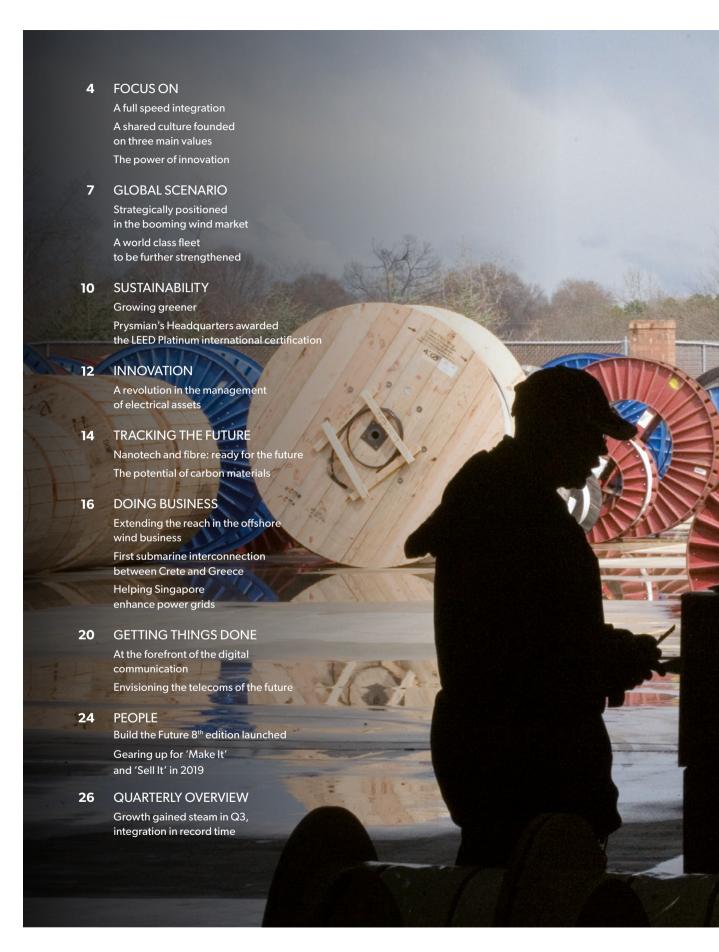
INSIGHT

04/2018 QUARTERLY MAGAZINE

FULL SPEED INTEGRATION

Giving shape to the new organisation and creating shared culture and values







RECORD TIME INTEGRATION

Editorial Team Insight

ne year following its announcement, the integration of General Cable continues at full speed. The new organisation – combining both Prysmian and General Cable – has been established in record time. With an extended leadership team ready to lead the Group at the corporate, regional, business and functional levels, Prysmian has been provided with the structure needed to strengthen its position as the global champion of the cable industry. Operations are the core of the process and Prysmian is even better equipped to deal with, and overcome, all challenges than could have been expected.

In the meantime, results for the first nine months of 2018 approved by the Board of Directors have shown growth gaining steam in the third quarter with the telecom business on the rise, profitability improved in high voltage underground, and an uptrend for industrial and trade & installers.

As a global leader in its industry, Prysmian is eager to fully exploit the opportunities made available by the digital revolution to get the best out of its communication platform and tools to the benefit of all its stakeholders, both internally and externally.

In 'GETTING THINGS DONE', we report that the progress made in this crucial field was recognised with the most prestigious awards, as Prysmian Group is forging ahead with initiatives aimed at capturing the full potential of the new technologies for an even more interconnected organisation, starting with its people.

In 'GLOBAL SCENARIO' we explore the global offshore wind farm market that is expected to almost double between now and 2025, determining that Prysmian Group is strategically positioned in this booming market and aims to further strengthen its leadership in the rapidly expanding wind power industry. In fact, Prysmian recently secured the Hornsea Project Two in the UK, linking the world's biggest offshore wind farm, that will provide power to over 1.3 million homes with green electricity, confirming the competitiveness of Prysmian's offer in this high value market.

Growing responsibly has always been a top priority and a strong commitment at Prysmian Group. In the SUSTAINABILITY session we report that Prysmian's headquarters in Milan received the prestigious LEED Platinum international certification, the international standard of reference in assessing environmentally friendly buildings that was developed by the U.S. Green Building Council.

A FULL SPEED INTEGRATION

On 4 December, 2017, Prysmian Group and General Cable announced they were about to merge into a single Group. One year on, the new organisation consisting of the two entities is a reality which has been achieved in record time, allowing the Group to create the structure needed to be a global champion of the cable industry.

n less than a year since the very first announcement of the merger deal with General Cable, Prysmian Group has built the pillars of the new, integrated organisation. A new and stronger than ever Group has secured the position at the top of the global cable industry with over €11 billion of sales, an increased global presence in over 50 countries, a broad manufacturing footprint with over 112 plants, the world's widest product and brand portfolio and the most innovative technologies developed in 25 Research & Development centres. CEO Valerio Battista recently stated in a message to Prysmian Group's people, that this is due to a combination of management expertise, talent and a highly diverse multicultural environment of about 30,000 people "whom I consider the company's most important asset".

According to the CEO, thanks to these strengths, the new Group will be able to meet the expectation of all stakeholders, from employees to customers and shareholders. All of this is happening at a time of considerable change, challenges and business opportunities: the transition to a smarter and cleaner energy scenario and the revolution of the digital economy, which represent clear opportunities for the global leader of the cable industry. Thanks to the increased capability to invest in innovation, the Group will be able to benefit from these opportunities. Of course, there will also be challenges to face, such as the constantly evolving global economic and political scenario, as well as the increasing competition in the cable and systems industry, but after the merger with General Cable, the company is even better equipped to face said challenges and succeed, both now, and in the future.



FORGING AHEAD WITH THE NEW ORGANISATION

We are some way into the merger process journey of Prysmian Group and General Cable, and the integration of the perimeters of the two companies is forging ahead beyond even the most optimistic expectations.

new organisation has been firmly established, along with an extended leadership team, ready to lead the Group at the corporate, regional, business and functional levels. Fabrizio Rutschmann, Chief HR Officer of Prysmian Group, explains that this was the outcome of extensive assessment and planning, with the differences between the two groups having been subject to widespread and in-depth analysis as well as designs being created for the new organisation.

The Group now also expects to be much stronger in terms of its geographical footprint, as General Cable has always been strong in the Americas, and through the merger Prysmian Group has doubled its position in this region. To facilitate a smooth process, Prysmian collected a vast amount of data on various cultural factors at different levels of the firm, with 1,500 employees taking part in a survey on this topic.

Operations are the core of the integration process, and Prysmian arrived well equipped to deal with and overcome any operational challenges, with its Fast Forward Operations program, aimed at raising awareness about the Group's strategy and to stimulate participation and contributions on behalf of all involved.

A shared culture founded on **three main values**

A cultural journey started just after the merger agreement, which aimed at combining the optimum traits of both Prysmian Group and General Cable, as well as to create a definition for the new organisation.

The journey of Prysmian Group and General Cable towards the creation of a shared set of values began with the event "Out In Front Together" that saw 480 managers from all over the world discussing the future of the company. This included a cultural survey, "Our Company Values Survey", held in the Prysmian Group Academy where 1,500 employees shared their thoughts

and opinions. by 10 cultural d i f f e r e n t additional 250 connected to stories and



This was followed workshops in locations with an employees who share leadership validate the results

of the survey. This allowed a more in-depth understanding to be gained of the behaviours critical to the company. The outcome of the survey and workshop has been shared with the top management in a dedicated session, adding observation in a stunning example of togetherness to finalise and release our new values.

The outcome was the definition of three key values: **DRIVE**, **TRUST**, **SIMPLICITY**. With the first, we aim to lead the industry evolution, combining our ability to develop our people and our business in a clear direction while anticipating customer needs. With Trust, we want to create an environment of trust that exploits diversity and collaboration, where people are empowered to make decisions with integrity. Simplicity means that we bet to simplify anything we can, focusing on high-value generating activities and timely decisions to boost our Company results.

Upon those pillars, according to Fabrizio Rutschmann, Chief HR Officer of Prysmian Group, "We empower our people to grow by leveraging on career opportunities, expressing themselves and sharing different ideas to make our company stronger".

The entire process made it evident to all that one of the most valuable assets shared by these two successful companies is people; this asset is of even greater importance to the new combined group. The new group comprises of people with different backgrounds, stories, and complementary capabilities and skills: it is a truly multicultural group with a shared passion for success.

THE POWER OF INNOVATION

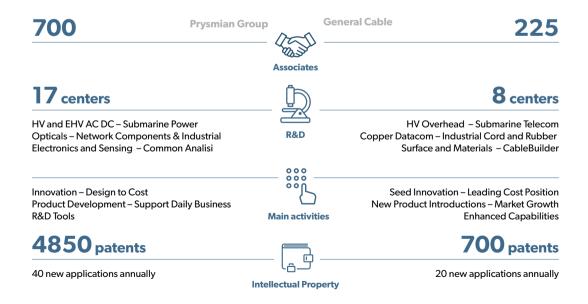
Srini Siripurapu, Chief Research & Development Officer Prysmian Group, explains how the combination with General Cable has created a new Research & Development powerhouse as both companies' skills and knowledge shape product development for the future.

fter the combination with General Cable, Prysmian Group now has a combined R&D global footprint of 25 centres worldwide, of which there are 8 from legacy General Cable and 17 from legacy Prysmian Group, and a combined portfolio of over 5,600 patents. Two key General Cable R&D Centres have been added; the Indianapolis Technology Centre, a Centre of Excellence for Materials Innovation, and the Marshall Technology Centre, a world class Electrical Testing Lab.

A VERY RICH STORY. Srini Siripurapu, the Group's new Chief Research & Development Officer, explains that both companies "have a very rich history of successful development and

commercialisation of flagship products and well recognised brands in the global wire and cable industry". The combined Group will continue to invest in the already established R&D leadership in high voltage, submarine and telecom products and has already been sharing expertise in R&D for its 'bread and butter' insulated low voltage and medium voltage energy products. Srini states that the new organisation "now has the broadest product portfolio in this space to service customers in any part of the world". Overall, he adds, "this merger provides tremendous opportunity for our R&D team to learn from each other and adapt the very best of the R&D tools and practices, to create an efficient collaborative ecosystem with our customers, partners and suppliers."

Getting stronger together





he global off-shore wind turbine market is expecting to boom from \$29.4 billion in 2017 to \$58.8 billion in 2025 with a compound annual growth rate of 7.7%, according to recent figures published by Reports and Data, a New York based market research and consulting firm catering to varied industries. This considerable development is a result of several factors, from increases in oil prices to a shift to renewable sources of energy. In addition, the giants of the oil and gas industry can find immense potential to shift towards offshore wind energy as they already possess the necessary infrastructure and skill set, thus boosting the market for turbine. Construction of sustainable infrastructure is required for the purpose of off-shore power generation as turbines are anchored to the ocean floor. Given that the oil and gas industries are already participating in this practice, we see more

and more oil giants investing in the offshore wind production. Companies like Shell and Statoil are diversifying their reach by entering this new market. Aside from these oil and gas giants, companies providing services such as platforms for offshore fossil fuel are also witnessing the growth of a new market.

From the cable and systems industry standpoint, the growth of the offshore wind market can only be welcomed, as it represents the high end of product offerings in terms of technological excellence and higher added value. As a world leader in this area, a position reinforced by the recent merger with General Cable, Prysmian actually enjoys the advantage of being a growing company in a fast growing market, where it can boast a long-standing track record of offering customers proven, cost-effective cable designs and operating systems.

he market is also rapidly evolving, demonstrating that it is capable of growth even in the absence of subsidies. In 2017, three out of four winning bids in German auctions for projects to commence in 2025 were for subsidy-free power, totalling 1.38GW of new capacity. The cabling industry increasingly believes that further progress in wind offshore cost-reduction could be achieved through the upcoming move to high-voltage (HV) inter-arrays and export lines. As a trusted and dedicated partner, Prysmian continues to support the needs of this growing industry, offering medium voltage inter-array cables, high-voltage alternating current and high-voltage direct current export cables. The growth trend is in fact strictly associated with technological advancements. Even if today the submarine cable infrastructure market is still hinging on 33 kV technology, it is clear that the

THE BOOMING WIND MARKET

industry is shifting towards 66 kV, enabling twice as much power to be transported than that of a single array cable, allowing it to work with larger turbines and reduce the length of cables required.

A NUMBER OF MILESTONES. Prysmian leadership is founded upon being a strategic partner for the biggest transmission system operators involved in

the development of the offshore industry, as well as the most important developers. Among the several offshore wind farm subsea connections completed, the Group realised a number of milestones in the industry: BorWin2 project (North Sea), the first 800 MW connection to offshore wind parks and the largest VSC system; SylWin1, the highest-ever rated system for VSC technology with a power rating of 864 MW operating at the highest commercially available voltage level of ±320 kV DC; and IFA2, a ±320 kV DC interconnection to connect Tourbe in France to Chilling in Hampshire, UK. One of the most recent projects secured by Prysmian is an approximately €300 million contract from French TSO Réseau de Transport d'Électricité for the 220 kV HV export lines for the first three French offshore wind farms -Fécamp, Calvados and Saint-Nazaire.

NEW ACHIEVEMENTS. Prvsmian recently added several important contracts for new cable connections for offshore wind farms and turn-key projects to supply and install submarine inter-array cable systems. Among the latest achievements, a contract was secured for the development of submarine power cable links for Hornsea Project Two in the UK, the world's biggest offshore wind farm, and the Group succeeded in commissioning the inter-array cable system for the Wikinger offshore wind farm, located within the West of the Adlergrund cluster in the German Baltic Sea. Details of both are reported in the DOING BUSINESS section of Insight.

SHOWCASING IN HAMBURG

Prysmian Group went to Hamburg to exhibit its state-ofthe-art range of products and services for the offshore wind industry at the 2018 edition of the Wind Energy event. Wind Energy was a key industry event for the Group to present its developments in innovative, sustainable and costeffective cable solutions for the offshore renewable power sector, including HVDC technologies for offshore wind farm applications, high-performance 66 kV cables system for interarray networks, AC and DC power transmission submarine cable systems, and solutions specifically designed to meet demanding conditions and display high resistance to abrasion, UV radiation, corrosion, bending and torsion stress. The Group also presented its innovative Power Link Cable Solutions service designed to provide a comprehensive and effective asset management of submarine cable operations, from prevention to repair.



A WORLD CLASS FLEET

TO BE FURTHER STRENGTHENED

rysmian already holds a 15% market share in the offshore wind cables and systems market and aims to increase it to 30-40% in the near future, leveraging on technological developments in cable manufacturing and installation and on a world class fleet of cable laying vessels. In order to be prepared to support the offshore wind power revolution, between 2012-2016 the Group invested around €200 million to create a world-class fleet of vessels, Cable Enterprise, Giulio Verne and Ulisse, able to lay cables at all water depths. CEO Valerio Battista recently confirmed the additional investment in a new cable-laying vessel for submarine cables, which will allow Prysmian to further strengthen its leadership in terms of resources and assets.

The new cutting-edge cable laying vessel will bolster Prysmian's turnkey approach, under which it delivers end-to-end EPCI projects, from engineering, manufacturing and installation, to full monitoring and diagnostic services. It will support long-term growth prospects in the submarine cable installation business, strengthening the Group's interconnection and offshore wind project execution capabilities. The new vessel is intended to be the most capable cable layer in the market and to offer enhanced project versatility thanks to advanced features like deep water installation capabilities for depths of more than 2,000 metres, increased cable loading capacity, performance of complex installation operations supporting a variety of burial systems, including heavy duty ploughs; state-of-the-art positioning and seakeeping systems and a reduced environmental footprint. The cable vessel is expected to be delivered by Q2 2021.



GROWING GREENER

Prysmian's Headquarters in Milan <u>received</u>
the prestigious LEED Platinum international
certification with a score of 85/100. Highest
marks obtained in three categories. The most
sustainable building in the Italian capital of
industry and finance.

rysmian's Milan headquarters were awarded the LEED Platinum international certification, which is the standard of reference in assessing environmentally friendly buildings, with regard to all aspects of their construction. The certification was developed by the U.S. Green Building Council, a private membership-based non-profit organization that promotes sustainability in building design, construction and operation.

The 22,000 sqm building, located in the 'Bicocca' district of the Italian economic capital, scored 85/100 and obtained the highest marks in three categories: "Energy and Atmosphere", "Water Efficiency" and "Innovation in Design". To date, it is the most sustainable building in Milan and the second in Lombardy, which envisages the most technologically advanced solutions that are being adopted and implemented by the so-called smart cities around the world.

The Group inaugurated its headquarters in 2016 after three years of work. The building was designed by the architect Maurizio Varratta, who followed specific innovative architectural criteria and paid a strong attention to energy efficiency and sustainability, which are distinctive of smart cities planning a building criteria.





SMART WORKING AT THE CORE OF THE NEW STRUCTURE

In the new headquarters, Prysmian's people can benefit from natural light, thanks to large glass windows, and move around surrounded by plants and water pools that help improve internal microclimatic conditions. Of course, smart working is the core of the HQ's structure, as the building is designed to improve work and promote a sense of community through a network of carefully designed meeting rooms, open spaces and common areas.

Everything has been designed to encourage flexibility and productivity as well as to meet various working needs directly, such as team and remote working, in addition to providing spaces where people can concentrate or engage in informal interpersonal activities. Several 'smart' initiatives were launched for the 700 employees working in the Milan headquarters: the 'Fruit Initiative', for example, provides employees with fresh fruit twice a week; in addition, Prysmian refunds public transport fees to those employees who don't take private nonsustainable transport to go to work. Energy consumption is sharply contained as well as the use of paper, artificial lighting is provided by variable-intensity LED illumination automatically regulated by sensors based on natural light levels that also detect the presence of people and shut off lights in empty open spaces and vacant meeting rooms. Plastic bottles are banned, electric car charging stations available.

A DRIVING FORCE OF STRATEGIC IMPORTANCE

With the new headquarters Prysmian wanted to promote a better integration between private and working lives by providing a better flexibility to working hours. "We are proud of this achievement which proves our real commitment in terms of sustainability and confirms the path followed by Prysmian in realizing such a milestone building, both on national and international level, a point of reference especially for its high environmental standards" commented Andrea Pirondini, Prysmian Group Chief Operating Officer. The LEED Platinum certification confirms once again that sustainability is a driver of strategic importance for Prysmian, as reported in the Sustainability Report 2017. Among reported results, to be mentioned the increase by 5.2% of the economic value generated and distributed in 2017 - compared to 2016 - reaching €7,866 million. In addition, ozone-depleting emissions decreased by 5%, as the Group confirmed its presence at the top of the main international sustainability indexes and assessments, including FTSE4Good, Dow Jones Sustainability Index (DJSI), Carbon Clean 200 and CDP Climate Change.

A REVOLUTION IN THE MANAGEMENT OF ELECTRICAL ASSETS



Prysmian Electronics originates from Prysmian Group's will to establish an operative unit offering electronics-based products, designed, at least at an earlier stage, for the monitoring of power

transmission cable systems. "The idea – explains Candela – has its roots in a patent, developed with a team of researchers in 2006, when I was a professor at the University of Palermo, for a device to detect PD in electrical systems". In 2009, Prysmian acquired the intellectual property of the patent and in 2012 it created Prysmian Electronics, a fully integrated Group company that now has a turnover of € 15 million.

TECH GIANTS AS CUSTOMERS

Originally, PRY-CAM identified only a portable camera-shaped device for PD measurements: PRY-

CAM Portable. At a later stage, PRY-CAM started to evolve and identify a technology and a broader range of products. Today the acronym CAM also stands for Condition Assessment and Asset Management. "PRY-CAM – explains Candela – comes from the merge of the words Prysmian and Camera. The first product released looks like a camera, based on the concept that cameras are portable, high added-value objects, which maintain their value over time and allow to store the captured data and review them, whenever desired. Since then, we have released more devices and today we do not measure only PD, but also all electrical parameters, temperature, noises generated in the surroundings of cables and much more. For example, DTS (Distribute Temperature Sensor) allows temperature



measurement along the entire route of a cable system to monitor its performances; DAS (Distributed Acoustic Sensor), allows to detect by ways of an acoustic sensor the presence in the vicinities of a cable of - for instance - an anchor that could damage it and to localize a possible fault".

PRY-CAM technology leverages three main features. First, it

relies on outstanding performances in terms of sensitivity, precision, reliability and speed.

Second, the fully integrated manufacturing of products within the Group makes them financially competitive. Third, and most important, is connectivity. A whole Cloud-based system

is built around this technology and the connected devices can transfer entire sets of information to the Cloud for real time

COSTS AND SERVICES

access. "Today our database hosts more than 1 million measurements that had never been classified and stored before

we did it, ranging from condition of use, to malfunctioning and overheating, to name a few", explains Candela. "Our mission is to gather and classify data for it to be analysed by automated diagnostics systems. In addition, our system can be used by anyone, regardless of their specific expertise, with data interpretation made extremely easy".

PRY-CAM services prove to be cost-effective and its products fit perfectly with turn-key supply patterns. "I always like to make an example", Candela says. "In the 80s, when you bought a new car, you would buy the audio device from a specialist retailer. Today, the car manufacturer's website offers three or four different-priced audio system options, fully integrated into the cockpit and operated via the car's entertainment system, regardless of their brand. The same thing happens with our products and our system is not only integrated, but it is also highly cost-effective. Furthermore, our end users have a single point of contact and do not face warranty issues. In addition to monitoring systems, we also provide analysis and periodic reporting service, with large TSOs now relying on our solution for this reason alone. That would have been impossible to imagine a few years ago.

"Our future focus will be mainly on PD measurements applied to Direct Current (DC), because this is where Prysmian Group is more active and the undisputed leader. As a matter of fact, in terms of

FUTURE DEVELOPMENTS

diagnostics capabilities, we are the only ones who can offer this type of service." Candela says. "We will

focus also on taking another step to integrate our monitoring systems with cable systems: the new Smart Link-box", he adds. Link-boxes have been existing for more than half a century, but so far, they have always been passive tools. They are steel boxes placed by each joint along the cable system's route that host cable earthing connections and surge arresters, which play a key role in the case of lightning bolts or short circuits. Until a short time ago, whenever a fault occurred, the box had to be opened to make necessary checks and closed afterwards. "This activity should be carried out every six months but it's a complicated operation goes on Candela - and often it does not take place unless a fault occurs. With the integration inside the link box of monitoring devices capable of providing all functioning parameters, we avoid any invasive action. This delivers remarkable advantages in terms of real-time information gathering and maintenance planning. Our ultimate goal is to keep on integrating electronics within cables rather than outside, as it was in the past."

NANOTECH AND FIBRE: READY **FOR THE FUTURE**

he term 'nanotechnology' covers the processing, separation, consolidation, and deformation of materials at the level of a single atom or by molecule. Nanotechnology is making electronic, optical and optoelectronic components possible that could lower cost or and increase process precision of electronics. This field of research is key to enabling communications over higher frequencies than those used today, making it essential to the 60-100GHz devices that are expected to appear in the coming years. Nanotechnology also has the potential to solve current data storage and retrieval bottlenecks, and realise new, more efficient ways of storing data. In addition, the integration of nano-components into sensors and devices should provide a huge impetus for the Internet of Things.

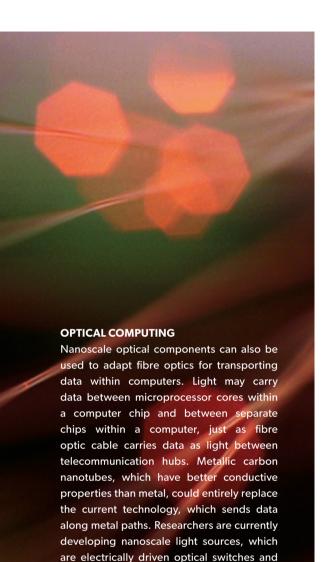
The field of Nanophotonics carries out research into the interaction of light with matter on the nanometre scale, resulting in new application possibilities and technologies. Incorporating nano-features into

optical fibres opens up many new possibilities. Nano-engineered optical fibres have applications in communications networks, as well as areas such as environmental and safety monitoring, chemical and biological sensing, and medical research. One of the key applications in communications is using nanotechnology to help confine light in photonic crystal fibres.

Fibre photonics allows for the cost-effective fabrication of diffractive optical elements directly on the facet of an optical fibre, allowing optical functions such as light splitting or focusing. Instead of just transporting light between two points, an optical fibre with nano-features can introduce different kinds of waveguiding phenomena. This also allows the use of photonic band gap effects to confine light in a hollow core fibre. The result: lower latency, excellent power handling and possibly even ultralow loss - all of which would be impossible to realise with 'traditional' optical fibre.

CARBON NANOTUBES

A carbon nanotube is a tube-shaped material, made of carbon, which has a nanometre scale diameter. The fact that the growth of carbon nanotubes is difficult to control precisely can be leveraged to produce a saturable absorber that controls pulsed laser outputs over a much wider band than traditional semiconductors. Standard erbium-doped laser diodes used in fibre optic communications networks provide a constant beam, but adding a saturable absorber produces a pulsed output, which is far more useful in communications networks.



also lower power consumption.

Clearly, nanotechnology has a great deal to offer in the area of fibre networks. Of course, as with all innovations, cost reduction will prove an important driver for adoption. Once nanophotonic technologies can compete with existing solutions on price, they should rapidly gain the market share.

routers that can convert electrical data into

optical data, route it to a microprocessor

core, and convert it back to electrical data for processing. Computers based on this

technology are considerably faster than

anything available today. This method, which

circumvents the resistance of metal, might

The potential of carbon materials

Prysmian has long focused on nanotechnology with the aim of facilitating the commercial uptake of nano-carbon based materials. The issues of concern in this rapidly evolving field were discussed at the 6th Nano-Carbon Enhanced Materials Consortium (NCEM-6), hosted by Prysmian at its HQ in Milan.

The meeting was attended by representatives of the consortium members, Airbus Group (UK), RTE (France), GE Global Research (US), Bose Corporation (US), International Copper Association (US), and the newest members since the beginning of 2017, Rolls Royce (UK), Whirlpool Corporation (US), ArcelorMittal (Spain), NISSAN (UK-Russia), Tecnalia (Spain), Johnson Matthey Plc. (UK).

As a member of NCEM, Prysmian has long held an interest in nanotechnology, as it is one of the multiple fields being explored as part of the company's continuous R&D activity. Prysmian is currently studying nanotech with the aim of obtaining new and extremely highly performing materials such as graphene, carbon nanotubes, nanofillers, and more.

Prysmian is developing new products using materials and technologies that do not yet have a market, but for which it is believed a market will exist in five or ten years. Said products might be useful as a barrier against liquids entering the cables, against fire or even to replace conductors, but the costs of achieving such performance remains yet to be assessed.

Last year the Group signed a cooperation agreement with the US-based Nanocomp Technologies Inc., a world-leading company specialising in the production of carbon nanotube-based products and materials. The two companies agreed to join forces to test and improve the use of these technologies in power transmission, power distribution, telecom networks, control and instrumentation applications. Prysmian and Nanocomp have also agreed to evaluate, at a later stage of the project, whether to commence large-scale production of products and technologies developed as result of their research.

EXTENDING THE REACHIN THE OFFSHORE WIND BUSINESS

Prysmian successfully commissioned <u>the inter-array</u> <u>cable system for the Wikinger offshore wind farm</u> in the West of the Adlergrund cluster in the German Baltic Sea.

After the new award secured for the Hornsea Project Two in the UK that will provide power to over 1.3 million homes with green electricity, Prysmian Group makes another step forward in this booming market with the completion of another milestone project.

The Wikinger project was first secured in February 2015 with a contract awarded by Iberdrola, the worldleading renewable energy developer and operator. The commissioning marks a further significant milestone for the Group, being one of the first large category offshore wind farms where the Group has been responsible for the full inter-array 'turnkey' supply and installation contract. Prysmian has been responsible for the design, manufacture, installation, burial, termination and testing of a total of 81 km of 33 kV submarine cables in various cross-sections to connect the seventy 5 MW wind turbines with the offshore substation within the 350 MW wind farm, offering strategic expertise and an extended ability to execute a complex and complete installation solution, whilst ensuring tighter control over the entire supply chain. The cables were produced at the Prysmian facility in Drammen, Norway, one of the Group's three excellence centres for submarine cable production, along with plants in Italy and Finland.

This follows the award for the Hornsea Project Two in the UK, celebrated in the last issue of Insight, which confirmed the competitiveness of Prysmian's offer in the high value inter-array market. The inter-array submarine cables system to be provided by Prysmian will connect 110 of the 165 wind turbines and the offshore substation platform in a project that involves more than 300 km of 66 kV inter-array cables with EPR insulation and single wire armouring systems plus all related accessories. Hornsea Project Two, located 89 km off the Yorkshire coast, will be able to supply well over 1.3 million homes with green, renewable electricity once it becomes operational in 2022. The project has been awarded to Prysmian by Ørsted Wind Power A/S for what will become the world's biggest offshore wind farm.



81 km

of 33kV submarine cables in various cross-sections

UPDATING ON CPR AND PRODUCT DEVELOPMENT AS T&I BENEFITS

The results achieved in the trade & installers business in 2018, as reported in the QUARTERLY OVERVIEW section, displayed an uptrend, as sales and profitability benefitted from the favourable sales mix following the new construction products regulation coming into effect, which also helped an increase in sales volume in Europe. In order to share knowledge and best practice, and consequently leverage on CPR initiatives and support local challenges, 30 people from the commercial and R&D teams gathered in Milan to provide an update on the current status of CPR adoption and product portfolio development.

The Group's Energy Product Strategy & Business Development team introduced the meeting underlining that Prysmian Group is in full compliance with requirements since the mandate of CPR in July 2017. Prysmian Group was able to steer and educate the market exerting a positive business impact. Moving forward, the Group will have to leverage on excellence across affiliates, focus on developing its product offerings, take an active role in market surveillance, and invest in communication. CPR is still seen as a fundamental asset for business growth, while market surveillance and communication can represent effective ways to contribute to a stable and well-informed industry. Taking a proactive approach in new product development and influencing local requirements is the best way to avoid delay.

First submarine interconnection between Crete and mainland Greece

Under a contract worth €125 million, Prysmian will develop a 135km-long HV cable system to be laid at installation depths of up to 950 metres.

rysmian Group secured a new contract, worth €125 million, for an interconnection between the island of Crete and mainland Greece in the Peloponnese region within a project awarded by the Independent Power Transmission Operator, which operates the transmission system for Greece's power grid. The project is the first submarine electricity interconnection between the Greek island and the mainland and involves the design, supply, installation and commissioning of a high voltage alternating current cable system composed of 150 kV three-core cables with XLPE insulation and double-wire armouring. The route extends over 135 km, reaching a depth of installation of up to 950 metres.

The submarine cables will be produced at the plant in Arco Felice, Italy, and will be installed at sea by the vessel Giulio Verne, which forms part of the Group's proprietary fleet and is among the most technologically advanced in the world. Delivery and commissioning are scheduled for 2020. The project is in line with the contract signed in 2014 with IPTO for the submarine connection between the island of Syros and the Lavrion energy transmission system in the Greek mainland, and confirms the Group as a key player in submarine connections in Europe, particularly in the Mediterranean area, where Prysmian was recently awarded a contract for two interconnections between the Cyclades islands of Evia, Andros and Tinos.





Helping Singapore enhance

Power Grids

The securing of an important contract marks the first venture for the Group in a major project in the APAC region in many years, partly thanks to a new factory in China.

Prysmian has secured a new major strategic contract in Singapore, marking the Group's involvement for the first time in many years in a project of this size in the APAC region, which also involves the supply of locally manufactured products and solutions. Thanks to its extensive knowledge, high-performance cable solutions and the new cable factory in China, Prysmian has been awarded a contract by the Singapore utility SP Power Assets Limited, worth a total of €33 million, for the design, supply, installation and commissioning of two high voltage power cable systems to connect the Rangoon and Paya Lebar substations in the city-state.

Prysmian will also supply its monitoring system using the Group's proprietary PRY-CAM technologies, which consists of a PRY-CAM grids permanent monitoring system for the automatic acquisition, processing and classification of partial discharge signals and spot temperatures, designed for remote monitoring of three-phase strategic assets. The power transmission system comprises of 44 km of high voltage alternating current underground 2000 mm² 230 kV cables with a seamless corrugated aluminium sheath and related high voltage accessories. Cable and accessories will be supplied by the Chinese subsidiary through its recently opened state-of-the-art factory which offers the APAC utilities market a wide range of high and extra high voltage cable technologies, as well as medium voltage solutions and fire protection cables.

The EPCI type contract will highlight the Group's ability to provide a comprehensive package of services and to deliver a complete cable system solution including installation in a 50m deep tunnel in water-cooled troughs and supply of auxiliary cables, including telephone and LV cables, fibre optic cable and distributed temperature sensors for the distributed temperature sensing of power cables.

AT THE FOREFRONT OF THE DIGITAL COMMUNICATION

As a global leader in its industry, Prysmian is eager to fully exploit the opportunities made available by the digital revolution to get the best out of its communication platform and tools to the benefit of all its stakeholders, both within and outside the company. The progress made in this crucial field was recognised with the most prestigious awards, as Prysmian Group is forging ahead with initiatives aimed at capturing the full potential of the new technologies.

Webranking improved again

For the fourth year running, the <u>Prysmian Group website has ranked in</u>
<u>the Top 10 of the prestigious Webranking Italy 2018</u>. The company has also reached the Top 10 in the 22nd edition of the European league table.

The research that assesses the digital transparency of the 111 largest Italian listed companies moved the Group up one place from the previous year and confirmed its position as one of the best performers in the "Industrial Goods and Services" sector. Prysmian's presence in the Top 10 ranking once again highlights the importance that the company places on its corporate website as a vehicle of transparent corporate communications, and that it is a key asset of the Group's digital communications ecosystem.

The ranking is carried out by Lundquist in collaboration with Comprend and assesses the companies' ability to meet their stakeholders' increasing demands in terms of transparency, in particular by analysing the state-of-the-art digital and corporate communications of the Italian listed companies. Webranking is considered to be Europe's leading assessor of corporate websites. The Group also earned a special mention with regards to the videos dedicated to Prysmian's employees on the website's career section.

The award was subsequently confirmed also at European level, as Prysmian Group achieved the Top 10 positioning in 22nd edition of the Lundquist research ranking the websites of Europe's 500 largest listed companies in terms of digital corporate communications.



Top Brands in People Careers section













SELECTED IN LINKEDIN AWARDS

The Group was among the three finalists of the Italian contest gathering in Milan to celebrate success.

Prysmian Group is one of the three finalists in the 'Best Employer Brand with 1,000-10,000 employees on LinkedIn' category of the Italy LinkedIn Talent Awards, which is an exclusive program aimed at celebrating the success of companies in Italy in the talent acquisition and employer branding space. The other two finalists

in the category were Perfetti Van Melle and World Food Product.

A dedicated LinkedIn team analysed the performance and results of all organisations that utilise LinkedIn Solutions in their recruitment and hiring process across Italy. The finalists for all categories gathered in Milan for an exclusive celebration ceremony.

CHATBOT COMBINED WITH AI

Prysmian launched its first chatbot integrated with the Company's Intranet

Prysmian Group launched its first chatbot 'Blu Bot' as a result of the combination of skills and expertise in Artificial Intelligence of highly specialised company Softec and the Conversate digital platform. It aims to facilitate the company's communication with its 30,000 employees in the areas of HR, IT and Communications.





Blu Bot was created in just six weeks and can be used for both external and internal communication. This is another step towards the Group's digital transformation process:

Softec was responsible for redesigning the Group's Intranet and for developing and integrating the Blu Bot chatbot within this new environment, while employees of Prysmian Group and General Cable across various continents helped fine tune the chatbot by conversing 24-hours a day and thus enabling Blu Bot to quickly learn and enhance its knowledge.

Stefano Brandinali, Group Digital Innovation

ENVISIONING THE TELECOMS OF THE FUTURE

Prysmian at FT-ETNO Summit 2018 calls for renewed focus on fibre broadband infrastructure, "critical to fulfil the requirements of future digital applications"

rysmian Group continues to draw the attention of the telecoms industry and policy makers to the importance of network infrastructure. Addressing the recent FT-ETNO Summit 2018, the Group's Telecom Executive Vice President, Philippe Vanhille, laid out a vision for a successful future telecoms and digital industry. Sharing a stage with the heads of leading European telecom operators at the important event in Brussels, Vanhille presented the Group's views on the future model for broadband networks. emphasising the importance of both investors and policy-makers taking a long-term view. Which, in the fast-changing digital sector, means promoting the deployment of high-quality passive infrastructure that will be able to respond to a yet undefined future demand for digital capacity.

FOCUSED ON AMBITIOUS GOALS. Prysmian is convinced that it is crucial to stay focused on the ambitious goals for connectivity laid down by the European Commission. First and foremost, this means investment in a homogenous and future-proof optical fibre infrastructure. "We need the concept of deep fibre to become mainstream", stressed Vanhille, as "a dense fibre network that can fulfil the requirements of future digital applications". At stake in this debate is the foundation of the Gigabit Society. That is why Prysmian will continue steadfastly contributing to the EU debate, to ensure that focus is maintained on the infrastructure needs that will ultimately satisfy the digital demands of European citizens.

TOWARDS A GIGABIT EUROPE

Most influential European wire and cable manufacturers gathered in Vienna for the European Broadband Competence Office (BCO) Network Training Session, as part of the Europacable Association, to discuss the future European Gigabit Society. Antoni Bosch, VP Telecom Solutions at Prysmian Group, joined the debate along with over 30 other representatives of national and regional authorities, renewing the commitment to support the deployment of a stable digital infrastructure across the continent. "Europe needs investments in fibre deep networks which are vital for our economy and society to be competitive in the digital 21st century, and only high-quality cables will contribute to making Europe's Gigabit Society a reality", he stated.

Europe needs investments
in fibre deep networks
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digital 21st century.
Antoni Bosch,
Vice President
Telecom Solutions at
Prysmian Group

Innovative solutions for 5G technologies

The new Karona Overblowing System allows for faster deployment of cables for congested duct networks and rural broadband applications. This was the first successful installation in the UK.

rysmian took another step forward in connecting homes and businesses with the newly launched Karona Overblow System, a new solution that enables the installation of high density optical fibre cable into pre-existing sub-ducted routes containing the existing legacy cable. Existing networks are already congested with legacy cable, but installing more ducts can be expensive and time consuming. Prysmian presents a solution to this issue with a new way of installing additional amounts of fibre cable using the existing duct network. Said solution, the Karona Overblowing System, comprises overblow cables, installation equipment, connectivity and comprehensive training. Britain's Openreach is already benefitting from the new solution to help install its 'Single Fibre Network' in both major cities and remote rural areas. Prysmian developed part of the Karona system specifically to allow Openreach to add small diameter cables into a range of low diameter sub ducts where legacy cables already exist.

SHOWCASING TELECOM SOLUTIONS IN BEIRUT

Prysmian was the Gold Sponsor of the 2018 FTTH
Council MENA Conference in Beirut, Lebanon, a threeday event devoted to the theme "FTTH, Connecting
the Nation" aimed at highlighting the key role of FTTH
in building state-of-the-art digital societies as well
as the benefits of FTTH deployment for fixed/mobile
operators, governments and consumers. Prysmian
Group showcased its latest products for the telecom
business, with a specific focus on the MENA market
and solutions aimed at "MEETING TOMORROW'S
DEMANDS TODAY", to support customers in the
realisation of some of their most important projects
where quality products and innovative cabling
solutions are fundamental in meeting the increasingly
demanding needs of modern broadband networks.

NEW ACCOLADE IN BRAZIL

Prysmian has been acknowledged as the best in class at the 15th "As Melhores da Dinheiro", one of the most respected awards in Brazil, honouring companies with the best management practices in corporate governance, human resources, innovation and quality, social responsibility and financial sustainability. The award was created 15 years ago by leading weekly 'Istoé Dinheiro' which reports on Italian business and economics. Prysmian has been ranked first among companies in the electronics, machines and electrical components industry.



Prysmian Group

Join the YES Program

Shared values, united goals, a collective trust.

Bruna Chitoni

Milan Headquarters, Italy Communications

BUILD THE FUTURE 8TH EDITION LAUNCHED

Thanks to the innovative program, Prysmian has recruited nearly 300 talented graduates since 2012.

rysmian Group has launched the eighth edition of its international recruitment program 'Build the Future', which offers graduates a highly professional training path through their integration into

an outstanding working environment. Fifty new graduates with different backgrounds – economics, business, engineering, physics, chemistry, mathematics and information technology – will come from all corners of the globe to join our team this year. The recruitment process will be taking place until

December 2018 and the selected graduates will be integrated by the first quarter of 2019.

Since 2012, Prysmian has recruited nearly 300 graduates from over 30 countries in five continents. In 2017, 42% of new

recruits were women and the percentage of females is set to grow to 50% by 2019. The program's goal, after the first three years, is to assign graduates the roles of junior manager or

specialist in a technical area, in the country of origin or overseas, according to a meritbased approach based on performance, personal aptitude, results and company needs.

"We strongly believe that young people's contribution is fundamental in terms of

ideas and innovation," commented Fabrizio Rutschmann, Chief HR Officer, Prysmian Group. "They are also involved in accelerating our company's growth, making it more competitive, as well as being increasingly open to and integrated with the communities in which we operate".



Gearing up for 'Make it' and 'Sell it' in 2019

Prysmian continues to run its recruitment programs to attract and train talented professionals from all over the world. The Group has announced the upcoming editions of "Make It" and "Sell It", in their fourth and third year respectively.



NURTURING THE ENGINEERS OF THE FUTURE

"Make It" is a four-year program targeted at manufacturing engineers, as well as other specialist technical staff who have obtained a bachelor's degree in engineering, or equivalent, and who possess 3 to 7 years of experience in similar positions. The program includes a three-month local on-boarding, a two weeks introduction in the Group's headquarter in Milan and attendance at the Prysmian Group Academy.



BUILDING A WORLD CLASS SALESFORCE

"Sell It" is a three-year career development program for talented sales professionals. The training takes place within the Prysmian Group Academy – in partnership with the world's most renowned business schools – and continues in the Group's key locations through a structured and constantly monitored induction program that from the beginning has allowed the attendees to meet all key customers in each of the business areas.

GROWTH GAINED STEAM IN Q3 TELECOM ON THE RISE

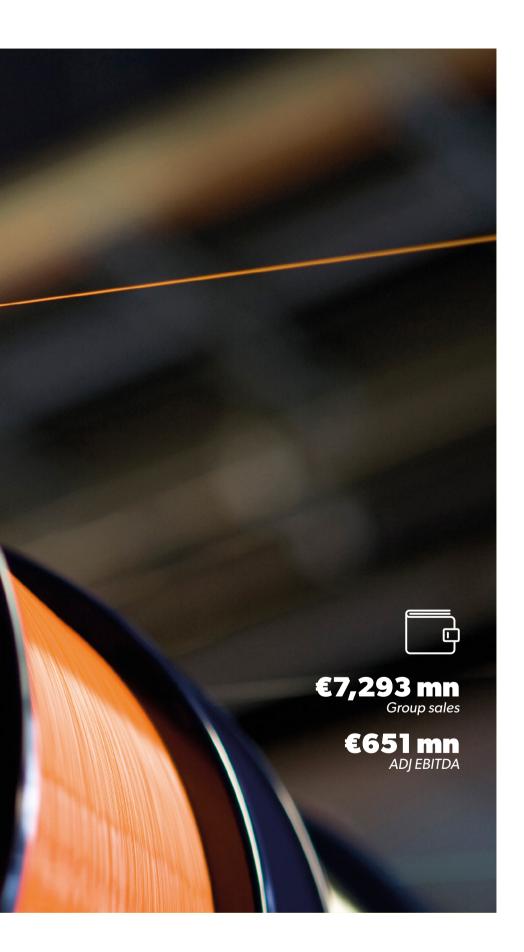
Profitability improved in high voltage underground, and there has been an uptrend for industrial and trade & installers. General Cable's integration and synergies proceeding according to plan.

he Board of Directors of Prysmian Group has approved the consolidated results for the first nine months of the year. These results were 'largely' showing improvement, with a sound organic sales growth of 3.8%. Growth gained steam in Q3 and a 7.4% increase was reported. Chief Executive Officer Valerio Battista pointed out that the integration with General Cable, which began promptly after the closing of the acquisition, is proceeding according to plan, as the achievement of synergies is progressing in line with expectations.

In the energy projects business, the order intake for submarine cables is consistent with Prysmian's market share, with the first part of the year marked by a slowdown in securing the award of some important projects and their postponement to the last part of the year or to 2019. In high voltage underground, the tendering process has begun for the large projects SüdLink and SüdOstLink in Germany, which represent important opportunities. The investment in the new cable-laying vessel for submarine cables has been confirmed, which will allow Prysmian to strengthen its leadership in terms of resources and assets.

The CEO also noted that in the telecom business, the Group is a strategic partner in several of the world's biggest broadband projects. The market has responded well to innovative new businesses such as the monitoring of power grids using Pry-Cam technology and monitoring and maintenance services for submarine cables. 2018 profitability targets were confirmed, with fully-combined adjusted EBITDA in the range of €860 to €920 million.

QUARTERLY OVERVIEW



Sales

Sales amounted to €7,293 million, including €1,246 million generated by General Cable, chiefly driven by the optical cables business and connectivity systems for broadband telecommunication networks, as well as the uptrend in high voltage underground, industrial and T&I.

Adjusted EBITDA

Adjusted EBITDA came in at €651 million, of which €148 million was attributable to General Cable, compared to €714 million in 9M 2017 (€167 million from General Cable). This included a €25 million impact generated by reorganisation and efficiency improvement costs. The income is related to the listing of YOFC on the Shanghai stock exchange amounting to €36 million.

Net Financial Debt

The net financial debt amounted to €2,877 million as of 30 September 2018, compared to €436 million on 31 December 2017. The main factors that influenced the figure were the impact generated by the acquisition of General Cable, amounting to €2,599 million, positive operating cash flows of €403 million and an increase in net working capital amounting to €570 million, largely attributable to energy projects.

Guidance

The Group confirmed the forecast of a fully-combined adjusted EBITDA for the full year 2018 in the range from €860 million to €920 million, up from the €733 million reported in 2017.

Energy Projects

Organic growth up 6.4%

Stable profitability, net of the Western Link provisions, was accompanied by a decrease in the Group's order book due to the postponement of some important projects. There is a stable market share and positive performances of high voltage underground in APAC, Southern Europe and South America.

Energy project sales (excluding General Cable perimeter) reached €1,086 million – a 6.4% organic growth. Adjusted EBITDA was €117 million, negatively impacted by the €70 million provisions related to the Western Link project, excluding which was equal to €187 million, up from €181 million in 9M 2017. Adjusted EBITDA ratio to sales went to 10.8% from 17.4%.

In the **submarine business**, organic growth was affected by the impact of the Western Link project. The main projects for the period were the connections of the offshore wind farms Borwin3 and 50 Hertz, the NSL between Norway and Great Britain, the Cobra cable link between the Netherlands and Denmark, and the IFA2 interconnector between France and Great Britain. The completion of several inter-array connections, such as the Wikinger project, one of the most important offshore wind farms in the Baltic Sea, was also significant. Prysmian Group also confirmed an investment of about €170 million for building a new cable-laying vessel, which is expected to be operational by Q2 2021.

In the **high voltage underground business**, the positive results recorded in H1, driven mainly by growth in demand in APAC, Southern Europe and South America, were confirmed in Q3. The procurement process started for major interconnection projects in Germany such as SüdLink and SüdOstLink. The Group also recently secured new projects for a total value of approximately €80 million.

The power transmission order book totalled about €1,900 million, as the projects awarded were essentially consistent with Prysmian's historical market share. It does not include two major contracts worth €220 million and €125 million, which have not yet received notice to proceed. Between August and October, the Group was awarded these two contracts for inter-array cables for two offshore wind farms, Fécamp and Courseulles-sur-Mer, and for the interconnection between the island of Crete and mainland Greece in the Peloponnese region.



Energy Products

T&I increased volumes



T&I reported growth in Europe and North America, as well as improvements in the Middle East. Power distribution is also positive. Industrial & NWC showed good organic growth and mixed improvement.

Energy products sales amounted to €3,793 million, with a 2.6% organic growth, thanks to volumes increases in Europe and North America. Adjusted EBITDA came in at €180 million, down 7.1% compared to the same period of 2017, with a 4.7% ratio of adjusted EBITDA to sales from 5.3% one year earlier.

Energy & infrastructure sales amounted to €2,533 million, with 1.7% organic growth, while Adjusted EBITDA was €92 million from €107 million in 9M 2017 and a 3.6% ratio of adjusted EBITDA to sales compared to 4.3%.

The results in the **trade & installers** business showed a continued uptrend in Q3, thanks to the ongoing volume of growth in North America and Europe — particularly in Germany, Italy and Spain — and a trend improvement in the Middle East in Q3. Adjusted EBITDA benefitted from both the favourable

sales mix following the new Construction Products Regulation coming into effect as well as the increase in sales volumes in Europe. **Power distribution** reported a positive sales trend in Q3 2018, particularly in France and Germany, while weakness was reported in Northern Europe.

Industrial & network components sales grew organically by a sharp 4.9%, reaching €1,146 million, while the adjusted EBITDA was €88 million, in line with 2017, with a 7.6% ratio on sales. The specialties, OEMs & renewables market recorded an organic growth of sales, with a good performance of railways, rolling stock and crane applications and a recovery of mining and renewables. The growth, recorded in all geographical areas, was mainly driven by the Americas and APAC area. Growth was also confirmed for elevators in Q3, supported by the favourable market conditions in North America. The sales uptrend of the automotive business was driven by growth in North America and South America, whereas the APAC area reported a slowdown. Network components demonstrated solid performance, supported by the volumes in China and North America.

Oil & Gas In line with 9M 2017

In the core cables oil & gas business, demand for onshore projects market remained constant. Profitability was also stable, despite the reduction in volumes of the offshore.

Oil & gas sales amounted to \le 194 million, excluding the General Cable perimeter, virtually in line with the figure of 9M 2017 with a 0.4% negative organic change compared to 9M in 2017. Adjusted EBITDA in 9M 2018 amounted to \le 2 million compared to \le 5 million in 9M 2017, with a 1.3% ratio to sales from 2.3% in 9M 2017.

In the SURF (Subsea Umbilicals, Risers and Flowlines) business, the market of umbilical cables shrank in Brazil and profitability declined due to increased competitiveness. Demand improved nevertheless in the downhole technology business, compared to the same period of 2017, benefitting from the production increase of shale oil & gas in North America.



Telecom

Sharp sales uptrend

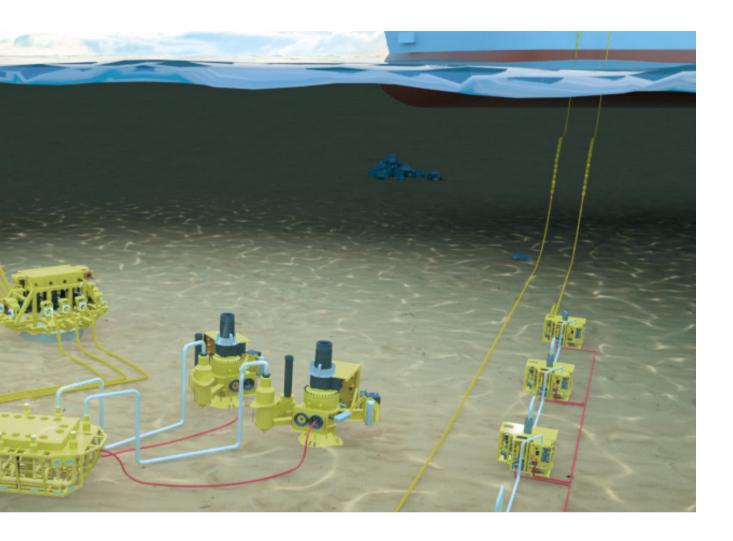
There was a sharp uptrend in sales thanks to acceleration in Q3 in Europe and Latin America. Profitability increased thanks to the growth in volume, efficiencies and optimisation of manufacturing set-up solid MMS performance thanks to European demand for data centres and data cables.

Telecom sales, excluding GC perimeter, grew organically by 6.5% to €974 million, driven by the Q3 trend improvement in Europe and Latin America. Adjusted EBITDA climbed to €204 million compared to €167 million while margins also improved with a 20.9% ratio of adjusted EBITDA to sales from 17.6% in 9M 2017, benefitting from the increase in volumes, the recovery of industrial efficiencies and the positive results of the subsidiary YOFC in China.

Organic growth of sales of the **telecom solutions** business was due to the ability to seize the ongoing growth of demand for optical cables by operators developing broadband networks. In Europe, the volume trend was positive. In North America, the development of a new ultra-broadband network is generating

a constant rise in demand, which benefits Prysmian, as testified by the \$300 million signed with Verizon for the supply of optical cables. Brazil and Argentina also showed increased investments by their main telecom operators. In Australia, works to the construction of NBN's new "multi-technology" platform continued successfully.

The high value-added business of optical connectivity accessories continued to perform well, thanks to the development of new FTTx networks in Europe, particularly in France. Multimedia solutions showed a solid performance, particularly in Europe, where demand was also driven by the growing investments in data centres.



Higher demand seen for cyclical businesses

In the submarine business, despite the slowdown in order flow in the first half, Prysmian aims to maintain its leading position, partly as a result of the expected increase of projects awarded in the final part of the year.

Global economic growth remained positive in the first nine months of 2018, with a sharp acceleration in the US economy driven by rising domestic consumption and investments, whereas China continued to display the positive trend that they had been experiencing since the beginning of the year. Growth in Europe, while still positive, started to slow in the second half.

Within this context, Prysmian Group expects demand in the cyclical construction and industrial cable businesses to be higher than in 2017, driven by Europe and partially offset by the Middle East, with uneven performances in the other geographical areas. In the submarine business, despite the slowdown in order flow in the first half, Prysmian aims to maintain its leading position, also in light of the expected increase in the volume of projects awarded in the final part of the year. In

the high voltage underground business, a recovery on 2017 is expected, with a gradual improvement in China and South-East Asia. The telecom segment growth is expected to stay solid in 2018, driven by increased demand for optical cables in Europe and North America, whereas copper cables are slowing due to reduced demand from Australia.

In light of these considerations, the Group expects an adjusted EBITDA for FY 2018 in the range of €860-920 million, inclusive of the recently acquired General Cable business for all of 2018. The forecast also takes into account the negative impact of exchange rate trends of approximately €30 million and the provision of €70 million already recognised in H1 2018 deriving from the costs associated with the delays in the Western Link project.

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