



Waste Management
Focus on waste
telematics

Intermodality
The challenges
of the Italian System

Industry 4.0
An opportunity
not to be missed

Transport & Logistics
From Telematics to
Internet of things

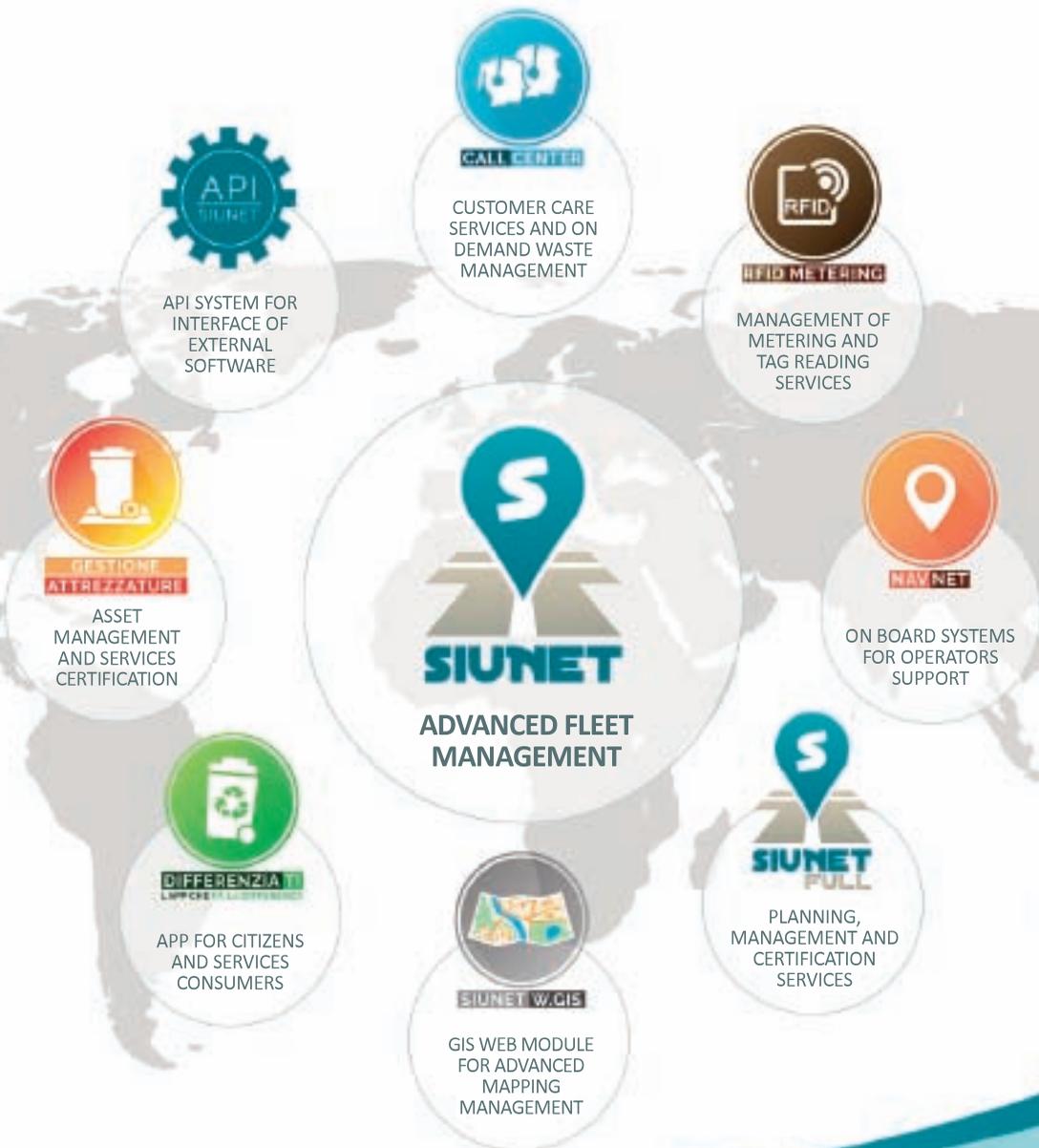
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One Team, one Dream



GROUP

Internet of Viasat

Over the last ten years, a profound change has taken place in the road transport market in Italy and, more generally, in Europe.

This transformation falls within the more general framework of the so-called Fourth Industrial Revolution, which has finally brought about a new paradigm - for Western economies, but not only. With particular reference to our country, the crisis in the sector has clearly shown how the point of no return has been reached a long time ago. Refusing to accept reality, indulging in the thought of the good old times, does not come cheap. Over the last 6 years, almost 17,000 road transport companies have disappeared from the market. According to Infocamere's data, 95,259 companies have registered with the Chamber of Commerce as of 30 November 2016 - about 15% less than in 2010 (112,216). The economic situation has certainly had a major impact on these figures, which are made even more dramatic by the effects of the opening of borders and the advent of competition from foreign operators (especially those coming from the East, from an Italian point of view). However, all of this is just a gust of wind which pales in comparison to the storm of change that still awaits us. Industry 4.0 brings along new processes, models and strategies that will completely disrupt the current understanding of economy and market. The Internet of Things is no longer just that curious neologism, introduced by Kevin Ashton, which used to fascinate conference audiences, but a solid reality on which new industrial models are taking shape. It is no coincidence that the American magazine "Fortune" described 2017 as the year of artificial intelligence, the "fundamental magic" needed to study, analyze and process, through algorithms based on deep learning, large amounts of information (Big Data) acquired by vehicles, things and people, equipped with sensors and interacting with each other through the Web.

Viasat Group's IoTplatform project finds its natural place in this scenario. It is a sort of "application cloud", understood as "middleware" capable of integrating the different platforms of the Group, safeguarding its technology, know-how and specificity from a widespread point of view, free from monolithic IT solutions. It is not just a simple plug&play solution which, by its nature, would tend to level down the offer of platform services according to standardization logics, but a modular architecture that can be tailored to the customer's specific needs, harmonizing the different technological solutions of all the Group's subsidiaries. In this issue entirely dedicated to fleet management, the second of this year on Viasat's 30 years of activity, we will focus on these themes. We will tell you what the Viasat Group is doing on the tracks of its tradition of technological innovation, in order to redesign its own unique identity on the basis of how this epochal revolution will remodel our future in the times to come. As a protagonist, like always.

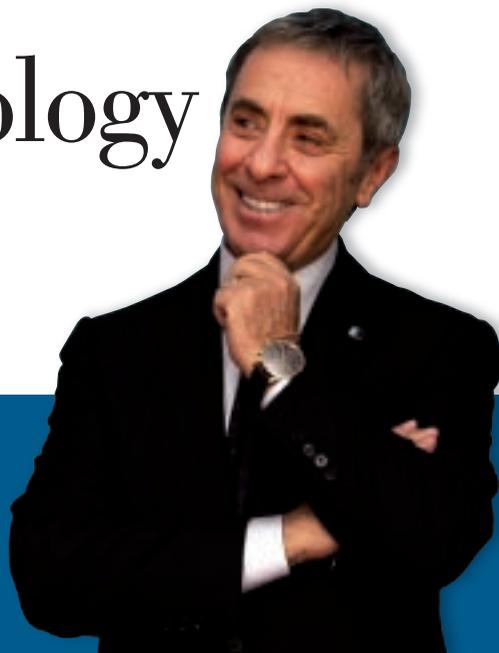
I wish you a pleasant reading.

Francesco Signor

Viasat Group

Not only technology but also people

Interview with **Domenico Petrone**
President Viasat Group



After all the stories of companies in a struggling country and the debates on the economic crisis that we hear, it is nice to see, for once, that Italy is still growing, innovating and creating job opportunities. This is the case of Viasat Group, which was able to become a stable, international symbol of successful Made in Italy with the valuable, direct contribution offered by each of its foreign subsidiaries in their respective countries.

Mr. President, in recent years Viasat has been developing solutions that are increasingly oriented towards the logistics and fleet sectors. Which is the reason of this choice?

Logistics includes services and processes aimed at planning, managing and organizing the flow of goods and information from start to finish. Efficient and sustainable freight transport logistics plays a crucial role when it comes to ensuring that many other services and activities in our economy - from the production of goods to delivery and recycling, from the local to the global level - keep running smoothly. In Europe, the logistics sector accounts for about 14% of the GDP of the entire EU and, taking all activities into account, employs more than 11 million people across all the Member States. It is also expected that the growing demand for freight transport, which is already expected to catch up by 2020 with the peak levels reached in 2008 before the economic crisis, will increase by more than 40% by 2040. We are focusing a lot of our energy on this sector, because we believe that the economic impact of freight transport logistics and its contribution to Europe's growth and competitiveness is extremely significant.

What is the key to further expand this market?

As the competitive and regulatory scenario evolved, the issue of the safety and traceability of goods has become increasingly important in the logistics sector, with repercussions in terms of supply chain ma-

agement and transport. Here, too, information technology, and in particular the Internet of Things (IoT), can offer valuable support, increasing the level of visibility and control over the supply chain. Transport is a good example of how IoT technologies can represent an added value: in fact, this sector needs systems that, on the one hand, allow the planning, management and optimization of flows, both along the supply chain and within complex logistics hubs such as intermodal ones - interports, ports, interchange points, etc. - and, on the other, allow the real-time traceability of goods. Finally, there also is a need to verify the integrity of goods, often carried out by checking the integrity of the container.

From telematics to IoT, then?

Telematics is, by now, an obsolete term that fails in fully describing the current revolution, which is the logical consequence of what has happened in the last thirty years - years in which informatics and telematics converged. IoT has unlimited applications, but they require significant investments in terms of infrastructures to allow smart connection and communication between devices those environments in which vehicles, people and things move. Italy is proud to have companies that reached technological excellence in this field; in fact, the most important European companies in the sector were born in Italy. A perfect example of this is the first Viasat satellite anti-theft device, which dates back to the second half of the '80s. As it has already happened in other manufacturing sectors, the most stri-

king example being Olivetti in the IT sector, today we run the risk, once again, of giving up our role as innovation leaders, compromising an extraordinary opportunity for a brighter industrial and occupational future to the detriment of our country.

Is it not risky to "delegate" success exclusively to data, technology and innovation?

It certainly is. In fact, the technology is very important in this scenario but people are more important. From this point of view, even more important are the investments made by our Group in order to create Operations Centers that meet the most modern quality standards in terms of data security, disaster recovery procedures, interoperability (multiDevice, multiProtocol, mutiServices) and communication protocols in line with the European eCall specifications (which were also discussed in the context of TSP Association) as well as minimum data sets for insurance companies. In addition, our versatile services can be planned in a scalable way according to the specific needs of particular customer segments, such as freight transport and logistics companies, city cleansing, as well as private, public, car rental, car sharing and carpooling fleets. On a final note, our most important characteristic is represented by the sophisticated applications that make Viasat one of the most stratified and diversified Big Data platforms in the world, but also by the hundreds of qualified people providing security and 24/7 services all year round.



Efficient transport for a real social cohesion

By **Antonio Tajani**
President European Parliament

In Europe, the logistics sector accounts for about 14% of the GDP of the entire EU and, taking all activities into account, employs more than 11 million people across all the Member States. It is also expected that the growing demand for freight transport, which is already expected to catch up by 2020 with the peak levels reached in 2008 before the economic crisis, will increase by more than 40% by 2040. The economic impact of freight transport logistics and its contribution to Europe's growth and competitiveness is therefore extremely significant.

“Logistics includes services and processes aimed at planning, managing and developing the flow of goods and information from start to finish. Efficient and sustainable freight transport logistics plays a crucial role when it comes to ensuring that many other services and activities in our economy - from the production of goods to delivery and recycling, from the local to the global level - keep running smoothly”

Efficient, safe and sustainable transport is key for the practical achievement of two of the four ‘fundamental freedoms’ of the EU: the free circulation of people and goods. In the past - from 2008 to 2010 -, I held the position of European Commissioner

integrating different innovative concepts, including the Internet of Things. This is a clear example of the concrete, tangible added value of what Europe is doing to improve the quality of life for all its citizens.

for Transport, so I am well aware of the strategic scope of logistics and freight transport activities, two key sectors for the European industry and economy. Thanks to the development of the so-called trans-European networks (TEN-T, ed), Europe now has a modern, integrated and intermodal transport system, capable of making the most of all the different transport modes: by road, rail, inland waterway and air. Transport, be it passenger transport or freight transport, also allows us to achieve the European social cohesion objectives, as it is inclusive by definition, serving and reaching territories the development of which is lagging behind, as well as the weaker and more disadvantaged parts of society. In addition to strengthening the existing networks and their proper interconnection with extra-European countries, Europe today is also in charge of ensuring that passengers' rights are fully respected, an issue I was very committed to as a Commissioner. In this sense, Europe's recommendations, even when they may concern a single country, are always part of a much broader, European strategy. Although inequalities between the more advanced countries and those in which the efforts to strengthen and innovate are lagging behind should be considered normal, it should also be pointed out that today there are technologies and interoperability standards that allow everyone to make substantial progress on the strategic area of intermodality. For this reason, special and constant attention must be paid to the quality of planning, which, from the outset and at all levels - from European to national, regional and local - must pursue unique and shared objectives, showing consistency and sustainability. The same applies to logistics, which plays a central and crucial role, not only on the transport front, but also for a truly incisive and innovative European industrial policy. I believe that Italy and Europe must equip themselves with a greater number of modern logistics infrastructures, with the dual objective of making it efficient and sustainable, in terms of reducing transport times, consumption and costs, while also fostering the reduction of harmful emissions. I could mention, for example, the satellite navigation technologies related to the European space programmes: Galileo and Copernicus. These entirely European infrastructures allow us to develop countless applications in the fields of transport and logistics, combining and integrating different innovative concepts, including the Internet of Things. This is a clear example of the concrete, tangible added value of what Europe is doing to improve the quality of life for all its citizens.



#Transport, #Innovation, #Network

Interview with **Graziano Delrio**
Minister of Infrastructure and Transport

There is no future in the world of road transport and logistics without intermodality, an old concept that has been mentioned since the 1980s, often promoted, but never really implemented to its full potential. However, if we want to win this challenge, we have to make progress in the fields of technological innovation, digitization, telematics solutions and platform integration, so as to enable people, vehicles and goods to circulate more quickly, safely and cost-effectively.

How important is it to assure the free circulation of people, goods and services, also through an efficient and sustainable freight transport system, keeping the development of the internal market, the prosperity and the economic, social and territorial cohesion of the EU in mind?

I would like to start from the last G7 Transportation, which took place in Cagliari last June and ended with a joint declaration that put the social value of infrastructure under the spotlight. We must focus more and more on high-quality infrastructure projects, as the economic and social development of the European community depends on the mobility of people and on an efficient, en-

vironmentally sustainable and intermodal freight transport system. The quality of our democracy is at stake, because ensuring efficient mobility means improving the quality of life for millions of people and results in a sustainable economic development.

In your opinion, is it necessary to relaunch a new Italian strategy with regard to freight transport logistics?

Europe is one of the world leaders when it comes to reducing emissions, and investing in logistics, with particular regard to sea-rail integration in order to reduce road traffic, is a key component of this strategy. In recent years, Italy has been accelerating to close the gap on this front. Our "iron treatment", together with the "water treatment", are finally bearing concrete fruit: our data about

"From mountain passes to European corridors and ports, we need an interconnected, intermodal, safe and sustainable network. Our objective is a modern system, able to support economy and growth, increase the quality of life in the cities allowing access to territories and creating simple connections between Europe and the Mediterranean"

last year show a significant increase in railway freight transport. We have to keep up the good work. We must finish connecting the last mile that separates ports and inter-

ports from the national rail network and the international routes. In fact, we must consider the whole country as the EU's logistic platform towards the Mediterranean, a gateway to and from other continents.

The EU draws attention to the key role of intermodality and calls for a better integration of multimodal platforms in the planning activities of Member States. How are these comments received in Italy?

Intermodality is the key to our success. In this respect, we have put a system policy in place. I am thinking of Marebonus, an incentive for the creation of "Sea Motorways" the aim of which is to promote road-sea intermodality in freight transport by launching new maritime services or implementing existing ones. Other initiatives are Ferrobonus and 'Sconto Traccia', aimed at developing the intermodal road-rail freight transport system. I am also thinking of the 900 billion € spent on infrastructural works in 2015/2016; of the more than 40 million € invested over the same period in order to digitize the logistics chain (Italy is now the first country in the EU and the third country in the world for customs clearance times, while three years ago it ranked 37th); of the approximately 200 shipyards in 57 ports of national relevance; finally, of the 200 million provided for in the Contratto di programma RFI for railway "last mile" interventions. In short, we have planned and implemented a network of interventions that will certainly elevate our integrated logistics system to the European level.

However, there can be no intermodality without Internet of Things (IoT) telematics. Is this the main route to follow?

Over the next twenty years, we will have to account for major investments in an environmentally friendly and technologically networked transport system. I am thinking, for example, of the smart roads and digital infrastructures that will allow us to have driver-less cars and public transports in the future. All of this will go hand in hand with an improvement in safety standards and in the efficiency of existing transport networks by road, rail and sea; their performance will be improved by implementing new technologies. Infrastructures should be part of a "connected" lifestyle, a gateway enabling economic exchanges, promoting territories and improving the quality of life.



Winning strategies

Interview with **Marco Petrone**
CEO Viasat telematics and Corporate Development Director the Viasat Group

A long and uninterrupted growth in Italy, and a process of internationalization which started in 2013 and knows no hesitations. Today, Viasat speaks many languages and has many homes - from Turin to Rome, via Lisbon, Madrid, Alcalà de Henares, Bucharest, Sofia, Warsaw, Bytom, Brussels, London, Southen-on-Sea, Santiago del Chile, Buenos Aires - in which almost 600 people work, who have helped make the Group the world leader it is today.

Viasat between past, present and future and... a new editorial challenge. What is this about?

For Viasat, the past has been an exciting ride, the present is undoubtedly full of satisfaction and the future looks very interesting. One could think that Viasat was born as "the first, the original satellite anti-theft system". But today, it is no longer just a synonym of security, safety and assistance: it also means Fleet Management. To meet the many and varied demands of the market, the company had to specialize specific teams in different segments. Similarly, 12 years after the first edition of the "Guida alla Sicurezza", in collaboration with public institutions and private companies, we have decided for 2017 to redouble our commitment to providing clear and complete information to all our stakeholders. Thus, here is a publication specifically tailored for all the economic operators who are interested in the transport, logistics and management chain of all the assets and people located in different geographical areas, translated into Italian and English, so that we can reach all our readers and followers more easily.

How is the Group's international growth progressing?

The history of Viasat Group - a company founded in 1974 and established in Italy as first mover and leader in the domestic mar-

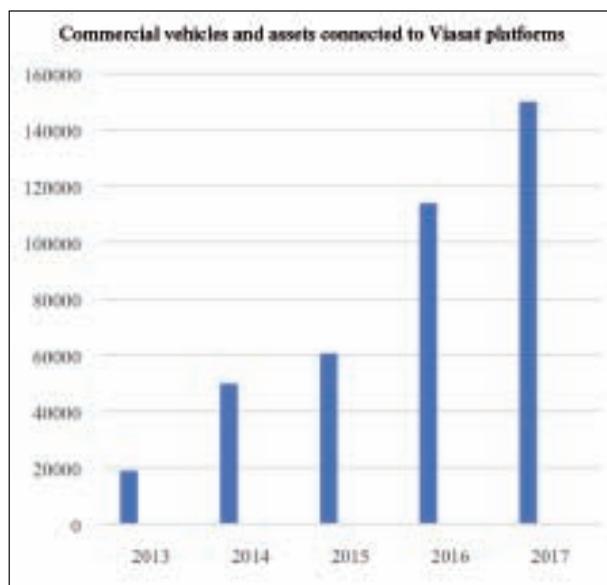
ket, before entering the international competitive scene - is a history marked by continuous, solid and sustainable growth. Its technologies have evolved year after year, progressively expanding the range of the telematics solutions requested by its old and new customers. A few years after the opening of its new international FMS business unit, Viasat has registered numbers from which it is not difficult to see the excellence of its technological, commercial and qualitative offer, with a base of connected vehicles and assets which has grown from almost 20,000 units in December 2013 to almost 150,000 in September 2017.

What is the source of the solidity of Viasat Group's international project?

New fleet management and freight transport technologies are always more important for logistic companies and for the community as a whole. On the one hand, vehicle monitoring and cargo tracking are now an investment that pays off immediately. On the other, in a common European area where people and goods can move freely, and in a historic time when people and goods can hide dangers for society, monitoring a vehicle and tracking what it transports also becomes a collective interest. Let us think, for example, of the risk of terrorism, or of food supply chain control.

So much enthusiasm for a long accepted challenge. Is this the reason behind your success?

Well, certainly one of them. But there are many other reasons why Viasat people take on the everyday challenges of business and professional life with passion and dedication. On the one hand there are their careers, their desire to improve, to successfully carry out the projects entrusted to them, to achieve their objectives, and so on. On the other hand, however, there are profound reasons, ones which our reason pretends to ignore and our instinct reminds us every day: the 600 employees of the Viasat Group, together with thousands of collaborators scattered across 4 continents, believe that these systems can enormously improve the quality of life of people. Together with them, we are happy to see that more and more people are sharing this belief.



A technological beacon for a more sustainable world

By **Massimo Getto**
Vice President and CFO Viasat Group



Can waste become a profitable activity rather than an expensive burden and create new, unexpected opportunities for environmentally friendly economic development and “green”, quality job opportunities in the process? Is it possible to curb improper or illegal practices, making legal alternatives attractive and affordable? Datamove, a Viasat Group company, was born with one objective in mind: to build a bridge between waste management and green economy. We have observed the status quo and identified innovative, unconventional solutions combining growth, employment and environmental sustainability, to help create a more usable ecosystem. In our world, the cost of inefficiency in this sector is going to grow higher and higher, both in economic terms and in terms of sanctions, one of the constant objectives of our work is to offer simple and user-friendly tools to make virtuous behaviors more convenient, thus favoring them. By using the IoT (*Internet of Things*), a network of devices and sensors that communicate with each other and all together with a Central Operations Center, it is possible to help municipalized companies to increase their efficiency and reduce costs, thus helping cities become greener by reducing carbon dioxide emissions, among other things.

“Technology can bring significant advantages for all those involved in the logistics of urban waste. More and more companies are choosing Datamove, A Viasat Group company, for the level of service we offer, the simplicity and user-friendliness of our solutions and the quick return on investment”

Let us imagine a situation in which each garbage bin destined to receive our waste is equipped with a sensor, capable of transmitting data such as position and percentage of filling. And there is more. What if, by gathering enough data about the habits of citizens who leave their waste in a specific bin, a predictive model could be developed allowing to plan vehicle missions in advance? That being the case, these simple data, turned into information, would allow the waste disposal company to plan its activities, choose the most suitable vehicle for each mission and organize routes and itineraries rationally, saving time and reducing atmospheric pollution at the same time. In addition, by consciously and thoroughly using these technologies, municipalized companies can reduce their operating costs by up to 40%. This efficiency is reflected in the collection costs and consequently in a lower expenditure for citizens. But once again, there is more. Through a simple App, citizens can monitor and verify the level of service of the waste collection company. This allows them to know when garbage bins have been or will be unloaded and check the activities of street and urban park cleaners. By using their smartphone, they can inform municipalized companies regarding the disposal of bulky waste, take and send a picture to the company employees in a matter of seconds. It will then be possible to send a suitable vehicle, keeping the time spent by bulky waste on our roads to a minimum.

The IoT even allows garbage bags to transmit useful data. If every citizen had garbage bags personalized with an RFID tag, whenever a bag is placed in the collection bins or loaded onto the garbage truck, we would be able to read the tag and associate it with the citizen's personal data. This technology would allow for an accurate, verified pricing of the collection service. We could pay according to what we consume and not based on parameters which are not directly related to the production of urban waste, such as the size of the house in which we live or

the number of people who live there. As a CFO, I have been in charge of evaluating corporate investments for many years now. In my experience, no other investment has ever had returns so fast, consistent and able to bring significant positive externalities to everyone involved, as those of the companies that have chosen to invest in the IoT and in the analysis of large amounts of data with the right technology.

170 billion dollars: in the years to come, this will be the cost of the growing (70%) urban waste generation on a global scale, the World Bank calculates. This cost is destined to increase, with a potential impact on society in Italy and Europe as well. However, risks can often turn into opportunities. This is the case of what we have described above, in which positive externalities are created for all the subjects involved.

A new suitable mobility paradigm

By **Marco Annoni**
CEO Vem Solutions

The mobility of goods and people is an absolute necessity and holds a great economic and social importance. However, it is also an indirect cause of problems that need to be managed. Road accidents, pollution and traffic congestion are constantly increasing, road infrastructures are saturated and their improvement is made difficult by due to the lack of space and appropriate structural investments. The scientific community attributes to mankind a significant role in increasing the frequency and severity of extreme climatic phenomena and in causing global warming. According to the EU estimate provided in the Transport White Paper, transport accounts for 25% of CO2 emissions, 71% of which are directly related to road transport. On the other hand, goods and people need to move more and more quickly, efficiently and safely.

ICT communication technologies and the Internet of Things (IoT) play a crucial role in solving this dilemma. In order for these solutions to become effective and economically sustainable, the evolution of the different solutions in the domain of the Intelligent Transport System (ITS) - this is already taking place at a multinational level, pushed by technological and market factors that are not integrated enough - must prevent a fragmentation of solutions and ensure interoperability at European level. In this sense, Telematic Service Providers (TSPs) can play an important role by proposing and developing new co-operative business scenarios based on replicable, standard technical solutions. At a national level, the Viasat Group is a leading player and is favoring this approach together with the other members of the TSP Association.

The objective of the European Commission is to spread the adoption of ITS solutions in order to guarantee system interoperability at European level, ensuring permanent access to information, continuity of service and finally the creation of effective cooperation models that can be applied to the different actors in the transport sector. In this process, countries are asked to harmonize their respective national strategies with the aim of creating an interoperable transport system at the European level, suitable for urban and goods transport, in order to reach the zero emissions objective by



2030. The identified areas of intervention focus on different aspects. First the streamlining of the supply chain by implementing appropriate supply systems, in which deliveries and loadings within urban areas are coordinated. Then the introduction of access and circulation control mechanisms for commercial vehicles in urban areas, through incentives for vehicles with low environmental impact and the introduction of restrictive regulations for city access, require the widespread adoption of ICT. Or the maximization of the use of ITS solutions and systems to streamline logistics operations and the loading/unloading process; managing travel times by avoiding traffic-prone routes. Another solution is the adoption of the practice of scheduling deliveries outside of working hours, thus encouraging the use of infrastructures when the traffic is lower. At

last the creation intermodal infrastructure networks for the conversion of urban freight transport into other means of transport with a lower impact (e.g. City Logistics scenarios).

In this globalization process of telematic solutions, Viasat Group will certainly play a leading role, also thanks to the growing presence of its subsidiaries in many European countries. It is also worth mentioning how service scenarios that apply the IoT paradigm to fleets are gradually developing. Technically, these data can be transferred from the "smart" sensors via a vehicle gateway to a Big Data ICT plat-

form, capable of collecting and processing the data, carrying out analyses and providing services. Sharing these data anonymously through standard and open protocols will allow the creation of a new generation of services for road transport, both telematic and dedicated to mobility planning and management by public entities.

As we understand, the key factor for these scenarios is the adoption of common protocols for the exchange of these data and the creation of a modern, flexible regulatory framework at an European level in order to accelerate this type of development, in which Viasat Group aims to play a leading role in terms of technical evolution, service portfolio and commercial presence.

"The management of commercial vehicle fleets through the IoT requires the adoption of common protocols for the exchange of data and the creation of a modern, flexible regulatory framework at the European level in order to accelerate this type of development. In this context, the Viasat Group aims to play a leading role in terms of technical evolution, service portfolio and commercial presence"

tion initiatives at key mobility points such as interports, hubs, logistics nodes, motorway segments, etc.

To make this real, Viasat can provide various solutions, ranging from the supply of raw data, to more in-depth analyses (dashboards, cartography, reports, geofencing applications) with details on: traffic information and control; origin and destination matrices; commuting traffic to/from interchange nodes; routes and distances covered; parking maps; planning and access of commercial vehicles in controlled areas; loading/unloading of goods in the interports and parking time inside the areas; analyses for different periods (hours/days/months...), on specific road areas and segments; road conditions and dangerous locations. All this comes with the option of including information on vehicle type and, if necessary, transported cargo type.

“Through the analysis of data, it is possible to create services that can positively impact the security of drivers, as well as extraordinary opportunities for public and private companies that choose telematics to optimize the management of their business and to improve their offer of mobility-related services”

Depending on contingent requirements, it is also possible to modify the spatial and temporal boundaries of the analyzed areas from time to time, in order to extract information, process it and visualize it on appropriate dashboards, and then proceed with an evaluation of the appropriate interventions. Finally, it is possible to customize views, information layers and reports as needed. The data and information are acquired by Viasat Group through its communication software; they are processed and stored by Viasat and Vem in full respect of the customers' privacy. This huge amount of information, if properly managed and processed, makes it possible to create services that can positively impact the security of drivers, as well as extraordinary opportunities for public and private companies (Telco, PA, insurance companies, car renters, transport and logistics companies, etc.) that choose telematics to optimize the management of their business and to improve their offer of mobility-related services.



Viasat Group, a first-class database

Thanks to its consolidated presence in the LBS (Local Based Services) market, Viasat Group can count on one of the most important and consistent telematic databases at the European level, powered by information systems for the real-time collection of mobility data, which are collected and transmitted by dedicated on-board units. Viasat S.p.A. and Vem Solutions, both 100% controlled by Viasat Group, manage the data on behalf of the Viasat Group. Over the years, they have gained significant experience in the big data sector: 12 billion locations in Italy are monitored and analyzed every year, on the routes covered by over 25,000 commercial vehicles and over 500,000 cars, which amounts to approximately 2% of the vehicles circulating in Italy today (ACI and ANIA, 2015). This percentage varies depending on the marketing of insurance policies by insurance companies. Taking into account the European footprint of all its subsidiaries, the Viasat Group currently boasts a customer base of commercial vehicles (both light and heavy) of over 150,000 units, which makes it one of the leading Fleet Management operators in Europe.

Transport Authority: the pivotal role of Big Data with regard to competition

How to manage the major changes which are taking place in the transport sector, and the need to respond to the growing needs for mobility through integrated services: these are two major themes, two priorities at European level, taking into account the centrality of mobility as a service based on digitization, sharing and sustainability. Technological innovation and digitization are profoundly changing the way services are organized and the demand for mobility. In this context, premises must be created to ensure that the market stays open, preventing all kinds of digital monopoly and making it so old dominant positions are not transferred to new, innovative markets. “Today, Big data - as the President, Andrea Camanzi, says - play a pivotal role with regard to competition. It is precisely on

these premises that the Authority will adopt the next regulatory measures, aimed at maintaining the advantages for both companies and citizens, in terms of choice and quality of service, in the medium and long term. In this respect, the technology platforms that offer mobility services need to be carefully, sparingly and proportionately regulated in order to maximise their benefits”. Many companies have already integrated a global vision into their development strategies and competitive technological choices. They should be supported as long as they keep markets open to new entrants and create opportunities for more advanced mobility services, which are now made possible, among other things, by the technological upgrading of infrastructures.



The safe route for business comes from the IoT

// In the commercial vehicle fleet sector, the development of IoT (Internet of Things) technology, thanks to the potential of vehicle connectivity, can bring important benefits in terms of increased vehicle control, rationalization of costs and management of the information which is already at a company's disposal". **Angela Tumino and Giulio Salvadori, Directors of the IoT Observatory of the Politecnico di Milano's School of Management**, will 'discuss' about the world of technological evolution in Italy.

Which are the numbers of IoT in Italy?

During 2016, the IoT market in Italy has reached 2.8 billion euros, showing a very high growth rate (+40%). This is an excellent result, which confirms its centrality with regard to the digital development of our country. A significant contribution to the growth of the Italian ICT market - which as a whole grew by 1.8% over the same year, reaching 66.1 billion euros - is directly attributable to IoT solutions.

What kind of potential does it have?

A huge potential. For example, we expect the Smart Car market, which is already very important in Italy, to keep growing significantly over the next twelve months, thanks to the increase in natively connected cars. The expiry date of the eCall regulation is drawing near, but the market seems to have gone so far as to "surpass" it. All this will promote the adoption of Smart Logistics solutions to support the transport sector (250 million euros, 9% of the market), to manage company fleets and satellite anti-theft systems. By the end of 2016, more than 800,000 freight transport vehicles were connected via SIM card.

Will this impulse also come from Industry 4.0?

Of course. One area in which we expect more dynamism in 2017 is the Industrial IoT, an issue of absolute importance within the recent innovation process that production systems are experiencing with the paradigm of Industry 4.0. In this case, we hope that market growth can be supported by the incentives provided for in the Piano Nazionale Industria 4.0 (the so-called "Calenda Plan"), which provides for investments in research and development, as well as tax incentives, over the next four years (2017-2020), to the benefit of companies that will invest in technologies and projects that support the Fourth Industrial Revolution.

In a sector which is looking for innovation such as the road transport and logistics one, what role can the IoT play?

In the Smart Logistics area, there are consolidated solutions for fleet management which use the satellite locationing of vehicles to support routing and/or freight transport monitoring activities. Most of these solutions use identification and localization functions to optimize the transport process (real-time updating of travel plans) or to assess the quality of the services offered. Also, a simple identification of the vehicle allows the automatic management of access control, automating the recognition process when entering or exiting a terminal. The technologies supporting these applications are now ready, which should help encourage their propagation, with clear benefits in terms of internal process quality (e. g. planning) and effectiveness (e. g. the increase in revenues resulting from greater customer satisfaction).

Which is the most interesting solution?

Solutions that, other than identifying and locating vehicles, add information gathered through the integration with the vehicle's on-board system and through specific sensors. Possible uses are weight, fuel consumption and tire pressure measurements. This trend is leading to even more elaborate applications, where the emphasis on security is related to management within complex logistics centers such as ports. In contexts like these, IoT technologies are integrated into complex solutions for the localization of operators, the monitoring of environmental and context parameters, the verification of each operator's security profile and of the area in which they are operating.

What is the key factor to help the IoT market grow further in Italy?

At this stage, we believe that the key to further growth in the IoT market is the development of value-based services that take ad-

vantage of the opportunities offered by the connected objects. For example, connected cars (Smart Cars) will make new services possible related to safety, maintenance, navigation, energy saving and shared mobility. In industrial contexts (Industrial IoT) the monitoring of the operation of production plants will introduce predictive maintenance logics, probably even the practice of paying for machinery on the basis of their actual use (pay per use). Looking at areas that are closely related to Public Administration - such as the Smart City - the huge amounts of data that could be collected by objects in the urban context could allow the development of "operating systems" to better govern the territory and develop valuable services for the community.

"The time has come to surpass the current connection level of objects, shifting our attention to the services that they enable. To do this, it is necessary to identify the right strategies to exploit the data collected by the connected objects, which conceal a huge, largely unexplored potential"

As IoT solutions become increasingly popular, companies are beginning to realize the potential of data recorded by smart devices. With regard to research, the Observatory has formalized five methods to exploit IoT data. Not all the data evaluation schemes presented are equally "mature" and widespread in the IoT panorama. Information has been collected on 53 projects started in Italy and abroad, in which data gathered by connected objects were exploited. The results are shown in the table below.



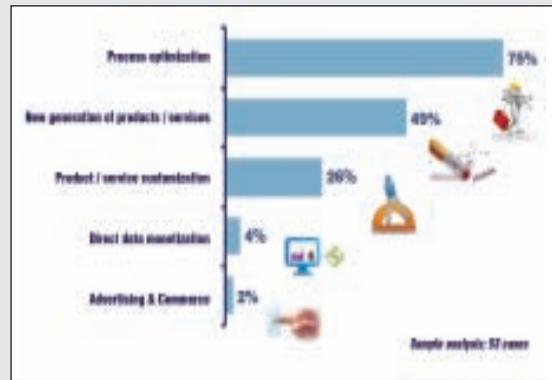
VIASAT BLUTRACK, THE EVOLUTION OF TRANSPORT

As the competitive and regulatory scenario evolves, the issue of the safety and traceability of goods has become increasingly important in the logistics sector, with repercussions in terms of supply chain management and transport. Here, too, information technology, and in particular the Internet of Things, can offer valuable support, increasing the level of control over the supply chain. Intermodality, in fact, requires solutions specifically designed to track goods regardless of the means of transport used to transport them. This is why Viasat launched the new BluTrack, specifically designed to protect goods during intermodal transport. After being coupled with the cargo unit, this tracking device follows all of its movements and continuously sends, at set intervals, its position to the Viasat Operations Center. From the Operations Center, the data related to the single devices are then forwarded directly to the PCs of the cargo owners. The devices are installed on the cargo itself, giving its owners the possibility to check and monitor its exact position even after a change of carrier. In addition, BluTrack is powered by extremely long-life batteries, also available in rechargeable version, and offers a range of sensors that can notify different transport parameters: temperature, humidity, door opening, crash, motion status or prolonged stop. In addition, other solutions are available which are more focused on driver protection. The issue of driver safety comes first, and every precaution must be taken to ensure it. Sirens and other kinds of alarm are just some of the systems that guarantee the drivers' peace of mind.

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CMA
MONITORING
a Viasat Group Company

AUTOMONITORING

YOUR FLEET UNDER CONTROL

- COMPANY VEHICLE MONITORING
- ADVANCED SECURITY SYSTEM
- DRIVING STYLE ANALYSES
- PETROL CONTROL
- SETTLING DRIVERS' WORKING TIME
- ROUTE HISTORY
- REMOTE TACHOGRAPH READOUT
- ONLINE STATUSES FOR VEHICLE ARMING
- BORDER CROSSING REPORTS, ETC.





In this way, the interests of companies and end-customers converge, which facilitates the achievement of their respective objectives and a fairer and more sustainable sharing of costs (in proportion to the actual benefits received by each party). As a consequence, insurers and insured become allies when it comes to the effective and correct use of technology, and in using technology itself in order to find more responsible, careful and virtuous ways to operate their vehicles - which, in fact, should be considered a common purpose. In fact, it has been demonstrated that careful and prudent driving behavior not only results in a containment of insurance risk, but also reduces fuel consumption, wear and tear and vehicle maintenance costs - all factors which directly and immediately benefit the operator/owner of the vehicle. It is in the road transport and commercial vehicles sector, much more so than in others, that the perfect ecosystem can be created - one that does not regard telematics as an instrument for exclusive and dedicated use of a single part of the supply chain, but as an open and flexible platform, able to support the functionalities and fulfill the needs of the entire supply chain. All of this finds context in a logic of interoperability and portability that crosses the boundaries of the insurance sector, to

The telematic policy, more than simple insurance

By **Paolo Ravicchio**
Head of Insurance Business Unit Viasat S.p.A.

Telematics is profoundly changing the insurance market and the traditional business model of insurance companies, also and above all because it requires them to put themselves at the service of the customer. It undoubtedly is - in the opinion of operators from this sector and as well as others - the great protagonist of this new season. In addition to the essential risk containment goals, which insurance companies have understandably prioritized, the latter have in fact been looking once again at the "Black Box" technology as an extraordinary solution, able to enrich and differentiate their commercial offer, in order to captivate the interest and satisfaction of customers. This goal is not to be achieved only through discounts on the policy premium, but above all by offering high added value, highly innovative services. All of this becomes even more relevant in the road transport sector, where the need for efficiency and cost-effectiveness is even greater, and where the Black Box can be used at the same time, both by insurance companies as a tool to monitor behavior, habits and driving styles, and by the insured as a work tool to control, manage and protect their own vehicle or fleet.

the advantage of all actors and operators in the sector. As a consequence, the insurance market is experiencing great turmoil on this front. The leading companies are engaged in the task of remodeling their offers completely in terms of tariffs, policy contents and services offered. As it is already happening with cars, alternative premium calculation mechanisms are in fact being introduced for trucks as well, based on telematic driving indicators in addition to the traditional risk parameters. Moreover, insurance guarantees and coverage conditions can now be improved thanks

"It is in the road transport and commercial vehicles sector that the perfect ecosystem can be created - one that regards as an open and flexible platform, able to support the functionalities and fulfill the needs of the entire supply chain. All of this finds context in a logic of interoperability and portability that crosses the boundaries of the insurance sector, to the advantage of all actors and operators in the sector"

to the contribution of telematics, which increases the security of vehicle and transported goods by reducing the risk of theft and robbery and by facilitating driver assistance and protection in case of accident, aggression or sudden illness. On top of it all, as we have already mentioned, high added value, special telematic functions and services for the monitoring and professional management of vehicles are being offered.

Thus, insurance policies in the road transport sector are now more than just a remedy in case of accident: they become an extraordinary element of prevention, protection and service thanks to the contribution of telematics. That being the case, a question arises: does insurance 1.0 still make sense?



Welcome to the world of Viasat Fleet

Interview with **Daniele Simonaggio**
Fleet Business Unit Manager Viasat S.p.A.

Comprehensive satellite locationing solutions for every need. Useful and practical for those who only own a few vehicles; evolved and performing for those who have large fleets to manage. Improving business management and optimizing operating costs has never been easier and more cost-effective. Welcome to the world of Viasat Fleet.

Let's start from the team. What is Viasat Fleet?

The Viasat Fleet division is made up of a team of professionals, technicians and experts focused on the road transport and logistics market. The information that we put at the fleet manager's disposal through an intuitive dashboard and specific, easy-to-use reports, ranges from vehicle use data to driving style data, from vehicle and load security data to mission management data, including real-time communication with the driver and much more. The quality of Viasat Fleet's telematics solutions provides operators in the mobility and road transport sector with the best possible business management and the highest possible degree of security and cost-effectiveness by reducing operating costs.

So, has the time finally come for telematics?

Viasat has been on the market for decades and is regarded by the industry as a reliable and experienced partner. Our telematics solutions provide an effective answer to the monitoring, locationing and reporting needs of vehicles, goods and activities. They make it possible to check fuel consumption, lower insurance costs, provide security and assistance for vehicles, goods and people, allow in/out communication between headquarters and vehicles and the recovery of excise duties. We support our customers through our 5 proprietary Operations Centers, supported by 25 outsourcing Operations Centers in Italy and abroad, active 24/7, 365 days a year. A team of specialized operators, a capillary network of highly qualified service centers and the ability to supervise the entire operating chain by controlling the entire production, distribution and supply cycle of services, are among the strong points of Viasat's offer, which lays its foundations on consistently high quality standards and a high level of operational flexibility, which allows us to meet the needs of our customers in the best possible way.

Traceability, security, cost-effectiveness: I think these are the watchwords among Fleet Managers. How do you ensure these conditions?

The traceability of transports and shipments is ensured through the Viasat Fleet Web console, which allows road transport companies to track, locate and monitor the vehicles of their fleet and the goods they

transport at any time and from any online workstation. This allows companies to optimize their trips, schedule missions via tablet/on-board satellite navigator and activate a constant, direct contact between Fleet Manager and driver. By remotely controlling the fleet, companies can know with certainty the entire route taken by the vehicles, but also the exact time of delivery, the level of fuel in the tank or how long the driver has been driving. The on-board systems are certified and equipped to guarantee the highest security levels, with 60 types of alarm sent to the Viasat Fleet Web console and more than 40 automatic alarms managed by the Viasat Operations Center, which provides 24/7 assistance to our customers and guarantees maximum safety for both drivers and transported goods. All these elements lead to a reduction in costs, achieved through an optimal management of the company's activities. In short, nothing is left to chance.

One last question. There is a lot of talk in the sector about chronotachographs and excise duties reimbursement. What can you tell us in this regard?

The control bodies have stepped up their vigilance on the roads and within companies, with the aim of ensuring that the regulations about the drivers' driving times, breaks and rest periods are properly observed. Viasat Fleet allows companies to remotely and automatically download the data recorded by the chronotachographs in accordance with the law. The "Real Time" function allows them to keep the drivers' driving hours and rest periods under control in order to better plan their missions. This allows for the analysis of infringements with the aim of avoiding heavy penalties.

What about excise duties?

Fuel accounts for 90% of the total expenses sustained by transport operators. This is why the reimbursement of excise duties is so important for transport companies, especially in a difficult economic situation and in an increasingly competitive market context like the ones we find ourselves in. In Italy, as in the other European Union countries, motor fuel is heavily burdened. This is why Viasat, thanks to its partnership with Tecno Accise, a company that has been operating in the sector for over 15 years, deals with all the practices necessary for recovering excise duties, supporting with its professionalism and competence all the companies that transport people and goods from Italy to abroad and vice versa.

Not just technology but vertical know-how and simplicity



By **Alessandro Peron**
CEO Team.ind Solution

In order to be more competitive in an increasingly global market characterized by a high level of competitiveness, companies that operate with mobile fleets over a territory must focus harder and harder in order to optimize every resource and be able to make real-time decisions, which is strategic for their business.

In this context, technology is now essential for companies to operate effectively and efficiently in the sector: it enables faster communication between headquarters and traveling personnel while automating, expediting and optimizing tasks and activities; it facilitates document digitization and file sharing to/from anywhere; it allows access to information in a practical and fast way, making appropriate, timely decision-making possible. In other words, technology makes it possible to work better, more productively and efficiently.

A relatively new member of the Viasat Group's "big family", Team.ind Solution is a system integrator specialized in creating intelligent technological solutions for the world of mobility. Our solutions allow to automate and simplify the management of field personnel and vehicles in motion over a territory, minimizing the waste of time and resources. The information systems we developed are an advanced tool for accurate industrial accounting, which involves the identification, optimization and control of assets, costs and processes. However, in order to concretely support business operations, technological solutions must be able to translate the particular needs of each sector and company in a timely fashion.

In the field of mobility, each sector has spe-

cific needs; if we want technology to bring real added value to companies, it is essential to understand how they operate, which internal processes need to be optimized and what are the dynamics and the challenges posed by the company's activity and market. This is why our technology suites are based on a vertical industry know-how. Over decades of field experience, working directly with companies, we have developed specific expertise in different markets. This vertical know-how has led to the creation of a number of ad-hoc solutions such as AssistenzaSemplice, LogisticaSemplice and especially TrasportoSemplice.

AssistenzaSemplice. Automates and simplifies the programming, allocation, management, control and reporting of interventions by technicians (including urgent ones), while taking into account the constraints related to technical capabilities, customers, type of intervention and related costs.

LogisticaSemplice. Streamlines the planning and optimization of the correspondents' activities, increasing the level of service and tracking the goods at each stage.

TrasportoSemplice. A suite that allows the companies in the sector to automate their operational activities and to manage in an effective and efficient way their employees and assets (vehicles, trailers, containers, swap bodies). It can be integrated with any corporate ERP; it optimizes the planning, allocation, monitoring, reporting and accounting processes of activities, allowing accurate management control. It is a modular solution that allows the management of direct and indirect fleets. It is designed to meet the specific needs of each type of transport (distribution, groupage, full loads, controlled temperature loads, etc.), helping companies to comply with the regulations in force (e. g. those about chronotachographs, driving hours, breaks and rest periods) and/or the standards

of service required by the client (e. g. temperature certification), including safety standards (e. g. Vanini scale or TAPA), in an easy and intuitive way. At the moment TrasportoSemplice is a consolidated solution in the Italian market. However, thanks to the widespread presence of the Viasat group throughout Europe, huge opportunities for growth are now opening up on the international markets. After all, the suite is fully compliant with the European regulations and standards, and accessible in several languages.

"Over decades of field experience, working directly with companies, Team.ind Solution has developed specific expertise in different markets. This vertical know-how has led to the creation of a number of ad-hoc solutions such as AssistenzaSemplice, LogisticaSemplice and TrasportoSemplice"

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- **Satellite**
- **Consumption**
- **Driving hours**
- **Delivery Finalization**

#ASIMPLEDAY



The World of Waste Management

The market positioning of the SIUNET services platform has been improving over the last year, as Datamove and Viasat offered it more and more successfully as a 360° solution for the management and certification of services dedicated to companies operating in the world of waste management services. This is how it works: a complete system based on a single multi-channel platform allows the optimization of the internal management processes of the companies that deal with urban hygiene services. This is achieved through powerful tools that give visibility to a company's work at all levels, improving the transparency of management towards customers, public administrations and above all citizens. We discussed this with **Gianni Barzaghi, CEO at Datamove.**

What are the choices behind this success?

The positive results are the result of a series of strategic integrations, both hardware and software, with players of great importance operating in the same market. In most cases, these integrations have turned into business relationships with customers or partners. Without these specific implementations, the same situations would not have produced such results and, most of all, the leap in quality which still places us in a position of competitive advantage today would have been impossible. In fact, our competitors don't seem to be able or willing to assure that flexibility that is now required to survive in competitive markets.

How much work is there behind these results?

A great deal of work. Behind it, there is certainly a constant commitment on the part of all the Datamove staff, aimed at guaranteeing innovative solutions for a constantly changing and growing market, such as that of waste management. But

"The market positioning of the SIUNET services platform has been improving over the last year, as Datamove and Viasat offered it more and more successfully as a 360° solution for the management and certification of services dedicated to companies operating in the world of waste management services"

there is a top-notch customer care service as well. Together with the support provided by Viasat and Vem of the Viasat Group, with whom we operate in synergy and on an ongoing basis, our attention towards the consumer has also grown and this has meant a lot in the eyes of our customers.

What about the most significant figures?

To date, Datamove provides specific services for the management of a 3000-vehicle fleet in the waste sector. Our client companies service a user base of more than 4,000,000 citizens every day. Our latest achievement is to offer integrated metering

management systems for punctual pricing services. We have developed different solutions that can be adapted to the operational practices of the different regions of our country and, more generally, of the entire Europe. In 2018, we will be among the first players to guarantee a data management chain compliant with digital data storage regulations. The new path, dictated by the introduction of the Environment Ministerial Decree 20.04.17, makes it compulsory to comply with this requirement in order to work with public entities. Consequently, obtaining this certification becomes strategically important, even in the short term.



Towards the zero waste objective

A measure came into force on June 6, 2017, with a Decree of the Ministero dell'Ambiente of April 20, 2017, which establishes the criteria for a punctual metering of the tariff for municipal and similar waste (Gazzetta Ufficiale No. 117 of May 22, 2017). The criteria established therein are aimed at implementing an effective tariff model, commensurate with the service provided, to fully cover the costs related to the management of municipal and similar waste. We talked about this and other matters with **Luca Moretti, Vice-President of the Anthea Group**.

What do you think about the Environment Ministerial Decree of April 20, 2017?

The new Decree by the Ministry of the Environment and Protection of the Territory and

the Sea, together with the Ministry of Economy and Finance, is the only real novelty in a sector that has been stagnant for years at the regulatory level. The new decree has finally clarified and circumscribed the methods of measuring the waste collected from users wherever punctual tariffs are applied. The work took more than two years and involved technical commissions, environmental and IT experts and trade associations, all together with the precise intent of providing a regulatory framework to clarify, once and for all, the cases in which we can or cannot talk about punctual metering.

What was your contribution?

The contribution by the Anthea Group and Datamove, which confirms its pivotal role with regard to punctual metering, was also that of having a series of IT requirements introduced in the decree, aimed exclusively at

AVR Roma in charge of door-to-door collection of bulky waste

When AVR SpA was put in charge of the collection of bulky waste and its transportation to the Roman plants, Datamove played a crucial role in securing the contract. As a quick response to AVR's requests for a hardware and software solution to guarantee the immediacy of collection, planning and intervention certification, while at the same time providing call center operators with an innovative and smart solution for the daily management of customer interaction, we developed an integrative module of the SIUNET platform called "Ritiri On Demand". The new project immediately demonstrated its potential by simplifying a number of activities such as phone call booking, activity pre-planning, definitive assignment of tasks, on-site collection and intervention certification; all of this with the complete satisfaction of our customers. "The introduction of these new tools - explains Alessio Incorvati, AVR's supervisor for this activity - for the daily scheduling of collections that require maximum commitment by the entire Roman call center staff, has improved the entire process considerably. We are immediately operational, from the initial phases of collection request acquisition to the immediate assignment (where possible) of the actual date and time of collection. This also allows us to organize the teams and assign them to the vehicles optimally, according to the loading volumes, and to better plan the actual field collection service with the help of powerful on-board tools (Android-based automotive navigators). All this allows the operator to perform the assigned tasks in a timely fashion, obtain additional information about the unique characteristics of an intervention, report any anomalies during the task and it provides him with valuable support in finding his way through the chaotic traffic of Rome. Additionally, the operator can send timely reports to the call center in case of delay or re-scheduling of the collections". As such, Datamove's solution is an excellent tool for the optimization of a service that, if managed with the help of cutting-edge technological tools, guarantees top-level performance, improving the overall efficiency of the company to the benefit of the citizens.

eliminating weak metering systems that can be easily used to manipulate the data, starting from the idea that citizens only want to pay what is actually measured. The requirements introduced will play an important role over the next few years with regard to the choice of the IT system for waste measurement, but also for punctual tariffing. In fact, the privacy terms as well as the terms that regulate the unalterability of collected data and their storage have been standardized for the first time.

How has the Group's activity developed over the last few years?

In recent years, the Anthea Group has consolidated important projects in the field of IT system provision. The systems supplied range from environmental management to punctual measurement and end user tariffing. The consolidation of the area that we generically call Tariffing has been made possible thanks to a team of highly qualified people in terms of both process management and technological skills. This is how, in 2010, the planning of Anthea R10.50

“The SIUNET system has enabled the creation of a collection metering platform that, in addition to complying with the IT requirements of the new Ministerial Decree, has allowed the introduction a platform for the real-time analysis and control of service levels and performance indicators”

began. It is a cloud-based solution, able to provide a unique and transversal IT system which can be jointly managed by collection manager, municipal administration and end users. Today Anthea, thanks to its partnership with Datamove and Viasat, can provide not only software platforms but also all the hardware metering and management tools, as well as specific proprietary Apps for operational management. In addition, Anthea

provides an on line portal where each user can check all their information, services, collections, invoices and payments in accordance with the Smart City concept.

How important is the partnership with Datamove?

It is fundamental. With Datamove, a Viasat Group company, we immediately found the ideal conditions to implement the integrations that are the basis of a reliable and evolved system. Specifically, the SIUNET system has enabled the creation of a collection metering platform that, in addition to complying with the IT requirements of the new Ministerial Decree, has allowed the introduction, for the first time in the world of environmental services, of a platform for the real-time analysis and control of service levels (SLA) and performance indicators (KPI), through cloud platforms available from any device (PCs, tablets, smartphones). This service measurement element, which is now seen as an added value, will become a standard in the short term, also with the introduction of the new Waste Authority.



GORENT E VIASAT, PARTNERSHIP ALWAYS MORE “GREEN”

Gorent is a leading Italian company that specializes in vehicle rentals for city cleansing services. Born in 2002 in Florence, over the years it has expanded its range of services by combining vehicle rental with the sale of used fleet end vehicles, and introducing vehicle geolocation thanks to the innovative telematics platform owned by ECOFLOT.

Gorent was the first company in Italy to introduce the rental formula for city cleansing vehicles, thanks to a fleet of about 860 units and a client portfolio that includes the main public and private companies in the sector of environmental services over the entire national territory. Thanks to this strategy, in 2016 Gorent was able to achieve a turnover of more than 21 million euros, with a positive outlook for 2017. In 2016, the

company also established strategic relationships abroad, securing, among other things, an important contract in Madrid for the management of city cleansing in an area as large as one third of the Spanish capital. This operation is the first significant signal of Gorent's growing interest in the European markets, an objective that the company and its President Furio Fabbri have set in the short - medium term.

Always attentive to environmental sustainability and searching for innovative and ‘green’ solutions to guarantee an avant-garde state-of-the-art fleet of vehicles, the company has also established a partnership with Viasat in 2012. Initially, Viasat offered Gorent a service for the installation of on-board telematics systems in which the obtained data was then sent to a third-party data manager. Starting from September 2013, the relationship was further refined by contracting activities such as proactive maintenance, monitoring and installation/uninstallation of (proprietary) control units, data supply, vehicle geolocation and use as well as daily functional checks on the fleet. Today, the relationship between the two business realities is stronger and more effective than before, and their ever-successful collaboration is of great importance for the development of the VIASAT telematics system. It is, in fact, based on an ongoing, in-depth exchange aimed at bringing requests/needs and final technological solutions closer and closer together.

Gorent today is one of Viasat's reference points in the field of environmental services, as it owns one of the largest fleets that uses their satellite system.

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real-time locating data on each vehicle or asset in your fleet. As part of our security offer, we can equip most vehicles, assets, and machinery with additional functionalities in order to improve the defenses of the vehicle and its contents.

The satellite telematics market has experienced an extraordinary evolution over the last ten years, in response to a need for greater security of corporate assets. In this sense, companies are equipping themselves to counter the ever-increasing phenomenon of vehicle theft, strengthening countermeasures with the aim of protecting their fleets and assets and reducing vehicle downtime, with positive effects on profitability.

The solutions provided by Enigma Telematics have contributed to the recovery of machinery and vehicles for over £100 million since the end of 2016. This figure does nothing but

prove something that is already quite clear: monitoring fleets and corporate assets is essential in order to ensure cost reduction with a strongly positive effect on business results. Not only does this allow the company managers to prevent theft and facilitate the recovery of the stolen properties; it also enables them to analyze the data from a predictive point of view, so as to support strategic decisions regarding corporate assets, vehicle fleets and machinery.

Skyline, the mission is under control

By **Simon J.Keam-George**
CEO Enigma Telematics

The concept of Big Data is not new, but it is indeed crucial for many companies looking for a better use of data in their daily activities. The process of distilling information into segments of significant and easy-to-manage facts can often be discouraging. This is where the Skyline platform comes in, offering full control to fleet managers, with tailor-made reports that allow for an in-depth breakdown of tracked assets, machinery and vehicles. The up-to-the-minute tacking of key vehicle and asset systems allows you to be proactive rather than reactive. Skyline provides you with operational data and detailed information, giving you the ability to respond quickly to any situation. also helps to reduce fleet costs, increase performance and optimize maintenance procedures. An additional feature of our software is theft prevention and recovery, which provides you with

Enigma Telematics, a company specializing in telematics and fleet management based in the United Kingdom, and the Viasat Group: an opportunity rich meeting. For 25 years, Enigma Telematics has been operating in the construction, plant, waste management and commercial vehicles industries, with a focus on the domestic, European, Middle East and African markets. Our extensive experience in the industry enables us to provide our customers with the best solutions to meet their unique needs. Our joining, in 2013, of the Viasat family has offered a two-fold advantage. On the one hand, we have brought our wealth of experience and knowledge to Viasat, particularly our know-how in the field of plant and construction telematics. On the other, we have been able to use the Group's resources to integrate and develop innovative solutions for our current and future customers.

"Enigma Telematics works in the field of fleet management with a customer base shared between the United Kingdom(65%), Africa and Middle East (35%). It offers a wide range of services related to fleet management, construction and agriculture vehicles tracking, utilities and waste management. For volumes of road haulage, under the European Union, the United Kingdom weighs 90%"



ViaTrack, stay connected

By **Cati Mocanu**
CEO Viasat Systems

IoT technologies are becoming more and more popular. The widespread diffusion of connected sensors has pushed many sectors towards change. This includes the transport sector, which, thanks to the opportunities offered by vehicle connectivity, can now considerably improve its efficiency with regard to vehicle monitoring and maintenance, and obtain considerable advantages in terms of cost optimization and rationalization of available information.

To better manage all this, companies need tools to process this information and make it quickly and easily available. This is where ViaTrack, the best possible answer to this requirement, comes in. It is a professional web application for fleet monitoring and management. It uses GPS technology, which makes it possible to contact drivers and vehicles in real time and provides a very intuitive dashboard where you can schedule periodic analysis and surveillance reports as well as automatic alerts when a specific event occurs.

If the number one priority of each company is to expand its business by improving operating margins, ViaTrack is, without a doubt, an indispensable solution for any fleet manager who, thanks to its functionality, can optimize travel and transport costs, plan the best routes and monitor the progress of activities so as to reduce inefficiencies and increase productivity.

Another very important feature of this platform is flexibility, a fundamental quality that makes the difference when it comes to choosing a technological solution that can adapt to any type of requirement. Therefore, it is ideal for large companies that need to take advantage of technology to overcome competition, organizing their business with the aim of respecting delivery, loading and unloading schedules and, last but not least, reducing the fuel consumption and maintenance costs of their vehicles. Likewise, it is also an extremely useful suite for construction companies that use earth-moving machines or special machines for which it is important and necessary to certify when, where and for what they are used. In this sense, ViaTrack provides an overview on the activities of the entire fleet, allowing you to intervene quickly and efficiently. Finally, it perfectly adapts to the activity planning, monitoring and certification needs of the companies operating in the field of urban hygiene, which use vehicles that are expressly designed to provide specific services at a local level, following very strict policies which involve total precision, punctuality and accurate reporting, according to a maximum transparency logic. In a nutshell: no matter how complex our customers' needs are, ViaTrack will always have the right solution.

Viasat Systems is a company that offers satellite telematics solutions for fleet management. It has been present on the Romanian market since 2001. Since 2015, it has joined the Viasat Group, which is of global importance in the telematics sector. This is the natural evolution of a decade-long relationship, and it has strengthened our presence on the market, creating new opportunities for satellite locating systems in our country, especially with regard to the insurance market, while allowing us to remain focused on our core business: FMS (Fleet Management System) solutions. Not by chance, this year, we started offering insurance telematics solutions on the Romanian market, building on Viasat's Italian experience in order to launch an absolutely innovative "telematic insurance" project in partnership with Groupama,

one of the most important Romanian insurance companies. We pride ourselves with being the first to offer this type of service in our country and, even more so, with the positive reception it has received from the market, where insurance companies are undergoing, like their European counterparts, a path of substantial transformation, which is also technological. Its purpose is to rethink the offer of insurance products in a more personalised way, significantly reducing the handling costs of accidents and fraud.

"Viasat Group acquired the Romanian company Viasat Systems in May 2015. The company has always been active in the field of fleet management (including monitoring of construction and agricultural machinery, utilities and waste management) and, more recently, of Insurance Telematics. In 2016, new medium and heavy truck registrations in Romania were more than 7400 (a 32% increase compared to 2015)"

ViaFleet Enterprise, the Portuguese footprint in fleet management



lows, through the analysis of various indicators, to intervene on the driver's driving style with obvious positive effects on fuel consumption and, consequently, on CO2 emissions as well as brake, tire and engine wear. In addition, let us not forget the digital tachograph-related services, which can help companies streamline remote data download procedures. The information is made available in real time and helps improve the management of drivers' driving times and rest periods with clear advantages in terms of operational efficiency and sanction reduction.

Our goal is to provide our customers with advanced tools to support decision-making, always striving to improve our QoS, also in terms of proposal diversification and creativity. We don't just want to present a line of products or services to our customers and be content with being considered one of the many options on the market. We want to help them, becoming their advisors and partners. This will allow us to simplify and manage the empowerment and decision-making process, dynamize operational choices, increasing efficiency and improving the day-to-day management of mobile assets.

Blusat Serviços Telemáticos was founded in Lisbon in 2016, as part of the Viasat Group's international development. A growing and ever stronger trend towards the globalization of services, technological production, technical skills and the quality of our commercial offer, which represent the most solid foundations of the Viasat Group. All this has been made possible at local level, thanks to a team of experts with an average experience of over a decade in the local IT/Telco/Telematics/FMS areas - and thus, able to understand and satisfy the needs of the Portuguese market.

The transport sector accounts for about one third of primary energy consumption in Portugal. Making it less energy-intensive is therefore absolutely essential in order to promote competitiveness and reduce the costs associated with the circulation of national products towards

the domestic and international markets. Therefore, contributing to the creation of an efficient, well-structured and intermodal transport network will always be our priority.

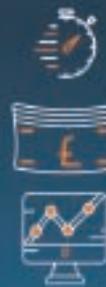
Given Portugal's geographically strategic position, improving the integration of European and global transport chains is becoming increasingly crucial in the national design of a more internationalized economy. The existence of an efficient and well-structured intermodal transport network is an absolute priority in order to maximize the volume and value of exports and to create new job places.

By **Patricia Cristo**
CEO Blusat Serviços Telemáticos

To provide the logistics industry with innovative tools to facilitate and improve the interoperability and intermodality of transport, optimize the efficiency of the network and minimize its environmental impact. This is Blusat Serviços Telemáticos's challenge: one that materializes into an evolved ability to design, manufacture and market security and telematics protection systems and services, using the satellite technologies of the Viasat Group. Hence ViaFleet Enterprise, an indispensable solution to manage all the operational aspects of a vehicle fleet in a simple and effective way, and thus a perfect fit for the needs of small and large road transport companies on the Portuguese market.

Not only does ViaFleet Enterprise make it possible to monitor the vehicles, so as to optimize missions and intervene in case of anomalies or unexpected events - it also al-

"Blusat Serviços Telemáticos was founded in early 2016. Its main activity is the marketing of services for Fleet Management Systems and for the security of goods and people, drawing from the Viasat Group's commercial, operational and technological know-how. Portugal, together with Spain, is one of the main FMS markets, with over 1,3 million commercial vehicles"



SAVE TIME

REDUCE COSTS

IMPROVE PERFORMANCE

**OPTIMISE YOUR FLEET PERFORMANCE WITH
OUR SMART DATA**



Complete Fleet Management

Our fleet management system enables you to have complete control over your fleet by giving you:

- Detailed overview of fleet
- Real-time location tracking
- Monitors fleet health
- Protects employees



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telematics**
a Viasat Group company

Contact us

T: +44 01702 507200

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www.enigmavehicle.co.uk

Automonitoring System: all you need



24/7 protection against vehicle theft and other alarm events. The "24h Protection" service is equipped with a feature that triggers the automatic alarm procedure. Automonitoring system is an ideal tool for dispatchers and logistics specialists. It facilitates the processing of shipping orders, verifies the drivers working hours, transmitting digital cronotachograph data and their permissions. It can identify the driver and monitor border crossing events; it is equipped with a sophisticated trailer and load protection system – a functionality specially designed for the transportation of perishable and valuable goods. The system can generate different reports that help manage the fleet, giving you the ability to configure and customize reports based on the different needs of your customers. In short, a vital element for planning and executing tasks in transportation and distribution companies.

By **Jacek Raczka**
CEO Cma Monitoring

Vehicle monitoring is an effective way to optimize business activity, improve driver safety, protect the means and goods against theft. Automonitoring system has been designed by CMA Monitoring and is dedicated to customers operating in different sectors and with different fleet sizes. Automonitoring facilitates vehicle management and driver performance monitoring 24 hours a day. The system provides real-time information on vehicle position, route and stops. It also checks your driving style. Once the system is installed, driver performance increases in terms of effectiveness and safety, optimizing business processes and giving full control over the fleet. Automonitoring also provides a

CMA Monitoring operates in Poland with two head offices, Warsaw and Bytom (Katowice), 6 commercial offices, 96 employees and a Security Operation Center, operating 24x7x365. It operates in the fleet segment (which accounts for 95% of the revenues), the remaining is done on the market

"Acquired in the first half of 2016, it operates in Poland in the fleet segment (which accounts for 95% of the revenues), the remaining is done on the market of monitoring private and commercial buildings. The Polish market is one of the fastest growing markets in Europe in business terms with a goods traffic equal to 14.8% on the European volume. The biggest increase was recorded in the period 2007-2015, passing by 151 billion tons-km (2007) a 261 billion (2015)"

of monitoring private and commercial buildings with over 19.000 assets connected to their platform. CMA Monitoring features are congruent and complementary with those of the rest of the Group: call to service, excellent performance and quality of products developed and made in Europe; customer satisfaction guaranteed by a local professional team with a significant experience. This deal makes Viasat more competitive and react to the growing market demand in order to our direct Pan-European presence.

Aidoo: the intelligent workforce management solution



By **Didier Bennert**
CEO Emixis

A workforce management tool to help plan and manage in a simple and efficient way the "field" activities of your staff (technicians, maintenance specialists, healthcare professionals, etc.) through an app for smartphones and tablets. This is Aidoo : an integrated solution that allows those with a team of any size to better organize its complex operational processes. The Aidoo solution combines a web module, used to assign tasks to your work team, and an Android App to support daily operations. It ensures that the necessary information to manage all the work orders in real time is readily available, thanks to satellite geolocation. It also allows to plan interventions, digitize documents, take photos and collect the customers' digital signature. It finally brings detailed info on completed missions and a history of the interventions carried out always at a smartphone's reach. In addition, Aidoo provides a web reporting platform to track and report on the time needed to carry out the activities,

staff attendance/absence, consumables used as well as any problems encountered.

It is possible to create automatic reports and to integrate the flow of information on your own ERP system.

The advantages of this solution are many and they have a direct effect on the company's profits, improving the profitability and quality of the services offered. This is achieved by increasing the number of daily interventions, reducing the operating inefficiencies that result in time and energy wasted on the road, and finally by allowing you to save significant amounts of money in administrative costs and increase customer satisfaction.

At Emixis, we are primarily concerned with developing and providing state-of-the-art solutions for fleet management, but there is more. Most of our clients work in the construction, technical services and logistics sectors.

After 20 years, we decided to take on a new challenge and made our entrance into the Viasat galaxy. We believe this is a great opportunity to share our innovation and technological development projects, exploiting the individual expertise of all the companies of the Group and tapping into the shared know-how to make our business grow further. At the moment we are offering a container monitoring solution supplied by our English subsidiary Enigma Telematics,

and an innovative solution for the management of chronotachograph data, created by our Italian subsidiary Teamind Solution. In addition, we are supporting all the companies of the Group, especially those operating in the UK, Poland and Bulgaria, so that they can directly offer the Aidoo solution on their respective markets. What is more, we are now known as Insurance Telematics experts in Belgium and France. In short, our growth objectives remain the same, but the horizons have become much wider.

"The company, acquired in July 2016, has been developing innovative solutions that integrate hardware and software, making available complete Suites for managing fleets of vehicles, and business assets. In 2016 the market of medium-heavy trucks registered in Belgium volumes growing + 17.7% and + 11.8% in the Netherlands!"



of responding to any request quickly and individually.

The MobileFleet platform consists of a central unit or AlertPhone, integrated with a GPS locator and a GPRS/GSM module that enables the transmission of the data collected by the on-board device and puts it at the customer's disposal, through an extremely simple and user friendly web application. There are many available functions: in addition to the position and speed of the vehicle, it is possible to send the driver messages about the mission and check fuel consumption as well as a wide range of information that varies depending on the accessories installed in the vehicle. We are talking about an increasingly advanced vehicle monitoring system that, through the optimal management of this data, allows us to improve the company's management and operational performance. We are always at our customers' side, offering integrated, in-house developed solutions capable of supporting the decision-making process and making a solid contribution towards the improvement of business results.

MobileFleet: The best answer to your needs

Di **Raúl González Rodrigo**
CEO MobileFleet

MobileFleet is a platform that allows you to monitor all your mobility activities (involving vehicles, people, machines, etc.), wherever they occur and in real time. Whether you are a private individual, a self-employed worker, the manager of a small and medium-sized enterprise or the manager of a large fleet of vehicles, MobileFleet allows you to keep your vehicles under control and provides you with all the necessary information to improve their performance and efficiency, allowing you to cut unnecessary costs. Continuous innovation and a solid know-how in the field of engineering are the basis of our philosophy, which has always been focused on the development of new operational technologies, able to adapt to the needs of our Clients. We are talking about proprietary solutions, development capabilities (hardware and software) as well as the production and sale of our products at the most competitive market prices. We can manage the entire product cycle, which gives us the advantage

We joined the Viasat Group at the beginning of 2017, strengthening its presence in Spain, where it had already landed with Viasat Servicios Telemáticos in 2012. In the Iberian peninsula, our desire is to push towards a strong integration between the two realities and to

support the local management group, in order to promote the widespread diffusion of telematics services with particular regard to the fleet and insurance telematics sectors. We are also present in Latin America with MobileFleet Chile, which represents the first step towards a truly global presence of the Viasat Group, with the aim of giving continuity to our successful business model in Italy and Europe.

In Spain and Chile, we have been specializing in providing satellite telematics services for vehicle fleets, with a strong network of installers and a rock-solid experience in the production, development and management of solutions for

vehicle security, M2M communication and GPS tracking. Looking at the Spanish market, in 2016 road freight transport grew by 7%, driven in particular by international traffic (35% of total Spanish traffic), while the volume of goods transported by road stood at around 12% of overall traffic in the entire European Union. It is also worth noting that, in the last year, Spain recorded a double-digit increase (11.2%) in new registrations of light commercial vehicles.

"Viasat Group acquired the company at the beginning of 2017 with the aim of strengthening its presence in Spain, in a logic of integration with Viasat Servicios Telemáticos, and of directly accessing the Latin American market thanks to MobileFleet Chile. In 2016, Spanish road freight transport grew by 7%, driven in particular by international traffic"

EuroGPS eVehicle: the chance to grow

By **Ivaylo Georgiev**
CEO Viasat Technology



As we know, commercial telematics, also known as real-time GPS vehicle tracking or Fleet Management, offers unquestionable benefits. In this sense, EuroGPS eVehicle, the integrated software platform that provides numerous telematics solutions to businesses and public institutions, can make the most of them all. The complete objectivity of the information on vehicles and mobile processes in general, due to the fact that the organization has access to real-time data on where, when, by whom and how exactly company vehicles are used, has an immediate impact on security. A substantial reduction in the use of company vehicles in non-working hours, for personal use, and outside planned routes and on-site visits, which in turn leads to a substantial mileage reduction. An effective control to curb unfair practices - including theft of vehicles and goods - as well as a fleet speed control that, in fact, leads to reduced fuel consumption, breakdowns and maintenance costs. Other positive effects



are: the optimization of working hours; increased service quality, obtained through transparent service provision; reduced administrative costs for the management and control of business processes.

In short, despite the complexity and size of the fleet, Viasat Technology's EuroGPS eVehicle corporate telematics systems make the fleet safer, more productive and efficient while reducing operating costs, excess mileage and wasted time.

In May 2017, the Viasat Group took over the majority package of EuroGPS, today known as Viasat Technology - market leader in Bulgaria, Macedonia and Serbia as a provider of electronic systems, software platforms, services and

Big Data. Viasat Technology is an Internet of Vehicles-based operator, with cutting-edge fleet management software and hardware solutions that have enabled the group to secure more than 50% of the local market share. Considering the highly dynamic and fragmented global IoT market, we are confident that competitiveness can be increased, and numerous business opportunities created in the future.

Viasat Technology currently provides services to thousands of customers and the total number of vehicles equipped exceeds 39,000. Its technology is ISO certified. The hardware and software development methodology and the business processes are ISO 9001:2008 certified; the R&D center and the production are ISO/TS 16949-2009 certified for the design of corporate telematics devices applied to the automotive industry. Finally, the IT security management is ISO/IEC 27001-2005 certified.

"In May 2017, the Viasat Group took over the majority package of EuroGPS, today known as Viasat Technology, market leader in Bulgaria, Macedonia and Serbia as a provider of electronic systems, software platforms, services and Big Data. It is an Internet of Vehicles-based operator, with cutting-edge fleet management software and hardware solutions that have enabled it to secure more than 50% of the local market share"



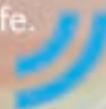
Change the hour and minutes, change the day to the night, week, month, season's year, and the weather forecast.

Change your address, change from a T-junction, to a junction to for roundabout and to a street, change from a Square to an Avenue, change to the road, the motorway – Change the Traffic.

Change from your place, your city, from your country, from even continent, from habitat to atmosphere, then to an ecosystem and environment – Change of Course!

Change from tricycle to bike, motorcycle, for car, a boat or even the train, or then even a plane - Change the Destination.

Change from an apartment to a home, or to go on vacations, in business, or just even changing your lifestyle – Change your Life.



Viasat is still changing since 1974, to keep following Yours and Our Changes.
In Viasat we like to name it **Evolution.**



POWERED BY BLUSAT

www.viasatonline.pt

Wind Tre Business and Viasat, a partnership between innovators



“The partnership between Wind Tre Business and Viasat was born with the aim of bringing to the market an innovative security, protection and satellite locationing solution, one that will be able to take full advantage of both the network of the largest national mobile phone operator and the experience of the European leader in satellite telematics”. These are words by **Davide Villa, Business Marketing Director at Wind Tre**. We have interviewed him.

Which Fleet Management solutions does Wind Tre Business offer? And what kind of customers are you targeting?

Wind Tre Business offers innovative and modular

Fleet Management solutions, which in turn provide vertical services that can adapt to different needs and market segments. In particular, in the road transport, rental and logistics sector, Wind Tre Business guarantees fleet managers the highest levels of assistance, protection, security and control for vehicles, goods and people. In this context, the Viasat Operations Center is one of the distinguishing elements of our proposal and, without a doubt, the first contact channel in case of emergency. Thanks to the GPS support and the widespread mobile network of Wind Tre, the Operations Center is always able to locate vehicles and people in need with the utmost accuracy, wherever they are.

So, the Fleet Management service was created in partnership with Viasat. What do you think about this collaboration?

The partnership between Wind Tre Business and Viasat was born with the aim of bringing to the market an innovative security, protection and satellite locationing solution, one that will be able to take full advantage of both the network of the largest national mobile phone operator and the experience of the European leader in satellite telematics. This is undoubtedly an important collaboration, based on a solid partnership, whereby our customers have the opportunity to acquire “turnkey” solutions for the management of “connected vehicles” directly from the Wind Tre Business sales network.

In light of the union between these two centers of excellence, what results do you expect?

The IoT in Italy is growing significantly, mainly driven by the smart cars, smart energy and industry 4.0 markets. According to data provided by the IoT Observatory of the Politecnico di Milano, the value of the Internet of Things ecosystem has already exceeded 2.8 billion Euros in 2016, with an increase of more than 40% compared to 2015. This scenario represents for Wind Tre Business an important investment opportunity, in order to strengthen its role of preferred partner of the companies that undertake Digital Transformation processes. By focusing on the world of smart cars as smart mobility solutions, it is possible to significantly increase security and energy savings while drastically reducing the impact of theft and insurance fraud, thus making mobility 2.0 even more sustainable.

“The IoT in Italy is growing significantly, mainly driven by the smart cars, smart energy and industry 4.0 markets. This scenario represents for Wind Tre Business an important investment opportunity, in order to strengthen its role of preferred partner of the companies that undertake Digital Transformation processes”

As IoT solutions become increasingly popular, the potential of data recorded by smart devices becomes more and more apparent. Why do they represent a strategic opportunity for businesses?

The collection and organization, in the form of Big Data, of the information generated by network-connected devices are very valuable in the eyes of companies, institutions and end users, as they make it possible to develop a complete ecosystem of solutions that offers a 360° coverage of the optimized management of infrastructures and means of transport. In this way, it is possible to better understand the

dynamics of sustainable mobility, with obvious implications on issues such as preventive maintenance, risk prevention, driving safety, energy savings and the reduction of environment-polluting emissions.

Technology is needed to combat uncontrolled competition

By **Silvio Faggi**

Vice President Albo Nazionale Autotrasportatori



The most difficult challenge of these years is posed, without a doubt, by the comparison with other European companies. In this sense, Europe is still traveling at different speeds, with different costs and conditions. In a sector such as road transport this leads to social dumping, unfair competition, barely legal solutions and distortions that are difficult to reverse. After the eastward expansion and with road transport opening up to international haulage, trucks with foreign number plates are becoming more and more numerous on Italian motorways. Our road transport companies are well aware of this fact. Every day, they are forced face the unfair competition by the many foreign companies that transport goods across our territory - the lack of tax harmonization between the different European countries makes it more convenient to use these carriers irregularly. According to an estimate by Transportounito, drivers with foreign driving licences account for 20% of all the circulating drivers. According to a study carried out by the Albo degli Autotrasportatori and the World Road Association (AIPCR), more than 60% of the trucks that cross the Alpine passes have a non-Italian number plate: the most numerous are Romanian ones, but there are also high percentages of Croatian, Slovenian and Turkish trucks.

TO COMPETE ON AN EQUAL FOOTING

TRANSPORT VOLUMES: EAST AND WEST COMPARED

COUNTRY	2006	2014	2006/2014
Bulgaria	7 959	21 027	164%
Hungary	18 054	27 887	54%
Slovakia	17 009	26 265	54%
Slovenia	9 834	14 211	45%
Spain	67 200	67 610	1%
Portugal	27 295	24 394	-11%
Germany	78 637	47 110	-40%
Belgium	23 402	12 641	-46%
France	28 692	14 113	-51%
Italy	31 640	15 462	-51%

milions t/km - Source: Eurostat

“The only way forward for a better Europe is to comply with the rules and to allow European companies to compete on an equal footing. We are not against East European transport operators, but it is essential that they carry out their work in full compliance with the regulations in force. Satellite control technology has been tested for a while now, and it could be immediately implemented. Ensuring proper enforcement of the rules, and verifying that road haulage rules are actually complied with, would certainly be easier with the help of modern technologies. Their use would allow police forces to carry out road checks specifically targeted at vehicles that are engaging in these illegal practices. Thus, it is very important that all the associations and politicians show their commitment and ensure that the GNSS project, ‘Monitoring System for heavy vehicles’, becomes operational as soon as possible”.

Massimo Bagnoli, President of FIAP - Italian Federation of Professional Transport Operators

Corporate taxation: Italy and the East

COUNTRY	TAX ON COMPANIES
Italy	64,80%
Slovakia	51,20%
Czech Republic	50,40%
Estonia	49,40%
Hungary	48,40%
Lithuania	42,60%
Romania	42%
Poland	40,30%
Latvia	35,90%
Slovenia	31%
Bulgaria	27%
Croatia	20%

Source: Uomini e Trasporti

If modern technology and satellite tracking systems, which are quite common today, were to be used and interconnected through an adequately structured public platform, we would be able to seriously and constantly monitor not only the position and routes of heavy trucks, but also the flows and the quality of goods being transported within the EU, the regularity of vehicles and of the drivers' working conditions. In this way, total control would be established with the aim of ensuring full compliance with the rules and safety standards which carriers are being asked to violate more and more often, to the sole benefit of customers.

But there is more. The police forces themselves could be promptly notified whenever vehicles in the vicinity violate driving times, breaks, rest periods or the rules of the Traffic code. They would also be able to obtain real-time information about the most frequently used roads, or keep under control the traffic flows on those bridges and viaducts whose structure might collapse if overburdened. The pilot project approved by the Transport Commission in Brussels under the name of "GNSS Monitoring System for heavy vehicles", largely a result of the efforts by Ms Daniela Aiuto as a member of the European Parliament, goes in this direction. The idea is to equip every freight transport vehicle in Europe with satellite monitoring devices managed by a single European central unit, capable of tracking and controlling, through an advanced GPS system, the haulage of goods by means of heavy trucks. The aim is to make roads safer for every driver, to put up a fierce fight against illegal haulage, to combat criminals which often use heavy trucks for illicit traffic, and finally to reduce pollution in terms of CO2 emissions.

0,43 €/km is the cost of an Italian driver employed on the international scene. Only Belgian drivers are more expensive (0.48 €), while French drivers cost about the same. In Bulgaria, this cost drops to 0.11 €; in Romania to 0.13 €, and in Slovenia to 0.19 €. (Cnr)

280 € is a driver's minimum wage in Romania (for 40 weekly hours) - almost six times lower than in Italy. In Bulgaria it amounts to € 214, in Poland € 434, in Slovenia € 791. (Cnr)

35,9% is the weight of contributions on the total cost of labor for an Italian driver employed on the international scene in 2016. The figures are only higher in Spain (36.6%) and Belgium (51.6%). In Slovenia the percentage drops to 16.1%, and in Romania to 22.8%. (Cnr)

VIASAT FLEET WEBCONSOLE: TO BE COMPETITIVE, TECHNOLOGY IS NEEDED

This is exactly what Viasat does: it provides an opportunity for growth to all those companies that refuse to be crushed by international competition. This is where the Viasat Fleet Webconsole comes in: new, fast, intuitive and with a revamped user interface. When connected to the exclusive on-board unit, it represents the best answer to the road transport companies' needs for greater optimization and operational efficiency. The fleet manager monitors in real time the position and status of vehicles and employees on a screen, checking travel distances, unauthorized deviations, loading/unloading times and the progress of activities. The ongoing monitoring of activities makes it possible to optimize the coordination of resources. Viasat Fleet Webconsole is an essential organizational tool. It also provides advanced functionalities to allow the certification of activities and to provide accurate info on: shipping and delivery status, driving time and rest periods as detected by the chronotachograph, the scheduling of technical interventions such as vehicle servicing, ordinary/extraordinary maintenance and tire change. Viasat Fleet Webconsole also makes it possible to manage vehicle maintenance and security up to the highest levels, and allows the configuration of temperature thresholds and related reports from the device for cold chain temperature monitoring; it provides info on fuel consumption and driving style. Finally, Viasat Fleet Webconsole allows you to plan your activities and check your performance by consulting monthly or yearly analytic reports with graphs, which allow a deeper understanding of processed information and related trends (missions, vehicle activities, driving style, excise reimbursement).



Industry 4.0

An opportunity not to be missed



The reform of Confindustria in June 2014 acknowledged the role of the Confederal Technical Groups to support management bodies in defining the "strategic management guidelines" of the Confederal Organisation. **The Logistics, Transport and Sea Economics Technical Group** - of which Domenico Petrone, Chairman of Viasat Group, is a full member - was born with the purpose of being an ideal place in which to study, assess and propose solutions aimed at making the Italian transport and logistics system more efficient and competitive. We have interviewed **Guido Ottolenghi, its Coordinator**.

With particular regard to the freight transport sector, why is launching innovation projects in the context of Industry 4.0 an opportunity not to be missed?

Industry 4.0 is a revolution that provides the opportunity to focus on the customer by changing the business models and value proposition of companies. It is undoubtedly a great opportunity for growth. The development of digital technologies in the productive sectors is an irreversible process, a wave that we have to ride, unless we want to drown in it. Therefore, in the transport and logistics sectors in particular, it is a necessary response, because failure to adapt would result in a competitive gap extremely difficult to bridge.

These sectors are constantly in search of innovation.

It is certainly no coincidence that these sectors are highly innova-

tion-oriented, with substantial capital invested in research and development; they are at the forefront when it comes to experimenting and adopting advanced technological solutions to stay competitive in a globalized market. I am thinking, for example, of the new logistics management and goods tracking systems, of platooning in road transport and automated driving.

Logistics and freight transport need intermodality. What is our progress?

We have come to a point in which Italy, albeit lucky enough to be a natural platform in the middle of the Mediterranean Sea and close to the Suez Canal, is unable to act as a logistic base for the traffic coming from the East. Container traffic data in major EU ports is proof of this. Thus, intermodality is a strategic response for the development of freight transport and the extension of the hinterland of the Italian logistics system. It is necessary to foster the modernization of the country in terms of connection between sea and land with regard to logistics, creating conditions for goods to be collected in volumes big enough to consolidate traffic. This would ensure daily departures, at least towards the main destinations in Central Europe.

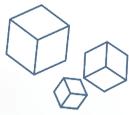
However, all this requires effort on the front of technological platforms.

There is no doubt that technological platforms play a fundamental role in this scenario. And it is essential that they should communicate with each other, be interconnected. Otherwise, the resulting criticalities would be many; and regrettably, this is what is happening today, with a negative impact on national transport and logistics.

6.751 km is the length of the Italian motorway network, 45% of the Spanish network (14,981 km) and 58.4% of the French network (11,552 km). Germany has 3.61 km of motorway every 100 km² (12,971 km in total), while Italy has 2.24 km. In 10 years, we have built 4% more. Spain built 45.4%, France 11.3% and Germany 7.5%. (*Eurostat*)

2 bn tonnes is the amount of goods passing through the Mediterranean, which amounts to 19% of world traffic. Italy (in 2016) managed 485 million tonnes of it, a 1.6% increase compared to 2015. Container traffic, with a 3.3% increase, reached the threshold of 10.5 million TEU, while the Ro-Ro segment, with 93.6 million tonnes, increased by 3.6%. (*Assoporti*)

5,5 km is the average length of railway lines per 100 km² in Italy. In Germany, it is more than double (11.5 km per 100 km²). The Italian railway line is 16,752 km long, the German 41,328 km long and the French 30,318 km long. Over the last 10 years, France has dismantled 2.17% of its railway tracks, while Germany has dismantled 0.49%. Spain, which has 15,312 km, from 2004 to 2013 has built 19.2% more, and Italy 4.9%. (*Eurostat*)



AIDOO TEAM LEADER

by  **emixis**
a Visual Engineering Company



ONE APPLICATION TO MANAGE YOUR CONSTRUCTION SITES



Plan your construction sites

Schedule the work and allocate personnel and equipment



Register staff presence

On-site registration of staff attendance and activities, as well as absences or inability to work



Follow-up on equipment usage

On-site recording of construction equipment usage, malfunctions and breakdowns



Manage your supplies

Record orders, follow-up on materials consumption and validate supplier deliveries



Document your work

Add pictures to show progress or issues. Take notes and add other useful information



Report on progress

Automatic reporting of work, activities, working hours and supply usage

Road safety more checks on heavy trucks



a reduction of 1.3% in traffic accidents, of 9.2% in fatal accidents and 9.8% in fatalities, compared to the previous year. With regard to traffic in general, the data show a reduction of 1.8% in traffic accidents, and respectively of 3.1% and 3.3% in fatal accidents and number of fatalities. The main causes of accidents that involve heavy trucks do not differ substantially from those of general accidents: failure to comply with speed limits, speeds not suited to road and traffic conditions; distraction, failure to respect safe distances - especially on the extra-urban road network - and rules on priority.

With regard to road transport controls, what can you tell us?

It is known that every year, the Italian Police Forces must ensure a minimum threshold of controls which, in accordance with Legislative Decree N. 144/2008, amounts to 3% of the working days of the drivers of "heavy-duty" vehicles (i. e. falling within the scope of the European legislation on chronotachographs). With regard to this objective, the total number of checks was 4,751,000, 91.8% of which took place at the roadside. This largely positive result was made possible by the intensification of controls on professional road transport and implemented, in particular, by the Polizia Stradale corps, which ensured more than 94% of the total roadside checks. A 1% increase when compared to the previous year.

It is well known that the road is the most commonly chosen way to transport goods. Statistics, albeit incomplete and belated at times, tell us that - according to Eurostat - 80% of all land transport takes place by road and only 20% by rail. In Italy, these percentages are higher for road transport (85%) and lower for railway transport (15%). As if to say: Italy is a long country, but not so long as to discourage the choice of road transport, which is still characterized by flexibility, timeliness and cost-effectiveness. However, such a choice does generate concern when it comes to road safety. We have discussed this with **Giuseppe Bisogno, Director of the Servizio Polizia Stradale**.

Which violations do you find to be the most frequent?

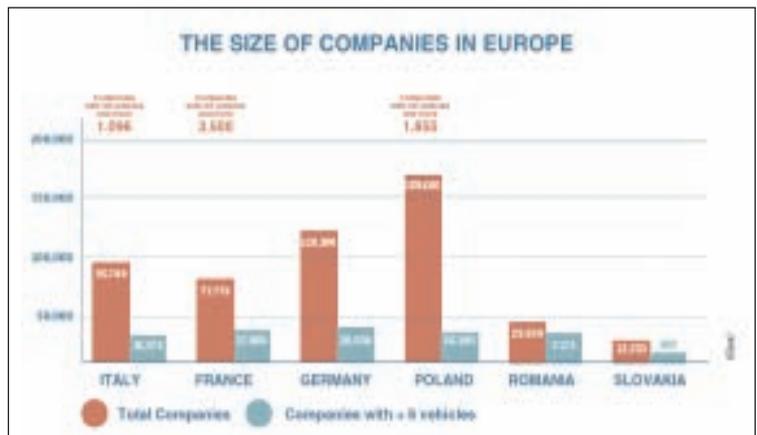
Apart from "common" violations, which are not typical of road transport - such as those described by art. 79 C.d.S., with particular reference to tire wear - the high number of violations ascertained by the Polizia Stradale in terms of driving times, breaks and rest periods (about 20,000 in the first 5 months of 2017) justifiably leads us to believe that, despite the attention that companies are paying to the issue of road safety, there is still a lot to do. In this respect, it is absolutely necessary to increase the awareness of those working in the sector, warning them about the absolute danger of failing to comply with the social legislation. And this does not include the negative repercussions that such violations may have from the

What kind of impact does such a high number of heavy trucks have on our roads?

Let's begin with saying that an increased presence of heavy trucks on our roads does not necessarily mean greater danger and that road transport is economically strategic for the country. That said, it is the very nature of "heavy trucks" that affects the fluidity of traffic and the severity of the consequences for the people involved in case of road accidents. This is without going into the details of the respective responsibilities.

In detail, what are the most significant figures when it comes to road accidents?

According to the data recorded by the Polizia Stradale in 2016 with reference to heavy trucks, there has been



point of view of a free, healthy competition between companies.

What prevents a more effective use of technological tools by road transport companies, with the aim of facilitating the road controls by the Polizia Stradale, among other things?

The Piattaforma Logistica Nazionale, an ITS created by the Italian Ministry of Infrastructure and Transport, will soon come into operation. It will network all the logistics nodes in Italy (ports, inter-ports, railway freight centers, private operators) with rail and road transport operators, in order to reduce and make more constant the time needed to pass through the Italian logistics chain. In addition, new, "smart" tachographs will have to be installed on newly registered heavy trucks starting from 2019, in accordance with the European legislation. They will allow remote monitoring of driving and resting activities and of the routes taken by the vehicles, by means of a communication system capable of providing the police in real time with an early diagnosis. The police will then use it to check the weight of the vehicle and any possible abnormal behavior by the driver, such as, for example, failure to insert the tachograph card, power supply interruptions and sensor failures. Of course, the effectiveness of these tools cannot be fully appreciated until their use is made mandatory for all users.

"The new, 'smart' tachographs, which will have to be installed on newly registered heavy trucks starting from 2019, will provide the police in real time with a series of data, including the monitoring of driving and resting activities, as well as the routes taken by the vehicles"

In short, mandatory Black Boxes for everyone?

The legislative decree on competition, among other things, aims to promote sustainable mobility and the development of smart cities through "Black Boxes or other similar electronic devices aimed at creating technological platforms". The initiative will be very useful if, in addition to providing benefits to its end users, it will represent a valuable support to the activities of the Polizia Stradale, both in terms of combating vehicle theft and detecting accidents, including rescue operations.



Viasat: the chronotachograph solution

In recent times, roadside and company checks have been stepped up considerably in order to ensure that the rules governing driving times, pauses, rest periods and the correct use of the chronotachograph have been complied with. Needless to say, a mistake, although understandable in the face of such a complexity, can be very expensive. For this reason Viasat, in collaboration with Teamind Solution, has launched a complete suite of tools (management, satellite, tachograph and on-board terminal) for the remote downloading of chronotachograph data and its management in compliance with the law (EC REG. 561/2006). This solution covers all the needs of the road transport operator, protecting him from expensive IT investments needed to automatically and legally store the data of his own fleet, to manage the registration of vehicles and drivers, to monitor the regular collection of data and documents, to automatically produce and print the notification and/or warning letters (required by law) and much more. In other words, it is a solution that makes it possible to outsource certain activities, with direct advantages for the transport company, which can save time and resources and dedicate them to other activities with a higher added value. We offer free consultancy and data analysis services, to verify their compliance with the EC REG. 561/2006 and to get the fleet manager to experience first-hand the benefits of a solution that allows him to administer and control his fleet, create notification letters and prevent infringements. In fact, in addition to the on-board devices (satellite, tachograph, on-board terminal), the chronotachograph suite also provides a software application to analyze the downloaded data and verify any infringements, explaining the reasons for each one in a plain and clear language, as well as the correct behavior that the driver should have taken to avoid it (which is also useful to comply with the obligation to train and inform drivers, provided for by the EC REG. 561/2006).



Do not worry. The answer to “Cargo Crime”

Theft and robbery against road transport operators in Italy and Europe. Which countries are most at risk? And which numbers are the most significant?

Thefts and robberies against road transport operators increased significantly in Italy and Europe. According to the data collected by Tapa Emea's archiving and analysis system, 2611 crimes against road transport operators were recorded in 2016, an increase of 72% compared to the previous year. The countries with the highest levels of risk were the United Kingdom, the Netherlands, Germany and Sweden. And in the first quarter of 2017, with more than 700 accidents already recorded, the trend shows no signs of stopping. As far as Italy is concerned, where just over 60 offenses have been registered over the course of the entire 2016, we should point out that the figure has certainly been understated.

There are two reasons behind this: first and foremost, the Police Forces do contribute to the feeding of the database due to legislative restrictions, which does not happen in other countries. But the real reason is that companies tend to hesitate when it comes to denouncing the event.

The use of particularly violent actions by criminals is an entirely Italian peculiarity. Which techniques are most common?

Violent actions, with weapons and actual kidnappings of drivers, do not only happen in Italy. They are common in South Africa and Eastern Europe as well. What is certain is that our country has been refining the technique over the years. The most common methods are: intrusions (cutting the tarpaulin, opening the rear doors), roadblocks, fake police checks. Some novelties are the so-called "Ro-

S The term 'cargo crime' designates all predatory offenses committed against heavy trucks. Official data from the European Union show that the theft of goods handled by the European logistic supply chains results in a business cost increase of about 8.2 billion Euro per year. "The threats of organized crime are significantly increasing throughout the Old Continent - says **Franco Fantozzi, President of the Italian Working Group Tapa Emea** - and are becoming increasingly violent in some countries, including Italy, where robberies are the main cause of concern". How can we prevent crime? With satellite telematics.

HEAVY TRUCK THEFTS IN ITALY: 2.053 OF THEM DISAPPEAR EACH YEAR

THE IMPORTANCE OF SATELLITE TELEMATICS TO COMBAT AN INCREASINGLY ORGANIZED AND VIOLENT CRIME

A ccording to the latest data provided by the Polizia di Stato with regard to 2016, in Italy 2,053 heavy trucks are stolen each year (171 per month and more than five a day). Campania is Italy's most affected region with 367 thefts, followed by Lombardy with 289 and by Sicily, tied with Apulia at 247. Other regions at risk are Lazio (193), Piedmont (123) and Emilia-Romagna (104). Almost every other region showed a percentage decrease in comparison with the previous year. On the other hand, 1,131 heavy trucks per year are returned to their rightful owners, 55% of those stolen (the percentage is similar to that of the previous year) The goods that attract thieves the most are smartphones, tablets, currency, electronic goods, cigarettes, medicines, clothing, metals, cosmetics and food products. The threats of organized crime are increasing dramatically and manifesting themselves in increasingly violent ways (boardings, armed assaults and driver kid-

nappings) There is, however, a solution to this long-standing problem, and it is at everyone's reach: satellite technology. The National Observatory on the theft and robberies of road transport operators, established in 2016 at the Central Office of the Criminal Police, issued a vademecum with 12 recommendations, rules of conduct and prevention measures. Among them, it recommends the adoption of a "suitable, last-gen anti-theft satellite system together with anti-jammer telematic tools". This is because statistics confirm the effectiveness of satellite devices, highlighting a significant divergence from national averages, both in absolute and percentage terms: lower risk of theft and higher number of recovered vehicles (up to 90% for Viasat's top-of-the-line device). These data should encourage legislators to put forward bolder and more innovative initiatives, going as far as to make the adoption of satellite fleet management systems compulsory on a national level.

manian roll" - acrobatic subtraction with moving vehicle - and, of course, the use of jammers and other electronic devices.

In this sense, what are the strategies and solutions to combat cargo crime?

Satellite telematics is undoubtedly decisive, and it is an essential element when it comes to putting together suitable preventive measures against cargo crime, provided, of course, that it is supported by adequate control, verification and intervention procedures. We, the Tapa Working Group, are encouraging the use of the best technological solutions and, at the same time, developing articulated projects and initiatives in the fields of safe parking areas and intervention protocols with the Police Force; in addition, we are promoting the Tapa security standards.

“Statistics confirm the effectiveness of satellite devices, highlighting a significant divergence from national averages, both in absolute and percentile terms: lower risk of theft and higher number of recovered vehicles”

In terms of security, some countries stand out more than others. In short, which countries are the most far-sighted in Europe?

Certainly the countries of Northern Europe, where safe and certified parking areas are more widespread, and the number of companies that use technologically advanced standards and security systems is greater. In these areas, there is more awareness of the problem than in others. As a result, more projects aimed at preventing and combating cargo crime are being implemented.

Theft and Finds truck in Italy – year 2016

Italian Regions	Theft	Finds	%
Abruzzo	86	16	19
Basilicata	24	5	21
Calabria	77	37	48
Campania	367	162	44
Emilia Romagna	104	61	59
Friuli Venezia Giulia	21	2	10
Lazio	193	97	50
Liguria	15	31	207
Lombardia	289	233	81
Marche	33	11	33
Molise	11	3	27
Piemonte	123	104	85
Puglia	247	160	65
Sardegna	16	7	44
Sicilia	247	111	45
Toscana	67	32	48
Trentino-Alto Adige	6	0	0
Umbria	32	5	16
Valle d'Aosta	0	0	0
Veneto	95	54	57
Total National	2.053	1.131	55



Runtracker 5.5, the safe route

Satellite telematics, in spite of the modest investments it requires, is indispensable to bring a competitive advantage to Italian transport companies, and more generally to the whole country. In this sense, Viasat's RUNTRACKER 5.5 - designed and manufactured in Italy - distinguishes itself as a satellite device that can provide top-notch locationing, security and communication services. Once installed on board of the vehicle, it communicates with the Viasat Operations Center. Through high-profile technologies such as the GPS satellite system (Global Positioning System), the GSM communication system (Global System Mobile) and the Internet, it allows precise locationing and web map visualization, together with anti-theft protection in Italy and throughout Europe. The analog and digital input and output signals offer a mix of additional functions to gain total control of your fleet: chronotachograph data management, driving style analysis, fuel control, communication with on-board devices (tablet, navigator, smatphone) and maximum levels of security against thefts and robberies.

Since the 1980s, Viasat has been pioneering the use of Infotelematics technology in Italy and Europe. Its cutting-edge solutions reduce fleet management costs, taking full advantage of the huge potential of satellite telematics.

An eye on the road



Road safety has always required a variety of measures in various areas, including driver training, infrastructure and vehicle improvement, and the intensification of road checks. It is advisable to perform these interventions because, as **Umberto Guidoni, Secretary General of the ANIA Foundation** points out, "About half of all work-related casualties happen on the road, so much so that road accidents are the main cause of occupational fatalities".

In July, Aci and Istat released the definitive data on road accidents in 2016. What do you think about this?

A positive factor is the number of casualties, which decreased again in 2016 after the worrying trend increase of the previous year. Road casualties added up to 3,283, a 4.2% decrease compared to 2015 and, most of all, a 20% decrease compared to 2010. These figures tell us that we are on the right track, but we should not lower our guard, since the number of injuries and accidents has been on the rise again, after several years. With regard to vulnerable road users, there were fewer casualties among pedestrians and motorcyclists, but more among cyclists.

The number of heavy transport-related casualties has also dropped. What can you tell us about this sector?

The Polizia Stradale's provisional data had already given positive indications, which were then confirmed by the Aci / Istat report. Looking

at the heavy truck segment, there was a 13% decrease in casualties. It should be remembered, in this context, that about half of all work-related casualties happen on the road, so much so that road accidents are the main cause of occupational fatalities.

Road safety is also a key element for freight transport companies. What is the current situation?

Companies tend to disregard the risk of road traffic accidents, because they think that the variable nature of factors such as infrastructure, traffic, vehicles, human behavior, etc. is difficult to control. These variables help cause a more frequent driver misbehavior. Distraction, fatigue, stress, sleepiness, incorrect nutrition, altered psychophysical condition due to alcohol or drugs: all these elements can lead to poor reaction times. What is more, in recent years, a new criticality has emerged: driver distraction caused by technological devices such as smartphones, tablets and satellite navigators, which can also be used while driving. It is essential to devise specific initiatives, targeted at the companies operating in this sector.

How can we effectively intervene in order to reduce risk in the freight transport sector, consequently limiting work-related accidents?

In the past, the ANIA Foundation has proposed a business training model aimed at increasing the perception of road risk while, at the same time, providing useful information to those that work with vehicles. To demonstrate the validity of this concept, ANIA has been running, for about a decade, the project "Sicurezza nel trasporto pesante" (heavy transport safety), a true best practice model for company fleets at risk. The project has provided for a number of specific measures for transport companies, in the

area of road risk prevention and management. Especially worth mentioning are: specific training for drivers; improved work organization to reduce risk factors; a stricter enforcement of rules with regard to driving times and rest periods for drivers, vehicle maintenance as well as cargo loading and transport. The model developed over the years has had an actual impact on road safety, as can be inferred from the data collected on a sample of heavy trucks

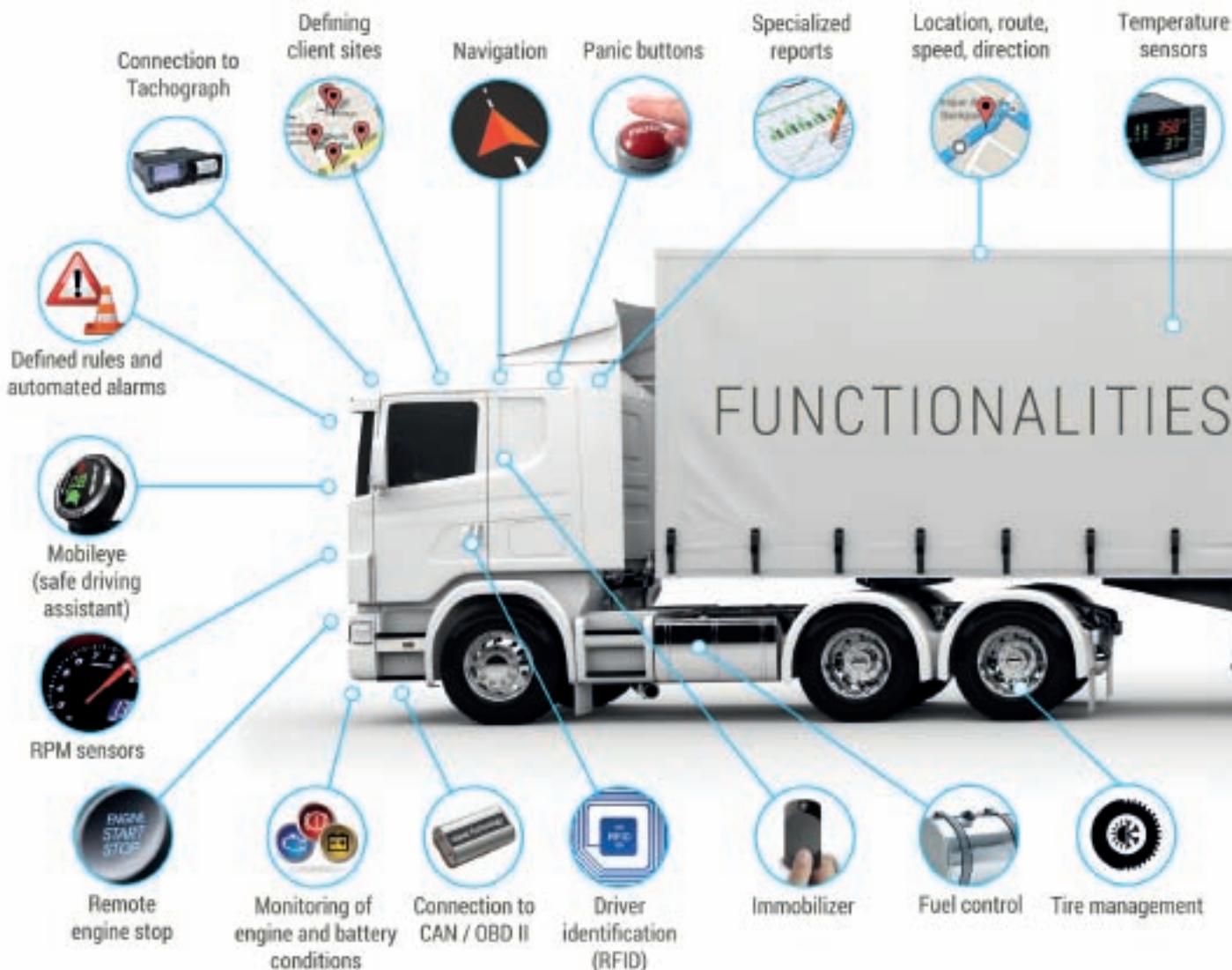
(weighing over 40 tonnes) belonging to 55 road transport companies located throughout the national territory, showing a reduction in the accidents/vehicles frequency and in the general number of accidents.

"The ANIA foundation has been running, for about a decade, the project "Heavy Transport Safety, a true best practice model for company fleets at risk, aimed at increasing the perception of road risk while, at the same time, providing useful information to those that work with vehicles"



TECHNOLOGY
a Viasat Group Company

REAL TIME GPS VEHICLE TRACKING AND FLEET MANAGEMENT



Autonomous driving technical tests



Hheavy trucks with automated or semi-automated driving, alternative fuels, greater efficiency and lower environmental impact. Thanks to the developments of technology, the future is almost here. By 2020, 99% of all new trucks sold in Europe will be fully connected, telematic and digital. It is basically around the corner! We have asked **Gianmarco Giorda, Director of ANFIA**, about this topic.

How is the situation like, today?

We are making good progress. Platooning, i. e. the introduction of semi-automated commercial vehicle convoys between vehicles of the same brand, is already available today and, according to the "EU Road Map for Truck Platooning", will be available by 2023 even between vehicles of different brands. The introduction of fully autonomous trucks will take longer, but it is expected to become a fairly widespread phenomenon over the next ten years.

What advantages will this leap into the future bring us?

In general, the advanced driver assistance systems (ADAS) installed on the vehicle, up to full automation, will allow for lower fuel consumption and CO2 emissions - with savings as high as 10% - and higher freight transport safety and efficiency levels. This is because vehicles will be able to share more and more information in real time, exchanging data on their respective positions and speeds. Some ADAS systems have already been proven to reduce collisions between road vehicles by as much as 80%.

And in practical terms? Can you provide some examples?

The benefits in terms of safety come from truck platooning and, in a wider sense, from semi-automated and automated driving technologies. In platooning, the truck at the head of the convoy is the leader, and the vehicles that follow adapt to its movements, requiring almost no action on the part of the driver, so even braking will be automatic and immediate. Each truck in the group is equipped with an advanced remote control platform based on radars, cameras and a GPS system, as well as sophisticated security systems such as the CACC (Cooperative Adaptive Cruise Control) and the Advanced Emergency Braking System. Furthermore, it is able to communicate and interact with other trucks in the convoy thanks to Wi-Fi technology.

Interconnection between vehicles, but also between vehicles and infrastructure. What can you tell us about this?

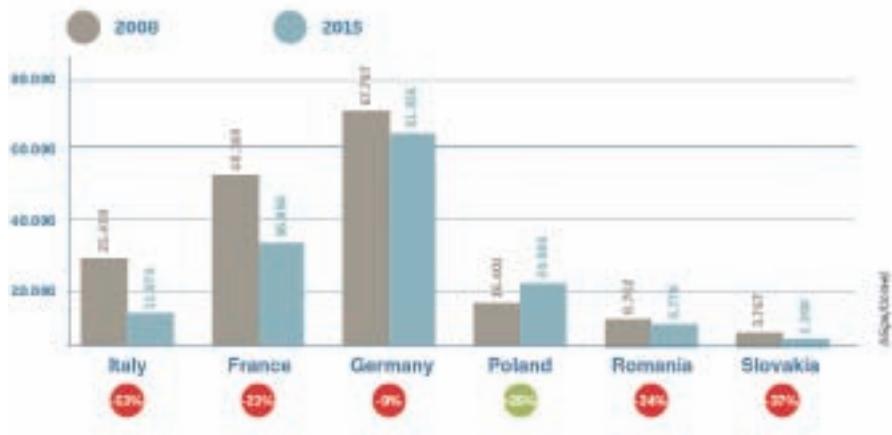
In this precise moment, in five European countries - Belgium, France, Germany, the Netherlands and Spain, with more to come - companies involved in pilot projects are testing applications such as Highway Chauffeur - the most advanced highway autonomous driving technology currently available -, as well as truck platooning and telecommunication network functionalities, including network slicing (which allows the creation of multiple virtual networks based on a single shared physical infrastructure) and LTE broadcasting (which allows to send a data stream to everyone in a given area). It is expected that from 2018, functions such as automated parking and the actual implementation of automated driving will become more and more crucial for the evolution of the industry. This also means that testing activities will be launched on the motorway networks that connect different countries within the EU.

-10% is the fuel consumption cut that can be achieved by acting on tires, aerodynamics of vehicles and driving styles in tandem with the new technologies. (*Freight Leaders Council*)

4% to 10% less Co2: this is the expected reduction in emissions for commercial vehicles using ecodriving supports. The result depends on the driver's initial driving style. (*Ertico Its Europe*)

Up to 28% dTCO reduction for a 40-ton truck operating over long distance that switches to ADS and AV - Autonomous Vehicle. (*Tir Magazine*)

REGISTRATION OF COMMERCIAL VEHICLES IN EUROPE



Is the road map outlined by the business world enough, or do we need more than this?

We do. A supportive regulatory framework obviously plays a crucial role when it comes to the further development and success of these technologies. For instance, investments in broadband Internet are one of the key factors to allow said technological developments to bring widespread benefits to the entire European economy and society. In general, harmonizing regulations across different countries is a key element when it comes to maximizing

to the new vehicles on the market today. The industry in this sector is committed to reducing greenhouse gas emissions through continuous technological innovation applied to fuel consumption, combustion improvements, aerodynamics, low rolling resistance tires and advanced control systems. The combination of several innovative elements (vehicles, fuels, integrated transport systems, driving behavior, etc.) represents the potential to reduce CO₂ emissions more successfully as part of an integrated approach.

these benefits. In short, we need international standards, also in order to obtain derogations and appropriate exemptions for this type of vehicle when traveling from one border to another. All the actors in the system are involved in this transformation: from road infrastructure operators to road transport and insurance companies, and most importantly, politicians.

However, all this technology requires a modern vehicle fleet...

That is true. In Europe, a truck is about 11.7 years old on average, but in general the figures show a fleet of trucks which still needs to be renewed and is not very efficient, both in environmental and in road safety terms, compared



For this very reason, Tecno Accise S. r. l. offers its support, know-how and professionalism in order to help its clients obtain a refund of excise duties on diesel fuel, according to what is established in the "Testo Unico delle Accise", both for road transport companies and those that use public works vehicles. Road transport

speaking, the procedures are different from country to country because no shared regulations have been laid down by the European legislation to date. Thanks to our teamwork, we have established a remarkable, continuous growth trend over the years, reaching a leadership position in the excise duties sector with more than 2,500 client companies, both domestic and foreign. All of this was made possible by our desire for innovation. Since the very beginning of our collaboration, Viasat has been the ideal partner for a company like ours, which makes research, development and technological innovation its mantra. The latest product of our fruitful collaboration with Viasat is 'Fuel', our control system for diesel tanks dedicated to the refueling of company fleets. Thanks to Fuel, companies will finally be able to control fuel consumption, reduce waste and rely on a strong deterrent against theft and product subtractions. Thanks to the range of services offered by the Tecno Group, companies finally have at their disposal all the tools they need to increase and improve their competitiveness in Italy and Europe.

EXCISES: FUEL PRICE GOES UP? GET REIMBURSED!

Fleets can become technologically advanced, heavy trucks can become automated or semi-automated - but the sad truth is that, despite the drop in oil barrel prices and the commercial policies of oil companies, excise duties and VAT still add up to about 70% of the average cost of oil products. These are fixed costs, unaffected by barrel price fluctuations. Let's consider that, if the raw material was freely provided by mother nature, a liter of gasoline in Italy would still cost 1.083€ and a liter of diesel fuel 0.965€, making Italian taxation on diesel fuel the second highest in Europe, only surpassed by that of the United Kingdom.

"Road transport companies can obtain a refund of up to 0.21€ per liter of diesel fuel consumed, while the companies that use public works vehicles can obtain tax exemptions for about 0.43€ per liter of diesel fuel"

companies can obtain a refund of up to 0.21€ per liter of diesel fuel consumed, while the companies that use public works vehicles can obtain tax exemptions for about 0.43€ per liter of diesel fuel. Refunds are not only an Italian issue, but a European one. To date, tax exemption is also accessible in the following five countries: Belgium, France, Hungary, Slovenia, Spain and Slovenia. Bureaucratically

Giovanni Lombardi, CEO Tecno Accise



Intermodality: the challenges of the Italian System

By **Marcello Di Caterina**

General Manager at ALIS - Associazione Logistica Intermodalità Sostenibile

Transport and efficient logistics are decisive factors for the economic development of a country. The future is embodied by the synergies and increasingly close collaborations between the various stakeholders operating in the sector (port operators and authorities, road transport and railway companies, terminal agencies, and so on) - in a single word, by intermodality. Its benefits are tangible and cross-cutting, and involve those working in the sector as well as the whole community. According to the international definition, intermodal transport is the transfer of goods from origin to destination which takes place through two or more modes of transport. This serves as a context for the so-called Motorways of the Sea - an ambitious project that the European Union has been carrying out since 2001, with the aim of providing efficient maritime connections between the various ports of the Mediterranean and favoring the transport of goods by sea over the extremely expensive and polluting road transport. There are many advantages to be gained from the adoption of rail, road and sea integrated logistics solutions. First of all in energetic and environmental terms, with a reduction in CO2 emissions of about 50% and economic savings ranging between 40% and 60%, as confirmed by very reliable sources within the sector. Suffice it to say that the combination of road and sea on the Sa-

lerno-Valencia route guarantees road transport operators savings of about 50% compared to the road-only solution. Secondly, shorter transport times: the optimal combination of road and maritime transport allows production industries in the North, for example, to deliver goods to the Sicilian mass retailers in less than 24 hours. The development of intermodal solutions finally leads a drastic reduction in the number of kilometers traveled by road transport operators. This results in environmental and economic benefits and leads to a significant road decongestion, which in turn reduces the number of accidents and increases the efficiency of infrastructure. Finally, it is worth mentioning the strategic role played by ports and interports - the true

“Transport and efficient logistics are decisive factors for the economic development of a country. The future is embodied by the synergies between the various stakeholders operating in the sector: port operators and authorities, road transport and railway companies, terminal agencies. In other words, by intermodality”

95,259 is the number of road transport companies registered at the chamber of commerce as of 30.11.2016, a 15% decrease compared to 2010 (112,216). Italy has lost almost 17,000 companies over six years. (*Infocamere*)

15,573 is the number of Italian companies owning more than 6 vehicles, compared to 17,889 French, 20,500 German, 16,190 Polish, 7,173 Romanian and 907 Slovak ones. (*Gipa-Unrae*)

9 bln/E equals to 0.7% of the national GDP, which is wasted every year due to deficiencies in the urban logistics system. (*Uomini & Trasporti*)

30% is the percentage of km traveled over medium distances by empty, i.e. unloaded vehicles. From 2010 to 2015, third-party, empty-vehicle travels increased by about 20%, especially with regard to short- and medium-range transport. (*Giordano Editore*)

98.5% of all goods remains within the national borders (937,370,621 tonnes in 2014). International transport (25,685,353 tonnes) only adds up to a fraction of the total. (*Istat*)

crossroads of transport and logistics and the pillars of efficient and virtuous intermodality. In Italy, despite the advanced state of development of the Motorways of the Sea, many interventions are still necessary before they are fully consolidated, such as the modernization and development of terminal infrastructures, the upgrading of connections between ports and hinterland, the installation of video surveillance systems and the creation of guarded parking lots. The European Commission itself believes that the competitiveness of European ports will depend on their ability to innovate in terms of technology, organization and management. According to Guido Grimaldi, President of ALIS - Associazione Logistica dell'Intermodalità Sostenibile, “Port security is a very important issue for transport companies that entrust their traffic to the intermodal logistics system. Therefore, transport and logistics companies must be able to ensure the security of the transported goods in order to be contracted by their potential clients. This is especially true when transporting basic necessities, IT products and valuable goods”.



Simple

VIASAT SYSTEMS is a telematics company born in Romania in 2001 and part of Viasat Group Italy since 2015. Its core business is GPS customised solutions, but it is also providing other tracking solutions:

VIA TRACK

GPS FOR FLEET MANAGEMENT

ViaTrack, GPS for Fleet Management, is suitable for domestic and international transport, distribution, advanced security, sales, construction and many more.



VIA WATCH

GPS FOR INDIVIDUALS

ViaWatch, GPS for individuals, is perfect for guarding the children, grandparents, and people with disabilities/ special needs or people with special activities (drivers for security, guards etc.)



VIA ASIG

GPS FOR INSURANCE

ViaAsig, GPS for insurance launched in June 2017, is addressed to the insurance companies, allowing them to adjust the insurance rates for the prudent drivers.

All the Viasat Systems solutions are innovative and new for the Romanian market and the partnership with Viasat Group made everything possible. Joining Viasat Group helped our business to grow and their knowledge and support will allow us to become the market leader.

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100 numbers to understand road transport

Is it possible, starting from numbers and statistics, to outline the transformation of a sector that is as passionate and critical as ever, in order to build a compass that everyone can use? This is precisely what the book "Ritratto in cifre. 100 numeri per capire l'autotrasporto" aims to achieve: to tell, with the help of numbers, about the new face of Italian road transport, its critical issues, the uncontrolled competition, the gap separating it from Europe and the solutions to keep it afloat. Without forgetting, of course, about its possible evolutions: from the car-

riers which are opening up towards experimentation and specialization (carrier 2.0), to the progress towards process digitization, industry 4.0 and intermodality - one of the most important elements for the future of the transport sector. This is the exact scenario in which satellite telematics, strong with the growth of the IoT, will play an increasingly important role in guaranteeing efficiency, safety, as well as environmental and economic sustainability to all the workers in the freight transport and logistics sector.

Italian road transport is undergoing a transformation. The economic crisis hit us like a very hard slap in the face. The economic situation was made more severe by the simultaneous opening of borders and by the advent of competition from Eastern European carriers, all of this while the competitiveness gap with respect to European colleagues was increasing even more. All of these factors have left deep scars on an already damaged business fabric: almost 17,000 companies (-15%) have disappeared since 2010. The greatest price was paid by individual enterprises (minus 20,000 units), while corporations and aggregation forms such as cooperatives and consortia have been growing instead. Road transport had never given such a sign of cohesion before: the world of "small business owners" is starting to

collapse as more and more structured companies make their way in order to deal with increasingly complex situations. This "moving background" is the central theme of "Ritratto in cifre. 100 numeri per capire l'autotrasporto" - a picture that adopts a clear, almost mathematical point of view in order to be as objective as possible: more than 100 numbers - at the beginning of each chapter - extracted from different sources, are



the 'roots' of a 'forest' of cross-referenced data, among which one can clearly glimpse the changes which are already underway or those that are just beginning to take shape. Actually, in some cases, it has been possible to highlight processes that are already well established, such as the new relationship between Italian road transport and Eastern Europe, which is no longer just a land of competitors and enemies, but also an escape route for those trying to cut down their costs. With regard to other phenomena, the volume highlights contours that are still vague, but promising. This is what happens, for instance, with future trends. The circulating fleet is still old, but there are signs of a renewed interest of the sector towards environmental sustainability, new fuels, energy saving and advanced technologies that will lead to assisted and au-

tonomous driving, with a consequent evolution of the profession and skills required by it. A not too distant future which the road transport sector will soon have to come to terms with, and which will require a new kind of relationship with the clients. In short, a changing, increasingly competitive market in which the objective knowledge of phenomena (supported by numbers) retains its pivotal role.



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