O3/2017 QUARTERLY MAGAZINE

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OPERATIONS: OUR KEY TO SUCCESS

Prysmian announced unprecedented investments aimed at increasing production and capacity worldwide.

H1 results: in the right direction

Making Europe the global digital leader

The big space rush

Prysmian Group





THE HARD Editorial Team Insight WORK BEHIND SUCCESS

Prysmian reached the halfway point of the year on a note of sharp increase in profitability, with improving margins in the strategic Energy Projects and Telecom businesses. Sales also showed a marked improvement in the second quarter after a poor start, due to adverse phasing in the Energy Projects business. The Industrial business has also enjoyed a positive trend, with an order backlog providing a strong outlook for the remainder of the year. Key to establishing this positive trend, that allows us to confirm the upbeat target for FY 2017, was the hard work done in building our project execution capabilities, and stronger and more cost-effective production capacity.

It's for this reason that we FOCUS ON the key to success of the company, that is the global operations structure that benefited from unprecedented investment plans to increase capacity and capabilities worldwide. These plans will allow us to meet demand across the high-added value markets with quality and innovative products, while improving efficiency and cost-effectiveness at our manufacturing facilities.

Our GLOBAL SCENARIO encompasses the world of the digital revolution, that sees Europe as the potential global leader. The potential will be realised if the continent embraces an ambitious approach towards connectivity, through advocacy amongst EU member states and manufacturing of state-of-the-art optical fibre.

MARKET & TRENDS reports the latest updates from the new space rush, that is attracting huge investment and driving revolutionary projects from many of the same people who ignited the internet revolution a quarter of century ago.

In the TRACKING THE FUTURE session, we look at how FinTech has revolutionised everything from banking and insurance processes to business transactions and consumer shopping habits. We also take a look at the effects of ongoing digitalisation on data security, discovering what new types of crime have arisen and their consequences.



Prysmian Group announced unprecedented investment plans aimed at increasing production capacity and capabilities worldwide. The plans will allow the Group to meet cable demand in the high added value markets with quality and innovative products, while improving efficiency and cost-effectiveness at its manufacturing facilities.

aising capacity and speeding up manufacturing capability; optimising procedures and processes; focusing on quality and innovation; and supporting people's development with continuous training. These are the goals set out in Prysmian's latest initiative, aimed at strengthening its operations worldwide.

This initiative – the global operations enhancement programme – has been introduced to meet today's growing cable demand in the telecom and power industries. It got off to a successful start in the first



Andrea Pirondini, COO of Prysmian Group

half of 2017, as Prysmian managed to complete and set to work its new optical cable plant in Slatina (Romania) and the new MV-HV plant in Yixing (China), while announcing the upgrading of its new fiber optic cables facility in Durango (Mexico).

The entire programme is being developed as part of the Group's 'Fast Forward' approach: Prysmian's means of improving and harmonising its manufacturing structure, avoiding the waste of resources and leveraging employee know-how and expertise. Andrea Pirondini, COO Prysmian Group, explains that Prysmian implemented the approach in the knowledge that "operational excellence is key to confirming competitiveness, particularly in dynamic and complex markets, such as energy and telecoms".



Slatina

1,000 employees

by 2020 **Over**

10,000 hours of training

Slatina becomes a fibre optic hub

The new facility in Romania is part of Prysmian's €250 million investment in its optical fibre and cable facilities, to support growing demand across the world.

Prysmian recently in augurated its new optical cable plant in Slatina, Romania, the largest of its kind in Europe. The new facility, just like the recently announced optic cables facility in Durango, Mexico, is part of a 3-year, €250 million investment plan aimed at improving

the Group's capacity worldwide, to meet growing demand for optical cables for the deployment of new high-speed telecom networks.

As well as Romania and Mexico, the investment plans includes the Group's existing optical fibre and cable facilities in Italy, France, the Netherlands, and North and South America, along with a new plant in Prešov,

Slovakia. In Slatina, the company is expected to reach 1,000 employees by 2020 and plans to improve production further. The site has become a centre of excellence for optic cables, with a significant commitment to innovation.

"We have a team of 20 engineers who are involved daily in cable designand materials management, as well as product development activities, particularly in high fibre-count cables. Here, we

develop high-performing cables with a fibre count exceeding

400, to ensure higher data rates and transmission capabilities," explains Francesco Fanciulli, CEO of Prysmian's Central East Europe region.

"R&D activities are driven by the commitment and ideas of our young engineers, who joined the company through the post-graduate programme, launched nearly seven years ago," continues Fanciulli. "Around 30 highly talented Romanian engineers work at our

operations site, mainly within the R&D, manufacturing, product management and supply chain areas. During their training period, they received over 10,000 hours of training to complete their induction and subsequently develop their skills."

million.
The investment
plan to improve the
Group's capacity

worldwide.

€250

FOCUS ON

ENHANCING CAPACITY IN MEXICO

Prysmian to boost capacity at its fibre optic plant in Durango, making it the Group's second-largest manufacturing facility worldwide.

rysmian is moving fast in Mexico, strengthening its presence in the country to support the rapid growth of the region more fully. The Group recently announced a \$15 million investment to enhance the company's manufacturing capacity in the area, with a new fibre optic cables facility in Durango, which will make the Mexican plant Prysmian's second-largest manufacturing facility worldwide.

With a manufacturing capability of one million km of fiber per year, expected to grow to two million km in a second stage, the new upgraded facility will be a crucial asset in addressing the growing need for broadband and telecommunications solutions in Mexico and Central America, which is currently growing at 20% every year.

The new plant will provide additional advantages to customers, explained by Juan Alberto Olivares, Prysmian Group's Technical Market Director for Mexico, Central America, and the Caribbean: "We have all the raw materials needed for this facility here in Mexico. It means that we can produce cables locally, supplying optic cable faster than ever before; and we will be able to quickly react to the needs of the market and those of prospective and existing customers."

He adds that "within two years, the plant will reach full capacity and we expect to nearly double our regional share in Mexico and Central America to 11% of the market".

PRYSMIAN MEXICO, A GREAT PLACE TO WORK

The Group recently earned the 'Great Place to Work' certification for its affiliate in Mexico. The institute that annually awards the best working places stressed how Prysmian has worked on the technical employee and managerial training, and underlined the transparency and quality of organisational communications, support for the personal and professional lives of workers, and the healthy relationships among colleagues.



Juan Alberto Olivares, Prysmian Group's Technical Market Director for Mexico.



Within two years, the plant will reach full capacity and we expect to nearly double our regional share in Mexico and Central America to 11% of the market."





ith the inauguration of the upgraded HV-MV plant in Yixing, Prysmian has made its presence in the Asia-Pacific region ever-more strategic, especially – but not exclusively – for the HV systems market. The Group already employs around 1,500 people in China, working in seven manufacturing plants, with the most important located in Suzhou, near Shanghai. At that site, the company has an R&D centre, including a centralised material and testing laboratory. It also boasts manufacturing plants in Tianjin, Yixing, Wuxi and Nantong, and sales offices in Beijing, Shanghai and Hong Kong.

With a cumulative turnover in 2016 of around €430 million, of which €130 million was in the HV business, Prysmian is enjoying a stronger position in a fast-growing market. It further strengthened its grip and increased its independence with the acquisition of the new facilities in Yixing, after it divested its 67% share in a joint venture last year.

Fabio Romeo, Prysmian's Chief Strategy Officer, states: "This area of the globe is growing fast: faster than other parts of the

world, and we think our know-how and technology can make the difference. The Chinese market is really challenging and the competition is strong, but we are working hard to succeed." Luigi Migliorini, CEO of Prysmian Group China, adds, "Prysmian Group can now offer a wide range of cable technologies and products, including extra high voltage and high voltage cable systems, as well as medium voltage and fire resistant cables, from 6kV to 500kV. The new plant will be capable of producing all the main designs available in the HV systems sector."

The strengthening of Prysmian in China comes at a time when the Chinese Government is pushing for the "One Belt, One Road" policy, a project in which Prysmian Group, thanks to new investment in Prysmian Technology Jiangsu, is aiming to be a major player.

The plant was acquired for around €42 million and is located in Yixing, a city with more than 1.2 million inhabitants near Shanghai. It boasts manufacturing and logistics facilities over an area of more than 190,000 sqm, with 5 production lines and a capacity of over 20,000 tons per year.

Making Europe the global digital leader

An ambitious approach is needed towards connectivity through advocacy amongst EU member states and manufacturing state-of-the-art optical fibre.

s Europe ready to drive – rather than follow – the digital transformation? At the present time, fixed broadband is available to 98% of Europeans, and 76% of European households can access high-speed broadband of at least 30 Mbps. 4G mobile networks cover on average 84% of the EU's population. Moreover, 74% of European homes subscribe to fixed broadband, and over one third of these connections are high-speed. The number of high-speed connections went up by 74% since 2014.

Those numbers show that Europe has created a solid basis for the current demands, but still not enough to sustain the expected development in the years to come. If the EU wants to be leader in the incoming digital revolution, larger-scale and sustained investments are needed. That is why Prysmian Group co-hosted, together with the Italian Permanent Representation to the EU, a meeting of national ambassadors, telecoms industry representatives, financiers, Commission officials and MEPs to discuss the EU's ambitions for its telecoms networks at a crucial moment in the legislative process.

Philippe Vanhille, Senior Vice President Telecom Business at Prysmian Group, expressed at the event the hope "to see an appropriate level of ambition in these plans by the Member States, with targets in terms of coverage and connectivity that will place Europe in the position to become a global digital leader".

Not just a matter of speed

Speed is usually rated as the most important goal to achieve: all over the world, internet users compare their digital experience mainly on this dimension. But Prysmian knows that the connectivity of the future demands much more than speed. Vanhille drew attention to the advantage of optical fibre not only for its capability to outperform other technologies in terms of download speed, but also on alternative key measures, including latency and reliability. The latter is very important, as any gain achieved through tackling the problems of latency or of slow upload and download speeds are entirely cancelled by broken connections.

Adapting to the digital age

It will be impossible for Europe without a dense optical fibre network to do so. Density starts with the development of core optical networks, which can providefibre-to-the-nodeaccess, where central nodes transmit from fibre to more traditional technologies. However, the ultimate goal we are enabling with our constant technology upgrading is fibre-to-the-home, whose functionality and durability reside on high quality fibre, optical cables and connectivity. Prysmian leads the way in research and development of these key passive components that carry it. We make significant investments worldwide to ensuring that we remain at the forefront of technological innovation.

Prysmian want to remember that the 3 key parameters of a reliable network for the 30 to 50 years are: the quality of passive components, the quality of the installation and the network homogeneity. OPEX will be strongly dependent of these 3 parameters.

Prysmian to support Italy's ultra-broadband

The partnership agreement with Telecom Italia was extended to the supply of optical cables and systems through three new contracts.

Prysmian Group has renewed its partnership with Italy's Telecom Italia with three new agreements concerning the supply of optical cables and connectivity. The cables will be used by the telecoms operator for the development of its projects included in the Digital Plan for ultra-broadband. The contracts are worth in excess of \leqslant 33 million, of which \leqslant 28.5 million is allocated to the supply of cables and the remainder for the sale of other components from the innovative ODF Flex product family.

The new generation fibre optic network is a key focus for Telecom Italia and its development constitutes a strategic commitment for the company. This commitment underlines the role of the network as a main enabler in spreading digitalisation to households and businesses throughout the country. Prysmian Group offers Telecom Italia the highest-quality and most innovative technical solutions available, to ensure the fastest and most reliable connections.

All of the optical fibres used to create the cables will be produced in the Group's Battipaglia Centre of Excellence, in Southern Italy, where 9 million km of optical fibre are produced every year. Prysmian is the sole fibre producer in Italy, where it maintains leadership in this high-end technology segment.

Carlo Scarlata, Chief Commercial Officer at Prysmian Cavi e Sistemi Italia commented: "Technology, innovation and in-depth knowledge of local communities, along with our international experience, allow us to manufacture the only fibre that is produced in Italy."

In this way, Prysmian Group is contributing to the digitalisation of Italy, through a fixed-line optical network with the highest technical performance, capable of satisfying the growing needs of Italian customers.

ITALIAN CAMPAIGN

For the third year running, <u>Prysmian has continued the 'Italy shows its true fibre' campaign</u>. The campaign promotes the unique expertise that the company can offer in support of the project to build an ultra-broadband infrastructure in the country. The Group is the only fibre producer in Italy: every year nine out of approximately 35 million km of fibre produced overall comes from our Battipaglia plant.



JOINING FORCES TO BUILD THE FRANCE BACKBONE



Jean Pierre Bonicel, Senior Business Development Director at Prysmian

Jean Pierre Bonicel, Senior Business Development Director at Prysmian and President of Objectif Fibre, explains that the whole sector is committed to reaching the goal of very highspeed broadband.

ringing very high-speed broadband service to every household, business and government office by 2022 is the goal of the Plan France Très Haut Débit, the French Very High-Speed Broadband Plan, that aims to ensure fixed-line connections of at least 30 Mbps to reach all corners of the country. Launched in 2013, this ambitious plan has included co-operation between the private and public sectors since its very conception, as it envisages a 10-year, €20-billion investment shared by private service providers, and local and central Government. Private providers are to lay down fibre-to-the-home (FttH) networks in metropolitan areas and departmental capitals, while local authorities will reach out to the rural areas to fill the gap left by private networks.

"The whole sector is committed to reaching the plan's ultimate goal," says Jean Pierre Bonicel, Senior Business Development Director at Prysmian and President of Objectif Fibre, the French association created in 2009 to represent the optical fibre industry in France. "Between 2012 and 2016, the volume of fibre installed for private networks through private operators and PINs (Public Initiative Networks) has grown fourfold, reaching 11 million km of fibre installed in France during 2016. "The stakes of this project are quite high," states Bonicel. "So at Objectif Fibre, we are working closely with professional organisations, as well as state institutions such as Agence du Numérique, Mission THD, ARCEP or CEREMA."

WHEN FIBRE IS MANDATORY

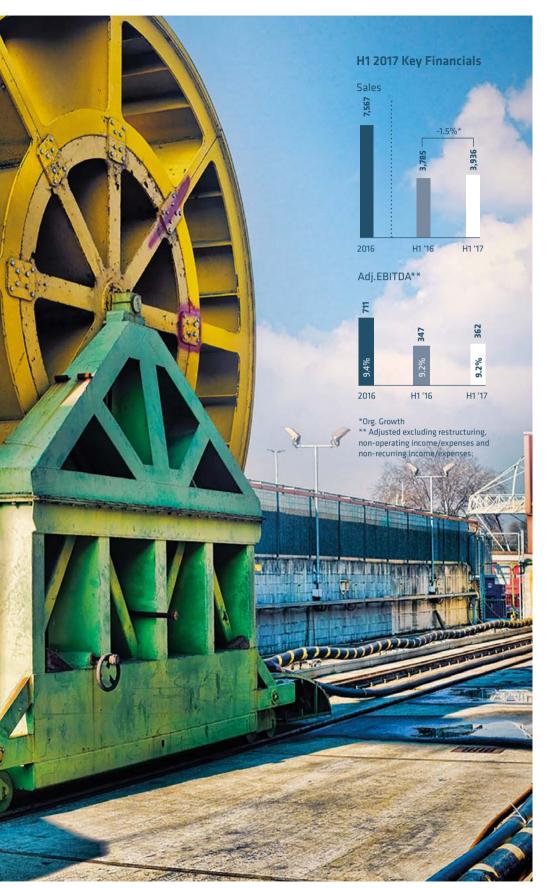
According to France's broadband plan, as detailed by the Macron Law of 31 August 2016, it is mandatory to install fibre in any new building, including those with a single housing or working space. "Objectif Fibre is committed to supporting installers and electricians, to provide professionals with the appropriate know how," says Jean Pierre Bonicel. Optical fibre industries and trade unions in France already signed a framework agreement for developing skills and career paths, where special attention is given to the installation and connection of fibre. Right now, there is no compulsory qualification, but some operators are asking their sub-contractors to undertake special training. Objectif Fibre has already certified 26 training centres for the purpose.







QUARTERLY OVERVIEW



Sales

amounted to €3,936 million, displaying a second-quarter recovery with organic growth of 0.6% thanks to recovery of the phasing in the Energy Projects and to an improvement for Industrial & Network Components.

Six-month organic sales retreated by 1.5%.

Adjusted EBITDA

climbed 4.3% on the first half of 2016 to €362 million with a marked improvement in profitability in the Energy Projects segment with Adjusted EBITDA margin at 17.0% versus 14.6%. Margins were also up in the Telecom segment thanks to growth in volumes and the effects of investments in fibre manufacturing efficiency.

Net Financial Debt

amounted to €1,000 million at 30 June 2017, improved from €1,031 million one year earlier, also including €99 million for shares buyback since January.

The principal factors influencing Net Financial Debt in the past 12 months have been: -€636 million in net cash flow provided by operating activities before changes in net working capital; -€237 million in net operating capital expenditure in the past 12 months, including €46 million to acquire the High Voltage assets in China; -€99 million to buy back the Company's shares.

Guidance

for full year 2017 is confirmed for an Adjusted EBITDA in the range of €710-€750 million, up from €711 million reported last year.

Energy Projects

Profitability well up



ales of Submarine Cables and Systems increased in the second quarter, recovering a good part of the ground lost at the start of the year, while profitability improved significantly, having also benefited from investments in new installation assets like the "Ulisse" cable-laying vessel and the new jetting system, which allowed a large portion of high-margin activities to be performed in-house. Major growth opportunities are seen in the offshore wind farm market, where the Group can offer a competitive range of technologies and turnkey services, from project engineering and management to design and production of innovative cable solutions, up to system installation, monitoring and maintenance.

Growth prospects for submarine cables are supported by the much greater competitiveness of offshore wind power

generation, measured by the reduction in the so-called Levelized Revenues of Energy (LRoE), featuring in the award of recent tenders in Germany.

Sales of High Voltage Underground were affected by weak demand in France, Middle East and the United States, despite benefiting from solid performance in Asia Pacific thanks to strong order intake in the second quarter. Results were also affected by the change in the Group's perimeter in China.

The underground and submarine power transmission order book currently stands at €2,450 million, thanks to important new projects secured in the past few months, amongst which the IFA2 interconnector between France and the UK.

A mixed bag for

Energy Products



Positive organic performance for Industrial & Network Components business, mainly driven by Specialties & OEMs and Automotive niches. Negative trend in E&I impacted by weak performance in Oman and slowdown in Central-East Europe for Power Distribution cables.

Overall sales of Energy Products declined slightly organically to €2,467 million, particularly because of the contraction in cyclical business in Europe, only partially offset by positive performance of certain applications in the industrial cables. Adjusted EBITDA was €135 million in the first half with a 5.5% margin on sales from 6.6% in the same half of 2016.

nergy & Infrastructure posted sales of €1,658 million, with Adjusted EBITDA at €74 million with margin on sales at 4.5% versus 5.5%, a decline largely due to the drop in volumes in Oman. Trade & Installers had mixed results, with positive performances in North Europe, Oceania and China and weakness in Oman, Turkey and Argentina. North America's renewable energy policies also had a negative impact. The implementation of the Construction Products Regulation in Europe will lead to higher quality standards and represents an opportunity for the Group.

Power Distribution performed well in Asia Pacific, North Europe and North America, while the slowdown in Germany and Eastern Europe was in line with expectations. Challenging market conditions in Central and Eastern Europe and Oman adversely affected profitability.

Sales of Industrial & Network Components increased 2.5% to €739 million, a sharp improvement after the decline at the start of the year, driven by solid performance in the OEMs and Automotive markets. Adjusted EBITDA was largely stable at €62 million.

Specialties, OEMs & Renewables enjoyed slightly positive organic sales growth, with solid performances by Railway and Infrastructure and a recovery by Mining and Renewables. Crane, Marine and Defence were still weak after peaking in 2016. The strengthening of the order book provides a positive outlook for the rest of the year. Sales of Automotive business were also solid during H1, mainly driven by growing demand in APAC and North America; margins were also good in H1. Elevator business recovered in Q2 after a soft start of the year, thanks to a positive trend in Europe partially offsetting negative APAC evolution. Finally, the Newtwork Component business suffered from the reduction of volumes for High Voltage accessories, only partially offset by the good trend in Medium and Low Voltage business in Europe and US.

The worst seems to be over for **Oil & Gas**

Core cable volumes up, thanks to recovery in onshore projects with good trend in profitability, still weak performance by umbilicals due to tough market in Brazil, DHT saw good onshore demand in US.

In the first half sales went down organically by 14.8% but the second quarter figures indicate that the worst seems to be over with the contraction halved to 7.6% from 21.2% in the first. Adjusted EBITDA was \leqslant 2 million in the first six months with a margin on sales of 1.1%.

he Core Cables Oil & Gas business recorded a positive performance with growth in sales, particularly in connection with onshore projects in North America, Russia and Middle East. The recovery in volumes along with the efficiencies achieved have supported profitability even in a difficult situation with prices under pressure due to weak demand.

The SURF business (Subsea Umbilicals Risers and Flowlines) has been affected by the steep downturn in the umbilicals market in Brazil, after a slump in new project awards in 2016. The Downhole Technology business saw onshore volumes recover in the USA thanks to the shale oil market, contrasting with generally weak demand in other markets, and margins under pressure due to the unfavourable product mix.



Telecom: solid sales organic growth

Sales up 7.5% organically driven by demand for optical cables.

Three-year, €250 million investment plan launched in optical fibre and cables. Growth in volumes and margins for Multimedia Solutions.

Sales amounted to €646 million mainly thanks to constant growth in demand for opticals driven by major investment projects in Europe and North America. Adjusted EBITDA up 38.6% to €109 million while margin on sales improved to 16.8% from 13.7%.

he Telecom Solutions business won important contracts with leading operators in Europe for the construction of backhaul links and FTTH connections. In North America, the development of new ultrabroadband networks is generating a steady increase in demand from which Prysmian is benefiting, as evidenced by the three-year

\$300 million agreement with Verizon to supply optical fibre cable from January 2018. The Group has embarked on a three-year €250 million investment plan to boost production capacity and efficiency. The high value-added business of optical connectivity also confirmed positive results, driven by the development of new FTTx networks in Europe.

Multimedia Solutions recorded higher volumes and improved margins in Europe and Asia Pacific, partly thanks to the improvement in the industrial set-up in Europe. Demand is being particularly driven by growing investments in Data centres.



THE MARKET APPRECIATED

Market reaction after H1 2017 results were positive, as figures came 2%/5% above expectations thanks to a better than expected performance in Energy Projects and Indsutrial&Network Comp. segments, and sharp increase in Telecom margins, partially offset by a weaker than expected performance in E&I segment.

Following the positive results, several brokers increased their Target Price valuation on Prysmian shares, including one upgrade of recommendation (Banca IMI, from HOLD to ADD, Target Price to 29.9 from 26.0 €/share). More in detail, GoldmanSachs confirmed the BUY recommendation taking its target price valuation to 32 €/share from 31 €/ share after increasing estimates on 2018 and 2019 results; Morgan Stanley, JP Morgan and Bank of America - Marril Lynch all confirmed their positive view on Prysmian taking their Target Price valuation to 29.0 €/share. Equita and Kepler reiterated their "NEUTRAL" stance, both adjusting their Target Price to 27.5 €/share after better than expected results and possible sector consolidation seen in the coming 6-12 months.

Upbeat targets for FY 2017 confirmed

The Group expects stable demand for buildings and utilities with Energy Projects enjoying a growing market mainly in the Submarines.

Global economic growth in the first half of 2017 was higher than expected thanks to the emerging countries and the consolidation of the positive trend by the more developed economies. After an uncertain start marked by lower-than-expected growth, positive jobs data in the US indicate a clear recovery since the second quarter, when China too recorded improved growth.

In such a context, Prysmian expects for FY 2017 a largely stable cable demand in the cyclical businesses of building wires and medium voltage cables for utilities. Various applications in the industrial business will have a mixed but positive performance thanks to an uptick in the Automotive and OEM markets. With Energy Projects enjoying a growing market, the Group expects to consolidate its leadership while further improving profitability in the Submarine business, while a slight decline is seen in the High

Voltage underground business, partly due to the change in the scope of consolidation in China. In the Oil & Gas, the stabilisation of the oil price in the region of \$40-50 is underpinning a resumption of onshore projects, while offshore activities remain weak, like the SURF business. In the Telecom segment, the underlying growth is expected to remain strong in 2017, thanks to growing demand for optical cables in North America and Europe, accompanied by a gradual volumes stabilisation in Australia.

Assuming stable exchange rates, the effect of translating the results into the reporting currency is expected to have a mildly negative impact on 2017 operating income.

The Group confirms the forecast of Adjusted EBITDA for FY 2017 in the range of €710-750 million, up from €711 million reported in 2016. The forecast is not only based on the Company's current business perimeter but also takes into account the order book.

THE BIG California a founder Jef

The new frontier is attracting huge investment from venture capitalists from California and all over the world. This investment follows the vision of Amazon founder Jeff Bezos to make space journeys more viable and affordable.

t's California again, a century and a half on, or so. But this time around it's not gold, but space, that people are rushing to. The global aerospace industry is seeing a renaissance with a start-up boom as space is fast becoming Californian venture capitalists' new frontier. Francois Chopard, CEO of aerospace accelerator, Starburst Accelerator, recently told CNBC that it's not only space that is booming, but more the global aerospace sector that is looking for

innovative disruptions. Amazon founder and leader Jeff Bezos' announcement of his plans to sell \$1 billion in Amazon stock each year to finance his space venture, Blue Origin, as well as the recent successful launches of Elon Musk's SpaceX rocket, are two signals that space is just the next frontier for people who changed the world with the internet revolution a quarter of century ago.

Technological advancement has made it feasible for entrepreneurs with great ideas and technologies to develop satellites with rockets and send them into space. In the last five years, dozens and dozens of space start-ups have blossomed, not only from the U.S. West Coast, but also Europe and Asia. Starburst Accelerator alone, founded in 2012, has since accelerated over 160 start-ups, with a \$5 million average funding target. Venture capital is an essential push to help

these companies grow up, and an increasing number of deals are happening in Silicon Valley, with more and more investors focused on aviation and aerospace.

The most renowned so far remains Blue Origin, the Bezos' company with big plans to pioneer the space frontier. Last year, Bezos received the first annual Space Innovation Award from Apollo 11 moonwalker Buzz Aldrin. The event was the first part of a three-year fundraising campaign devised by the ShareSpace

Foundation, which will culminate in the summer of 2019 with global activities coinciding with the 50th anniversary of the first moon landing. Bezos said he has been dreaming of space since the age of five, while watching Neil Armstrong and Aldrin walking on the moon in 1969, and with Blue Origin he is trying to make his dreams happen.

\$1 billion

to finance Jeff Bezos' space venture, Blue Origin.

The company's New Shepard, a fully reusable, vertical-takeoff/vertical-landing system, will fly suborbital space tourism and research missions. It adds to the company's reusable New Glenn orbital rocket, which is under development, as well as Blue Origin's powerful BE-3 and BE-4 engines.

Bezos' vision is to overcome the

MARKETS & TRENDS

A PIONEER IN THE AEROSPACE INDUSTRY Prysmian has been a leader in the aerospace

Prysmian has been a leader in the aerospace cable market since the 1960s when our predecessor, Fileca, provided first generations of aerospace cables to the Concorde programme. Today it continues to build on that heritage, leveraging decades of knowledge and expertise to bring customers the latest in high-quality cable and wiring solutions for civil, military and space aviation applications.

The Group caters for a broad range of requirements, with cable types to reflect the applications in which they are employed, from standardized ranges like DR and MIL-Spec Cables type, to more specific constructions including customised assemblies, data-transmission cables and optical cables. Space-designed Prysmian cables provide resistance to severe mechanical, electrical, chemical, temperature and radiative constraints.

In the space industry, Prysmian is creating the products of the future through its R&D department. We are developing new technologies to meet all possible future aerospace expectations, with world-class solutions such as weight reduction in aluminium-based cables, ease of installation of low-bending radius power feeder cables, performance improvements including higher-voltage capabilities and fire resistance, and higher data transmission levels with optical cables.



NEW OPPORTUNITIES THROUGH DISRUPTING FINANCE

As innovations transform various industries new business models arise. With the appearance of 5G, Internet of Things (IoT), Industry 4.0, Blockchain and other new technologies, this trend is set to continue well into the future.

riginally, the term 'FinTech' was used to describe technology that was used by consumer and trade financial institutions to manage their back-end, but today, it refers to a broad range of developments in the financial services sector. When internet banking and online shopping first made their appearance some twenty years ago, a significant number of critics were convinced that technology and trust issues were too significant to overcome and that these innovations would never be adopted on a large scale. As we can see, these predictions turned out to be entirely wrong.

Consumers are used to fast, accessible online experiences and have come to expect this from financial services providers. Banks and businesses, on the other hand, can benefit from the vast efficiency improvements that new payment, lending, transaction, analytics and automation services available today.

Countless 'traditional' banking processes have already been reshaped and enhanced through technology. Innovation has revolutionized trading and banking processes, giving rise to new developments such as peer-to-peer money lending, mobile wallets and crypto-currencies such as bitcoin. The next step will be widespread adoption of technologies such machine learning and data-driven marketing. Smart data predictive analytics and Al are likely to be key areas of focus for many investors. According to a report from Santander, IoT can have an impact on risk management and pricing, understanding customer needs, streamlining contractual processes, or trade finance underwriting. BI Intelligence has also forecast that robo-advisors - digital platforms that provide automated, algorithm-driven financial planning services with little or no human supervision - will manage \$8 trillion in global assets by 2020.



Benefits and infrastructure requirements

Besides direct user advantages, FinTech brings indirect benefits in areas such as job creation and increased accessibility to financial services. In its relatively brief history, it has delivered new jobs, contributed to economies, stimulated competition and enhanced productivity across various economies and markets. New technologies and approaches are also making financial services accessible in developing regions, helping small businesses grow.

Key developments driving the vast uptake of FinTech-based solutions include mobile computing, from smartphones to handheld payment devices, and digitalization.

These developments have marked consequences for network technology. Security, uninterrupted uptime, redundant energy, low latency wireless bandwidth availability and a state-of-the-art wired backbone have all become essential. After all, without these elements, none of the current and upcoming FinTech applications and services will work reliably. As there are still many legacy mainframe systems around in the finance world, there may also be some updating to take care of in order to ensure FinTech can realize its full potential across all regions and market sectors.



In the US the top ten banks (by assets under management) have participated in 72 FinTech investment rounds totalling \$3.6B since 2012.

New partnership models

We see traditional banks continuously rethink their service offerings and strategies in order to compete with the startups and smart service providers that are entering the consumer and business markets.

Recent IDC research indicates that approximately a quarter of all major banks see FinTech firms as potential acquisitions. Another 35 % indicated they would be open to collaborating with FinTech companies.

According to former Barclays Plc CEO Antony Jenkins, banks could become obsolete in the next 15 years as a result of the rise of new FinTech companies. Perhaps unsurprisingly, banks are actively investing in private FinTech companies. In the US the top ten banks (by assets under management) have participated in 72 FinTech investmentroundstotalling \$3.6B since 2012. The three most active Fitch investors are Citi, Goldman Sachs, and JP Morgan Chase.

All of the top ten banks are investing in blockchain technology. This offers a transparent, decentralized and secure method for tracking the exchange of assets and (financial) value, making it highly suitable for payment and transaction recording.

Increasing investments and continued growth

According to BI Intelligence, global funding for FinTech continues to grow. Worldwide FinTech funding, which totalled \$19 bn over the full year 2015, had already hit \$15 bn by mid-August 2016. The US, Europe and Asia-Pacific attracted the highest level of FinTech investment. Last year, Ant Financial, the digital payments arm of China's Alibaba, \$4.5 bn in a single funding round.

According to KPMG International's Q1 2017 Pulse of FinTech report, corporations and corporate venture arms continue to participate in Venture Capital financing at an elevated level, with 39 completed rounds reaching \$1.2 bn in VC invested in the first quarter of 2017. In Europe, the highest level in years was reached in this period (\$610 m). Throughout the remainder of 2017, FinTech investment should continue to grow.

Cybersecurity: successfully facing new challenges

ur economy and society are becoming increasingly digital. As IoT, cloud and FinTech applications become more widespread, cybercrime is developing accordingly and the Cybersecurity industry is growing rapidly. Key reasons for this growth include availability of new technologies, increasing awareness of dangers and changing legislation, such as the recent Cybersecurity executive order in the US. Companies and institutions are looking closely at their security investments. But what areas should they focus on?

Companies and institutions may introduce advanced perimeter defences, whilst leaving their internal organisations vulnerable. Certain physical networks are easier to tap than others, although in some cases (such as fibre) it is practically impossible to extract information in a legible format. Traffic can be rerouted automatically when suspicious activity is detected. However, the nearer data is to the end point, the fewer alternative routes are available, increasing vulnerability.

Developments in Cybercrime

Cybercrime, once limited to computers and peripherals, now extends to all online devices. The advent of the darknet with TOR access allows users to remain anonymous, making it impossible to retrace the steps of hackers. And Crypto currencies have made payments untraceable. Microsoft has published data showing that earlier this year the number of attempted cyber attacks are 600,000-700,000 a week. Just two or three years ago, that was 'merely' 20,000 each week.

The Eurobarometer 423 on Cybersecurity claims that up to 85% of internet users feel their risk of falling victim to Cybercrime is increasing. So which specific dangers will be the most prevalent in the near future? Experts predict an increase in ransomware and extortion exploits. Ransomware almost doubled in the first half of 2016, growing 172% in comparison to the previous year.

This type of crime may spread to a wider variety of (connected) devices. Figures from Norton indicate that 35% of people around the world own at least one unprotected device, making them vulnerable to ransomware, malicious sites or phishing. With the fast proliferation of IoT and 'Smart' devices, companies have an increasing responsibility to ensure the safety and security of the applications and data. Some manufacturers are looking at building this in at component or chip level.

The number of Industrial IoT hacks is also expected to grow. Europol has uncovered new trends, such as cybercrime-as-a-service, where hackers are paid to organize DDoS attacks. Convergence between governance and business systems may also mean greater vulnerability. Another risk category that needs to be carefully considered is the internal attack.



IMPROVING SECURITY

Awareness is essential in the fight against cybercrime. Making certain actions illegal or regulating them strictly is not always effective, as the internet has no borders.

A coordinated effort involving governments and the private sector is key. In addition to technology investments, standards, harmonization awareness and education are vital for developing and enhancing a culture of safety. Several basic steps can help companies and individual users protect themselves. These include developing processes and best practices around user privileges on networks, regular password changes, deleting unused apps, installing automatic updates, and using a VPN.



Risk boosts market potential

The United States are currently the main global Cybersecurity market, with \$31.5 bn forecast for 2016. Western Europe comes second, with revenue of \$19.5 bn. Markets and Markets estimate that Cybersecurity market size will grow from \$122.45 bn in 2016 to over \$202 bn in 2021, or 10.6% CAGR. The global cybersecurity market was valued at \$3.5 billion back in 2004.

According to Strategic Cyber Ventures CEO Tom Kellermann, total annual investment in cyber-security is likely to exceed \$200 billion in 2020. By that time, corporations will be held accountable for the security of their networks, by regulators as well as courts.

A Cybersecurity Ventures Report suggests the global industry will reach \$1 trillion by 2021 – whilst the cost of cybercrime damages grows to \$6 trillion each year by 2021. Global annual cybercrime costs could grow from \$3 trillion in 2015 to \$6 trillion by 2021. Juniper Research states that increasing digitalisation may increase the cost of data breaches to \$2.1 trillion globally by 2019. As more business infrastructure is connected, the average cost of data breaches will exceed \$150 million by 2020. Zion Market Research predicts that the global Cybersecurity market will reach \$181.77 bn in 2021 (9.5% CAGR between 2016 and 2021).

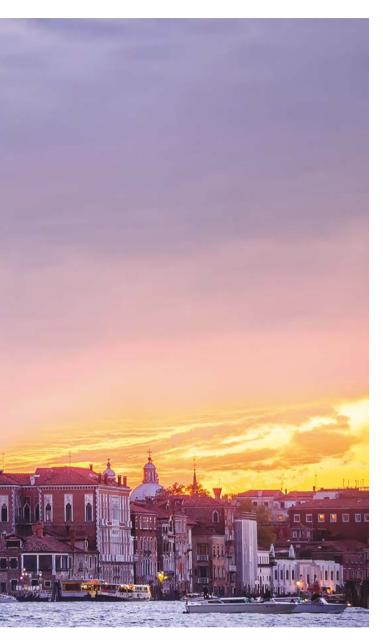


Prysmian Group also built the previous high voltage submarine cable link connecting Venice, Murano and Mestre.

erna Rete Italia, Italy's power transmission operator awarded Prysmian Group a series of additional works, originally included as option, to be added to the Venetian Lagoon submarine power links project, a contract won by the Group in 2016 following a European bid. The original project included the power connection to the island of Murano, in the Lagoon, and the industrial port city of Mestre. The new works are worth

€20 million project, including 6 km link, made up of HVAC 132kV cables.

approximately €20 million and involve the completion of the project aimed at strengthening the high voltage power transmission grid in the Venice area. The project includes a 6 km link, made up of HVAC 132 kV cables. The cables will be produced in the Arco Felice plant, near Naples. Commissioning is scheduled for 2018.



HELPING GENOA PORT GROW

Thanks to 35 km of medium voltage cables supplied by Prysmian, the port of Genoa, the biggest in Italy, will become even larger with the addition of new docks and the remaking of existing ones. The supply is now complete and included submarine cables, produced in Prysmian's Italian plants at Pignataro and Merlino. The products were tailored to the specific requirements detailed by the client, S.I.C.I., an Italian company that operates in the fields of infrastructure and services.

Maurizio Ciantra, Trade & Installers Sales Manager for Prysmian Italy, pointed out that the project was the outcome of strict cooperation between the engineers and the Group's production facilities, allowing us to win the contract and fully satisfy the client's needs.

Energizing Denmark with LV and MV cables

Prysmian Group set to become the leading cable supplier in the Danish market.

rysmian Group has signed a two-year framework agreement with an option for extension, following a tender by Eniig Forsyning A/S and NRGi. The agreement, worth about €3.2 million, provides for the annual delivery of 300 kilometres of 0.4 kV low voltage cable and 380 kilometres of 24 kV 1-core medium voltage cables.

The agreement also includes the use of the Group's cable drum tracking system 'Pry-Track', that offers an integrated remote monitoring solution. The cables will be used in maintenance and construction projects, developed within the Eniig and NRGi's supply areas.

The cables will be produced at the Group's high-tech cable production plants in Europe and delivered from Prysmian Nordics logistics hub, strategically located in Sweden, where a large range of low and medium voltage cables is stocked. Eniig is a newly formed utility company with 383,000 shareholders and 950 employees. Established as a merger of EnergiMidt, HEF and Energinord, it is now Denmark's third-largest utility company. Eniig's business segments cover the supply and sales of electricity and heat, fibre broadband, gas, street lighting, energy efficiency solutions and renewable energy. Eniig's supply area extends over approximately a quarter of Denmark's total surface, namely 10,500 km², located in Central and North Jutland.

NRGi is a consumer-driven utility company that distributes electricity to approximately 220,000 private households and businesses in Aarhus, Djursland, Mols and on the isles of Samsø, Tunø and Anholt.

"We look forward to working with Eniig and NRGi on the maintenance and expansion of their supply networks," says Brian Rasmussen, Utility Sales Director at Prysmian Denmark. "We are pleased that two of Denmark's largest utility companies have chosen to co-operate with Prysmian Group, thus emphasising our position and underlining the company's strategy of becoming the leading cable supplier in the Danish market."



Thanks to the co-operation started with Nanocomp Technologies, Prysmian Group extends its R&D reach to nanotechnologies applications in the cable industry.

everaging on the molecular structure of materials to achieve better performance was the goal that inspired the co-operation agreement signed by Prysmian and 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 in order to test and improve the use of these technologies in power transmission, power distribution, telecom networks, control and instrumentation applications.

The application areas in which nanoscience is making its biggest impact include electronic, electro-optic and optical products. The transition from semiconductor technology to nanoscale devices has anticipated improved properties and resolution, such as fluorescence labelling, scanning probe microscopy and confocal microscopy. Data storage based on nanostructures provide smaller, faster, and low-consumption systems.

Prysmian has a longstanding interest in nanotechnology, as it is one of the multiple fields that its continuous R&D activity is exploring.

Inventors awarded



'Prizes for inventions' is the title of a contest launched by Prysmian, aimed at researchers and Group employees from all over the world. In its last edition, the initiative saw 39 patents awarded, each one the result of significant teamwork. At the assignment ceremony, CEO Valerio Battista stated: "Every year, we invest increasing amounts in research and development, in order to innovate the market and satisfy the demanding requests of our clients. I like investing, but I am also aware that investments should yield results: transforming a patent into a business opportunity is our challenge."

Marcelo De Araujo Andrade, Senior VP R&D, pointed out: "Patents are an advantage for us because we can differentiate our solutions. We are working to accelerate the way in which we develop innovation, in order to respond to the market's challenging requests faster than ever."

Four speakers from the R&D department had the chance to present their work and share the business opportunities identified with the audience, which included the company's top managers.

SUPPLYING FIBRE IN RURAL NEW ZEALAND

The Te Urewera Fibre Installation project, which forms part of the New Zealand Government Rural Broadband Initiative School programme, is another successful project supported by Prysmian Group, that has supplied fibre to rural schools and communities in the Te Urewera area.

Prysmian New Zealand sourced products and solutions within the Prysmian Group network, to help overcome numerous infrastructure and installation challenges to modernise the communication systems in the remote area. An aerial installation was the best suited for the environment. Helicopters were used to erect the cable on nearly all of the power lines because the Te Urewera landscape consists of steep, rugged hills and native bush, making access by land difficult. The Te Urewera project is illustrative of the Group's commitment to connecting communities with state-of-the-art technology on a global scale.





Sailing round the world, green-powered

Two years after the round-the-world flight of Solar Impulse, the green journey continues over the seas, with Prysmian as a constant partner.



Achieving sustainable growth, through advanced technological solutions and a responsible business model, has always been a hallmark in Prysmian's industrial evolution. The company constantly aims to help 'green' partners by delivering cables that benefit the future of both our world and their businesses.

150 km of special

of special aerospace cables that distribute power around the aircraft. In the last three years, Prysmian entered the Solar Impulse project as a Specialised Partner, in which a special solar-powered plane landed in Abu Dhabi after successfully ending the first ever round-the-world flight using only the power of the sun. The Group was a crucial contributor to the milestone achievement in aviation by supplying of 150 km of special aerospace cables that distribute power around the aircraft.

Today, the challenge has moved to the seas, with Energy Observer, the world's first catamaran powered solely by renewable sources, presented at the Paris Air Show on 20 June 2017. Energy Observer and CEA Liten, the research institute that developed the project, have chosen Prysmian as the official supplier of cables which, due to high performance, reliability and light weight, provide energy generated from renewable sources – both wind and solar – to the vessel's motor.

Victorien Erussard, a former merchant navy officer and a French sailing champion, was appointed as the boat's captain, and he said he wanted to circumnavigate the world with a powerful message, similar to the philosophy that drove the Solar Impulse 2 team.

Continuing Build the Future

Prysmian's innovative graduate programme is entering its seventh year, confirming the success of an initiative that engages young people from all over the world on an extensive and exciting path of professional growth.

fter the recruitment process, the program starts with a two-week induction in the Group's Milan headquarters and continues with an additional week in a local plant. During this period, the graduates get to grips with Prysmian's products and technology, discovering how the operation and customer relationship teams work together, and starting to breathe the atmosphere in the factories.

A tried-and-tested, on-the-job training-plan allows young Prysmian employees to fulfil their potential. Participants recently also had the opportunity to meet the Group CEO, Valerio Battista, in person, as he told them: "You have real talent, selected globally after a hard recruitment process. We expect great contributions and inputs from you in the coming years. But we, as managers, have from our side a big responsibility during your training journey... we are committed to showing you the opportunities, in terms of challenging projects and career possibilities."

Build the Future offers graduates a true feel to the business, putting them to work in a number of different roles. They experience a six-month regional R&D rotation, working with Prysmian's technology team, three months in Operations and three in Customers Relations in their home country, while working on a personal project to help them learn more about the roles they're best suited for.





'Make It', the Prysmian way

Make It, the innovative recruiting and training program created by Prysmian Group to gather and nurture the engineers of tomorrow, is continuing its second edition, taking participants on a journey in Milan and then Mudanya, Turkey.



he current edition of the programme was launched in December 2016 and attracted more than 7,000 applications from all over the world. After an indepth recruiting and assessment process, the project concluded with the hiring of 60 engineers. Among them were representatives of every important field in the manufacturing industry: process, maintenance, planning, quality and product engineers.

After the selection, they were invited to Milan for the beginning of a three-week induction phase and were welcomed to Prysmian Group's global HQ in Milan by SVP for HR and Organization Fabrizio Rutschmann, who introduced them to the Group's industrial and company culture. The participants were then taken on an extensive trip into the manufacturing industry, discovering the diverse sectors in which the company operates through speeches from Prysmian's top managers in the Energy, Telecom and Oil & Gas divisions. Later on, they moved to the facilities of Arco Felice and Battipaglia in Southern Italy and then on to Turkey for the second part of the induction in the Prysmian Group Academy in Mudanya.

CELEBRATIONS IN ARGENTINA AND SWEDEN

Prysmian Group Argentina celebrated its 100th anniversary during a week of special events, involving the local community, with the theme of 'Connecting the Future'. Sweden celebrated too, marking the 40th anniversary of the Prysmian plant in Nässjö, with a public open day that saw customers and suppliers in attendance.

NEW ASSOCIATION PRESIDENTS IN ITALY, TURKEY

Carlo Scarlata, Chief Commercial Officer of Prysmian Italia, has been elected new President of ANIE AICE, the Italian association representing producers of energy cables and accessories, telecommunications cables and conductors for electrical windings.

ANIE AICE is part of Confindustria, the Italian national employers association. In Turkey, the CEO of Prysmian Group Erkan Aydoğdu has been elected new Chairman of Iletken, the Cable and Wire Manufacturers Association of the country.

Where young talents are nurtured

Prysmian celebrated five years of collaboration between SDA Bocconi School of Management and the Group Academy at the inauguration of the new Training Centre.

P rysmian Group was one of the first Italian companies to create its own international school for professional and managerial training and education, thanks to the co-operation of the renowned SDA Bocconi School of Management. The shared journey began five years ago, with the aim of introducing the best graduate talents from the Milanese University into the company.

Fabrizio Rutschmann, SVP HR & Organisation, stated at the time that Prysmian, as a public company that is committed daily to creating value for all its stakeholders, decided to invest in the education and work placement of young talents that are the company's most valuable asset and represent its future.

SDA Bocconi included in the FT Ranking

The international daily has recently published the Executive Education Ranking, which this year includes some of Prysmian Group Academy's education partners around the world.

Prysmian's main partner SDA Bocconi – which helped the company develop all the Academy's programmes – was ranked 4th in the world and 3rd in Europe in Customised Programmes, earning 2 positions compared to last year. The Essec Business School and Esade Business School, the universities involved in the development of the Regional Leadership Programs in Southern Europe, were ranked respectively 17th and 29th. The Stockholm School of Economics, which partners Prysmian for the Regional Leadership Programs in Northern Europe, was ranked 38th on a worldwide level and was listed as the best education player for the Nordic and Baltic countries.

The Financial Times annually monitors and evaluates all the best 85 customised programmes and the best 75 open-enrolment programmes worldwide, based on measures of participants' and clients' satisfaction, as well as the schools' growth in revenues, their international reach and faculty diversity.

Markus Venzin, Scientific Director of the Prysmian Group Academy and SDA Bocconi Professor, added: "Our FT ranking reflects SDA Bocconi's capability in developing intimate customer knowledge, which serves as a basis to design and deliver programmes that accelerate organisational change projects."

Astonishing numbers

More than 1,500 attendees and 100 training days per year, a figure that is further increasing in 2017, to almost 150 days.

Markus Venzin, Director of Bocconi's Claudio Dematté Research Division and Director of the Academy, underlined that through cooperation with Prysmian, new ways were developed to increase the impact of higher education on the learning-on-the-job activities in a global company.

Five years on, the Academy is a consolidated global training programme, involving and training burgeoning early career professionals from all over the world. A major step of this strategy of developing human capital was the inauguration of the new Training Centre at the Group's Milan headquarters, that are now hosting the Academy's courses. According to Rutschmann, it was "a further step forward in our strategy of developing human capital, which represents a valuable, essential resource for the Group".



"The FT Education Ranking," stated Fabrizio Rutschmann,"is a confirmation of our choices. We know our business and how our company works, SDA Bocconi and our other education partners know how to share and improve. Mixing these factors, we have designed and developed a series of learning experiences for our managers and professionals around the world. And we are planning new improvements, like new customised programmes for specific sectors and businesses and the new learning approaches, like the recent Learning Online System."

Time to 'Sell It' has come

The first edition of the innovative three-year programme, designed to gear up fresh sales teams and get them up-to-speed on selling Group products and culture worldwide, started early in 2017.

The launch represents the starting point of an even deeper commitment by Prysmian Group to nurturing young talents. "This is the first time we have launched a recruiting and training programme dedicated to this kind of professional," says Fabrizio Rutschmann, Prysmian HR and Organization SVP. "We are certain the strength of the Group and the relevance of our international projects, developed with many partners, will be an interesting

point of attraction for the candidates. Our capacity to grow in different markets relies heavily on the quality of our sales team." The programme includes a month of local on-boarding, then an induction period in Milan, to meet Prysmian's top management and become familiar the Group's global HQ, with training at the Global Sales Academy, a partnership with SDA Bocconi Business School located on the Group's main site.



Education for sustainable development



Prysmian strengthened the partnership with AIESEC's 'Youth for Global Goals' programme, to support the education of the youngest in a more sustainable way of living.

The Group is committed to making the life of people across the world more fulfilling and satisfying. Consistently with this mission, it has developed many collaborative initiatives with several organisations, the last with AIESEC for the 'Youth for Global Goals' programme.

The initiative addresses the 17 Sustainable Development Goals identified by the United Nations for the most urgent areas of intervention in the world over the next 15 years. AIESEC is the world's largest youth-run organisation and strives to achieve peace and fulfilment of humankind's potential. As such, its latest initiative aims to encourage young people to contribute towards the achievement of the Sustainable Development Goals.

Niels Maurice Caszo, President of AIESEC, praised Prysmian Group as a company with a longstanding commitment to sustainability-related activities, respect for diversity and the delivery of value to people, describing the Group as "the ideal partner for us."



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