign. If the tracked object falls or shifts position, the device detects its movement and sends an immediate notification with detailed data. This allows to determine if any actions need to be taken, or if it was a false alarm caused by passing

vehicles. TAT devices are so effective thanks to their precise accelerometer, long-lasting battery life, low power consumption, and the optional IP68-certified casing.

Before implementing Teltonika's solution, company employees had to perform physical checks, which meant higher CO2 emissions, significant fuel costs, and longer response times. By now, not only these issues are solved, but safety for both workers and road users has also increased.



Pavel Charitonovič, Sales manager

MORE OBD OEM DATA AVAILABLE FOR EVs



Learn more

Battery's state of charge, health, temperature, voltage, etc.



FIX IT BEFORE IT FAILS

In Peru, a leading automotive service provider is changing how vehicle maintenance is done with Teltonika's hardware. By using FMx130, ALL-CAN300, and ECAN02 devices, they have created a solution that gives users real-time access to important vehicle data through smartphones or computers, making both preventive and corrective maintenance simpler.

So how does it work? FMx130 monitors essential vehicle information such as location, speed, fuel consumption, and engine health. Meanwhile, ALL-CAN300 adapter reads CAN bus data, allowing service providers to track key parameters like engine performance and tyre pressure.

Finally, ECAN02 simplifies the installation process by gathering detailed diagnostics without the need to cut wires, meaning that the client does not lose warranty.

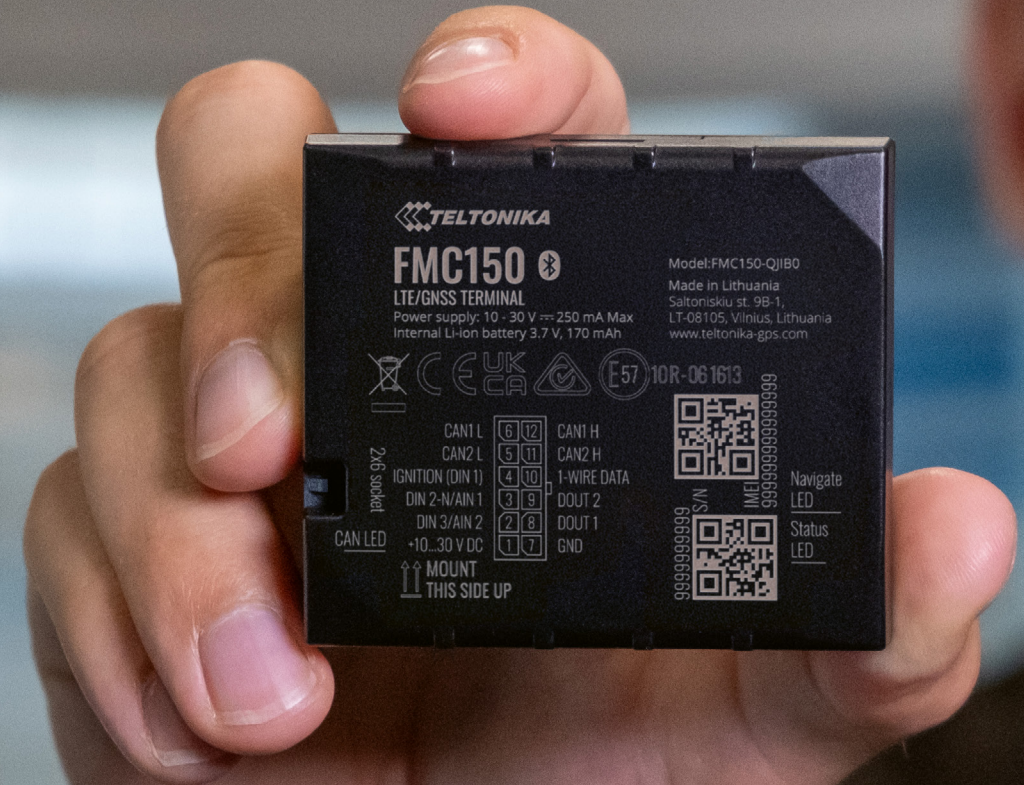
Thanks to this device trio, companies can make maintenance decisions based on accurate, real-time information, provide better service, keep vehicles in top condition, and reduce fleet downtime.



Benjamin Portocarrero,
Sales group manager



More data, more insights EXTENDED CAN PARAMETERS



Engine oil level, AdBlue level, door lock status, gross vehicle weight, and other parameters with FMx150 & FMx250 trackers



Learn more

NEW FLAGS ON TELTONIKA OFFICE MAP

Teltonika's worldwide presence was notably strengthened in 2024 with five new offices opening doors around the globe. As three of them – that's Poland, Italy, and UK – are in Europe, we talk to Domantas Balnys, head of development for Europe continent's offices, to find out what lies behind the rapidly increasing office count.

The year 2024 is a big one for Teltonika in terms of international expansion. How did we manage to open three offices in Europe?

Here at Teltonika, we are ambitious and determined to make an impact sooner rather than later whenever possible. This significant expansion could not have been achieved without the teamwork of our colleagues in administration, legal, finance, and other departments. The new office CEOs were no less eager to get involved and make a difference, so we joined them to provide any assistance necessary.

What were the main reasons to select Poland, Italy, and UK for the new offices in Europe?

These markets already generate some of the biggest turnovers in Teltonika, so they were

our strategic choice for further expansion and growth. The manufacturer's local presence in a country gives a huge confidence boost to both business partners and end customers. We know that directly from our clients in all the mentioned countries. They understand our mission to deliver innovative IoT solutions and fully support it.

What role does local talent play in the development of the new offices?

Local people know the country and its business culture really well. They can explain small but essential details that otherwise could be missed. Thus, we mix Teltonika HQ and local office culture. It is much easier to understand each other when you speak the same language – and here I am not talking about the linguistics only. ▶

Domantas Balnys, Head of development for Europe continent's offices

Teltonika's name and products are well known in the mentioned European countries. What is changing for our clients after we become locally represented there?

The most important thing is that we will be close by all means. Over time, our plan is to have not only salespeople but also technical support specialists who can go on-site and help when it is needed most. Teltonika offices are not just for representation – we are here to grasp market challenges and accelerate our business partners' growth.

How can we ensure that we are adapting to local market needs?

Communication is a key. We plan to cultivate it by conducting visits, quarterly mini-events, and training sessions for our customers to unveil the possibilities that Teltonika products offer. Our aim is to create an environment where clients can drop by at any time – it will be our pleasure to have a chat and assist them with any issues that may arise.

Europe is a very mature and competitive market for telematics products. Is there still room for Teltonika to grow here?



It is a mature market indeed but... If there is a vehicle without a tracker, it means there is room for growth! Besides, the potential related to asset trackers is huge as well.

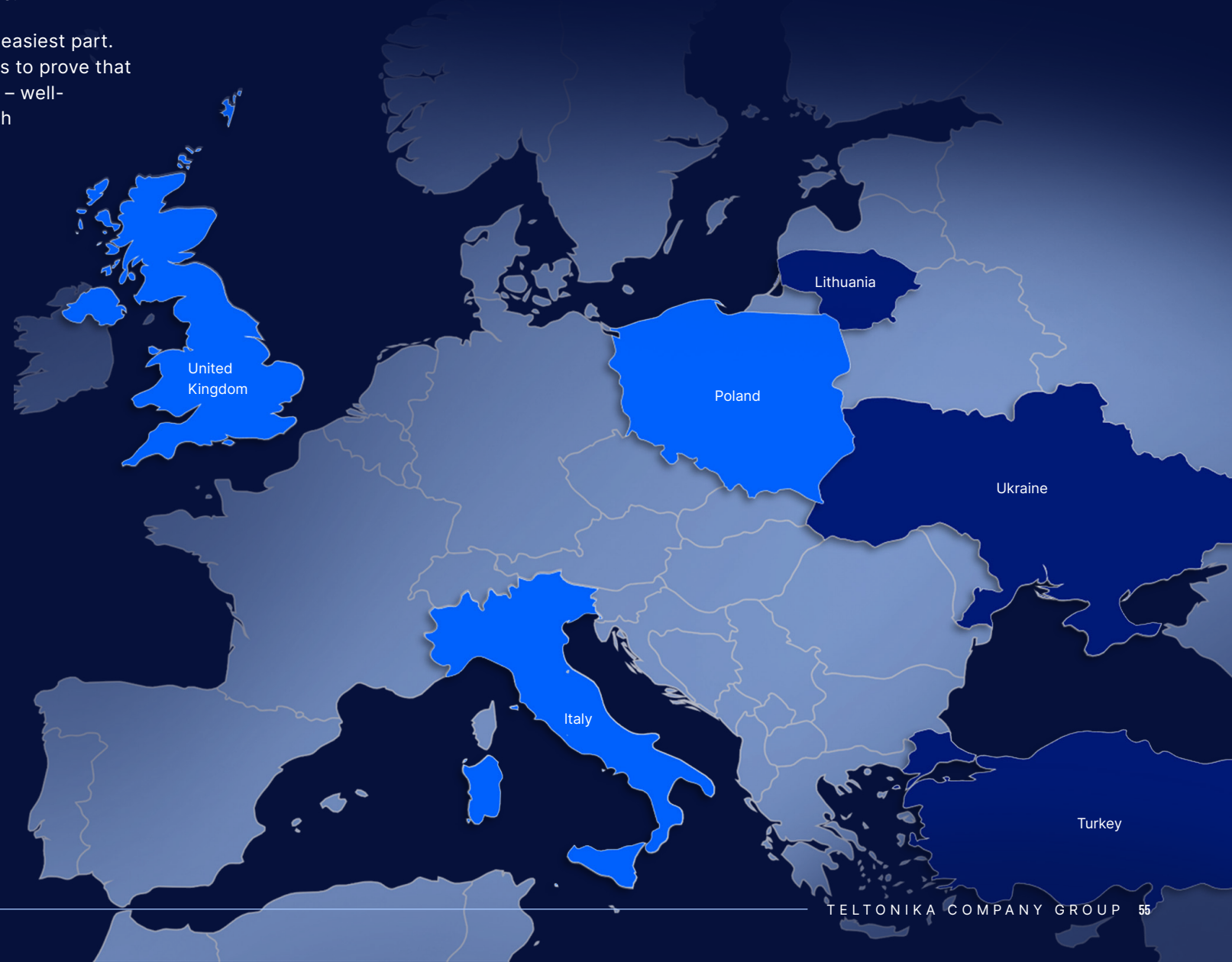
What are our plans for the future? Can we expect to see more offices opening in Europe?

For now, we are focusing on already existing offices to help them develop and succeed. The goal is to ensure that we are working as one unified team, closely collaborating between the headquarters in Lithuania and local teams.

To open an office is the easiest part. Then the real work starts to prove that it was the right decision – well-founded and aligned with the initially calculated risks and growth prospects.

OFFICES IN EUROPE

-  New offices
-  Current offices



ZOOM IN TO ZOOM OUT

Business growth often requires a closer look and a more personal engagement with one another.



At Telematics Summit 2024 events, we embraced this approach, creating a space to connect directly with our clients, share expertise, and collaboratively address market challenges. We are glad to provide a platform that fosters strong connections and drives the industry forward.





CAN YOU SPOT 8 TELTONIKA DEVICES?



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