

# INSIGHT

**Prysmian** Quarterly magazine  
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culminated in the new P-Laser 600 kV

Upbeat targets  
for FY 2016  
confirmed

Europe accelerates  
towards the Gigabit  
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**Editorial Team  
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**T**he results for the opening nine months of 2016 confirmed the growth seen in the first half, with project execution capability driving a 20.9% jump by Energy Projects, while Telecom confirmed the positive trend with an 8.4% increase. Profitability also increased, with margin on sales at 9.3%, and ADJ EBITDA climbing 11.5% to €527 million. CEO Valerio Battista stated, “Our capability to execute the major power transmission projects in our portfolio and confirmation of the solid growth trend by Telecom have driven the nine-month results.”

Among the contributory factors, Mr. Battista referenced the upbeat targets for FY 2016 and mentioned the “insistent focus on reducing costs and the progress in rationalising the manufacturing footprint”. A set of impressive milestone innovations achieved by Prysmian Group in recent times culminated with the successful development and testing of the new P-Laser 600 kV cable system for High Voltage Direct Current applications. In this issue, we FOCUS ON the undisputed technological advantage that helped the company secure leadership in the transmission of large bulks of electricity over long distances, often across or between countries and through submarine connections. In the last issue, INSIGHT reported that the Group called on the European

Commission to be consistent with its digital ambitions. The call was certainly heeded, as Europe is accelerating on the path towards the Gigabit Society, which we report in GLOBAL SCENARIO. A new set of proposals by the Commission, welcomed by the FTTH Council Europe, move in the same direction that Prysmian outlined, while a new code set EU-wide rules and objectives on how the telecom industry should be regulated to meet the growing need for speed and quality.

In MARKET & TRENDS we explore the power system of the future with the help of Marco Marelli, System Engineering Director at Prysmian Powerlink, recently appointed chairman of CIGRE’s SC B1 (Insulated Cables), one of the main standards authorities in the worldwide EHV cable industry. In an interview, Marco explains the mission of the body he was called to chair and the key points of his agenda.

GETTING THINGS DONE is always a priority at Prysmian. This time the Group got ready to work with the new cable laying vessel, Ulisse, that joins Giulio Verne and Cable Enterprise in Prysmian’s world-class fleet. The new vessel adds to the fleet’s extensive range of well-proven, in-house cable protection equipment to provide extended and strengthened submarine cable installation capability.



# THE POWER OF TECHNOLOGY

**A series of impressive milestone innovations have culminated in the successful development and testing of the new P-Laser 600 kV cable system for High Voltage Direct Current (HVDC) applications. This undisputed technological advantage helped Prysmian secure leadership in the transmission of large bulks of electricity over long distances, often across or between countries and through submarine connections.**

**P**rysmian Group recently announced it was ready to launch a new breakthrough cable technology for the development of power transmission grids that will ensure higher electrical performances, lower costs and better environmental sustainability: [the new P-Laser 600 kV cable system for High Voltage Direct Current applications](#). But it was just the last chapter of a decades-long success story that gained impressive momentum in the last year or so. Prysmian has always been at the forefront of developing innovative, ground-breaking technological solutions for power grids, namely cable systems for High Voltage applications. So the Group could leverage extensive knowledge of materials and

the capability to improve manufacturing processes. All of this allowed Prysmian to overcome the challenge of optimising a reliable industrial process with strict technological parameters and provide entire systems of cable and accessories with the best dielectric properties.

## **Helping build sustainable energy systems.**

The process has accelerated since late 2015 with the creation of a series of impressive milestone innovations that confirmed the Group's prominent role in the creation of cutting-edge technologies for HVDC power transmission solutions, such as the 600 kV MI PPL insulation technology. These cable links are key components of sustainable





kV cable system for High Voltage Direct Current applications – a new breakthrough cable technology for the development of power transmission grids that ensures better environmental sustainability, higher electrical performance and lower costs. It is, in fact, a significant and important new technology that shapes the progress of HVDC in the cable industry, confirming once again the Group's undisputed leadership in driving technological innovation within the sector. Just one month later, Prysmian Group reached two further record-breaking milestones in the field of power transmission, with the successful development and testing of the new 700 kV Mass Impregnated-PPL and 600 kV extruded cable systems for High Voltage Direct Current applications. It was the first time in the cable industry that voltages at these high levels have been achieved and also the first developments in cable technology that enable HVDC power transmission systems beyond 3 GW per cable bipole.

### **Shaping the progress of an entire industry.**

The final breakthrough cable technology for the development of power transmission grids that will ensure higher electrical performances, lower costs and better environmental sustainability is the new P-Laser 600 kV cable system for High Voltage Direct Current applications. This is a monumental milestone that shapes the progress of the entire High Voltage Direct Current cable industry, by reaching 3.5 GW per bipole, the highest power rating ever, with cost reductions of up to 30% per transmitted MW. Successful testing at 600 kV further proved the quality and robustness of the P-Laser insulation technology, with its application to HVDC underground and submarine systems marking a world first in the cable industry. These milestone achievements, realised in less than one year, further mark Prysmian's undisputed commitment to continuous innovation and the Group's technology leadership.

energy systems, to transmit large bulks of electricity over long distances, often across or between countries, such as those being developed in Germany. Over the years, Prysmian has successfully developed, tested and delivered the first-ever 200 kV and 320 kV HVDC projects using extruded insulation cable technology. Recently, it has established a world-class track record of nine cable projects completed or currently ongoing for voltage classes up to 320 kV, including the Trans Bay in San Francisco, the France-Spain and the Italy-France underground interconnections, and the large offshore wind cluster interconnections off the coast of Germany, such as BorWin2, BorWin3, HelWin1, HelWin2, DolWin3 and SylWin1.

### **New breakthrough technologies launched in a few month time.**

In December 2015, Prysmian gained verification of its higher voltage cable system technology for offshore wind inter-array networks. This followed the successful completion of type testing of its 66 kV cable system in accordance with CIGRE and IEC test protocols, as part of the Carbon Trust's Offshore Wind Accelerator programme. The new milestone was a further advance along the path towards the development of innovative, sustainable and cost-effective cable solutions for the offshore renewable power industry. In April 2016, the Group made a further step forward by launching P-Laser 525

# The pillars of submarine primacy

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**Massimo Battaini, Executive Vice President Energy Projects of Prysmian Group, tells us how continuous innovation helped the company build its supremacy in the submarine power cable market and announces that a very exciting pipeline of new products is expected to be launched over the next few years.**

**The Group's supremacy in the Submarine business seems to be based largely on its capacity to continuously produce innovation... what does this strength come from?**

The technical leadership of Prysmian in the submarine power cable market is supported by three pillars: first, a continuous focus on improving the performance and cost of the products and services we offer, striving to better understand and anticipate the requirements of our customers. Second, the outstanding engineering and scientific skills, not only in our R&D specialists, but also in many of the team members who deal with the day-to-day servicing of customers and projects. Last but not least, we apply appropriate levels of investment in developing, engineering and testing new products.

**What could the P-Laser product/system mean in terms of market share and in which areas?**

The P-laser insulation has the right features to lead the HVDC market, as the substitute of both XLPE and Mass Impregnated insulation. P-laser has a

higher operational temperature, which allows higher cable rating. Additionally, P-laser has a chemical composition that makes the cables much more robust against the specific difficulties inherent to the DC current. The HVDC market accounts for approximately half of the total submarine power cable market and serves mainly long-distance interconnectors between countries and grid access systems for off-shore wind parks.

**And what innovation is coming next in the HV field?**

We have a very exciting pipeline of new products to be introduced in the market over the next few years. The main focus of our innovation is the increase of the performance of Prysmian submarine cable systems: higher rating, higher voltage, lower losses, longer lengths. Of course, all these extended characteristics cannot compromise the optimisation of the total cost of ownership of the Prysmian submarine systems. Additionally, we believe that the new generation of submarine cable systems will have built-in 'intelligence': monitoring and control systems will allow smoother operation, also reducing the risks and costs of maintenance operations.



*Massimo Battaini,  
Executive Vice President  
Energy Projects  
of Prysmian Group.*



## Unprecedented and unique features

P-Laser uses an in-house developed thermoplastic material – known as HPTE (High Performance Thermoplastic Elastomer) – that permits more efficient cable production with lower environmental impact than traditional XLPE, where the manufacture is performed in a single and continuous process. A key feature of this new insulation technology is that, compared to XLPE, it does not require a chemical reaction during manufacture to achieve the material properties required for the long term electrical integrity of HVDC insulation systems. This feature gives the additional benefit of shorter production times and results in both reduced energy consumption and lower greenhouse gas emissions. P-Laser also boasts unique environmental performances with lower CO<sub>2</sub> emissions and fully recyclable materials, while higher electrical performance enables up to a 10% cost reduction in power transmission. The technology is also fully compatible with existing cable and accessory technologies.



# EUROPE ACCELERATES ON THE PATH TOWARDS THE GIGABIT SOCIETY

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**A new set of proposals by the Commission, welcomed by the FTTH Council Europe, move in the same direction that Prysmian indicated in its call on Brussels to be consistent with its digital ambitions.**

Just a few weeks after Prysmian Group called on Brussels to be consistent with its ambitions for a Gigabit Society by supporting the roll-out of optical fibre technologies, the European Commission proposed a set of measures to ensure that everyone in the EU will have the best possible internet connection to participate in the digital society and economy. It is not yet the abandoning of the doctrine of technology neutrality, but these proposals nevertheless encourage investment in very high-capacity networks and accelerate the roll-out of 5G wireless technology and free WiFi access points in public spaces.

[Philippe Vanhille, Senior Vice President Telecom Business at Prysmian Group, commented that the company was leading the way](#) in facilitating the progress of the EU debate on connectivity and lending

its expertise to the conversation. He said Prysmian believes the Commission has struck the right tone in this proposal which clearly incentivises the provision of the next-generation networks that Europe needs. The Group will continue in its efforts to facilitate the discussions and decision-making, as the proposals progress through the EU institutions.

The proposed set of measures by the Commission to create a Gigabit society by 2025 include, amongst others, the overhaul of telecoms regulations, a 5G action plan and free Wifi access points. In other words, the Commission is building on its existing 2020 broadband targets, by setting out a vision for a European Gigabit society, where availability and take-up of very high-capacity networks enable the widespread use but also development of products, services and applications in the Digital Single Market. Ronan

Kelly, president of the FTTH Council Europe, welcomed the Commission's proposals, saying that the approach showed 'progressive thinking' and 'looks like a big step in the right direction'.

"We welcome the streamlined focus on competitive, private fibre investment where commercially possible, and also the solutions proposed for building a single fibre network in rural areas," said Erzsebet Fitori, director general of the FTTH Council Europe, adding that, "stressing the geographical dimension and trying to prevent a new Gigabit divide is a crucial change". The prioritisation of access to civil engineering assets – which, if newly built, might represent up to 80% of the roll-out costs – should allow Member States to build on recent measures to reduce costs and extend the reach of future-proof fibre networks.







# A new Code for a common digital future

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**The European Electronic Communications Code sets EU-wide rules and objectives on how the telecom industry should be regulated. It applies to network and service providers and defines how they can be regulated nationally. It also brings the rules up to date, to take account of technological developments and safeguard consumers' choice.**





### WiFi4EU for communities

Another key initiative of the Commission's connectivity package, WiFi4EU, aims at helping European communities offer free Wi-Fi access points to any citizen. The Commission proposes to invest €120 million to give all interested local authorities the possibility of offering free Wi-Fi connections to their citizens in and around public buildings, health centres, parks or public squares.

### The 5G Action Plan

In addition to the Code, the Commission also presented a 5G Action Plan, which foresees a common EU calendar for a coordinated 5G commercial launch in 2020. This is alongside joint work with Member States and industry stakeholders to identify and allocate spectrum bands for 5G, organise pan-European 5G trials as of 2018, promote common global 5G standards and encourage the adoption of national 5G deployment roadmaps across all EU Member States.

The Commission and investors in the telecoms also consider providing venture capital to startups developing 5G solutions for innovative applications and services across industrial sectors. This would take the form of a specialised venture-financing facility helping them to bring new services to market, such as in the area of automated driving, goods delivered by drones, or virtual reality for specific professional collaboration.

The Code aims to create a stable regulatory environment which reduces divergences between regulatory practices across the EU. It substantially reduces regulation where rival operators co-invest in very high-capacity networks and makes it easier for smaller players to join investment projects, thanks to the pooling of costs and the overcoming of scale barriers, amongst others. New rules make the investment case more predictable for 'first movers' who take the risk to invest in those networks in less profitable areas, such as rural ones.

With the new Code, it is not only about competition for access to networks anymore, but also competition for investment in these networks.

The Code also aims to reduce divergences between regulatory practices across the EU in the area of radio spectrum. It proposes long licence durations, coupled with more stringent requirements to use the spectrum effectively and efficiently, while also coordinating basic parameters such as the timing of assignments to ensure timely release of spectrum to

the EU market and more converged spectrum policies across the EU. The Commission also proposes to reinforce the role of national regulators, and the Body of European Regulators for Electronic Communications to ensure consistent and predictable application of the rules throughout the Digital Single Market, limiting current fragmentation and inconsistencies. The investments triggered by the new framework could boost the EU's GDP by an additional €910 billion and create 1.3 million new jobs by 2025, according to Commission forecasts.

# GROWING NEED FOR SPEED AND QUALITY

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In 2015, some 71% of European households had access to a fast fixed internet connection with download speeds of at least 30 Mbps. But only 28% of those were in rural areas. For 4G mobile coverage, the EU average is 86%, but in rural areas only 36%. This is obviously not enough to address the growing need for speed, quality and reliability of the infrastructure necessary for the Digital Single Market to become real.

The connectivity initiatives, presented

along with new EU copyright rules, are part of the EU strategy to create a Digital Single Market, which consists of 16 distinct initiatives.

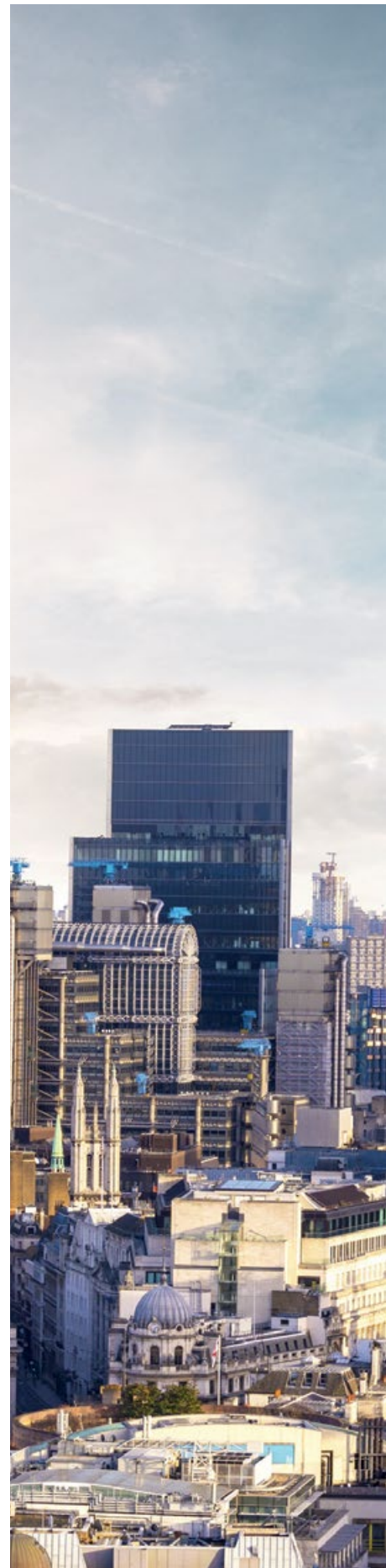
The Commission's proposals will need to be first endorsed by the European Parliament and the European Council, so that they can become legislation and implemented EU-wide. Once EU legislation has been adopted, the Commission ensures that it is correctly applied by each EU member country.

## Broadband targets for 2025

In order to address future broadband needs, the Commission proposes that by 2025 there should be download/upload speeds of 1 Gbps for all schools, transport hubs and main providers of public services, as well as digitally intensive enterprises. In addition, it aims at download speeds of at least 100 Mbps, which can be upgraded to 1 Gbps for all European households, rural or urban. 5G wireless broadband coverage for all urban areas, as well as major roads and railways, is also envisaged.

The plan also said that at least one major city in each EU Member State should have 5G by 2020.

These objectives can only be achieved with massive investment, estimated at €500 billion over the coming decade. The money will largely have to come from private sources, even if indicators suggest that under current investment trends there is likely to be a €155 billion shortfall. In order to address this investment challenge, the Commission proposed a European Electronic Communications Code, which is a modernisation of the current EU telecoms rules, which were last updated in 2009.





## Building Gigabit Britain

The UK's Independent Networks Co-operative Association (INCA), which represents alternative network ISPs and digital infrastructure builders – the Altnets – has published its Building Gigabit Britain report. The document, created in consultation with members including national players Sky and Vodafone, alongside CityFibre, Hyperoptic, Gigaclear, Relish, ITS, Warwicknet and others, outlines a number of Government measures required to facilitate the wide-scale deployment of pure fibre or 'Fibre-to-the-Premises' (FTTP).

The UK currently has the lowest FTTP deployment in the OECD, with around 2% coverage, INCA said in a statement. Building Gigabit Britain outlines how this puts the country at an inflection

point, with legacy copper-based networks increasingly unable to cope with the exponential growth in data.

The report offers six recommendations of specific measures the UK Government should take: a clear and achievable 'Gigabit Britain' strategy; remove financial barriers to FTTP roll-out; create a regulatory environment which encourages competition; review advertising guidelines to achieve greater clarity on the differences between fibre and a hybrid copper solution.

## Founding the 5G infrastructure in the US

The US Federal Communications Commission is taking a crucial step to facilitate the deployment of infrastructure that will ensure the installation of next-generation wireless services, or 5G. Building on previous infrastructure reforms, the Wireless Telecommunications Bureau signed an agreement to eliminate historic preservation reviews for small facility deployments across the US that do not adversely impact historic sites and locations. The agreement was signed with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers and removes regulatory burdens for infrastructure deployments that would have little or no physical impact on their respective sites. This change will make it much easier, quicker and cheaper to deploy the facilities on which 5G is being built – like distributed antenna systems, small cells and future technologies that haven't yet left the drawing board.

According to recent reports from the industry, wireless data consumption has grown 732% since 2010. And Cisco forecasts that global mobile data traffic will increase elevenfold between 2013 and 2018. 5G build-out will require increasing spectrum availability, ensuring backhaul connectivity, and facilitating infrastructure deployment. The agreement addresses infrastructure deployment, enabling more efficient installation of distributed antennae systems, also known as DAS, and small cells.



# FURTHER LEAP IN PROFITABILITY IN THE FIRST 9 MONTHS

**The results for the first 9 months of 2016, approved by Prysmian's Board of Directors, showed sales organic growth in line with the first half while margins rose in almost all the businesses.**

**T**he results for the first 9 months of Prysmian Group showed sales rising organically by 1.8% to €5,660 million with project execution capability driving a 20.9% organic growth by Energy Projects while Telecom confirmed the positive organic trend with a 8.4%. Profitability increased in all businesses, except for Oil & Gas, and ADJ EBITDA climbed 11.5% to €527 million, with margin on sales at 9.3%.

CEO Valerio Battista stated that “our capability to execute the major power transmission projects in our portfolio and confirmation of the solid growth trend by Telecom have driven the nine-month results.” While sales has grown in line with the first half of the year,

the Group posted another leap in profitability, with rising margins in almost all businesses except for Oil & Gas, still affected by the very poor market conditions. Among the winning factors, Mr. Battista mentioned the “insistent focus on reducing costs and the progress in rationalizing the manufacturing footprint”. The market trend was confirmed as solid for the strategic businesses of power transmission, interconnections, offshore windfarms and optical cables for broadband telecom networks. Mr. Battista said he expected the more cyclical businesses to gradually stabilise and Oil & Gas to experience continued difficulties. Based on these prospects, the Group confirmed the profitability targets for full year 2016, with ADJ EBITDA at the upper end of the range of €670-720 million.





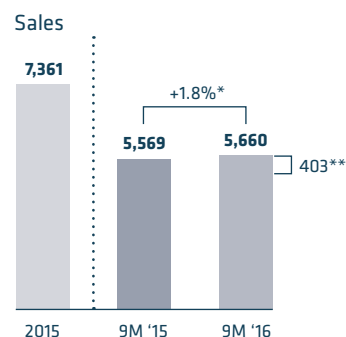
Sales grew organically by 1.8% to €5,660 million driven by solid trends in the Telecom business and sound execution in Energy Projects, in line with H1.

Adjusted EBITDA amounted to € 527m, or 9.3% on Sales, with margin expansion in all businesses, with the exception of Oil&Gas.

Continued focus on cost efficiency with relevant progress in manufacturing footprint optimization.

Net Financial Position reported a balance of €1,017 million as of September 30 2016 compared to €955 million at 30 September 2015. Excluding the recent acquisition impact of OCI and GCDT it would have been €822 million.

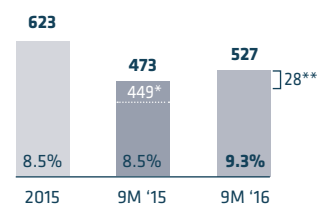
### 9M 2016 Key Financials



\*Org. Growth

\*\* Δ OCI Contribution 9M'16 vs. 9M'15

### Adj. EBITDA



\*Excl. €24m WL previous loss write-up

\*\* Δ OCI Contribution 9M'16 vs. 9M'15

# ENERGY PROJECTS SALES JUMPED 20.9%

**Project execution drove growth in submarine cables while also high voltage underground did well. Offshore wind in Europe expected to accelerate.**

The Energy Projects Operating Segment saw sales jumping to €1,172 million, posting organic growth of 20.9% on the first nine months of 2015, while profitability also improved, with Adjusted EBITDA up 12.4% to €172 million and a margin on sales at 14.6% versus 15.4% (13% excluding the €24 million write-up related to the Western Link project).

Sales of **Submarine Cables and Systems** rose considerably, driven by progress in the execution of the important projects currently in the Group's order book. Margins also much improved thanks to the focus on project management and to the enhancement of cable installation assets, making it possible to insource more of the installation operations. The outlook for 2016 is stable for power interconnections while an acceleration in offshore wind projects is expected.

Sales of **High Voltage Underground** business have performed particularly well, driven by the execution of the France-Italy interconnector and the execution of projects in North America and Asia Pacific. The medium term outlook is positive for markets in the Middle East, Asia Pacific and Central Europe. The underground and submarine cumulative power transmission order book stands high at €2,600 million.





## ENERGY PRODUCTS FURTHER IMPROVED MARGINS

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The first nine months saw weaker sales but better margins for Trade & Installers while Power Distribution improved profitability with growth slowing in Q3 as expected. Within Industrial, Elevators and Automotive were positive, while a slowdown occurred for Specialties & OEM.

**Energy Products Operating Segment** overall sales amounted to €3,398 million, posting negative year-on-year organic trend of 2.1%, with Oceania and certain Asian countries growing, Europe stable and a steep reduction in volumes in Brazil and Argentina. Adjusted EBITDA climbed 12.6% to €217 million, with the margin on sales improved to 6.4% from 5.7% in the nine months of 2015.

Sales of **Energy & Infrastructure** scored a negative organic growth of 1.9% to €2,300 million, of which €403 million contributed by Oman Cables Industry. Adjusted EBITDA climbed 25.3% to €123 million, of which €28 million from the additional contribution of fully consolidating Oman Cables Industry, with the margin on sales improving further to 5.4% from 4.5%.

The results for **Trade & Installers** showed a slight organic decline partly due to the decision to focus on a product and channel mix designed to protect profitability, which improved indeed. Positive performances were recorded in Northern Europe, while the important South American market,



like APAC and Central-Southern Europe, continued to turn down.

**Power Distribution** confirmed the positive sales trend, even if weaker in the third-quarter as expected, with a general improvement in profitability. Most of the impetus came from Northern Europe, the Netherlands and APAC, while demand slowed in Germany and exchange rates had a negative impact in Argentina.

**Industrial & Network Components** sales decreased organically by 2.5% to €1,021 million, mainly due to the instability of investment demand in certain sectors.

Adjusted EBITDA improved to €95 million from €92 million with margin on sales rising to 9.3% from 8.1%. Specialties & OEM reported a negative sales performance, while Elevators enjoyed a solid performance thanks to the increased market share in North America.

The **Automotive** business reported an increase in sales and a slight improvement in profitability, with APAC and Eastern Europe benefiting from the new manufacturing set-up. Sales of Network Components were slightly higher, with solid performance by High Voltage.

## OIL & GAS HIT HARD BY THE OIL PRICE TREND

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**Umbilicals evolving in line with expectation reflecting the framework agreement in Brazil while project phasing impacted the core cable business. Focus on supply chain optimization and effectiveness of manufacturing footprint.**

The **Oil & Gas Operating Segment** sales came in at €225 million with a negative organic growth of -31.6% as the performance was hit hard by the oil price trend. Adjusted EBITDA fell to €9 million from €21 million with margin on sales at 4.1% from 6.2%.

The negative phasing of both onshore and offshore projects in the **Core Oil & Gas Cables** business resulted in a steep fall in volumes and drop in prices. Market conditions stay difficult and the Group confirms its focus on restructuring and optimising the manufacturing footprint, while continuing to rely on the greater

competitiveness of its facilities in Asia.

In the **Subsea Umbilicals Risers and Flowlines (SURF)** business, the performance of Umbilicals is evolving in line with expectations and reflects the renewed terms of the framework agreement in Brazil. The Group is continuing its efforts to optimise the supply chain and strengthen integration with key suppliers.

**Downhole Technology** results were in line as having benefited from the full integration of Gulf Coast Downhole Technologies, acquired in the second half of 2015.

## TELECOM SALES HIGHER, EBITDA CLIMBED 20.9%

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**Sales posted an organic growth of 8.4% driven by healthy demand for optical fibre cables and for copper cables in Asia Pacific, while profitability also improved.**

The **Telecom Operating Segment** sales grew by 8.4% organically to €865 million, driven by healthy demand for optical fibre cables and by strong demand for copper cables in Asia Pacific. Adjusted EBITDA jumped 20.9% to €129 million, with margin on sales also improved to 14.9% from 12.6% in the same period of 2015.

The **Telecom solutions** business confirmed the positive performance of optical cables and fibre, with a solid trend in Australia, North America and France. The recovery of efficiency and competitiveness in fibre manufacturing has been reflected in a significant improvement in margins, accompanied by robust demand for copper

cables in Asia Pacific.

**Multimedia Solutions** enjoyed a positive performance in Europe, also thanks to increased production capacity for copper data transmission cables.

The high value-added business of optical connectivity accessories performed well, triggered by the development of new FTTx networks that provide the last mile broadband, in Europe and particularly in France, Spain and the Netherlands.





## Brokers confirmed their positive recommendations

Market reaction to the first nine months of 2016 was positive, with the stock price rerating steadily after the release. Operating figures were broadly in line with expectations, although with a different mix of business. All brokers confirmed their recommendation and target price, except Equita, that increased its target price to €24.8/share from 24.5/share and Fidentiis, that raised its valuation range to €25-26/share from €23-24/share.

Bank of America–Merrill Lynch confirmed its BUY rating despite a small negative

revision of FY 2016 and FY 2017 estimates, expecting Prysmian to continue reporting some of the strongest and less volatile earnings of the sector. Morgan Stanley appreciated Prysmian as one of the most consistent performers in Cap Goods, having posted eight quarters of positive organic growth, while continuing margin improvement. Intermonte confirmed its neutral recommendation after the strong YTD stock performance and a full-looking valuation, predicting a better entry point into a high-quality story.

## Positive environment for HV projects

**The first nine months of 2016 witnessed a macro environment with mixed growth in Europe's major economies, partially eroded by the uncertainty generated by the British vote to leave the European Union. In the United States growth remained stable but less intense than in 2015, while among emerging economies China and Russia are showing signs of stabilising after the uncertainties seen at the start of the year. The economic and political situation in Brazil remains challenging.**

The Group's expectations for FY 2016 is that demand in the cyclical businesses of building wires and medium voltage cables for utilities will be slightly lower with a general stabilisation in prices. Given the positive market environment for the Energy Projects, the Group expects both the Submarine and High Voltage underground businesses to improve their performance.

The reduction of investments due to the low oil price is expected to adversely affect the Core Oil & Gas Cables business. In the Telecom, it is expected that the increased demand for optical fibre cables recorded in the first part of the year, will continue through to the end of 2016.

The Group is therefore confirming its forecast of Adjusted EBITDA for FY 2016 at

upper end of the range €670-720 million, marking a considerable improvement from the €623 million reported in 2015. This forecast takes into account the current order book and the factors mentioned above, and reflects the expectations concerning full consolidation of Oman Cables Industry from 1 January 2016.

# ENVISAGING THE POWER SYSTEM OF THE FUTURE



*Marco Marelli, System Engineering Director at Prysmian Powerlink*

Prysmian Group boasts a long-standing tradition of presence in the International Council on Large Electrical Systems, one of the key worldwide bodies operating in the sector. The Group's highly qualified and distinguished experts take part on a regular basis in the Study Committees

and Working Groups of the Council, also contributing with technical papers. Recently the Council, known as CIGRE, announced that Marco Marelli, System Engineering Director at Prysmian Powerlink, has been appointed new chairman of CIGRE's SC B1 (Insulated Cables), one of the main authorities in terms of recommendations and standards in the worldwide EHV cable industry. In this interview, Marco describes the mission of the body he was called to chair and the key points of his agenda.

The International Council on Large Electrical Systems is one of the key bodies operating in the sector worldwide: what are its specific tasks and aims?

CIGRE is a permanent, non-governmental and non-profit international body with about 10,000 associates, founded in 1921 and dedicated to the development of the power supply sector through the identification and the development of solutions to industry issues. Work done by over 3,500 experts covers technical,

economic, environmental, operational, organisational and regulatory aspects.

A few months ago, CIGRE published the new Strategic Plan which strengthened the focus on support for the creation and development of the electrical system of the future. The goals for the next five years will therefore be around this topic. SC B1 (Insulated Cables) can contribute by fostering the integration of HVDC in power networks, facilitating the implementation of underground structures, increasing the awareness of stakeholders on the key factors towards sustainable development.

As new chairman of SC B1 (Insulated Cables) at CIGRE, what are the priorities in your agenda for year 2017?

I started my four-year term with a short message that summarises my views about the future of SC B1 and gives direction for next year.

I confirmed the centrality of the Working Bodies and the appreciation for the valuable people who deliver tangible results. Efficiency and quality in the preparation of these documents will have my full attention: already in 2017 I think



we'll have mechanisms in place to monitor the quality and time-to-market of the production of Technical Brochures.

The big change for SC B1 will, however, be around the empowerment of local experts in their own countries and regions: delegates will be the ears and the voice of the Study Committee and the many local experts will act as ambassadors of SC B1.

**The cable industry is already highly regulated. Do you think the current framework in Europe is strict enough to guarantee the needed standards in terms of safety and quality? And what about the rest of the world? Where do you see the need for regulatory action?**

The new European CPR - Construction Products Regulation - is a significant step ahead in this direction. This is one of the most advanced sets of regulations for both safety and quality, but my business experience in High Voltage and Submarine and my exposure to a geographically wide market mean it's easy to see the gaps. There are still many under-regulated countries and regions, in particular for those large projects and special works that happen too rarely to be covered by local standards.

Then, CIGRE could help with international recommendations about safety issues, as happens already for performance-related aspects. I took the initiative to include 'Safety, Health, Environmental and Quality considerations for cable systems' as a topic for discussion for the next CIGRE B1 General Session in 2018. Most

important, I'd like to engender within CIGRE the idea that SHEQ regulations and standards are not hindering but fostering innovation.

**What role does innovation play within the cable industry?**

Innovation has both a commercial and social impact. The world today is continuously dealing with issues about environment, safety, accessibility to resources for everybody, social acceptance, sustainable growth, and so on. I believe that innovation affects all of these issues, and I think this applies in the cable industry too.

**Here are just a couple of examples.**

One is about advanced monitoring systems and innovative policies for asset management. They may extend the concept of smart grids to large power networks, thus making for more efficient and safe use of power cables. Another example involves HVDC cable systems. Different and significant innovations in insulation materials have been fundamental in the increased use of interconnectors and development of offshore wind generation far from the coast in northern Europe. Both applications are bringing about better use of renewable energy, with a positive impact on carbon footprint, job creation and economic sustainability.

**CIGRE 2016 came at a very important time for Prysmian, as it followed announcements of the successful qualification of the most advanced**

**technologies in the field of insulation materials for HVDC cable systems, such as 525 kV HPTE (P-Laser), 600 kV XLPE and 700 kV MI PPL. Which one gained the most of the attention and why?**

P-Laser. No doubt! In fact all three innovations attracted attention and questions.

The 700 kV voltage level is definitely not common and can be considered a market niche, and our MI PPL cable has been seen as the confirmation of Prysmian's historical leadership in paper-based insulation systems.

Many people were looking for XLPE DC cable developments, expecting few manufacturers to be capable of reaching the 525 kV level. Announcing our 600 kV qualification and showing cable samples gave the perception of a company able to 'do more' than its competitors.

But most people were interested in the 525 kV P-Laser. Our customers appreciated the higher thermal and electrical performance of this insulation, in particular for HVDC, and are ready to consider P-Laser cables as a viable option when planning new power links.



# Submarine contract in Belgium

**Prysmian Group secured an offshore wind farm inter-array submarine cables supply by Tideway B.V. for the Rentel project.**

The project will become the fifth offshore wind farm to be constructed in the Belgian North Sea, and will contribute to Belgium's leading role in the effort towards achieving EU climate standards and increasing the security of energy supply in Belgium. Rentel N.V. was founded by a consortium of Belgian specialists in renewable energy with a significant track record in offshore wind, who have joined forces to develop, finance and operate the Rentel offshore wind project, which holds a 309 MW offshore wind concession in the Belgian North Sea. The Rentel wind farm is located approximately 34 km from the Port of Zeebrugge and approximately 40 km from Oostende off the Belgian coast. It will consist of 42 Siemens D7 type wind turbines and will produce nearly 309 MW at its peak, supplying CO<sub>2</sub>-friendly electricity to 285,000 households.

Prysmian will be responsible for the design, manufacture and supply of the

33 kV submarine cables in various cross-sections, together with related cable accessories. The Group will also provide the offshore cable termination and testing services. The cables will be produced in the Prysmian facility in Drammen, Norway, one of the Group's centres of excellence for submarine cables. The cables are planned to be delivered in summer 2017, while the termination works are scheduled to be completed in Spring 2018.

In the growing offshore wind market, Prysmian has moved ahead with major investments and is regarded as a trusted and dedicated partner, whether for medium voltage inter-array cables, HVAC or HVDC export cable needs. Recently, the Group announced the launch of its EPR insulated 66 kV cable solution for inter-array application, the first at this voltage level, enabling up to 15% cost reductions for offshore wind farms.



### **Awarded in Singapore as 'Best Italian Multinational'**

Prysmian Group has been named 'Best Italian Multinational Company in Singapore' by the Italian Chamber of Commerce in Singapore (ICCS) at the 2016 ICCS Business Awards, an annual event organised by the ICCS to honour the best Italian companies in the region. Paul Atkinson, Prysmian Group CEO Asean, received the award from the Italian Ambassador, Paolo Crudele. Jonathan Sloam, Prysmian Group's Business Director Asean, commented, "As a world leader in telecommunication cable and systems, Prysmian is shining proof of how Singapore is one of the smallest regions in the world yet one of the biggest centres of opportunity."

# Cables for MSC cruise liners

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**Prysmian has signed an agreement with Italian shipbuilder Fincantieri for the supply of 3,000 km of low voltage, armoured and unarmoured, screened and fire-resistant Seaflame™ cables for shipboard applications.**

The cables will be manufactured at the Group's plant located in Merlino, near Milan, Italy. The supplied cables will be used in the construction of two new cruise liners being built in the Fincantieri shipyard in Monfalcone in North Eastern Italy on behalf of the Italian ship owner MSC. With a gross tonnage of approximately 150,000 tonnes, these are the two largest cruise ships ever built by Fincantieri in Italy.

The award further strengthens Prysmian's close collaboration with Fincantieri for the supply of cables, not only for military vessels, but also for passenger carriers. Seaflame™ is an innovative range of ultra fire resistant power, control and instrumentation cables designed to deliver new levels of performance and safety for the world's leading marine businesses. As an integral component of power-gear, and power-feeding systems, in order for a vessel to sail and safely return to port, cables and cable systems must always remain operational, including in the event of an on-board fire – no matter how severe the fire or surrounding conditions.

## Making history in aviation and energy

[Prysmian was a Specialised Partner to the Solar Impulse project](#), 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. The epic journey of Solar Impulse began more than a year ago from the same Abu Dhabi airport and touched Asia, Japan, Hawaii, the United States

and North Africa, completing a world-round trip without burning a single drop of fuel. Bertrand Piccard, who piloted the aircraft with André Borschberg, noted that it was “more than a success in aviation history: Solar Impulse made history in the field of energy.” And Borschberg added that thanks to “partners who believed in the same vision we developed solutions to make our aeroplanes very energy efficient. Now all these technologies can be used in other applications to make our world more energy efficient as well.”



## The trident of submarine installation

**New cable laying vessel, Ulisse, is ready to work and joins Giulio Verne and Cable Enterprise in Prysmian Group’s world-class fleet.**

Following an investment of over €20 million, [the new cable laying vessel, Ulisse, is ready for offshore cable installation operations](#). With the new ship Prysmian Group can now rely on a fleet of three world-class vessels: Giulio Verne, Cable Enterprise and Ulisse. The fleet adds to its extensive range of well-proven in-house cable protection equipment to provide extended and strengthened submarine cable installation capability.

With Ulisse, Prysmian Group gains more comprehensive control of the supply chain by in-sourcing a greater part of

the installation work and further boosts the Group’s submarine project execution capabilities with a flexible asset that can both transport submarine cables and perform cable laying and burial operations in shallow waters. Massimo Battaini, Energy Projects Senior Vice President at Prysmian Group, commented that “thanks to this new vessel we can offer an ever wider and more versatile range of installation services, thus strengthening our position in a highly strategic sector for the Group.”

Following the purchase from the former

ship owner EOS, the flat-top barge has been converted into a 120m x 33m cable layer at the PaxOcean shipyard in Singapore. Renamed Ulisse, she now has an eight-point spread mooring system, enabling her to meet the operating requirements even in harsh environmental conditions. The first project to be executed by Ulisse will be the Negros-Panay connection in the Philippines – awarded in December 2014 and worth a total of around €90 million.



# Graduating in Build the Future

**Prysmian is seeking 40 talented young people from around the world for its sixth edition of the international recruitment programme.**

When the search process aimed at selecting **40 new graduates** in economics, engineering, physics, chemistry and mathematics is completed, the sixth edition of Build the Future will be complete. In doing so, it will bring the number of talented young people of various nationalities who have joined the company through the programme to over 200.

For selected candidates, the programme includes an initial **training** period at the Group's Milan headquarters, in partnership with SDA Bocconi School of Management, followed by a **one-year job rotation** in their home country in R&D, operations and sales, followed by **two years abroad** within a specific department. This allows participants to get first to the heart of the Group's dynamics and its production processes, while the subsequent years of experience will allow them to be fully integrated into the organisation, making their own significant contributions to business objectives.

This year, for the first time, Prysmian is opening its doors to candidates early during the selection process, through a **weekly live chat** on the Prysmian Group Graduate Programme Facebook page, through which more than 10,000 people from all over the world have been engaged, by meeting them online and answering their questions. Other social channels have been used, such as LinkedIn, local job portals and university websites. One-and-a-half months before subscriptions closed, the target of **20,000 applications** had already been reached.

"Making the most of our resources and recruitment programmes remains a fundamental aspect of the Group's growth: the promising young people of today are a very valuable resource for the company's future. Build the Future is a concrete example of our strategy, as we believe strongly in the competitive advantage that we derive from the talent of people."

*Fabrizio Rutschmann,  
Human Resources and  
Organisation Director  
at Prysmian.*

**BUILD**  
**the FUTURE**

The Prysmian Group  
Graduate Program



# NEW CALL TO SAY YES

**The new Group stock ownership plan aims at 1.5% of share capital held by employees.**

**P**rysmian Group has launched a new long-term stock ownership plan for its employees presented by CEO Valerio Battista in Milan to 300 managers from all around the world acting as ‘ambassadors’ for the initiative in their respective countries. The YES, or Your Employee Shares, plan is now in its fourth consecutive year and has already met with considerable success within the company: **to date over 40% of the Group’s approximately 20,000 employees in 50 countries have become investors** in the company they work with.

The YES plan, which has been extended by Prysmian’s Board of Directors for a **further three years**, offers employees the opportunity to buy Prysmian shares at a

discount of up to 25% on market price. **The previous three-year period scored a significant €17M investment**, standing out as proof of the trust employees have in our Group. To benefit the majority of employees, the discount for top managers is only 1%, whereas it is 15% for managers. The plan also calls for bonuses in the form of eight free shares for those who have already participated and are renewing their commitment. **A new loyalty bonus of five shares has been introduced** for those who decide to renew the 36-month lock-in period, prohibiting selling during the first three years of the plan. Starting this year, employees from Argentina, Indonesia, Côte d’Ivoire, Philippines, New Zealand and Tunisia can also join the programme.

## **A huge team guided by common goals**

Aksoy Ilker, Product and Key Account Manager for Prysmian Group in Germany, and part of the 1,000 people who have joined the programme, explains that he decided to join YES three years ago because he thought it was “a great opportunity to strengthen my sense of belonging and that of my colleagues”. Ilker adds that it was “fantastic” that there were thousands of people around the world, with different cultures, knowledge and positions, who thought the same: “I felt part of a huge team guided by common goals.”





“Our goal is to increase the share capital held by employees up to 1.5% by the end of this edition, in the second three-year period. For a public company like Prysmian, aligning the interests of its shareholders and employees is of fundamental importance.”

*Valerio Battista,  
CEO of Prysmian Group*

## Make It: where manufacturing is everything

**In 2015 some 6.000 candidacies were filed from all over the world.**

Prysmian Group is on the hunt for passionate engineers to help shape the future, looking for **professionals with between 3 and 7 years' experience in factory roles** such as process, maintenance, planning, quality, product development and production engineering, with a bachelor's degree in engineering, good English, strong people skills, a hands-on, can-do attitude and a real passion for operations.

The Make It programme, that last year received some 6,000 applications from all over the world, offers the opportunity, at Prysmian Group, to overcome challenges worthy of the most ambitious professional skills. The key roles currently on offer within the programme are those of Process Engineer, Maintenance Engineer, Planning Engineer, Quality Engineer Product Engineer, Production Engineer/Supervisor.

Isifo Olear, who joined the company through the first wave of Make It as a Process Engineer at the Claremont plant in North America, explains that he particularly liked the **international exposure to other cultures and ethnics**: “I appreciated the broad networking with people from other backgrounds that will be joining the company and in the future could be key leaders.” Isifo also says that he would recommend the programme to any young individual who wants to succeed with Prysmian: “The opportunities are significant and thanks to Make It they can be successfully fulfilled.”

**MAKEIT**

A manufacturing career  
at Prysmian Group

**Prysmian**  
Group



[www.prysmiangroup.com](http://www.prysmiangroup.com)

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