

# INSIGHT

**Prysmian** Quarterly magazine  
Group 04 | 2015

## ELEVATING BUSINESS

The latest achievements  
in projects around the world

Gaining strength  
in the first 9 months

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Broad consensus that  
more grids are needed

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The challenges  
of a changing world



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**Continuously sustaining broadband development**

Enhanced optical fibre production in Italy, expanded operations in Brazil and a new facility in Mexico are part of Prysmian investment efforts

**Elevating business**

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# FURTHER STRENGTHENING IN THE THIRD QUARTER

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Editorial Team  
Insight


**A**s the global economy approaches the year's end on a steady path, Prysmian Group also confirms solid results for the first nine months of 2015, and an upward trend for the year as a whole.

Continually improved sales and profitability across almost all businesses, alongside a solid orderbook, signal the good shape of the Group. This year's third quarter saw further strengthening of Prysmian's positioning in the crucial Oil & Gas sector with the acquisition of the US company Gulf Coast Downhole Technologies.

In this issue of INSIGHT we FOCUS ON how Prysmian is helping Italy in its broadband programme thanks to the fibre the Group produces at its centre of excellence manufacturing plant. We also FOCUS ON the elevator industry, a niche but global market where Prysmian is displaying its technological excellence.

Our GLOBAL SCENARIO stories are devoted to the 2015 Congress of the International Cablemakers Federation and also to the cable industry's preparation to deliver Europe's future power grids. In MARKETS & TRENDS, we update you on the strong global demand for optical cables that has been catching up with, and will potentially be overtaking, capacity in 2015 and beyond.

DOING BUSINESS reveals some of the important new contracts secured by Prysmian that have borne fruit this third quarter. Of note is the first ever submarine connection project in China that paves the way for new business opportunities in Asia. Our PEOPLE section reports that the fifth edition of Build the Future – the international recruitment programme that represents the Group's competitive edge – has now been launched.



### **New technologies, constantly developed**

True innovation and production process efficiency are the pillars of Prysmian's competitive optical fibre strategy. One of its most recent innovations, the BendBright<sup>XS</sup> 200µm fibre, allows optical fibres to be installed inside cables with a density never achieved before. With regards to system innovation, the Group is continuing to consistently develop new cabling and connectivity technologies to deliver information wherever it is required. Such innovations include the VertiCasa systems for installation in high-density buildings; VerTv for optical cabling for satellite TV; systems for installation inside pre-existing sewers, and extractable fibre technologies such as RetractaNet.


# CONTINUOUSLY SUSTAINING BROADBAND DEVELOPMENT

**Enhanced optical fibre production in Italy, expanded operations in Brazil and a new facility in Mexico are part of Prysmian investment efforts.**

### **The Battipaglia plant: a strategic stronghold**

Prysmian's centre of excellence in Battipaglia employs around 300 highly specialised staff and is the only facility in Italy offering optical fibre production.

"Thanks to the investments carried out, Battipaglia is now able to compete on the world market," explains Nicola Scafuro, Battipaglia Plant Manager. "The sector is highly globalised and faces very strong competition from Asian and American manufacturers, but Prysmian is committed to remaining competitive and to maintaining a strategic technological stronghold in Italy."



**P**rysmian Group continues to sustain development of broadband networks, while maintaining its commitment to innovation and competing in the optical fibre sector worldwide. In Italy the Group, committed to supporting the country's development plans for a new ultra broadband network, has completed a €30 million investment project in its centre of excellence located in Battipaglia, to boost competitiveness with some of the world's most advanced production capabilities, technology and know-how.

Always in Italy, Prysmian has also launched a dedicated communications campaign to illustrate how the country has the resources and knowledge to develop broadband

telecommunication network projects. In Brazil, the recent inauguration of a newly expanded optical fibre production facility in Sorocaba, São Paulo, is part of the Group investment efforts aimed at increasing competitiveness of fibre products and enhancing production capacity. The Brazilian project is part of the ongoing global scheme which will improve the performance of the Group's optical products and manufacturing processes, along with other excellence centres in the USA, France, Italy and the Netherlands.

From Italy and Brazil to Mexico, where Prysmian will be building a new telecom facility as the local market is experiencing continuous growth due to deregulation, increased demand for broadband

services and Government policy to boost connectivity. To reinforce its competitive position the Group is launching the investment of a new facility in Durango, where Prysmian Cables y Sistemas de Mexico is headquartered.

The Group is a world-leading provider of optical fibre cables for telecommunications networks, producing approximately 30 million km of cable a year worldwide in its five plants situated in Brazil, France, Italy, the Netherlands and the USA. At least nine million km of cable is produced in Italy, bound for strategically important projects throughout the world.

# Elevating business

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Sterrett Lloyd, Elevator BU Vice President, discusses some of the latest achievements in several important projects awarded to Prysmian around the world.



Following the recent successful completion of the One World Trade Center and Brookfield Place (World Financial Center) in New York City with ThyssenKrupp – for which Prysmian’s Draka Elevator Products Business Unit provided travelling and hoistway cables – the company continues its focus on providing sophisticated solutions to the world’s most important building projects.

Sterrett Lloyd, President of Draka Elevator Products, tells INSIGHT that it is an “exciting period” for the business unit, as it follows a series of contracts for cables and components from market-leading manufacturers in the elevator industry such as Schindler, KONE, Otis and previously mentioned ThyssenKrupp, to be used in some of the world’s most iconic buildings.

A recent important global contract that has seen Prysmian involved as an important technological partner, was awarded by KONE to replace all existing cables in the luxury **Marina Bay Sands hotel in Singapore**. The Group provided cut-to-

**“We are very happy with all our recent successful achievements, where Draka Elevator Products provided its state of the art technologies. Prysmian continues to offer sophisticated solutions to the world’s most important projects in the elevator sector,” says Lloyd.**

length round elevator traveling cables, pre-fitted with connectors to ensure reliability while reducing installation times.

Schindler Group recently awarded Prysmian two contracts, the first, to supply travelling cables specifically designed for the open-air environment at the half-scale Eiffel Tower landmark within The Parisian Hotel in Macau. The other development involved the supply of 13km of flat travelling cables that featured fibre optic and copper conductor technology for the rebuilding of the Three World Trade Center in Lower Manhattan. Planned to be 329m tall and with 80 stories, it is the tallest building currently under construction on the US East Coast.

# Minimising the damage of earthquakes

**How Prysmian systems are helping to detect problems in elevator systems thanks to a full-feature sensor.**

**By Sterrett Lloyd**

*Vice President of Prysmian Group's  
Elevator Business Unit*



Earthquakes pose a major challenge to building structures and their components, including elevators; even a light quake can distort or break the precisely aligned components of an elevator system. An intelligent seismic detection system can help by quickly getting the elevator to the nearest floor and prompting an exit. The damage is often not visible. One major concern is counterweight derailment – a stationary derailed counterweight is a problem. A derailed counterweight has large inertial forces that could damage an elevator's rails, brackets or guidance assemblies if it moves.

Unseated wire ropes are another concern. It is certainly an issue if the quake unseats

ropes that aren't in motion, but if the motor continues to turn, this could result in significant damage to the elevator system. Modern systems have a couple of ways to determine if elevators have sustained damage due to an earthquake.

'Ring on a string' counterweight displacement hardware is a simple means to detect counterweight derailment.

A more exact method to determine if and when an elevator should be shut down uses an electronic seismic detector that senses and measures acceleration on all three axes: up, down and laterally. If this motion exceeds a programmed limit, a detector signals to the elevator controller to stop the cabin at the nearest floor.

Prysmian Group systems help in detecting damages caused by an earthquake thanks to a full-feature sensor such as the Draka Event Monitoring Device (EMD), that detects both primary (P) and secondary (S) waves and will act accordingly. When the sensor detects a P wave of sufficient amplitude, it will send a signal to the elevator to stop at the nearest floor before the more damaging S waves arrive. As an added bonus, the EMD also records the date, time, duration, and peak acceleration in each axis for any seismic event that it detects, which can assist engineers in determining the extent of any damage.



The Marina Bay  
Sands hotel

Prysmian Group has also been contracted by Otis Elevator Company to supply its Super-Flex® cabling to the tallest building under construction on the US West Coast – Wilshire Grand Center, a 335m tall skyscraper in the financial district of downtown Los Angeles, California.

Otis also tasked Prysmian with providing multiple high-rise Super-Flex® Traveling Cables and Super-Duct® Hoistway Cables – which combine copper and fibre optic components for superior communication – to the Lotte World Tower, a 123-floor, 555m tall skyscraper currently under construction in the second-generation Lotte World complex in Seoul, South Korea. Once completed, it will be the tallest building in the Korean peninsula and the fourth tallest building in the world.

## Showcasing in Germany

Prysmian Group attended Interlift 2015, the leading meeting place for manufacturers and influencers in the elevator sector, in Augsburg, Germany. At the event, Prysmian's Draka Elevator Products Business Unit had the opportunity to display its traveling cables, as well as its full range of innovative elevator products and solutions.

# RISING TREND IN REVENUE, STRONG FINANCIAL POSITION

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**The results of Prysmian Group for the first nine months of 2015 approved by the Board of Directors showed a strengthened financial structure thanks to the generation of substantial cash flows.**

**T**he results posted for the first nine months by Prysmian Group were generally positive both for the rising trend in revenue and stable profitability. CEO Valerio Battista explained that the Energy Projects segment “has seen a further acceleration in performance”, particularly by submarine cables and systems. The Telecom segment and Energy & Infrastructure business have also enjoyed positive results, despite some signs of softening in the third quarter after strong first-half

growth. Mr Battista also noted that the Group’s financial structure had strengthened with Net Financial Position improving to €955 million thanks to the consistent capability to generate substantial cash flows. On top of that, with the acquisition of the US company Gulf Coast Downhole Technologies, the Group completed another step toward the strategy of strengthening its business in high-tech markets and sectors. For the Full Year 2015 the Group is forecasting Adjusted EBITDA in the range of €590–640 million (€616–€666 million excluding the negative impact of the Western Link project), marking a significant improvement from the €509 million reported in 2014.

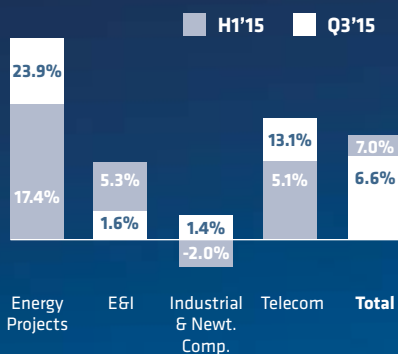
Prysmian Group will carry on throughout 2015 to rationalise its activities with the objective of achieving the projected cost efficiencies and greater competitiveness in all areas of the business.



### Continued organic growth and profitability improvement

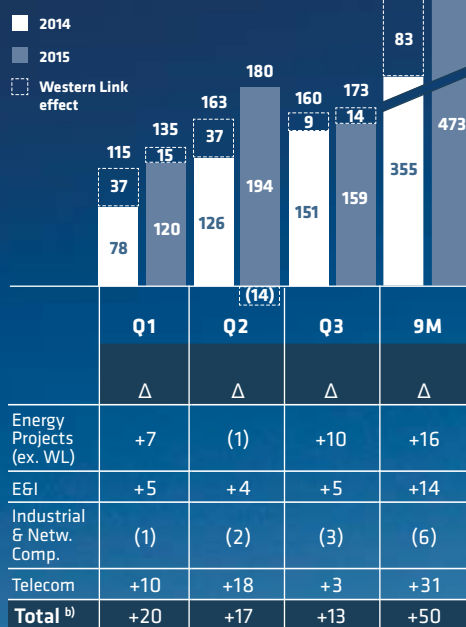
Profitability increase driven by Energy Projects, Telecom, E&I

#### Organic Growth a) (% change)



a) Org growth excluding WL submarine project effect  
 b) Total includes Other Energy business:  
 ΔQ1(€ 1m), ΔQ2(€2m), ΔQ3(€2m), Δ9M(€ 5m)

#### Adj. EBITDA (€ M)



Sales climbed to €5,663 million, up 6.9%, with good performance also in 3Q, up +6.6%. Energy Projects confirmed robust growth of 19.6%, good performance by Telecom, up 10.3%, and Energy & Infrastructure, up 4.0%, despite softening in 3Q. Industrials showed signs of stabilization in 3Q.

Adjusted EBITDA was up 11.4% at €488 million excluding WL. Major improvement in net financial position to €955 million from €1,292 million at 30 september 2014.

FY 2015 guidance confirmed with target above mid-point of Adjusted EBITDA range of €590 – €640 million (€616 – €666 million excluding WL).

Competitiveness in Oil & Gas bolstered by the acquisition of Gulf Coast Downhole Technologies.



# ENERGY PROJECTS PROFITABILITY UP WITH SALES

**The operating segment saw the Submarine business posting a significant growth in sales, reflecting performance of work on the major projects currently in the order book, that remained high. Market demand continued to be strong.**

Sales by Energy Projects operating segment reached €1,215 million in the first nine months of 2015, posting organic growth of +19.6% (including the impact of the Western Link project, organic growth was +19.9%). Profitability also improved with an Adjusted EBITDA of €174 million including the impact of Western Link, up 9.3% on the first nine months of 2014. Adjusted EBITDA excluding the impact of Western Link came in at of €189 million, up 8.6% on the first nine months of 2014.

Submarine Cables and Systems business reported a significant growth in sales, reflecting the execution of the major projects currently in the Group's order book. Market demand continued to be strong, particularly thanks to the contribution of power interconnection projects. The offshore wind farm segment saw the start of tendering activities in France and Britain. The level of the order book remains high at €2.7 billion, with sales visibility for a period of about three years. Order inflow benefitted from the recent winning of the first submarine project in China for the Group, carrying particular strategic importance. Lastly, execution of the Western Link project is confirmed to be in line with plan.



Sales by the High Voltage Underground business were essentially in line with the first nine months of 2014, with good performances in China and the Middle East, while Europe and North America were basically stable.

The SURF (Subsea Umbilicals Risers & Flowlines) business reported a growth in sales and robust demand for umbilicals in Brazil. Despite the drop in oil prices, Downhole Technology (DHT) cables showed signs of stabilization thanks to

the wide customer base and geographical diversification of the business. The acquisition of the US company Gulf Coast Downhole Technologies would further expand the range of high value-added services offered and strengthen the Group position as a supplier of complete customer solutions.

# ENERGY PRODUCTS IMPROVEMENT CONTINUED

**Trade & Installers recorded a stable nine-month performance while Power Distribution confirmed the organic growth trend. Good results for Specialties & OEM and Elevators while O&G and Automotive showed signs of weakness.**

The Energy Products operating segment sales posted a positive growth of 2.4% to €3,601 million in the first nine months of 2015, with Adjusted EBITDA up 1.6% to €193 million.

Energy & Infrastructure sales rose 4.0% organically to €2,175 million in the first nine months of 2015 with Adjusted EBITDA up 15.6% to €99 million. Profitability increased as Adjusted EBITDA margin in the E&I business reached 4.5%, posting a 20bps increase compared to the first 9 months of 2014.

Trade & Installers were generally stable, albeit with a slight slowdown in the third quarter. Some European markets, such as Spain, Britain and the Danube region, performed well, while North America confirmed robust demand in the wind farm. Signs of weakness continued in Brazil, France, Turkey and Germany. The Group continued its commercial strategy aimed at retaining market share while minimizing the impact on profitability.

Power Distribution demand remained solid thanks to the impetus of rising volumes in Northern Europe, Germany and Argentina. Pricing pressure remained in line with the previous quarters.



Industrial & Network Components sales –declined by 0.9% organically to €1,340 million but in the third quarter reported an improving trend with organic growth of +1.4%. Looking at the different sectors, Oil & Gas was still in difficulty as a result of the falling oil prices, leading to a sharp drop in Maintenance, Repair & Operations and a slowdown in new projects. There were positive signs from the offshore market, with the Group winning new orders in Indonesia, the Middle East and the Caspian Sea. Specialties & OEM confirmed the steadily improving trend, particularly in North America and Europe.

Renewable energy saw a positive trend in demand in China and North America offset by weakness in Northern Europe.

The Elevator business consolidated its leading position in North America and successfully expanded its offering to Chinese and European markets.

Network Components enjoyed a good performance in China and an improvement in demand in North America, offset by weakness in Brazil and in the HV business in Europe.

## TELECOM STILL SOLID DESPITE Q3 SOFTENING

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**The operating segment posted good performances in nearly every geographical area, as market fundamentals remained solid and prices generally stable. Brazil continued to be weak.**

Sales of the Telecom operating segment increased 10.3% to €847 million in the first nine months of 2015, despite the anticipated softening in the second half of the year. Stable prices in North America, Europe and Australia also helped the performance. Optical cables and connectivity enjoyed a strong increase in demand in all major markets, while the general price pressure seen in the first part of the previous year seemed to have ended, also thanks to US dollar appreciation.

In Europe the Group won contracts to realize backhaul links projects and FTTH connections for leading operators, such as Orange and Free in France and Telecom Italia. In North America the development of new ultra-broadband networks and new FTTx networks stimulated a continuous increase in domestic demand. In Brazil, the slowdown in investments caused volumes to fall, while the Asia Pacific region saw a positive trend in demand in Southeast Asia.

The Multimedia Solutions business posted a recovery in earnings thanks to the focusing on higher value-added products, such as data centers in Europe, and to the rationalizing efforts in lower margin businesses. The high value-added Connectivity business enjoyed a positive trend, thanks to the development of new FTTx networks (for last mile broadband access) in Europe.



## FY 2015 guidance confirmed

The macro environment continued to show signs of stabilisation and slight improvement in Europe, supported by the quantitative easing by the European Central Bank, while remaining sturdy in the US.

In such a context, the Group's expectation for FY 2015 is that demand in the cyclical businesses of medium voltage cables for utilities and building wires will record a slight recovery. In the Energy Projects segment, the Group confirms an improving trend with growth in the Submarine and SURF businesses. The plan initiated in response to the problems emerging in performing the Western Link project is proceeding as expected. Thanks to this action, as well as the strengthening of contractual guarantees and longer project timing agreed with the customer, the overall result in terms of Adjusted EBITDA is expected to improve by €35 million compared with the original estimate, reducing the negative impact from €167 million originally estimated to €132 million. As far as 2015 is concerned, Western HVDC Link is forecast to have a negative impact on Adjusted EBITDA of €26 million compared with the original estimate of €56 million.

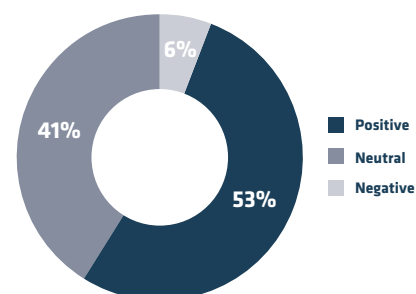
Based on the existing order book and considering all the above, the Group is forecasting Adjusted EBITDA for FY 2015 in the range of €590–640 million (€616–€666 million excluding the negative impact of the Western Link project), marking a significant improvement from the €509 million reported in 2014.

## POSITIVE MARKET'S VIEW REITERATED

The results for the first nine months of 2015 were slightly above expectations, especially in terms of organic growth and cash generation.

Energy Project sector continued to show robust performance in terms of organic growth and profitability, while Telecom business outlined a softening in organic growth trend due to some de-stocking effect. Almost all the brokers confirmed their positive/neutral view on Prysmian after the release of the results, with some limited adjustments. Among them, Credit Suisse reiterated the "Buy" recommendation with a target price unchanged at €23, as the stock is trading at 22% discount versus the Capital Goods sector. Bank of America Merrill Lynch confirmed its "Buy" maintaining the target price

Brokers' Recommendation



at €23 thanks to the attractive market valuation compared to the peers. Banca Akros reaffirmed the positive view on the stock, although reducing the target price to €23 from €23.5. Barclays, Equita and JP Morgan confirmed their "Neutral" view, with no significant changes in terms of target.

### Prysmian share performance 31 Dec. 2014 - 12 Nov. 2015





# THE CHALLENGES OF A CHANGING WORLD

The crucial issues for the global cable industry discussed at a conference hosted in Washington by the International Cablemakers Federation (ICF).

Industry experts and business leaders gathered in Washington this October for the International Cablemakers Federation Congress 2015, to discuss the current state of the cable industry in the context of a rapidly changing world economic landscape.

The Congress was opened by US Deputy Trade Representative Robert Holleyman, who made an assessment of the state of global trade at a crucial historical juncture that sees the US in the process of finalising the Trans-Pacific Partnership with their

Asian and Pacific trade counterparts, alongside discussions with the European Union in a separate bilateral trade agreement.

The outlook of the global electrical industry was discussed by a panel that included world-leading representatives of the sector Kevin Cosgriff, President & CEO of the National Electrical Manufacturers Association (NEMA), US; Don Leavens, Vice President & Chief Economist of NEMA, and Alberto Piana, Managing Director at JP Morgan, UK.

The discussion took a detailed look at NEMA's strategic initiatives such as cybersecurity, physical security, high-performance buildings and smart grid systems, and helped to build a better understanding of how global investors view the wire and cable sector.

The state of the industry was explored in a series of interviews with top representatives, chaired by Thomas Neesen of ICF. Philip Radbourne, Director at Integer Research, examined the wire and cable industry covered by the North

### **A global forum for the cable industry**

Founded in Vienna in 1990 as a non-profit organisation, the ICF represents the majority of global manufacturing capacity in the wire and cable industry. As the federation of the world's leading producers of cables, ICF's mission is to:

- Provide a global forum for its members
- Monitor emerging trends and their potential impact
- Enhance the visibility of the industry by highlighting the relevance of its products and its technologies as well as its contribution to the sustainable progress of society.



American Free Trade Agreement (NAFTA), an area encompassing Canada, the US and Mexico. The 'untapped potential' of the Iranian market as it reaches the end of its embargo, was the subject of analysis by Alireza Kolahi, Chairman of Abhar Wire and Cable Company. Volker Wendt, Director of Public Affairs at Europacable, the voice of the industry in Brussels, explained the market implications of its newly signed European Charter, which expresses a commitment to quality, ethics and sustainability in cable manufacturing.

### **The participation of Prysmian**

As a global leader in the cable industry, Prysmian Group was represented at ICF's Congress by a strong team of 5 executives:

- Massimo Battaini, CEO of Prysmian Powerlink
- Antoni Bosch Guilamany, Vice President, Business Unit Telecom Solutions
- Lorenzo Caruso, Director of Corporate & Business Communication
- Hakan Ozmen, President and CEO of North America Prysmian Group
- Enrico Schiappacasse, Director of Corporate Strategy and Public & Economic Affairs.

# BROAD CONSENSUS THAT MORE GRIDS ARE NEEDED

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**Raul Gil, Chairman of the Europacable Utilities Board, stresses the critical role submarine and underground cables will play in building the new, sustainable European electric infrastructure between now and 2050.**



Photo: David Plas

The e-Highway2050 is a project supported by the EU Seventh Framework Programme aimed at aiding the planning of the Pan-European Transmission Network, to ensure the reliable delivery of renewable electricity and pan-European market integration. The project identified that Europe needs to expand its electricity transmission grids to match the increase in electricity generation, notably wind and solar, in order to guarantee the future security and affordability of the power system.

“There is a broad consensus in Europe that more grids will be needed for a sustainable, de-carbonised and competitive energy market”, notes Raul Gil, Chairman of the Europacable Utilities Board in an interview with INSIGHT. But, in order to enhance public acceptance of power transmission lines, “submarine and underground cables will play a critical role in complementing overhead lines” he adds.

“As representatives of the European cable industry we hope that in Europe this message is understood by all”, says Gil; “the industry is ready to deliver Europe’s future grids”. Europacable also calls for a stable regulatory framework that allows us to properly forecast the needed investments. Gil points out that Europacable has been very committed to co-operating with the e-Highway2050 project as its targets are fully aligned with the industry’s goal of building a reliable, state of the art electricity infrastructure that will help to establish and define Europe’s future competitiveness, both for its societies and industries.

Gil is convinced that “the outcome of the work will contribute to building the right grids for Europe”, as Europacable remains fully committed to continuing the dialogue into the future to ensure that the required electricity highways are built on time and within budget.





### **A 70,000 people-strong enabler**

Europe's cable manufacturers are the global technology leaders in the wire and cable business. With over 70,000 people generating a turnover of over €20 billion in 2014, this sector will be the major facilitator in building Europe's 2050 power transmission grids, as it lacks neither technological excellence nor production capacity.

### **Investments from 100 to 400 billion Euros**

Raul Gil, Chairman of the Europacable Utilities Board, represented Europacable at the final eHighway2050 conference, 'Unveiling the Electricity Highways Project Results: Europe's Future Secure and Sustainable Electricity Infrastructure', held in Brussels. After 40 months of intense work, the commission-funded project concluded that a goal of close-to-zero emission by 2050 means €100-400 billion of investment in electricity transmission.

# UNPRECEDENTED GLOBAL DEMAND FOR OPTICAL CABLES

**The world is consuming more than a quarter billion km of cabled fibre per year, with demand continuing to rise. While in the past, global output steadily increased, in 2015 demand growth has caught up with capacity.**

The world market for optical cable hasn't experienced a downturn since 2002, when it collapsed after several years of rampant, bubble-driven over-investment. Since then, cable installment has witnessed a steady yearly increase; even during the great recession of 2009, a surge in Chinese demand offset the large downturns faced by other markets.

Nevertheless, world demand didn't reach its original 2001 level of 92 million fibres per km until 2006.

From 2006 to 2014, the amount of optical cable installed worldwide increased at a compound annual growth rate (CAGR) of 16%. In 2014, this increase was 18%, and the outlook for 2015 is a rise of at least 14%.

## **RIISING BY 40 MILLION KM PER YEAR**

By 2016, such demands for fibre may outweigh supply capabilities, raising questions concerning just how much any potential growth will be curtailed and when the rate of fibre supply will increase enough to restore the balance.

Demand from China will be a key factor in determining the extent of such a shortage. In 2013, the world market consumed 263 million km of cabled fibre; in 2014, this had risen to 311 million km. There are only three factories in the world capable of producing more than 30 million km of bare fibre per year, and a maximum of five capable of producing 20 million.

With predicted annual demand rising by 40 million km upwards per year, the world must create several new factories annually to keep up. Alternatively, existing facilities must make substantial investments to increase capacity.

## **THE LIMITING FACTOR IS PREFORM CAPACITY**

Several new fibre factories, six in China and one in India, have become operational in recent years, with at least two more predicted for 2015 and another for 2016.

However 'capacity' refers to draw capacity – the world's preform capacity is lower, and it is this capacity that has been the limiting factor in periods of shortage in fibre supply.

Although from 2012 to 2014, the world's total preform capacity grew by 87 million fibre-km, if demand continues to expand at rates of 40 million fibre-km per year, preform capacity simply will not keep up in the short term.



**China is key to determining the extent of possible shortage**

In 2013 and 2014 China accounted for 50% of the world’s optical cable consumption, and in 2015 this will increase to 53%. China Mobile, the world’s largest optical fibre and cable customer, will produce around one third of the world’s 2015 total orders.

China’s telecom, optical and cable markets have not been affected by the country’s currency devaluation and stock market fluctuations. Over the last three years, China’s three main telecom operators have installed more than 100 million km of cabled fibre per year combined, with potentially over 150 million fibre-km predicted for 2015. Due to several of China’s largest manufacturers heightening their efforts, the country’s exports of optical fibre and cable have increased significantly over the last two years.

**China imposes duties on Japan and US preforms**

The Chinese Ministry of Commerce has made a final ruling to impose anti-dumping duties on optical fibre preform products imported from the US and Japan, stating that China’s domestic industry has been damaged by the dumping practices of producers from these nations. The decision follows a preliminary ruling that duties ranging from 8.3% to 39% would be imposed on any future preform imports from producers based in America and Japan. The ruling saw higher anti-dumping duties for all suppliers except Shin-Etsu Chemical Co., which saw its duty reduced. There was one exception to the decision; duties are not to be placed on imports with a diameter less than 60 mm such as core rods.

# Three more US cities join Google Fiber list

San Diego and Irvine in California, alongside Louisville, Kentucky, have been invited by technology giant Google to join its Google Fiber project, bringing the total number of current, upcoming and potential fibre cities involved to 15. Google Fiber states that Americans are signing up for gigabit internet at a growth rate of 480% each year, citing market research by RVA Market Research & Consulting.

The company explained that the next step will be to begin a joint planning process with city leaders, which it believes are “passionate about bringing fibre to their communities.” Jill Szuchmacher, Director of Google Fiber Expansion, explained in her blog that to kick things off, the company will work with Irvine, Louisville and San Diego to conduct a detailed study of factors that affect construction, such as local topography, housing density, and the condition of existing infrastructure. Meanwhile, the cities will complete a checklist of actions, such as providing a map of utility lines, that will prepare them for a large-scale fibre build.

Google believes by working together with city officials it can break this colossal infrastructure project into manageable chunks. Szuchmacher explained that only once the planning process is completed would the company decide whether to officially bring Google Fiber to Irvine, Louisville and San Diego.



### Bringing better broadband to Americans

Nearly 51 million Americans cannot purchase a wired broadband connection with download speeds of at least 25-Mbps, and only 63% have access to speeds of 100-Mbps or more. To improve the situation, the US Broadband Opportunity Council presented four overarching recommendations: modernise federal programs to expand program support for broadband investments; empower communities with tools and resources to attract this investment and promote meaningful use; promote increased broadband deployment and competition through expanded access to federal assets, and improve data collection, analysis and research on broadband. In a recent report the council highlighted 36 actions that federal agencies are committed to taking, with timelines established for the next 18 months. Some major actions can only be taken by the Federal Communications Commission (FCC) and so were not covered in the council's report, however, the FCC, which welcomed the findings, has been taking its own actions too.

## Underground power lines: the German challenge

### Estimated costs of up to €12 billion

The German power transmission system operator Amprion has estimated additional costs of between 10 billion and €12 billion to place the country's high-voltage power lines underground. The German government had previously announced that additional costs for the SuedLink and Südost power lines would

be between €3 billion and €8 billion. Amprion have warned that the project will be both costly and technically demanding and believes that there will be delays of up to four years, with the possibility of the project ending in 2027 instead of the projected 2023 or 2024 deadlines.



### India's effort for extending electrification

India is multiplying its efforts to improve and extend the country's power infrastructure. Over 300 million people currently do not have access to reliable electricity in India even if over the past decade Indian electricity infrastructure has seen an impressive expansion. The country actually added 54 GW to its power generation capacity during the 11th Five Year Plan from 2007 to 2012 and is well on its way to add another 88 GW in the 12th Five Year Plan period from 2012 to 2017. The ambition to provide power to all is a main priority of government efforts to speed up economic and social growth. The power infrastructure improvement programme is also expected to give a boost to the power cable industry.



### Alcatel to strengthen IoT security

France's Alcatel-Lucent has acquired US-based Mformation, a leading provider of mobile and 'Internet of Things' (IoT) security and device management solutions for mobile operators, service providers and enterprises. This will allow Alcatel to provide a comprehensive, secure and cross-industry platform for IoT-optimised networks while elevating the company to number one for device management. Mformation, headquartered in Woodbridge, New Jersey, US, will be incorporated into Alcatel-Lucent's IP Platforms organisation, giving service providers and enterprises a secure, scalable, application-independent IoT security and control platform for use across multiple industries including automotive, healthcare, utilities, manufacturing and the digital home.

# FIRST SUBMARINE IN CHINA

## **Prysmian Group secures new contract worth more than \$140 million for a new interconnection that paves the way for new business opportunities in Asia.**

Prysmian Group has been chosen to execute the design, supply, installation, and commissioning of a submarine power cable link for a new interconnection between Hainan island and mainland China. The contract, awarded by Hainan Second Cross-Sea Interconnection Tie Project Management Co., a subsidiary of China Southern Power Grid, is worth in excess of \$140 million and is Prysmian's

first extra high voltage submarine cable project in the People's Republic of China.

Massimo Battaini, Prysmian Group's Senior Vice President of Energy Projects, stated that the contract "has strategic value, due to being awarded in China, a market with high growth potential, which is investing \$1.8 trillion in its power industry between 2011 and 2020".

The new link will accompany the existing 500 kV cable circuit connecting Guangdong and Hainan power grids, effectively improving the quality of electricity supply. The extra power will benefit the 1300 MW nuclear power plant being built in Changjiang County and help boost Hainan's efforts of being an international tourism island.

### **A 1,500 people strong established presence**

The Group already has an established presence in China where it employs over 1,500 people across a number of plants: Baoying (highvoltage); Tianjin and Suzhou (industrial applications); Suzhou (systems and network components); Shanghai (submarine); Wuxi (optical); Nantong Haixun and Nantong Zhongyao (elevators). Prysmian is also a major shareholder of YOFC, the country's number one of Optical Fiber and Cable. The Group is a leading supplier and installer of submarine cable links throughout the strategic, high-growth Asia Pacific Region, with milestone projects that include Penang Island in Malaysia, the Java-Bali link in Indonesia, Jeju Island in Korea, Ha Tien-Phu Quoc in Vietnam, the CNP-1 project in the Philippines and the Basslink HDVC Interconnector in Australia.



# Offshore wind farm connection in Belgium

Under a new contract awarded by offshore wind farm developer Nobelwind NV, Prysmian is responsible for the design, manufacture and supply of 33 kV of submarine cables with various cross-sections to connect 55 wind turbines with an Offshore High Voltage Substation (OHVS) that form the 181.5 MW wind farm located near the existing OHVS of Belwind 1.

In addition, a 33 kV coupling cable will be supplied for use as a backup connection between Belwind 1 OHVS and Bligh Bank OHVS. Prysmian will also provide offshore cable termination and testing services for the project. The cables will be produced in Prysmian's Drammen facility in Norway – one of the Group's centres of excellence for submarine cables.



## Onshore wind in Niagara

A significant order for power transmission and distribution cabling for an onshore wind farm project in the Niagara region of North America has been placed by NCS International and Eptcon Ltd. The Niagara region wind farm is the fifth largest of its kind in North America, and includes 77 3.0 MW wind turbine generators that produce a combined capacity of 230 MW. The turbines are grouped into ten collector circuits that bring power to substations via 34.5 KV of underground cable.

## Getting stronger in the high-tech downhole sector

Prysmian has acquired US company Gulf Coast Downhole Technologies (GCDT) in a \$45 million bid to expand its presence and product offering in the downhole equipment arena of the oil and gas industry. GCDT complements the Group's expansion strategy into the business area of Subsea Umbilicals, Risers and Flowlines (SURF) for offshore

oil extraction. Based in Houston, GCDT is active in the design and supply of innovative downhole equipment for the oil and gas industry, with a turnover of approximately \$34 million in 2014 and a customer base that covers a diverse range of oil field service companies including Halliburton, Baker Hughes, Weatherford and Schlumberger.

"Thanks to the integration of our SURF-DHT business and GCDT, Prysmian Group will be able to accelerate growth in an attractive high-value business and increase exposure to high-tech segments," states Prysmian Group CEO Valerio Battista.

## Confirmed #1 global cable producer



For the second year in a row Prysmian Group has secured first position in the Integer Research Top 100 Global Wire and Cable Producers Database 2015 rankings. Strong sales of fibre optic and submarine power cables in 2014 helped the Group retain the top spot ahead of competitors.

Those placed in the top 100 generated insulated wire and cable revenues of \$110 billion in 2014, representing 51% of the \$215 billion global market.

The

rankings include companies headquartered in the Middle East and North Africa, confirming a rise in revenues for this part of the world.

For the first time in seven years, Chinese companies haven't increased their rankings, with the leading Chinese cable maker dropping one place since 2014. Overall, the combined sales of those 39 Chinese cable makers who appear in the top 100 grew by less than 1% to \$24.7 billion in 2014, reflecting the slowing growth of the economy of China. In contrast, there has been continued recovery for the US and Mexico, thanks to new investment in cable factories and increased merger and acquisition activity in the automotive wire, fibre optic cable and tray cable markets.

### Showcasing at France's Jicable

The 2015 offering for this leading international conference on insulated power cables saw Prysmian as undisputed technology leader, boasting a long-standing tradition of skilled experts' presence and active participation in the conference. The Group presented 19 technical papers on an impressive number of state-of-the-art subjects such as transition joints and other network components; electrical rating calculations; mechanical test protocols; heavy duty installations; enhanced manufacturing processes, methods and lines; and Construction Products Regulation (CPR) for medium and low voltage distribution cables. The event came at a time of important accomplishments that have helped to cement Prysmian's leadership in the cable industry, with the successful commissioning and handover of four HVDC offshore wind farm interconnections and a solid future order book.

### Adding to the patent portfolio

At the Group's latest 'Prize for Inventions' event in Milan - which celebrates the hard work of Prysmian's Research & Development professionals - a total of 30 patents (granted since 2013) received awards. This resulted in some exciting additions to the Group's patent portfolio, particularly in high-tech and higher value-added areas.

Five patents were selected from those awarded: Bend-insensitive multi mode fibre (BIMMF); a cable monitoring system; UV filtering fibre coating; an impregnated MV cable joint, and high-fibre-density optical cable.

To date, the Group is the proud owner of more than 900 inventions, of which around

30% are in the energy sector and 70% in Telecoms.

"Never limit yourself. Innovation is in our Group's DNA, so always try to look forward and think differently," CEO Valerio Battista advises.



## Australian award achieved

Australia's nbn™ network awarded Prysmian the title of 'Supplier of the Year 2015', as the Group has demonstrated all nbn™ values consistently in its support of the building of Australia's continent-wide broadband network. Prysmian has supplied more than 4.5 million km of fibres within the network's cable, and has successfully reduced costs without compromising on quality. It was also

noted that Prysmian has worked tirelessly with nbn™'s supply organisation to ensure that the right cable is in the right place, at the right time.

The nbn™ is Australia's largest infrastructure project, and those companies involved in the building of its network are the best in the world at what they do. It is an honour to have

won such an award from a category filled with leading names that include: Alcatel, Ericsson, Corning, Accenture and Tyco among others.

Furthermore, Prysmian was recently awarded an exclusive supply contract for all of nbn™'s copper cable requirements; its first cable contract with nbn™ was awarded in 2011.

## Contributing to the EXPO success

Prysmian gave its contribution to the great success of Milan EXPO 2015, attended by 21 million visitors with the participation of 144 countries. The Group supplied the cables used to wire the so-called Piastra, the site's exhibition ground and its most important infrastructure on which the facilities, pavilions, clusters and amenities of the Milan Universal Exposition were

built. In particular, Prysmian supplied low environmental impact MV P-Laser cables for power distribution and LV Afumex cables with special performance in the event of a fire. Within the site, the Group also supplied LV Afumex cables to be installed in the pavilions of China, Azerbaijan, the Principality of Monaco and Japan, the latter judged to be among

the best of the event by the Bureau International des Expositions. In addition to the exposition site, the Group supplied special fire-safety, eco-friendly power distribution cables for the Isozaki Tower in Milan, and also provided low and medium voltage Afumex cables for installation along the new stretches of the motorway built to facilitate access to the EXPO.



### On stage at UK's Railtex

Prysmian's continued commitment to the rail sector was once again demonstrated by exhibiting at the UK's largest rail event, Railtex. With 468 exhibitors from 20 countries, Railtex continues to attract important visitors from across the industry and is strongly endorsed by UK track operator, Network Rail, which views the event as a key

opportunity to develop closer relationships with suppliers and potential partners.

Prysmian Group showcased a wide range of energy and telecom cables, components and solutions, specifically aimed at the rail industry, including the new Flexo Coupling Joint for Rail Signalling Power, designed as an alternative to traditional trackside

assembled heatshrink or resin encapsulated joints and available for use on copper or aluminium cable.

# BUILDING THE FUTURE

**The fifth edition of 'Build the Future', Prysmian's international recruitment programme, has launched.**

**T**he aim of the scheme is to identify and train the industry's most promising professionals, to help build the managers of tomorrow. The Group is on the lookout for approximately 40 recent graduates with degrees in engineering and economics. These candidates will have benefited from formative experiences abroad, be open to change, and be capable of working in teams. They should also possess leadership skills, an entrepreneurial spirit and a strong passion for international work and life. The successful individuals will be offered a complete training programme, at the end of which they will join the company, primarily in the areas of research and development, production and sales.



### The strategic factor

“The ability to develop and fully realise talent, together with international exchange and training programmes, represents an important competitive edge that will strengthen and support the Group in its growth. Build the Future is a perfect example of Prysman strategy in action. We aim to constantly seek out promising young people destined to become the future of our Group.” Fabrizio Rutschmann, HR & Organisation Director.

### Appealing programme

The programme continues to offer an indefinite-term contract, an attractive salary and an initial introductory and training period at our Milan headquarters, followed by a year of job rotation in the candidate's country of origin. These 12 months allow participants to get to the heart of the production process and to fully understand product technologies and client relationship dynamics. The following two years of experience, to be garnered abroad within a specific department, allow graduates to become fully integrated into the organisation and begin to make their own significant contributions towards our business objectives.

### From across the world

To date, Build the Future has helped to train, hire and create further opportunities for 130 young employees from 30 different countries: Australia, Brazil, China, Columbia, Denmark, Egypt, Finland, France, Germany, India, Indonesia, Italy, Lebanon, Mexico, Norway, the Netherlands, Poland, Russia, Singapore, Slovakia, Spain, Sweden, Thailand, Turkey, Hungary, the UK, the US and Venezuela.

**BUILD**  
*the FUTURE*

The Prysman Group  
Graduate Program

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