TELEMATICS JOURNAL

2025 | Vol. 8

HOW BIG
is telematics market?

In focus

Telematics market as big as the world

Telematics in action

Backup tracking in East Africa

In-depth look

A tour into Teltonika's Technical support division

Dear reader,

Despite market fluctuations and complexities, the telematics industry continues to offer significant growth outlook for forward-thinking companies. In this edition, we present the findings of an exclusive research that demonstrate the sector's remarkable potential, as well as how Teltonika's products and solutions are helping customers effectively leverage these opportunities.

Meanwhile, 'IoT Insights' are dedicated to the specifics of successful collaboration with OEMs, as we share with telematics service providers actionable strategy tips based on our business partnerships worldwide. We also take you to East Africa to experience how EYE Beacons provide critical backup tracking capabilities in environments where traditional solutions struggle.

Further on, we offer never-before-published access to Teltonika's Technical support division, where expert teams tackle complex scenarios every day. While travelling 'Around the Globe', you will discover carefully selected success stories, illustrating how smart thinking and our solutions address real-world challenges across continents and industries.

I warmly encourage you to explore this journal, as the knowledge it contains represents not just concepts but proven pathways to operational success in the dynamic field of telematics. So, turn to the next page and have a good read!

Antanas Šegžda, CEO, Teltonika Telematics

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AS BIG
AS THE WORLD

Telematics market – like the vehicles and other assets being tracked – is always on the move. This constantly changing environment brings both challenges to face and opportunities not to miss. Teltonika is on the mission to help our clients understand the market, its potential, and how to use it to the fullest.

How can we take full advantage of the market opportunities that lie ahead?

Growth despite challenges

The world economy as a whole – and telematics as part of it – faces a number of challenges: trade tensions, increasing borrowing rates, growing energy costs, unpredictable business environment, etc. There is no shortage of issues to deal with. All of them have a certain impact on the sales of new cars as well as the demand of related products and services.

Even in a situation like this, one thing is for sure – telematics has become an indispensable part of processes for many companies. They will not stop using telematics in their operations – it is a necessity like an Internet or email. Over the years, we have never seen telematics market going down. While growth rates varied, it has continuously expanded over the last two decades.

If such is the case, what can we expect in the future? How can we take full advantage of the market opportunities that lie ahead? What are the key business growth drivers to consider? A widespread uncertainty on a global scale makes it even more important than ever to look for the answers to these questions. ▶
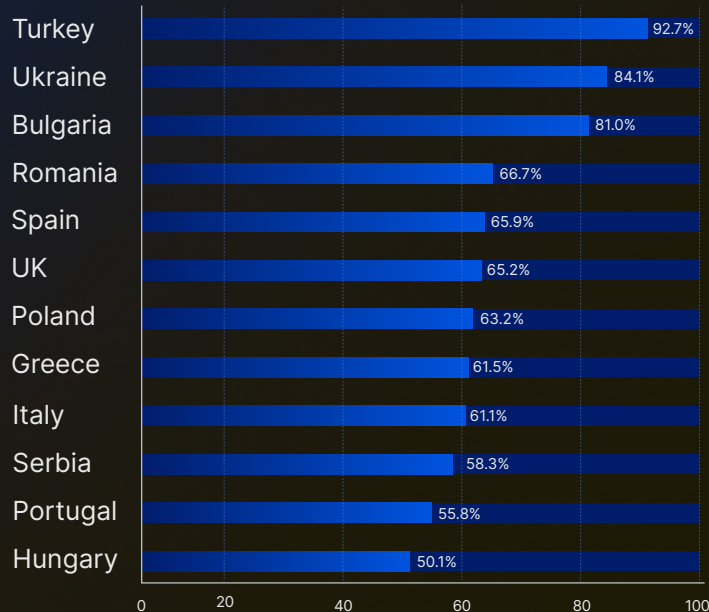
Step it up

Technologies are the vital part of the telematics industry, with two core places taken by Global Navigation Satellite Systems (GNSS) positioning and cellular networks. The latter one is always evolving, introducing faster speeds and other improvements, while letting older generation networks gradually step aside.

According to Global Mobile Suppliers Association's data, by November 2024, there were completed, planned, or in progress 2G and/or 3G network switch-offs in 77 countries. Going on for some time already, this process is not a new topic, however, it considerably affects telematics and everyone involved in the field to this day. If it has not happened somewhere yet, sooner or later it will, and it is better to be prepared.

While the evident action plan is to replace 2G/3G trackers with 4G devices, there is much more to it. This is a strategic chance to upgrade in various ways by considering the additional value that new technologies can provide – be it from the perspective of telematics service provider (TSP) or the end customer. Teltonika's telematics equipment is constantly advancing, offering practical features and valuable solutions that extend way beyond the traditional track & trace scenario – for example, OBD and CAN data reading to take fleet operations to the next level.

Thus, 2G/3G sunset is an ideal time to break free from the limitations of old hardware and get the best of telematics.

Countries in Europe with Teltonika 2G device sales exceeding 50%

Country	Percentage
Turkey	92.7%
Ukraine	84.1%
Bulgaria	81.0%
Romania	66.7%
Spain	65.9%
UK	65.2%
Poland	63.2%
Greece	61.5%
Italy	61.1%
Serbia	58.3%
Portugal	55.8%
Hungary	50.1%

How big is it? BIG!

Keeping this in mind, Teltonika – one of the industry's leading manufacturers – did the analysis to evaluate the size of the worldwide telematics market. The goal is to support our business partners by helping them to understand the demand for telematics solutions in different regions, make more justified strategic decisions, and, most importantly, accelerate their growth.

We gathered and took into account various data to estimate the percentage of motorised vehicles that will be equipped with a telematics device within the next 5 years. The result was 25 per cent, making it 5 per cent of motorised vehicles per year, including passenger cars, trucks, buses, etc.

How does this convert into actual numbers? Our estimation is that the target market constitutes 67.2 million units, or telematics devices to be installed every year. While doing this analysis, we excluded Teltonika's non-target markets: most notably, Russia, Belarus, Iran, Noth Korea, China and some other countries.

While the majority of telematics devices are installed in commercial transport, there are plenty of applications and use cases when trackers are successfully used in consumer cars. Therefore, we include passenger cars as a significant catalyst of the market expansion.

Breaking it down by region, the total of 67.2 million units annually is distributed as follows: Europe accounts for 19.2 million trackers, while Africa & Asia combined take 21.6 million devices and Americas amount to 26.4 million units per year.

"These figures show huge potential. The demand over the next 5 years is going to be enormous and Teltonika is well-prepared to support its business partners in making the most of it. Telematics is one of the few industries that offers unique growth opportunities despite the many challenges that companies increasingly face. We are on the mission to help our clients expand their customer base and deliver more value with Teltonika's advanced products and solutions," says Antanas Šegžda, CEO of Teltonika Telematics.

Teltonika's market penetration in Europe presents further insights into where the biggest potential lies. To uncover it, we analysed the sales data of the last four quarters (Q2 2024 – Q1 2025), filtering the TSPs that connected at least 50 of our tracking devices – that's over 2 million units deployed by more than 1,400 clients in Europe. Among them, there are over 500 TPSs that connected more than 500 devices. ▶
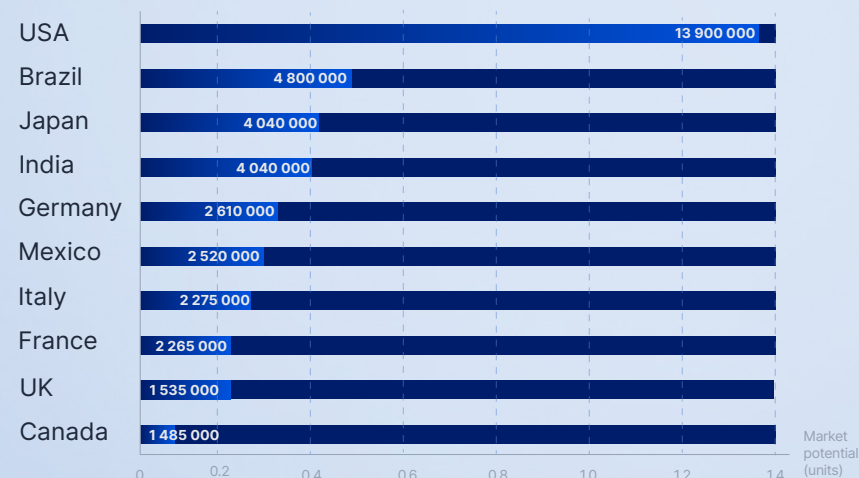
Looking into different product types, there is only a handful of countries with relatively high shares of Teltonika's tracking devices that can be mounted in minutes virtually by anyone, letting companies effectively solve the issue of high installation expenses. That's Sweden, Denmark, the UK, and Ireland in case of Fast & Easy category devices, and Sweden, Norway, and Denmark with OBD data category trackers. The rest of Europe is an open ground for increasing the reach of these time and cost saving products.

Meanwhile, certain countries in Central Europe and the Balkan region – Czechia,

Slovakia, Bulgaria, Romania, and Serbia – stand out with the high share of Teltonika CAN data category devices that enable fleet managers to have a detailed analysis of vehicle operations and enhance their performance. These trackers are invaluable in optimising fleet maintenance and can be highly beneficial for businesses in any country.

When it comes to CAN, OBD, and E-mobility category devices, the potential is even greater beyond Europe. The current adoption is low, and the opportunity is vast. These products carry substantial added value that is yet to be discovered by the companies across the globe.

TOP 10 countries worldwide with the highest telematics potential

Country	Market potential (units)
USA	13 900 000
Brazil	4 800 000
Japan	4 040 000
India	4 040 000
Germany	2 610 000
Mexico	2 520 000
Italy	2 275 000
France	2 265 000
UK	1 535 000
Canada	1 485 000

Committed to your success

Teltonika is making sure to be the preferred choice for everyone who wants to capitalise on the promising market outlook. First of all, amid the 2G/3G phase-out, we offer an extensive range of 4G devices that come with various functionalities and usage scenarios

for different sectors and industries. At the same time, there is still an understandable demand for 2G trackers, and our business partners can be confident that we will supply these devices as long as needed.

TOP 10 countries in Europe with the highest telematics potential

Country	Market potential (units)
Germany	2 610 000
Italy	2 275 000
France	2 265 000
UK	1 535 000
Spain	1 485 000
Poland	1 235 000
Turkey	1 160 000
Netherlands	510 000
Ukraine	500 000
Romania	425 000

Speaking of Teltonika's product portfolio, it is vigorously expanding with the innovative FT platform-based models – such as FTx305 series for electric transport. In addition to developing smart IoT solutions, Teltonika remains loyal to its never-changing goal of

being close to clients, which takes form in the opening of new offices. You are now welcome to visit us in Germany, Poland, Italy, UK, Japan, USA... Our worldwide presence already covers 27 countries and is set to broaden its reach further.

REGIONAL FOCUS:

EUROPE

Among the 77 countries that already switched 2G and/or 3G networks off, are in the process of it, or plan to do it, 47 per cent of the operators are located in Europe (Global Mobile Suppliers Association's data, November 2024). If Europe is more advanced in proceeding with 2G/3G sunset, is it still an issue there or not anymore? The case of Switzerland serves well as an answer.

In the beginning of 2023, the last Swiss operator discontinued to support 2G network. The country's fleet managers were prepared for it and transitioned to 4G telematics devices well in advance. So where did all the complaints about the vehicles being offline come from?

From the logistics companies located in other countries and tracking their transport across Europe. Once their vehicles entered Switzerland, they became 'invisible' due to equipped 2G trackers. There were cases when trucks with a cargo worth up to EUR 800,000 disappeared from the 'radar' for 5-7 days.

Surely, fleet owners were eager to upgrade to 4G devices as soon as possible and get their transport back online. It's that simple – businesses need to track 100% of their vehicles. Even if just 1% or 2% of the fleet is not visible in the system, it is not acceptable. Especially, when the issue can be easily prevented in advance. ▶
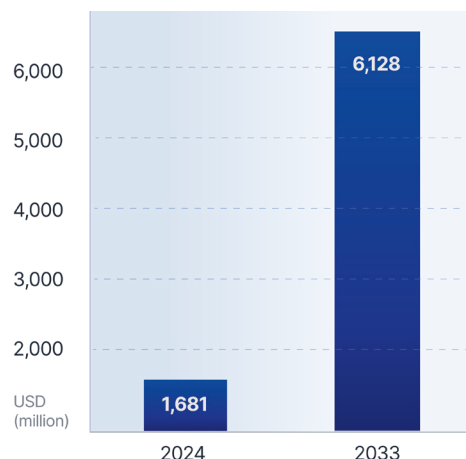
ASIA

Highly industrialised, technologically advanced, and with widespread vehicle ownership – Japan, South Korea, and Taiwan are perfect economies to experience impressive growth in telematics. For example, the commercial telematics market in Japan is set to reach USD 6,128 million by 2033, rising from USD 1,681 million in 2024 at compound annual growth rate of 15.5%, as forecasted by IMARC Group.

Both Japan and South Korea are well known for their strong automotive sectors, while Taiwan distinguishes itself with one of the world's highest rates of scooter ownership per capita. Taking all this into account, Teltonika is making sure that our business partners are able to leverage market potential in East Asia.

We are expanding the range of telematics devices available with local certificates – namely, Giteki in Japan, KC in South Korea, and NCC in Taiwan. This way, our clients not only can choose Teltonika products that suit their needs best, but also be confident that it complies with each country's technical standards for safety and interference with other electronic equipment.

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6,000                              6,128
5,000
4,000
3,000
2,000
                  1,681
USD
(million)
            2024            2033
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Commercial telematics market in Japan

AFRICA

Africa is currently undergoing a digital transformation, which also encourages the adoption of telematics across the continent. As a result, end clients look for more advanced solutions that can effectively meet their business needs.

Driver and cargo safety is one of the pressing challenges, especially, in the border areas and other zones where cellular networks are not available. In case of emergency, calling for immediate assistance becomes impossible, unless telematics equipment supports satellite connectivity.

Asset protection and visibility are equally essential for car leasing companies, mining industry, and many other sectors. For telematics services providers, this is a timely window of opportunity to fulfil the growing demand with Teltonika's extensive product portfolio and assistance in selecting relevant business partners for successful project implementation.

We are not just a supplier – we are trusted advisors and experts with dedicated regional teams, local know-how, and various educational activities. Through workshops and training sessions, Teltonika shares knowledge that lets get the best out of the market potential.

MIDDLE EAST

The telematics market in the Middle East has been growing fast in recent years and the similar upward trend is expected in the future. The driving forces behind this active

development include the rising need for more advanced IoT solutions, the expansion of the transportation-related sectors, and government regulations.

More and more countries are mandating the use of GPS tracking to improve road safety, reduce traffic violations, and exercise better control over logistics and passenger transport. For example, Saudi Arabia has made GPS tracking mandatory for all freight vehicles, while the United Arab Emirates rely on GPS systems to monitor school buses and taxis, which helps track driver behaviour and ensure passenger safety.

As a result, it is essential to keep in mind and understand well local compliance requirements. Teltonika has been present in the region for more than a decade, offering not only country-specific device certifications, but also reliable support and in-depth market insight. In other words, we provide everything to help our clients take their business further in this fast-moving market.

SOUTH AMERICA

South America is yet another world's region with an enduring telematics market potential. Let's take a closer look at the logistics market and some numbers that prove it well.

According to Mordor Intelligence data, all aspects of the logistics market in South America are expected to grow by 2029. The highest annual growth rates are projected for courier, express, and parcel segment (4.69%), freight transport (4.62%), and freight forwarding (4.4%), promising a high demand for telematics solutions in the years ahead.

Brazil is the region's giant that captured approximately 46% per cent of the continent's freight and logistics market in 2024. Such a high share is supported by the government's significant investment in transport infrastructure, with a projected USD 28 billion for fourteen new highway concession bids by the end of 2025 to cover over 8,400 km.

With offices in Brazil, Chile, Peru, Colombia, and Mexico, Teltonika is present locally to satisfy the current and upcoming needs of the fleet managers in this fast-moving region.
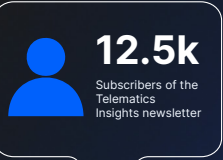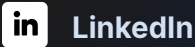
STAY INFORMED,
STAY AHEAD

We don't just track numbers – we make meaningful connections. Through our ever-expanding outreach channels, we ensure that businesses and industry professionals like you stay on top of the latest innovations in telematics. Whether through insightful LinkedIn content, webinars, or in-depth use cases, we are committed to delivering knowledge that strengthens your operations and expertise. See how we are growing to serve you better.
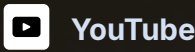
Use case articles

Fleet telematics	32
Logistics & delivery services	17
Agriculture, construction & mining	14
Use cases in 2024	15
Total	108

Learn more

▶ YouTube

Webinar recordings	65
Introduction to Teltonika products & solutions	42
Use cases	19
Total videos	195

1.6 million
total views

Learn more

LinkedIn

12.5k
Subscribers of the Telematics Insights newsletter

33.5k
Total followers

Learn more

Webinars

13
Sessions in 2024

69
Total sessions

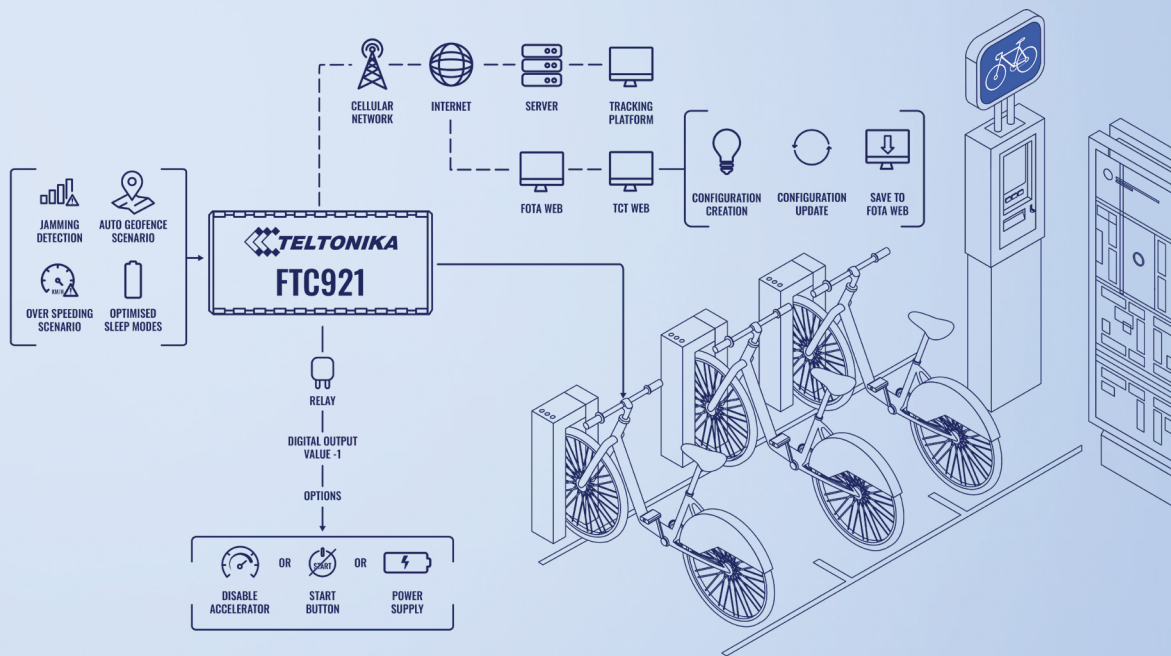**13.2k**
Total attendees

WE ARE EXPANDING TO SERVE YOU BETTER
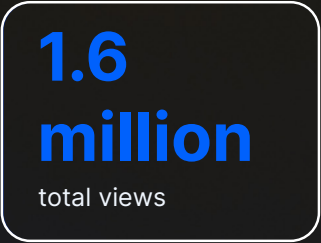
MORE WAYS

FOR DATA-DRIVEN FLEET EFFICIENCY

Find out how Teltonika GPS trackers and solutions transform operations in the urban mobility, delivery, logistics, and construction industries to provide measurable benefits for companies worldwide.


Reliable GPS tracking for urban mobility

The increasing density of tall buildings significantly disrupts satellite signals, making exact location tracking a challenge. This is particularly relevant for urban mobility industries, such as e-bike, e-moped, and e-rickshaw rentals. Teltonika FTC921 model is made for precision and offers best-in-class connectivity to ensure accurate positioning of e-vehicles, even in heavily built-up city environments.

Fuel and service optimisation with OBD data reading trackers

Fuel accounts for almost 30% of the total cost of running a fleet. In a world increasingly dependent on e-commerce and just-in-time manufacturing, logistics and delivery disruptions can affect production schedules, customer satisfaction, and business viability. Meanwhile, effective fleet management is critical to reducing costs, improving delivery times, and ensuring efficient operations. Teltonika OBD data-reading trackers can provide the precision needed to achieve all these goals.
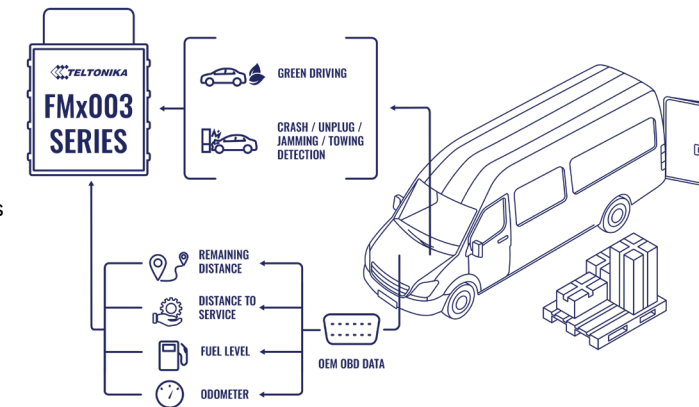
Heavy-duty vehicle timely maintenance with FMx250

Driven by urbanisation, population growth, and increased infrastructure spending, the construction market is forecast to grow by $1.17 trillion by 2028. As the industry expands, so does its reliance on heavy-duty vehicles to support large-scale projects. To successfully meet the challenges of monitoring such fleets in harsh climatic conditions while saving on operating costs, we offer a distinctive solution with FMx250 tracker series.
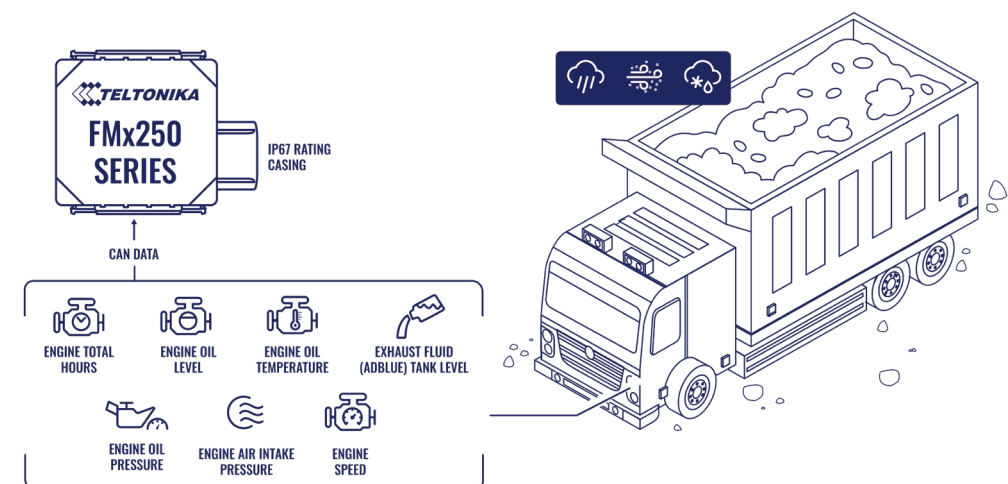
REDEFINING VEHICLE SECURITY WITH BACKUP TRACKING

When asset finance companies in East Africa were faced with widespread vehicle theft and loan defaults, they needed more than just standard monitoring. Teltonika FMB920 vehicle tracker combined with EYE Beacon became the secret weapon in an environment where conventional solutions failed.

Confronting tech-savvy thieves

In the fast-paced cities and remote regions of Kenya, Uganda, Tanzania, and Zambia, our client, a telematics service provider, was struggling with a critical challenge: protecting financed assets from tech-savvy criminals. With a recovery rate of less than 75% for vehicles and motorcycles, each loss meant a financial hit of around €5,000.

Before implementing the solution discussed further, car thieves were tampering with trackers, jamming signals, or completely removing GPS devices. The client had to install as many as four trackers per vehicle to maintain the visibility of their assets. This process added significantly to the cost and made the installation more complex and time-consuming.

The power of invisibility

The game changer was an elegantly simple solution: pairing Teltonika FMB920 trackers with EYE Beacons. While the primary FMB920 device provides traditional GPS tracking capabilities, the wireless EYE Beacon becomes the invisible guardian. Powered by Bluetooth® Low Energy technology, these beacons continue to transmit their unique IDs even if the main tracker is compromised – damaged, disconnected, vandalised, etc. ▶

With a recovery rate of less than 75% for vehicles and motorcycles, each loss meant a financial hit of around €5,000

What makes it so ingenious is that it's based on an ecosystem. With over 100,000 FMB920 models deployed across East Africa, the telematics service provider has created an invisible tracking network. Every FMB920 in the field becomes a potential receiver of EYE Beacon signals from vehicles flagged for recovery.

Our customer has strategically placed FMB920 trackers at city exits, roundabouts, main roads, and various high-traffic areas. Whenever EYE Beacon of a tagged vehicle passes within effective Bluetooth® range, the system immediately establishes its location for tracking and recovery purposes.

From loss to recovery

The results speak for themselves. The recovery rate jumped from less than 75% to an impressive 99%, revitalising the logbook loan business, particularly in the motorcycle sector.

One notable case involved a black Land Cruiser marked for repossession in Nairobi, Kenya. Even though the main tracker had been vandalised, the vehicle repainted white, and the number plates changed, the installed EYE Beacon continued to transmit its unique ID signal. The vehicle was located by another FMB920 in a completely different city and was later successfully recovered.

Even more impressive was the recovery where a car was driven from Kenya to Zambia with its tracker disconnected. Thanks to the undetectable wireless beacon and our client's multi-country presence, the asset was recovered despite crossing international borders.

The future of asset security

The described method has transformed fleet management operations, eliminating the need for multiple installations of GPS trackers and providing proven asset security across the region.

Our client now plans to extend the implementation of this innovative approach to financial institutions that provide asset financing services in East Africa. Reliability and cost-effectiveness make this telematics solution an excellent practice for any fleet asset protection.

> Our customer has strategically placed FMB920 trackers at city exits, roundabouts, main roads, and various high-traffic areas

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ALWAYS HAVE A
BACKUP PLAN

FMx920 SERIES
EYE BEACON

68.058553
16.525418

58.014321
67.524468

Learn more

TAILORING TELEMATICS FOR OEMS

Built-in telematics is a trend to stay and not every original equipment manufacturer (OEM) is interested in reinventing the wheel by learning it all from scratch. For telematics service providers, this presents a chance to become a perfect business partner.

Reinforcing the opportunity, the market potential looks highly promising. Based on Berg Insight estimates, the total shipments of embedded OEM telematics systems stood at impressive 59.3 million units worldwide in 2023 and are expected to reach 82.9 million units by 2028 at a compound annual growth rate of 6.9 percent.

To cooperate with an OEM manufacturer successfully, a tailored strategy is needed rather than just copying the approach used for fleet owners, even the biggest ones. Here are the important factors to take into account from our experience.

Applicable in multiple countries

OEM companies can have quite a vast geography: several manufacturing facilities with a distribution network across different countries or even continents. The key questions to answer are: Where will the vehicles or the bikes with telematics be shipped to? Is it a final country of distribution or not? What are the major differences between the markets where telematics will be deployed?

The solution has to be easily applicable in or have versions for all the locations the OEM is planning to sell it to end clients. At Teltonika, we make sure to have 4G Cat 1 and Cat M1 devices with a choice of regional modems and local certifications, allowing to deploy our solutions anywhere in the world.

Ready for factory implementation

Unlike its after-market counterpart, OEM telematics is normally deployed during the manufacturing process and should be provided in a way that makes the installation during assembly as efficient as possible. It means offering both clear installation instructions and a right device setup.

In this regard, the things to consider include: where inside the transport the device should be installed, how much space is available, what level of device protection is required, ▶

Tailored for native telematics

UNIQUE NO-CASING FTC305
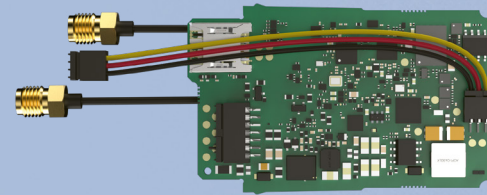
and how to assure the device's access to cellular network and satellites.

For instance, in order to meet e-bike OEM telematics requirements, we designed a special version of FTC305 – a PCB-only device with no casing to be mounted inside e-bike frame, while external cellular and GPS antennas are secured outside the frame.

Focus on compliance

OEM businesses pay close attention to the certification their providers hold and normally maintain a list of prerequisites for potential business partners. Before approaching OEMs, it is worth undergoing software penetration tests to demonstrate client data security as well as considering to obtain ISO certification.

There is no doubt that industry-reputed certification will help to go through due diligence process faster and easier. Here at Teltonika's telematics division, we comply with the following four ISO standards: ISO 9001 (Quality system), ISO 14001 (Environmental system), ISO 45001 (Safety system), and ISO 27001 (Information security management system).

Universal IoT connectivity

When it comes to connectivity solutions for an OEM business, it is impossible to provide a personalised plan for each end client – be it a private vehicle owner or business. Rather than managing a diverse plan portfolio, OEMs are interested in solutions that do not require an individual set up and can be activated automatically.

To assure hassle-free IoT connectivity, we recommend having a plan that fits the geographical coverage of the OEM's

distribution network, comes with a predefined amount of traffic, and supports automatic activation once telematics device is powered on – like Teltonika Global plan.

What is more, the provider's connectivity solution should be implemented together with telematics devices at the transport assembly stage. At Teltonika, we offer SIM card insert services – our products are shipped to clients already with the SIM cards inside. Alternatively, we provide our clients with SIM chips soldered inside telematics devices, the technology known as eSIM module, which means no need to insert anything manually.
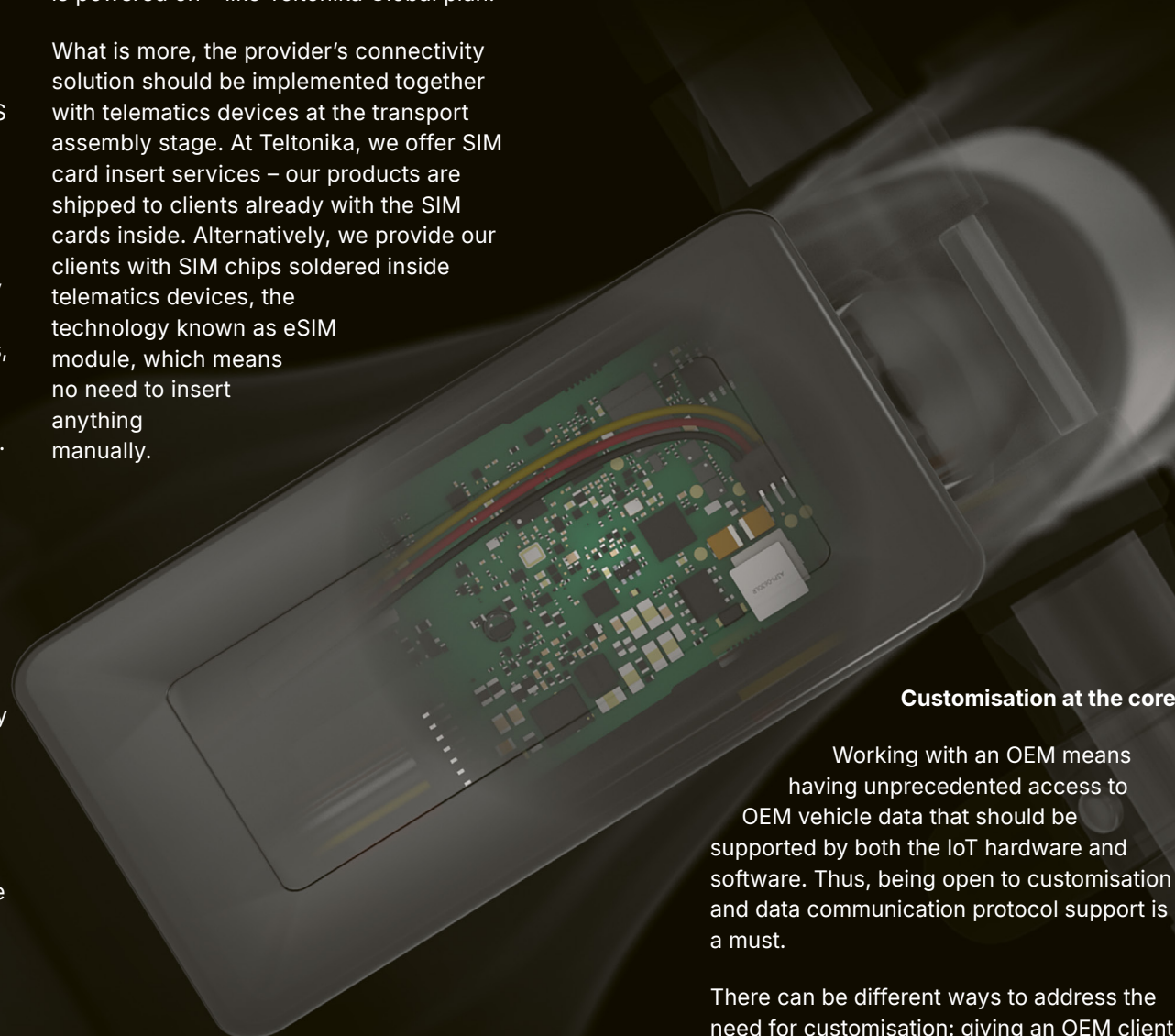
Customisation at the core

Working with an OEM means having unprecedented access to OEM vehicle data that should be supported by both the IoT hardware and software. Thus, being open to customisation and data communication protocol support is a must.

There can be different ways to address the need for customisation: giving an OEM client a solution flexible enough to be modified by the client or assuring all required data support and development to provide the client with a fully tailored solution.
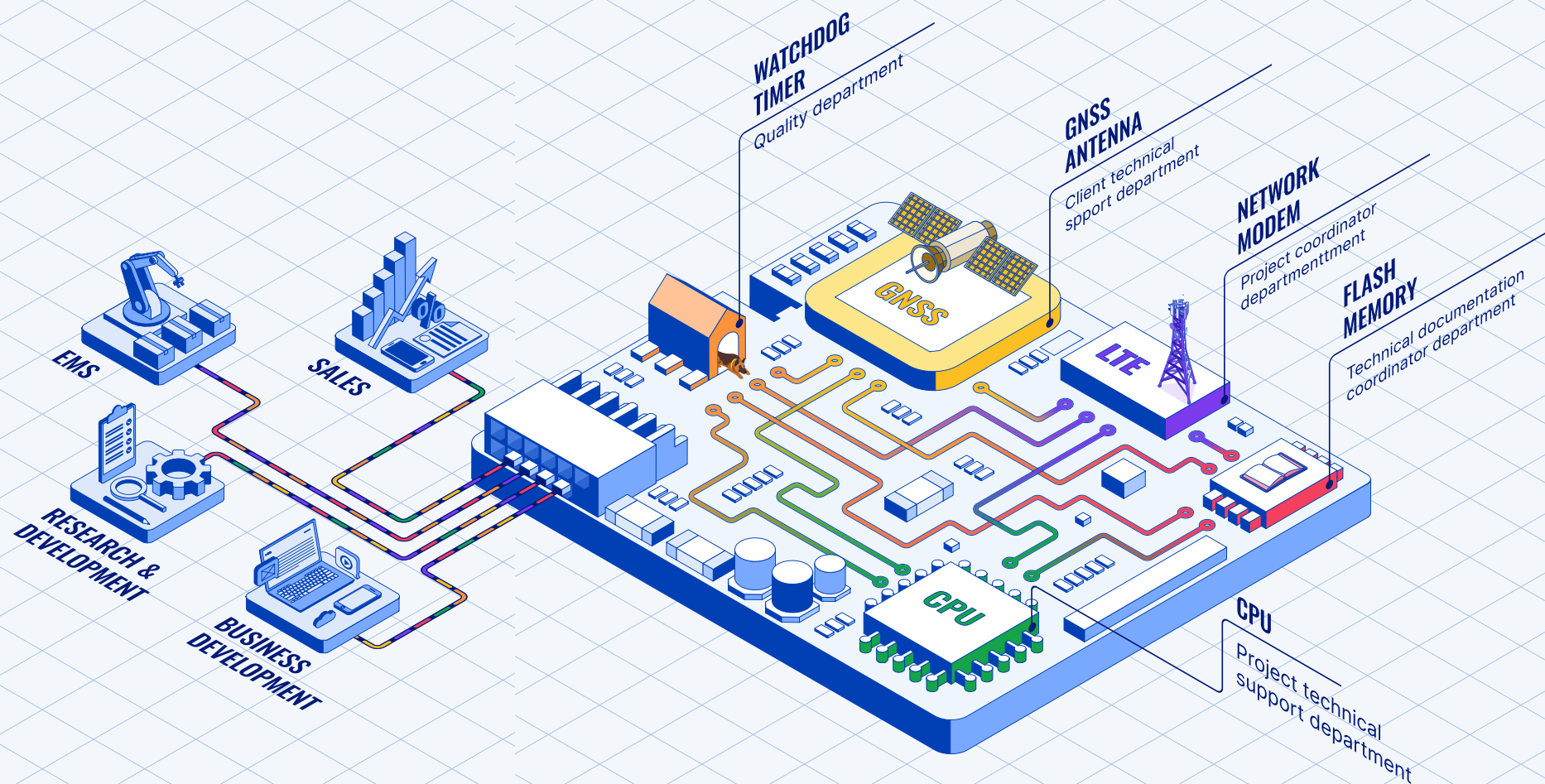
At Teltonika, we embrace both approaches. For vehicle and bike data reading, we provide our clients with the devices that support manual CAN functionality, allowing to configure what parameters from raw CAN data should be collected and how often. As another option, we can develop custom firmware based on a client's use case and make sure that our solution is fully ready for all the company's needs.

Moreover, Teltonika is ready to adapt by providing accessories that are designed specifically for the OEM manufacturing process – for example, custom harnesses to connect tracking devices right on the assembly line.

> We designed a special version of FTC305 – a PCB-only device with no casing to be mounted inside e-bike frame

A SYSTEM BUILT TO SUPPORT

Behind every resolved ticket, custom device setup, and on-time delivery, there is a well-coordinated system of specialists working across the globe.

Like parts of a printed circuit board (PCB), each department in the division plays a distinct role. Individually, they are only components and together they are a system. ▶

Teltonika's Technical support division is one of the most extensive and dynamic in the whole company. Its mission is to simplify technical challenges and deliver meaningful solutions that help customers succeed with telematics. And the vision? To be globally recognised as a leading technical support team powered by skilled individuals and known for innovation, expertise, and efficiency.

WATCHDOG TIMER
Quality department

GNSS ANTENNA
Client technical spport department

NETWORK MODEM
Project coordinator departmenttment

FLASH MEMORY
Technical documentation coordinator department

EMS

SALES

RESEARCH & DEVELOPMENT

BUSINESS DEVELOPMENT

CPU
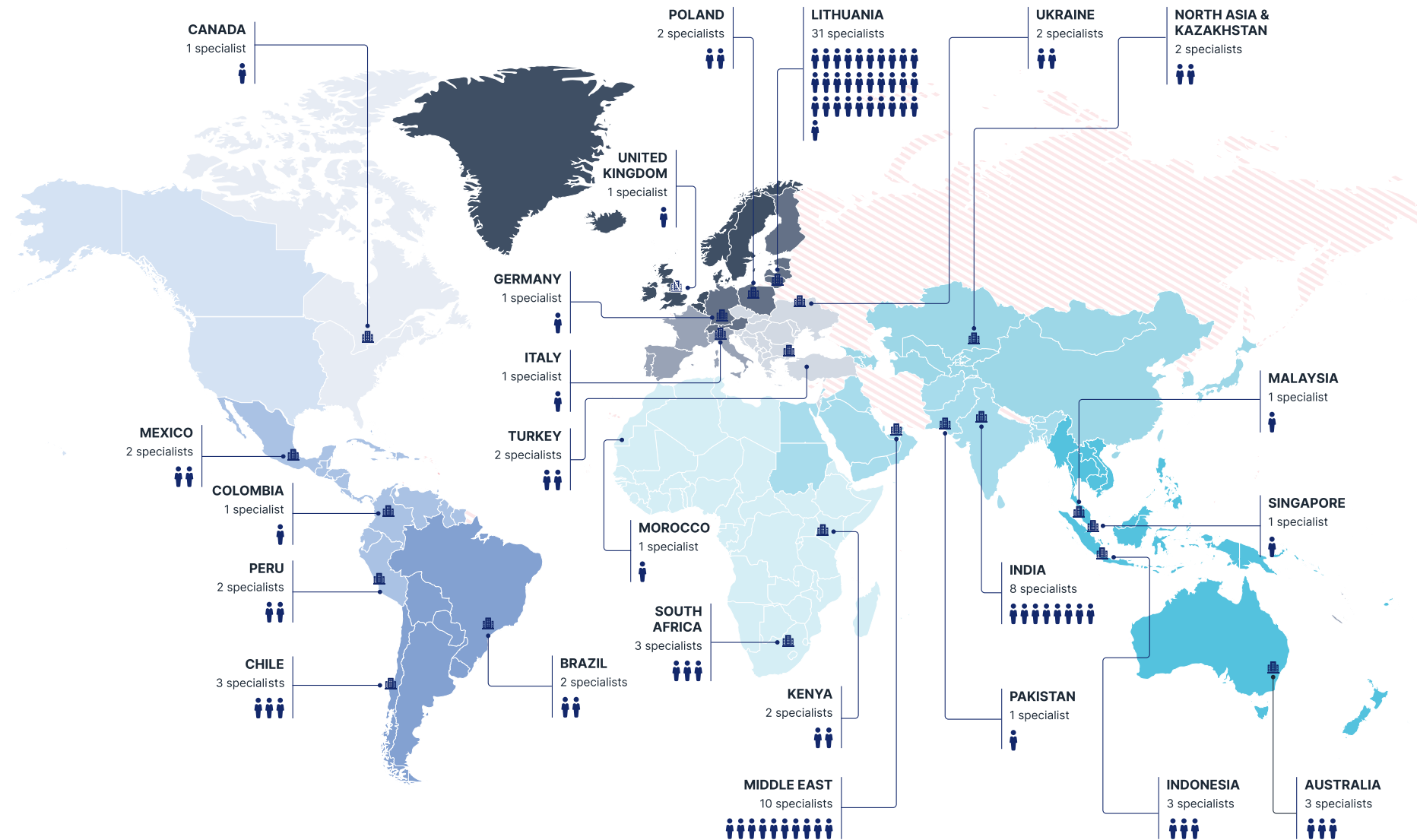Project technical support department

Client technical support department – GNSS antenna

This is the team that picks up the signals – the largest Technical support division's department in size and the first line of contact for most customers. They are the ones who identify an issue, coordinate resolution with other departments, and help point customers in the right direction.

From handling thousands of HelpDesk tickets every month to providing support through live chat, video calls, or in-person visits, this department ensures that every client has someone to turn to. All engineers are assigned by region, which means they understand the specific technical and cultural nuances of each market. Moreover, information is often provided in local language, making communication easier and more effective.

Beyond troubleshooting and helping clients get the best results with our tracking devices, the team educates them how to use Teltonika software and connectivity solutions. What is more, every custom development project (CDP) begins here, where specialists help define requirements, spot inconsistencies, and provide feedback to improve project quality. Global presence also allows to test devices in real environments all over the world, an unmatched advantage when solving region-specific technical issues.

Most recently, the team is involved in implementing AI tools into the HelpDesk system to better responsiveness and streamline support even further. Something for our clients to look forward to. ▶

CANADA
1 specialist

POLAND
2 specialists

LITHUANIA
31 specialists

UKRAINE
2 specialists

NORTH ASIA & KAZAKHSTAN
2 specialists

UNITED KINGDOM
1 specialist

GERMANY
1 specialist

ITALY
1 specialist

MALAYSIA
1 specialist

MEXICO
2 specialists

TURKEY
2 specialists

COLOMBIA
1 specialist

MOROCCO
1 specialist

SINGAPORE
1 specialist

PERU
2 specialists

INDIA
8 specialists

SOUTH AFRICA
3 specialists

CHILE
3 specialists

BRAZIL
2 specialists

KENYA
2 specialists

PAKISTAN
1 specialist

MIDDLE EAST
10 specialists

INDONESIA
3 specialists

AUSTRALIA
3 specialists

Project technical support department – CPU

When projects go beyond the standard, this is the team that takes over. Dealing with complex tickets, custom integrations, and feedback-driven feature development, the Project technical support department acts like the central processing unit. They handle data, solve advanced issues, and keep the entire support structure flexible.

This department contributes heavily to product improvement by working directly with R&D and other internal teams. It also supports knowledge sharing, both internally and externally, helping train engineers and maintain up-to-date technical materials.

From launching sophisticated solutions with key clients to refining platform functionality, this team plays a powerful role behind the many of Teltonika's most demanding projects. ▶

> Project technical support department acts like the central processing unit "

Project coordinator department – network modem

Just as a network modem keeps systems connected, project coordinators ensure everything stays in sync. They align client needs with development and manufacturing, manage backlogging, and oversee risk assessments to keep product launches on time.

When a customer request falls outside the standard offering, they evaluate feasibility and coordinate implementation. Their role is essential for resolving questions, keeping tasks on track, and ensuring that every product leaves the development stage ready to succeed in the real world.

> Just as a network modem keeps systems connected, project coordinators ensure everything stays in sync "

**Technical documentation coordinator department – flash memory**

Accuracy matters in every project, and that's where the Technical documentation team comes in. They can be referred as the division's flash memory, ensuring that every product order code, accessory configuration, and technical description is precise, accessible, and aligned across all platforms.

Their work includes administering inventory management system, overseeing internal documentation, and uploading technical content to the Teltonika website. The department also coordinates approval processes, updates documentation available for customers, and activates free and paid services on various software platforms.

Whether it's a unique engraving request, custom packaging, or last-minute order code change, this team ensures the information flows clearly between departments and reaches the customer exactly as intended. ▶

> Accuracy matters in every project, and that's where the Technical documentation team comes in "
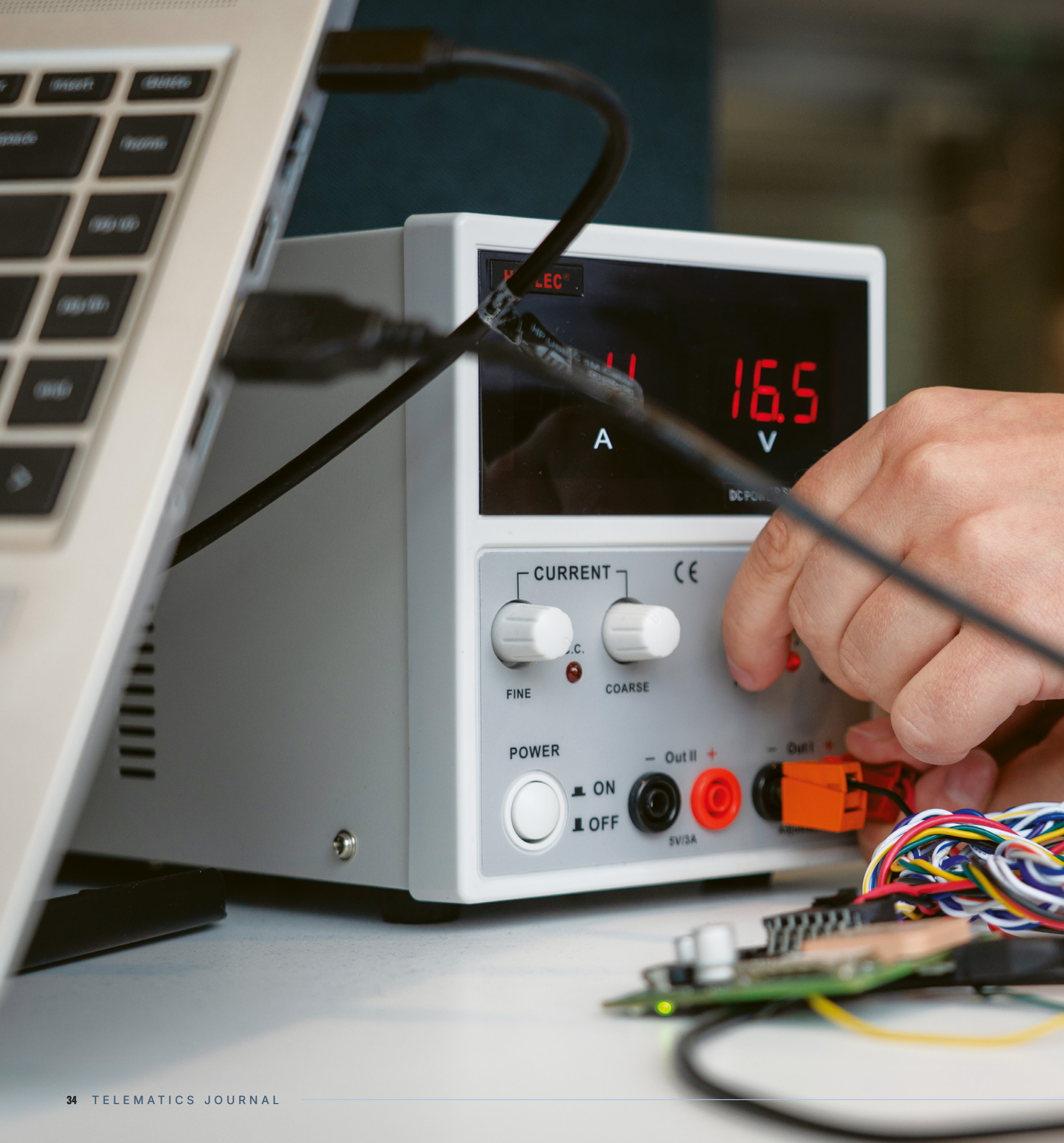
Quality department – watchdog timer

As the watchdog chip of the support circuit, this team makes sure everything runs as expected and steps in quickly when it does not. The department has a dual focus: ensuring manufacturing excellence and providing hands-on technical support.

Their work starts well before a product is sold, through supplier audits, compliance checks, and the meticulous completion of client questionnaires. Once a device enters production and field use, they manage return merchandise authorisation (RMA) processes, investigate non-conformities, and work with engineering teams to implement improvements based on real-time data and customer feedback. The Quality department's goal is to minimise risk and deliver reliable, high-quality products from day one.

The Technical support division at Teltonika is like a PCB – complex, precise, and powered by people. This is a team built to respond, guide, and deliver clarity where it is needed the most. Each department functions as a vital component in a larger system, transforming technical challenges into reliable solutions. Most importantly, they do it with a deep understanding of customer needs to meet every ticket and challenge with precision, care, and empathy.

AROUND
THE GLOBE

Let's explore the world of telematics with Teltonika's devices. In Latin America, we support organic farming with smart monitoring. In Africa, we improve fleet safety and enable critical emergency response. Across Asia, our solutions drive sustainable transport forward. Meanwhile, in Europe, Teltonika helps to meet the high demands of the construction sector. No matter the industry or location, we are ready to solve your business challenges and help you grow!

(CAN-)CONTROL YOUR EV FLEET

Saudi Arabia is actively advancing its electric vehicle initiatives. To support this transition and manage EV fleets more effectively, Teltonika's local business partner introduced a 5-year electric vehicle leasing program.

Instead of requiring upfront purchases, this approach allows customers to access the latest car models through long-term lease. To ensure smooth operations and protect high-value assets, the leasing company used our FMC130 tracker with the CAN-CONTROL adapter.

This solution enables real-time tracking, remote diagnostics, battery monitoring, and controlled engine access. It gives leasing business the tools they need to monitor vehicle usage, maintain contract compliance, and respond quickly when payments are missed or contract terms are violated.

One customer failed to make multiple monthly payments despite repeated reminders. With real-time GPS tracking, the vehicle's

movements were monitored and it was made sure the car was parked in a safe location. Using CAN-CONTROL, the engine was remotely disabled, preventing further unauthorised use. This eliminated the need for costly manual recovery and encouraged the customer to settle the dues.

Mohamad Hani Alfares,
Sales manager

What is more, the solution offers full visibility into fleet activity through CAN data, scheduled maintenance, and geofencing. Its flexible integration with leasing platforms also makes it easy to scale and adapt as business needs evolve.

As the EV leasing market continues to grow in Saudi Arabia, solutions like this help companies manage operations more effectively and ensure safe vehicle usage.

SMOOTH SAILING WITH FMC650

Indonesia is the world's largest archipelagic state, with around 17,500 islands. This vast maritime landscape positions the country as a significant player in the global shipping industry, with international cargo traffic reaching approximately 506 million metric tons in 2022.

To meet the challenges of Indonesia's diverse island region, Teltonika's client chose a tracker from our PROFESSIONAL category – FMC650. They needed a device that could connect to local storage, support multiple digital inputs and outputs, and work reliably even in areas with limited or no network coverage. Thus, FMC650 was the perfect fit thanks to its RS232 interface, large internal memory, high-capacity battery, and flexible I/O options.

By connecting our tracker to their local system through RS232, the client can collect and store data even when a vessel goes through remote areas without network coverage. Later, when the connection is available again, all the data is sent without any loss. Fleet managers get full information about the vessel's activity, even if the GPS signal was lost. And since the company is using a PROFESSIONAL category device, it is easy to add more sensors and features whenever needed.

Indonesia's maritime industry is expected to grow by 16.8% by 2028, making reliable tracking and data solutions more important than ever. With Teltonika's FMC650, the client has built a strong system for vessel monitoring, ensuring smooth data collection and long-term growth in the sector.

Dinisha Ugastasya,
Sales manager

GROWING SMART IN VENEZUELA

n the dry climate of Barquisimeto, Venezuela, traditional soil-based farming comes with serious limitations. To address this, one organic farm turned to IoT to improve how crops are grown and monitored.

The solution includes Teltonika's FMC130 and EYE Sensor, both installed in movable planting benches used for hydroponic cultivation. Acting as mini-greenhouses, these benches provide a controlled environment that can be carefully managed.

FMC130 is used as a static data receiver connected to a 12 V battery, while EYE Sensor monitors temperature, humidity, and movement to maintain ideal conditions and alert staff if something changes. The solution is supported by custom software built on the Wialon platform, which enables early notifications and helps schedule preventive maintenance. For example, if a wild animal enters the area, a buzzer is triggered. The system also detects when a bench is opened or moved, adding extra visibility and control to day-to-day operations.

In a region where agricultural conditions are unfavourable, having the ability to monitor and manage climate variables has made a big difference. The farm can now use resources more efficiently, respond to environmental changes faster, and improve decision-making.

Paola Osorio,
Sales manager

KEEP AN EYE ON

humidity, temperature, movement, and magnet status

EVERY MOTORCYCLE MATTERS

I n Spanish cities, where motorcycles dominate the streets and theft remains a persistent concern, one Teltonika client is transforming urban mobility security. By integrating our trackers into their vehicle monitoring service, they offer a solution tailored for both individual users and businesses.

In the B2C segment, the focus is on proactive theft prevention. With the help of FMB920 and FMB965 devices, end users receive real-time alerts in the event of unusual motorcycle movement, allowing to take immediate action. For example, in Barcelona, a motorcycle in September 2024 was located and recovered within just 30 minutes of the incident being reported.

In the B2B arena, the client is steadily expanding by partnering with companies that manage large motorcycle fleets. Straightforward integration and reliable performance have made our trackers a preferred choice for fleet operators looking to enhance security and maintain better control over their assets.

Jelizaveta Tiurina,
Sales manager

The choice between FMB920 and FMB965 is based on the characteristics of a vehicle and the customer's specific needs. For instance, FMB965 is ideal for motorcycles with lower battery capacity. Meanwhile, both devices offer the core features essential for vehicle security: real-time location, route history, speed, mileage, and stop reports – all accessible through a user-friendly mobile app.

By combining Teltonika's hardware with an intuitive software platform, our client has built a reputation as a trusted name in urban vehicle security.
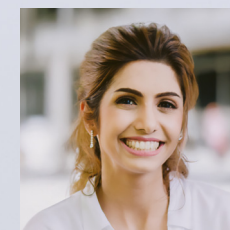
FMC125 TAKES THE LEAD IN THAILAND

T hailand's telematics regulations have grown more extensive in recent years. What started as a safety measure for vehicles transporting hazardous goods now covers a wide range of commercial vehicles, including public buses, vans, taxis, trailers, and trucks with more than ten wheels. To meet these requirements, such transport must be equipped with GPS tracking for real-time data transmission to the Department of Land Transport (DLT) and driver identification through card readers.

Previously, Teltonika supported this standard with the FMU126 model. With this device's lifecycle complete, attention has shifted to FMC125, a 4G LTE Cat 1 tracker fully compatible with DLT specifications and offering greater versatility. It allows driver identification via RS232 connection to the Thai driving license card reader. Its dual SIM functionality ensures continuous connectivity by switching between networks – especially useful for fleets operating in areas with uneven coverage.

The device also enables accurate fuel monitoring by connecting to flow meters or CAN systems, helping businesses control one of their largest operating costs.

Tanisha Pandey,
Sales group manager

Moreover, our tracker is compatible with the LTE bands widely used in Thailand, including 1, 3, 7, 8, 20, and 28, which ensures stable data transmission across the country. For companies relying on real-time tracking, this means fewer interruptions and more reliable performance.

FMC125 is already being used by logistics businesses, rental fleets, and heavy equipment operators to manage vehicles, protect assets, and improve driver behaviour. As Thailand keeps investing in smart infrastructure and digital logistics, the demand for connected fleet solutions is growing and our tracker is well positioned to support that growth.

SOUTHEAST ASIA IS GOING GREEN

The diverse geography and rapid urbanisation in Southeast Asia create unique challenges for sustainable transport. As countries across the region keep on implementing green initiatives, two key priorities are clear: reduce emissions and improve energy efficiency, particularly in logistics and public transport.

Electric vehicle adoption is gaining momentum, supported by government sustainability targets. In March 2025, Singapore introduced new climate goals, aiming to lower CO2 emissions to between 45 and 50 million tonnes by 2035, on the path to achieving net-zero emissions by 2050. Meanwhile, the Philippines continues to face severe congestion issues in cities like Manila, where the rise in vehicle numbers has worsened air quality and raised public health concerns.

Teltonika's telematics solutions are already helping businesses tackle these challenges.

FMC150 tracker, with an integrated CAN data processor and support of over 2,000 vehicle models, gives fleet operators access to essential insights for monitoring vehicle parameters and

Rakesh Raj Kumar,
Sales group manager

improving their impact on the climate. For more demanding use cases, such as logistics or public transport, FMC650 is the option to get reliable advanced data.

By optimising delivery routes, reducing idling time, and enabling smarter vehicle use, both models support cleaner fleet operations to help businesses stay aligned with local sustainability goals and global climate commitments. In a region where infrastructure varies dramatically from city to city, telematics allows companies to operate in a greener way.

THE LIST IS LOOOOONG!

More than 2,000 supported vehicle models

Supported vehicle list

CUTTING IDLE TIME, NOT PROFITS

In central Brazil, a transportation and logistics company was looking for a way to reduce fuel waste caused by excessive engine idling. High outside temperatures meant that drivers often left engines running while stopped to keep the air conditioning on. It became an everyday habit that quietly drove up costs across the fleet.

To solve this challenge, the company equipped its vehicles with Teltonika's FMC130 tracker. Configured to monitor engine-on time without movement, the device helped fleet managers spot patterns of excessive idling in real time. Reports and alerts allowed them to respond quickly and guide drivers toward more fuel-efficient behaviour.

Driver identification was another key advantage. With this feature, the company launched an incentive program to reward drivers who reduced idling times. This not only boosted accountability but also encouraged a more sustainable driving culture.

Claudia Regina Issa Parrero, Sales manager

Since implementing the solution, the company has reduced fuel consumption, improved operational efficiency, raised driver awareness, and lowered CO_2 emissions – saving both money and the planet.

STAY CONNECTED AND SAFE

For logistics companies operating across Africa, fleet visibility means more than just efficiency. It is vital for safety, accountability, and business continuity. Teltonika's client in Zambia, responsible for transporting high-value goods, needed a reliable way to track their trucks and protect their drivers in areas with no cellular signal. The risks were high: costly thefts, vulnerable drivers, and rising expenses tied to vehicle escort and international data roaming.

To solve these challenges, the company used Teltonika's FMC125 device together with Iridium Edge® satellite modem. While our tracker already provides stable 4G LTE connectivity-based tracking with dual SIM support, which is ideal for cross-border data cost control, Iridium Edge® enables seamless satellite communication in places where mobile coverage ends. With this solution, vehicles can be monitored across the entire continent. More importantly, drivers have a critical line of defence – a panic button linked to the satellite connection, allowing to call for help even in remote regions.

In one incident, a truck was ambushed in a no-signal zone by armed attackers. The driver was able to call for help in time, as the alert reached fleet managers immediately, thanks to the satellite transmission. A helicopter with a security team was deployed without
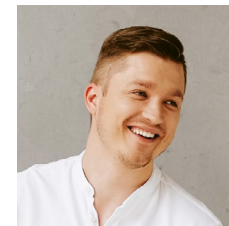
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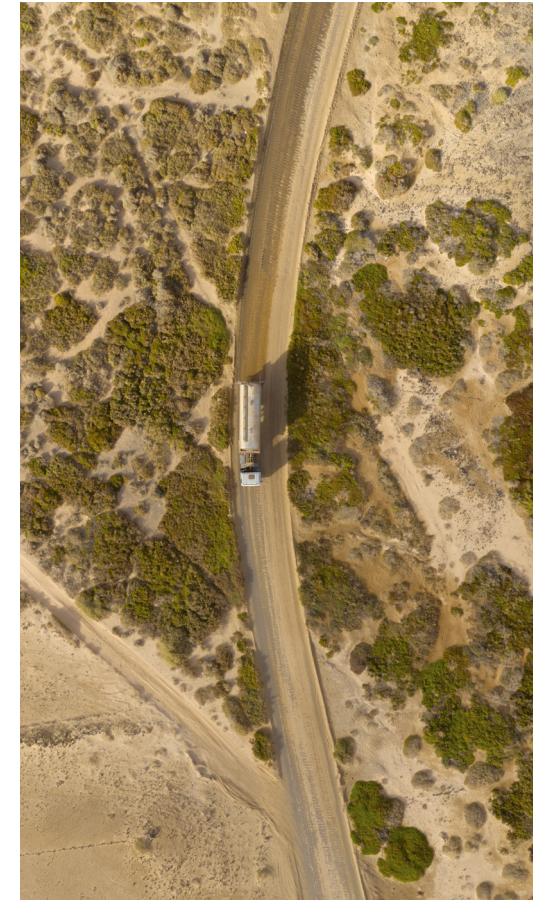
delay, protecting both the driver and the cargo.

Since implementing this solution, the client has not lost a single vehicle. Fuel and data costs have dropped, drivers feel protected, and the improved reliability has helped the company secure more business. In areas where cellular connectivity cannot be guaranteed, this solution has become an essential tool for safety, security, and operational success.

LOST IN THE URBAN JUNGLE? NOT WITH FTC921

Teltonika's client in Dubai faced three key challenges: tracking e-bikes in restricted-use lanes, finding a GPS tracker compact enough for tight spaces, and ensuring it could support a 45 V input, which is typical for electric two-wheelers. To meet these requirements, they selected our FTC921 model – a compact next-generation tracker built on the FT platform. It features a wide power supply from 10 to 90 volts, making it well-suited for e-bikes.

While there are other trackers with high-voltage support on the market, a key advantage of FTC921 is its positioning accuracy. Designed for urban environments, the device ensures precise track even in areas with obstructed satellite signals – a common issue in such megacities as Dubai. A high level of precision is essential when monitoring movements in narrow bike lanes or dense infrastructure.

With reliable real-time tracking, the company has a clear visibility into how and where its fleet is used. They can identify high-demand zones based on pick-up and drop-off patterns and redistribute bikes more efficiently to meet user preferences. Moreover, the solution supports broader city initiatives. Usage data highlights popular cycling routes that can be shared with urban planners to make informed decisions about bike lanes and safer infrastructure.

Previously, fleet management relied heavily on manual processes with limited visibility and higher operational costs. Since implementing FTC921, the company has improved e-bike distribution and gained the insights needed to scale operations with confidence.

Shadan Khyser Pasha,
Sales manager

CITY-PROOF TRACKING

with FT platform devices

FT platform

NO SURPRISES, JUST SMART MILEAGE TRACKING

In Switzerland, flexible car subscription services are becoming a popular alternative to traditional car ownership, offering customers a complete package: insurance, maintenance, taxes, and more – all under a single monthly fee.

Teltonika's business partner needed a reliable way to track mileage and vehicle status across the fleet to avoid post-contract disputes. Their vehicle leasing contracts are based on both time and mileage. While a flexible approach benefits customers who drive fewer kilometres, it also creates a challenge – vehicles are often returned with significantly higher mileage than originally agreed. This leads to unexpected fees for the customer, uncomfortable conversations, and ultimately even lost future business opportunities.

To prevent these issues, the business partner integrated FMC003, an OBD data reading tracker that reports vehicle mileage in real time. When the system detects that the distance driven is approaching or exceeding the contract limit, the team can proactively reach out to the customer and offer a package upgrade. This prevents last-minute surprises and helps maintain a positive client relationship while also creating opportunities to sell higher-value subscriptions.

Eimantas Žuramskas,
Sales manager

Our device sends vehicle DTC error codes, which helps streamline maintenance operations. Since the partner outsources repairs to local repair shops, having early visibility into potential issues adds more value. GPS tracking is also used for security purposes, though thankfully, it hasn't yet been needed by this particular client.

In some cases, where OBD mileage reading is not supported or the port location is inconvenient, the team uses FMC880 model. With this device, vehicle distance log is calculated using an odometer, providing the same visibility and control.

By choosing the right Teltonika devices for the job, subscription-based mobility providers stay transparent, proactive, and customer-friendly – turning potential problems into opportunities.

OEM PARAMETERS

that power decisions

Learn more

KEEPING BACKUP POWER IN CHECK

Due to the ongoing war in Ukraine, reliable access to electricity has become a daily concern for both individuals and businesses. As blackouts and infrastructure damage continue to affect power supply, many have turned to gasoline generators as a critical backup. A telematics integrator in Ukraine partnered with Teltonika to help a national pharmacy chain to manage around 2,000 units of small mobile 3kW generators across various locations.

The company chose Teltonika's FMB204 tracker, featuring an IP67-rated casing that protects it from dust and water, which is ideal for outdoor installation. It also includes the largest internal battery in our portfolio, ensuring that data transmission continues even when a generator is off or disconnected.

The solution has made it possible to automate and simplify generator management across multiple cities and regions. If a generator is moved, especially during non-working hours or too far from the pharmacy, an alert is triggered. Moreover, information on operating hours is provided, allowing to calculate fuel consumption and plan service intervals. This enables faster response to potential issues and helps ensure a continuous power supply where it is needed most.

Alexander Grechanov,
Sales manager

HEAVY DUTY? OUR DEVICES CAN HANDLE IT!

In the United Kingdom, our client, working closely with construction firms, has introduced a telematics solution to help their customers get more from their heavy machinery. While the company's core business is selling equipment such as excavators, diggers, and dump trucks, they saw an opportunity to offer added value through predictive maintenance and machine usage tracking.

The solution includes Teltonika's FMC250 model and EYE Sensors, both perfect for the demanding construction environment. Our tracker features IP67-rated casing and an integrated CAN data-reading chip, making it well-suited to withstand rough outdoor conditions and monitor heavy machinery. It provides live data on fuel consumption, engine hours, and idle time to help operators identify inefficiencies and reduce unnecessary vehicle usage. EYE Sensors are mounted directly onto moving components like excavator arms or buckets. This allows to track their activity and usage hours. Rather than relying solely on engine runtime, service intervals can now be scheduled based on actual equipment movement, leading to more targeted maintenance and better long-term performance.

The solution helps end-users avoid machinery overuse, reduce fuel waste, maintain fleets in better condition, and get lower insurance premiums. With around 300 heavy vehicles already connected, the company plans to scale their operations significantly in the near future.

Mindaugas Pocius,
Sales manager

TELTOHEART: A NEW ERA IN REMOTE CARDIAC MONITORING

Teltonika's innovative TeltoHeart device – a multi-functional medical wristband – is changing how individuals and healthcare professionals monitor heart health. Darius Ilgevičius, director of Teltonika Telemedic, explains how this unique solution makes a difference.

TeltoHeart is gaining momentum in the healthcare sector. What makes it different?

The healthcare industry has long been looking for a reliable, accessible, and efficient solution for continuous heart monitoring. With TeltoHeart, we provide a 3-in-1 solution: 6-lead ECG monitoring, atrial fibrillation detection, and ongoing heart rate surveillance – all in one compact, wrist-worn device. What makes it different is that this level of medical-grade service was previously only possible in hospitals. Now, patients can track their heart health anytime, anywhere and make decisions based on advanced data and insights.

What inspired the Teltonika team to develop such a device?

We identified a growing need for preventive healthcare solutions. Through extensive market research, customer feedback, and internal analysis, we observed a gap in accessible, high-quality heart monitoring. Cardiovascular diseases remain the leading cause of death worldwide, yet some problems go undetected until it is too late. TeltoHeart helps people by giving them real-time information on their heart activity. Our ambition is to make advanced health monitoring available and affordable, securing early detection and timely intervention. ▶

Darius Ilgevičius, director of Teltonika Telemedic

Can you tell us more about the development process and how you ensured medical reliability?

Our journey began with a clear vision: to create a device that meets the highest medical standards and is ready to use for everyone. We invested heavily in research and development, working with cardiologists and healthcare professionals to refine every aspect of the device. Each feature – from the ECG sensors to the atrial fibrillation detection algorithms – has been rigorously tested for precision and reliability. The result is a certified medical device that doctors and patients can trust.

The result is a certified medical device that doctors and patients can trust "

How does TeltoHeart benefit healthcare professionals?

Doctors can now monitor patients remotely, reducing unnecessary hospital visits while keeping a close eye on their condition. The 6-lead ECG offers detailed insights, enabling accurate diagnosis and early detection of irregularities. In addition, our patented algorithm analyses cardiac data in real time, providing clinicians with an efficient tool to track patient progress and adjust treatment accordingly.

How user-friendly is it for everyday users, especially the elderly?

We designed TeltoHeart with simplicity in mind. It features an intuitive interface, clear data presentation, and seamless connectivity to smartphones and healthcare platforms. Even users without medical expertise can easily monitor their heart health and share reports with their doctors with just a few taps.

How accessible is TeltoHeart to the general public?

We believe that heart health should be within everyone's reach. We are doing our best to make the device present in as many pharmacies, clinics, and telemedicine platforms as possible, making it easy to obtain. Its simple, user-friendly interface ensures that even those without technical knowledge can benefit from remote heart monitoring. It takes time and effort, but we are on the right path.

Looking ahead, what role do you see this multifunctional device playing in the future of healthcare?

Slowly but surely, we are already seeing TeltoHeart become an integral part of modern cardiac care. The device is now available in certain pharmacies and clinics, making professional-grade heart monitoring open to more people. But this is only the beginning.

WIRELESS
6-lead electrocardiogram

INNOVATIVE
Atrial fibrillation detection

PRECISE
Continuous heart rate monitoring

We are continually developing new features and improving our algorithms based on actual usage data. Our team aims to create a comprehensive cardiac care ecosystem that smoothly connects patients, healthcare providers, and emergency services. The future of cardiac monitoring is proactive and personalised, and TeltoHeart is leading this transformation.

¡HOLA FROM MEXICO CITY!

Telematics Summit is picking up speed and has reached the third location – Mexico.

The event was filled with fresh ideas and valuable insights to spark new success stories. More than just meetings, these gatherings bring us closer to our clients, create new business opportunities, and highlight solutions that companies may have overlooked or underestimated.

We cannot wait to see you at the upcoming summits. In the meantime, take a look at some standout moments from the unforgettable day in Mexico!

THE WAY TO SAFETY

Hidden in this digital maze is the route from the FMx650 tracker to Teltonika's DSM solution. Can you trace the path and unlock the smartest way to protect your drivers and fleet?

Teltonika DSM uses deep learning and face recognition to detect drowsiness and distraction. Paired with **FMx650** series tracker via RS232, it provides accurate and timely event data.
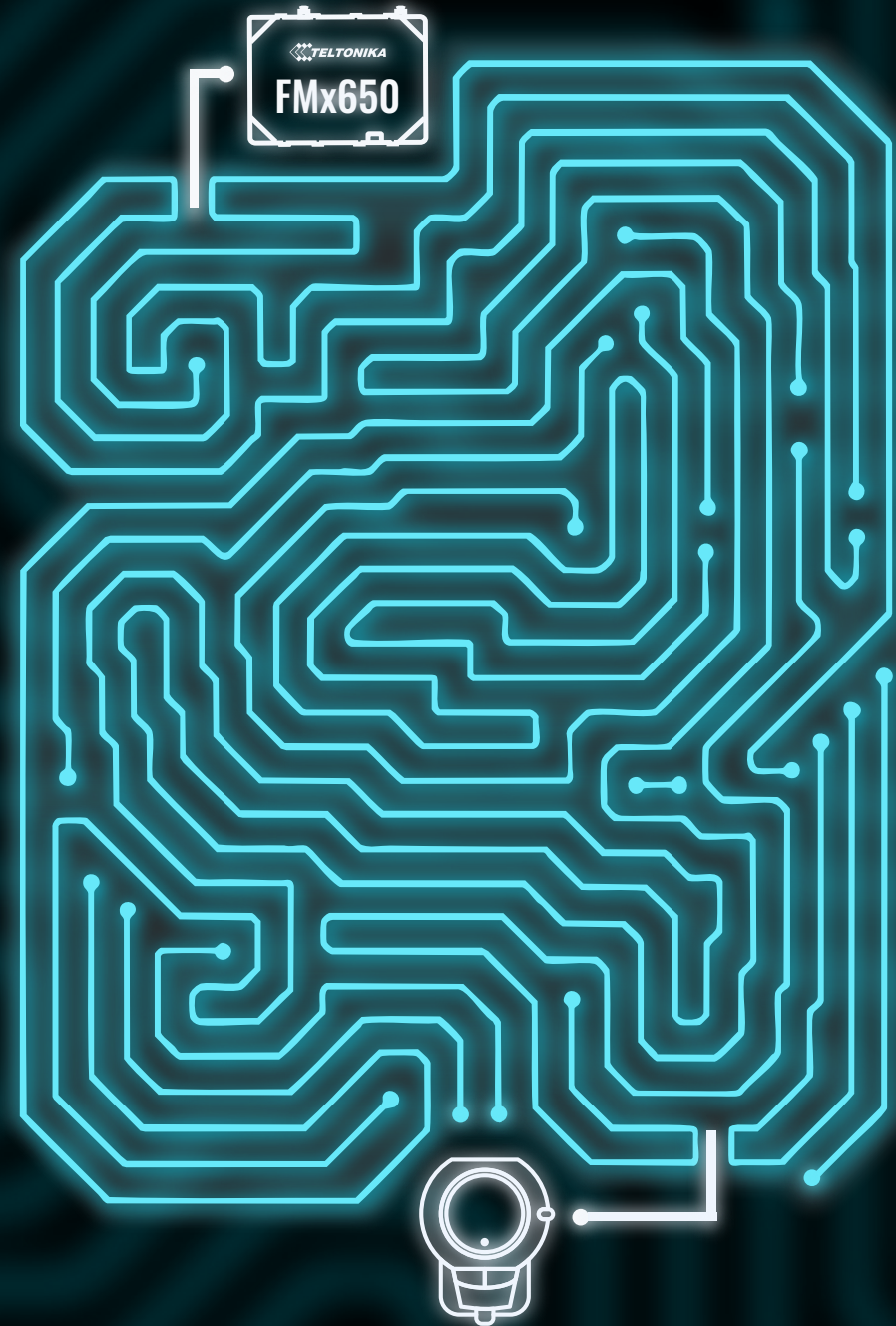
www.teltonika-gps.com
info@teltonika.lt

Saltoniskiu st. 9B-1
LT-08105 Vilnius, Lithuania

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