



# THE IPLOCA NEWSLETTER

DECEMBER 2018



## London Convention Retrospective

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## IPLOCA Mission

To provide value to members through a forum for sharing ideas, engaging the industry and its stakeholders, facilitating business opportunities and promoting the highest standards in the pipeline industry.

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## Letter from the President

**It is my honour to have the opportunity to serve as IPLOCA President for 2018-2019. Firstly, I would like to thank Andy and Michelle Ball for their leadership in 2017-2018. Next year, our main priorities are to complete the update of IPLOCA's strategy, expand participation of our Corresponding Members and improve communication with you, our members.**

We are delighted to see several new faces on the Board. I would like to warmly welcome all the incoming directors whose profiles you will find on page 8 of this newsletter. I would also like to personally congratulate our Executive Secretary, Juan Arzuaga for celebrating his 10<sup>th</sup> anniversary with IPLOCA on 9 September and would like to thank him for his important contribution to our association.

Just over 530 attendees participated in our 52<sup>nd</sup> Annual Convention, which took place in London for the first time. Special thanks go to our convention sponsors, without whom such an event would not be possible. In addition to our excellent guest speakers, new elements were added to the programme: Business to Business (B2B) pre-scheduled one-on-one meetings and informative poster sessions.

The tour programme included visits to many of the famous icons of London such as Buckingham Palace, Windsor Castle, Hampton Court Palace, Kew Gardens, the Imperial War Museum, the Victoria & Albert Museum and the Science Museum. A retrospective on the convention can be found on pages 14 to 19, including a feature on the winners of this year's IPLOCA Awards.

In this newsletter, you will find updates on the work of the HSE & CSR Committee and the Innovation Committee (specifically the Novel Construction Fall Session) and a report on the Latin America Regional Meeting. You will also note that the Scholarship programme is already receiving applications for the 2019 academic year.

At the convention, we had an overwhelming response to our request for feedback on the role of the association. Should you have any comments, please feel free to contact a board member. We always welcome your valuable input.

Best regards,

A handwritten signature in blue ink, appearing to read 'John Tikkanen', with a long horizontal flourish extending to the right.

**John Tikkanen**

IPLOCA President 2018-2019

# News from Geneva

## Executive Secretary Celebrates Ten Years with IPLOCA



At the Board of Directors Dinner in London on Sunday 9 September, current IPLOCA Executive Secretary, Juan Arzuaga was presented with a commemorative wooden dish (handcrafted by Brian Laing) to mark his 10<sup>th</sup> anniversary with the association.

In his own words Juan recalls, "It is funny the way it happened... I had been a member of the Board of IPLOCA for a couple of years and had just left my seat in Sydney in 2007. I was leaving Techint E&C after being with them for 26 years and was preparing to move back to Argentina when I received an email from Luc Henriod seeking candidates to take his position as Executive Secretary since he was soon to retire." Juan indicated his own interest in taking on such a role, and met with the Executive Committee in Montreal during their subsequent board meeting. He and his wife,

Alejandra, then returned to Argentina as planned on Saturday 28 June, Juan being unemployed that weekend. A few days later he received the good news from Luc and started with IPLOCA on 9 September 2008! Ten years on, he and Alejandra have started the process of acquiring Swiss nationality.

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## Season's Greetings

IPLOCA's Board of Directors and the staff of the Secretariat would like to thank everyone who has been involved in the work of the association during this past year. We are of course grateful for your expertise, the sharing of your time and in some cases for hosting our events and sponsoring activities. We are also particularly thankful for your friendships!

In 2019 we look forward to new goals and achievements to help prepare our association for the future, particularly through the development of our strategic business plan. Our very best wishes to you all for a healthy, safe and prosperous new year!

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## 2019 IPLOCA Scholarship Programme

As a reminder, the submission deadline for applications is **28 February 2019**. Spread the word within your companies – we encourage you to make use of the electronic versions of the flyers in seven different languages which are available on our website. You will also find information on the eligibility requirements on the same page: [www.iploca.com/scholarship](http://www.iploca.com/scholarship).

Applications should be made in English online at [www.scholarsapply.org/iploca](http://www.scholarsapply.org/iploca). Please note that all the supporting documentation needs to also be provided in English.

---

## Board Meeting Update

### London

The September Board of Directors meetings were held in London during the week of the annual convention from 10-14 September. The following highlights the main discussions and decisions made.

### Minutes of the Amsterdam Board Meeting

The action items and decisions made at the Amsterdam meeting were reviewed in detail and certain items were carried forward as appropriate.

### Treasurer's Report

Adam Wynne Hughes, President of Pipeline Induction Heat, presented the Treasurer's Report, saying that IPLOCA continues to be in good financial health.

He started with the forecast to complete 2018 and also presented the report to the AGM which was approved by the Board. He confirmed that funds continue to be allocated as follows: CHF 1.5 million as a Convention Contingency Fund, CHF 1 million as an IPLOCA Contingency Fund and a similar amount in general funds. It is expected that a refund will be obtained of the 20% VAT charged for the DMC services of the convention.

## 2019 Convention

IPLOCA's 53<sup>rd</sup> Annual Convention will take place in Bangkok, Thailand from 30 September to 4 October, 2019.

## New Members

One Regular Member was confirmed: **Mohammed Al Barghash Co.Ltd.**, Saudi Arabia.

Two Associate Members were confirmed: **Driver Global Construction Consultancy**, U.K., **Kebulin-Gesellschaft Kettler GmbH**, Germany.

One Corresponding Member was confirmed: **INA Plc**, Croatia

## Name Changes

The following name change was approved: MASA-DIAP to **MASA PIPELINES S.L.**

## Resignations

Considered as resigned because of non-payment of 2018 membership fees:

- **CHETRA - Mining Machinery**, Russia
- **CIS Catering International Services**, France
- **Jiangsu Yulong Steel Pipe Limited**, China
- **Grup Servicii Petroliere S.A.**, Romania
- **Vozrojdeniye JSC**, Russia

## Development of IPLOCA Business Strategy

The Board was informed that, as agreed at the Amsterdam meeting, Strategy Consultant, Ed Bond, would be having informal discussions with Board directors, the Executive Secretary and other IPLOCA members during convention week, to gain a better understanding of what the association's purpose is and what our expectations are for the future. The plan is for the strategy document to be presented at the Annual Convention in 2019.

## Scholarship Sponsorships

The Chair of the Scholarship Committee, Steve Sumner, announced that three companies were interested in sponsoring IPLOCA scholarships and that further sponsors are welcome. IPLOCA funding of the scholarships will continue until 2023.

## Convening of the 2018-2019 Board of Directors

On Friday during the week of the Annual Convention the retiring president, Andrew Ball said it had been a privilege to be president over the past year. There had been good conversations and debates; it was a great board that had embraced change. He thanked the Geneva staff for a successful convention and for the organisation of the board meetings throughout the year. He then thanked the board members who had finished their term and the retiring directors left the room. The 2018-2019 Board convened.



Incoming President John Tikkanen presented Andrew Ball with his presidential pin.

Andrew Ball tabled the proposed names for the 2018-2019 officers and the board voted unanimously to appoint John Tikkanen as President, Iosif Panchak as 1<sup>st</sup> Vice President, Oliviero Corvi as 2<sup>nd</sup> Vice President and Adam Wynne Hughes as Treasurer.

## Appointment of Directors and Directors-at-Large

There being vacant seats in a number of regions, John Tikkanen proposed the appointment of Albert Zakhem as Director, Middle East & Africa; Doug Evans & Steve Sumner as Directors, Europe Central; and Ma Chunqing as Director, East & Far East. All these appointments were unanimously accepted by the other directors.

The names of the proposed Directors-at-Large were tabled by John Tikkanen. The board then voted unanimously to appoint Doug Bailey (Caterpillar), Fatih Can (Tekfen Construction), Oliviero Corvi (Bonatti), Bill Solomon (Vacuworx) and Tim Zboya (Bechtel) as Directors-at-Large.

## Nominations to the New Committees

The 2018/2019 Board will run four committees and two projects, which were confirmed as follows, along with their Board members for each committee:

**HSE & CSR Committee:** Sue Sljivic (Chair), Alberto Barbieri, Yasar Giregiz, Albert Zakhem and Leon Richards

**Innovation Committee:** Bill Solomon (Chair), Jacquelin de La Porte des Vaux, Fatih Can, Najib Khoury, Doug Bailey and Tim Zboya

**Membership Committee:** Oliviero Corvi (Chair), Kelly Osborn, Gonzalo Montenegro, Giacomo Bonfanti, Ma Chunqing, Khulud Halaby, Daniel Fernandez and Steve Sumner

**Strategy Committee:** Doug Evans (Chair), John Tikkanen, Iosif Panchak, Adam Wynne Hughes, Andy Ball and Johan Van Wassenhove

**Convention Location & Communication Project:** Adam Wynne Hughes (Project Lead), the Executive Committee

**Scholarship Project:** Steve Sumner (Project Lead), Scholarship America (Management)

## Regional Meetings

It was confirmed that the regional meeting in Lima, Peru was taking place on 9 October. A report on this meeting can be found on the IPLOCA website and later in this newsletter. It was agreed, however, to postpone the regional meeting scheduled to take place in Abu Dhabi in November due to the fact that the main organiser, Georges Hage, had resigned from the board. Future regional meetings in 2019 were discussed as follows, and all dates need to be confirmed:

- **Amsterdam** (The Netherlands) early April

- **Houston** (in conjunction with the Offshore Technology Conference - OTC) 6 May
- **Parma** (Italy) 28-29 May
- **Moscow** (Russia) possibly 11 June

## Priorities for the 2018/2019 Board

John Tikkanen informed the board that his four priorities for the coming presidential year are as follows:

- Complete the review of IPLOCA's strategy and direction
- Expand participation of Corresponding Members (pipeline owners/operators) in IPLOCA
- Conduct at least five successful regional meetings/workshops in addition to the annual convention
- Expand and improve communication with the membership

## Next Board Meeting

The next board meeting will be held from 5 to 8 December 2018 in Vienna, Austria.

# World Federation of Pipe Line Industry Associations



**Members of the WFPIA met during IPLOCA's Annual Convention in London with the participation of IMCA (the International Marine Contractors Association) which had recently joined the Federation.**

Following a brief update on the current situation in different

regions of the world, Juan Arzuaga reported on contacts made with other local construction associations in Russia during his recent visit to Moscow. HSE statistics and environmental indicators were also amongst items discussed.

The next meeting will be held at the PLCA Annual Conference taking place from 6 to 10 February 2019 in Amelia Island, FL (U.S.A.).



WFPIA members from left to right: Paul Schultz (PLCAC President), Kevin Barrett (PLCA Executive Director), Neil Lane (PLCAC Executive Director), Robert Darden (DCA Executive Vice President), Allen Leatt (IMCA CEO), Cheryl Burgess (PIG Director General), Jay Osborn (DCA President), Juan Arzuaga (IPLOCA Executive Secretary), Andrew Ball (IPLOCA President), Adam Wynne Hughes (IPLOCA Treasurer), Robert Reiss (PLCA President)

# New Directors

## on the 2018-2019 IPLOCA Board

We warmly welcome the following directors, as a result of the 2018-2019 elections and nominations of Directors-at-Large.



### **Doug Bailey, Director-at-Large**

Doug is originally from Colorado, U.S.A. and started his career as a mining engineer working in copper, coal and silver mines in the western U.S.A. He joined Caterpillar over 20 years ago and has had the opportunity to live

and work internationally for Cat in Japan, Peru and Chile working in various commercial and engineering roles. Doug is currently Global Pipeline Manager for Caterpillar Inc. and lives in Houston, Texas, with his wife Channa and their two children where they enjoy hiking, skiing and travelling.



### **Daniel Fernandez, Director for Associate Members**

Daniel, an Argentinian national, is Executive Vice President – Latin America for Worldwide Group and related companies under the WG, U.S.A. He is a Mechanical Engineer and has a Master's degree in HSE with initial

responsibilities within the refining industry and then a successful career in the construction industry, working in particular for Techint E&C, a leading international EPC contractor and well-known pipeliner. Daniel was previously a Board member of IPLOCA from 2011-2012 and was also appointed as a director in 2018. He is married to Miriam and has three children.



### **Yasar Giregiz, Director for Europe Eastern**

Yasar is President & Board Member of Fernas Group of Companies. A Turkish national, he has worked in the Group since 1993, managing and supervising large-scale projects in the oil & gas industry, energy industry, road

construction, hydraulic works and mining & stripping, in Turkey, the Middle East and India & Bangladesh. He

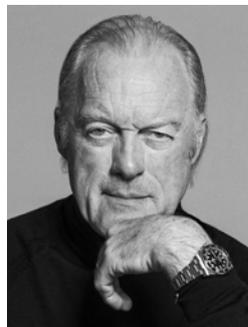
started his career at the TPAO – Turkish Petroleum Co. as Project Manager and Process & Plant Manager and was thereafter promoted to several positions, until joining Fernas Construction Company. Yasar is married to Ayse and has three children.



### **Leon Richards, Director for East & Far East**

Leon has more than two decades of project delivery experience with McConnell Dowell and is currently the Group Technical Director - Pipelines. He has been a member of the McConnell Dowell Pipelines team since 1996

during which he has led and delivered projects throughout Australia and South East Asia in both the water and gas industries. Leon is a Civil Engineer and has a Master of Engineering Science in Construction Management and a Master of Construction Law. He also serves on the Board of Directors of the Australian Pipelines & Gas Association (APGA) and is Chairman of the APGA Contractors Committee. Leon lives in Brisbane with his wife Lika and their two sons. They enjoy travelling and the outdoor sporting lifestyle of the region.



### **Johan Van Wassenhove, Director for Europe Northwest**

After a career in steel construction, engineering services and industrial piping, Johan joined DENYS in 1988 as Managing Director of DENYS Group, a subsidiary of SOGEA (SGE/

VINCI). He is currently CEO Managing Director and Board Member and over the years, has developed the DENYS-Group into an international, diversified contractor active in Europe, North and Sub Sahara Africa and the Middle East. A Belgian national, Johan is a Civil Engineer and has an MBA. He speaks Dutch, French, English, German and Spanish. He lives in Belgium and is married to Regine Mahaux.

### **Tim Zboya, Director-at-Large**

Tim is Regional Pipeline Manager/Project Manager for Bechtel Oil, Gas & Chemicals, Inc. in the Pipeline Business Line. He has over 36 years of global engineering, project management and operations management experience focused on pipeline and related facilities for the oil and



gas industry. His experience covers all facets of project development through EPCM/EPC project execution, and features both onshore and offshore design, large project management, and field construction management. His previous work experience includes senior positions with

Express Pipeline Ltd., Colt Engineering/WorleyParsons, UniversalPegasus International Inc., and Oleoducto de

Crudos Pesados (OCP) Ecuador. A Canadian national, Tim is a Mechanical Engineer and works in Houston, Texas, U.S.A. He is married to Diane; they have three adult children and enjoy their house in Florida.

We also welcome back **Najib Khoury**, Advisor to the President of C.C.C (Consolidated Contractors Company) as Director of Middle East & Africa; he previously served as IPLOCA board director from 2008 to 2016 including as IPLOCA President from 2014 - 2015.

## Membership Centre

### IPLOCA 2019 Membership Fees

Membership fee invoices were emailed at the end of November and the payment due date is the first business day of 2019 (i.e. 2 January). **Please note that paper copies of invoices will only be mailed upon request.** Membership certificates will be sent out in January. If you have any questions please contact IPLOCA's Administration Manager, sarah.junod@iploca.com.

### New Regular Member



شركة محمد البرغاش  
M.AL-BARGHASH CO.

**Mohammed Al Barghash Co. (MBTC)** is a leading engineering, procurement and construction company, operating in large scale water, oil & gas, pipelines, well heads and other onshore works. MBTC was established in 1976 in the Eastern Province of Saudi Arabia and has been guided by a multi-national, multi-discipline workforce which includes managers, engineers, professionals, supervisors, foremen and various craftsmen providing 40 years of quality and committed construction services. The company strives to maintain the highest level of professionalism, integrity, honesty and fairness in relationships with clients, employees, suppliers, subcontractors and professional associates.

#### Mohammed Al Barghash Co.

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[www.mbtc.com.sa](http://www.mbtc.com.sa)

### New Associate Member



**Driver Group**, founded in 1974, operates under two brands: DriverTrett,

a multi-disciplinary consultancy which provides specialist commercial management, planning, programming and scheduling, project management, and dispute resolution support services; and Diales which provides Expert Witness services to the global engineering and construction industry. Both DriverTrett and Diales have a wealth of experience within the pipeline and oil sectors in offices situated in Europe (including the U.K.), North America, the Middle East, the Far East and Australia. The Group's experience includes onshore and offshore pipelines, construction of offshore structures and ships of various types including the construction phase of the famed Solitaire.

#### Driver Group

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### New Corresponding Members



**INA Group** plays a leading role in Croatia's oil business and a significant

regional role in hydrocarbon exploration and production, oil processing, and the distribution of oil and oil products. INA Group consists of several affiliated entities, entirely or partially owned by INA, d.d. The Group is based in Zagreb, Croatia. INA has hydrocarbon exploration and

production operations in Croatia, Angola, and Egypt. The oil is processed at INA's oil refineries - RN Rijeka and RN Sisak, while INA's regional retail network includes 496 retail sites in Croatia and neighbouring countries.

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**YPF** is Argentina's largest energy company, operating a fully integrated chain with leading market positions

across the domestic oil & gas upstream, downstream and power generation segments. With over 95 years of history, it is a publicly traded corporation on the New York and the Buenos Aires stock exchanges. YPF's upstream business produces around 530,000 boe/day. Besides its

conventional oil and gas operations, the company leads the development of unconventional resources outside North America, including the Vaca Muerta play, a world-class shale formation. In addition, its downstream business includes 3 refineries and a vast retail network of over 1,500 service stations. It is also one of the main petrochemical manufacturers in Latin America.

As part of the energy transition towards a low-carbon future, YPF is also investing in new solutions including renewable power projects and initiatives to improve energy efficiency across all its businesses. YPF is fully committed to unlock value across all energy paradigms in order to supply energy to its customers in an efficient and sustainable manner, applying world-class technology to all its operations.

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## Member News

### M. Al-Barghash Co (MBTC) Signed Seven-Year Contract with Saudi Aramco

Saudi Aramco has awarded MBTC the Long Form Contract of the Onshore Maintain Potential project at various locations in the Eastern Province of the Kingdom of Saudi Arabia for seven years with the overall contract value of approximately USD 600M. The scope consists of installing 500 gas / oil / water injection well head facilities, flow lines & trunk lines with an overall length of approximately



1300 km of different sizes. This will further strengthen the existing relationship between MBTC and Saudi Aramco. MBTC is already engaged in executing Saudi Aramco's Long Form Contract of East West Pipeline Replacement & Reconditioning works of 1200 km for five years.

In addition, MBTC has recently completed the Lump Sum Procure Build (LSPB) Contract of Yanbu South Terminal Offsite Facilities Project from Saudi Aramco. The project will restore and integrate Yanbu South Terminal (YST) with Yanbu terminals in order to facilitate Arabian heavy crude oil supply to local refineries and oil fuel importation at Yanbu Crude Oil Terminal (YCOT) by providing export capabilities for Arabian Light and Arabian Super Light crude oil export at YST. MBTC has recently successfully completed an EPC project from Saudi Electricity Company for Combined Cycle Power Plant no. 12 sales gas delivery system of the Gas Pipeline Project in Riyadh, and also successfully completed the expansion of Fuel and Feedstock Gas Pipeline Project from Royal Commission in Jubail.

### DENSO Awarded Largest Field-joint Coating Contract for EUGAL Pipeline

DENSO Group Germany has been awarded the largest field-joint protection contract for the EUGAL pipeline in Germany. Three quarters of the 48,000 joints (around 36,000 field

joints) along the EUGAL natural gas pipeline – the most important ongoing new construction project in Central Europe – will be protected by the DENSOLEN®-N60/-S20 tape system, which will be applied using DENSOMAT® wrapping machines. The company behind the EUGAL is GASCADE, a joint venture between BASF and Gazprom. The pipeline will eventually become a crucial transport link, securing the natural gas supply between Germany, the Czech Republic and Poland. The 485 km pipeline will run parallel to the OPAL from its connection to the Nord Stream 2 pipeline in the Baltic Sea, passing through three states in eastern Germany before reaching the Czech Republic. DENSO's contract is to protect over 340 km of the EUGAL pipeline. Ten of the twelve major global construction companies are relying on DENSO to protect the DN-1400 pipelines against corrosion. The tender for the project was the first of its kind to include automatic wrapping. With a number of petrol-driven or electric DENSOMAT® wrapping machines and a full repair or replacement service, DENSO guarantees reliable construction progress on the site within just a few hours of application.

### Fluor Uses IBM Watson to Deliver Predictive Analytics Capability for Megaprojects

In September, Fluor Corporation and IBM announced the use of artificial intelligence-based systems to predict, monitor and measure the status of engineering, procurement, fabrication and construction (EPC) megaprojects from inception to completion. Fluor's extensive engineering, fabrication, construction and deep supply chain expertise, coupled with artificial intelligence and analytic technologies from IBM Watson, forms the foundation for big data analytics and diagnostic systems that help predict critical project outcomes and provide early insights into the health of projects. Large capital projects, especially in the energy and chemicals, and mining and metals markets, are incredibly complex with enormous amounts of data, people and moving parts that are constantly changing and need to



be understood to keep a project on schedule and budget. To gain insights from project data in nearly real-time and to understand the implications of changing factors, Fluor is introducing the EPC Project Health Diagnostics (EPHDsm) and the Market Dynamics/Spend Analytics (MD/SAsm) systems. Developed with IBM Research and IBM Services, working collaboratively with Fluor, these innovative tools help to identify dependencies and provide actionable insights by fusing thousands of data points across the entire life cycle of capital projects.

### New Offshore Lifting Developed by Heerema



Heerema Marine Contractors (HMC) has developed a globally unique, innovative way of lifting that will redefine the boundaries of lifting operations offshore. This 'QUAD lifting' was tested successfully on October 22, 2018 in the Gulf of Mexico. The QUAD lifting enables HMC to integrally install and/or remove oversized topsides or jackets. This revolutionary innovation is an important expansion of HMC's services and guarantees unmatched lower overall project costs.

### Herrenknecht Direct Pipe® World Record in New Zealand

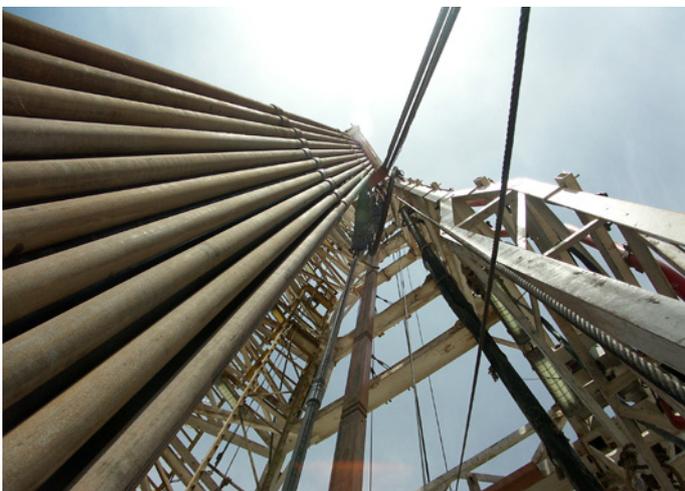
For the modernisation of a wastewater treatment plant near Auckland, innovative Direct Pipe® technology is in use to install a sea outfall pipeline. With a length of 1,930 meters, contractor McConnell Dowell's project team sets a new distance world record with the Direct Pipe® method. Watercare's Army Bay Wastewater Treatment Plant project, on the Hibiscus Coast near Auckland, New Zealand will create an additional 2.9 km long sea outfall. The pipeline connects the pump station with the discharge point, about one kilometer off the coast. This will significantly increase the capacity of the wastewater treatment plant. Special attention is being paid to environmental protection so as not to impact the surrounding recreational and fishing area.



The local fauna includes kiwis, New Zealand's national symbol, which are under special protection. The Direct Pipe® method is ideal for such sensitive installations. Herrenknecht's patented pipeline installation method uses an AVN machine. The pipe string is attached to it and simultaneously inserted during the tunnelling process. This is done with the help of the "Pipe Thruster". With pushing power of up to 750 tonnes, it thrusts the pipeline under the ground. Pipeline installation takes place in one step. In this way, the environmental impact is kept low and the landscape remains intact. The new discharge at Watercare's Army Bay Wastewater Treatment Plant is scheduled to go into operation early next year and will equip the facility for future population growth.

### Extension of License at Ras Qattara Concession in Egypt for INA Group

New Corresponding Member, INA Group, and Eni's IEOC (International Egyptian Oil Company) have been granted an extension of the Ras Qattara Concession license until 28 March, 2023 by the state oil company EGPC (Egyptian General Petroleum Corporation), the Egyptian Ministry of Petroleum and Mineral Resources and the Parliament. At Ras Qattara Concession, INA participates with a 25%



working interest, while Eni participates with the remaining 75%. The Ras Qattara Concession covers an area of 104 km². Production began in 1994 in Zarif field, and two years later in Faras field. So far, a total of 69 M barrels of oil have been produced, of which INA's share was 7.5 M barrels. Active in exploration and production in Egypt since 1989, INA Group is currently present at four concessions: as an operator in the development fields of Sidi Rahman and Rizk at the concession of East Yidma, and as a partner at the other three concessions, Ras Qattara, West Abu Gharadig and North Bahariya.

### J Murphy and Sons Ltd. Launches TBM "Elizabeth" and Opens Refurbished Offices

J Murphy and Sons Ltd, working for Cadent, recently reached a major project milestone with the launch of the tunnel boring machine (TBM) "Elizabeth" on the Harefield Southall Pipeline Diversion project. The TBM was launched on time and in line with the project programme making the milestone a satisfying moment for Murphy's project manager, Mick Boyle, who said that months of planning and collaborative working with Cadent and HS2 had helped achieve this.



"Thanks to the 'one Murphy' ethos we've been able to make good use of the extensive skillset across all parts of the business." A 300 m long, 1.8 m diameter tunnel will now be constructed between the shafts using an Iseki TBM. Work will be completed in October 2019. In October, Murphy CEO John Murphy and local MP Amanda Milling, officially opened the company's new offices in Cannock, also taking the opportunity to meet with apprentices and graduates.

### Pipeline Engineers and Associates (PEAL) and Gas Transmission Pipeline Project

The Pipeline Engineers and Associates Limited (PEAL) has recently built and tested a 21 km 42" OD cross-country high pressure gas transmission pipeline in the southeastern part of Bangladesh. This is, so far, the highest diameter pipeline

adorning the gas transmission grid. The pipeline, under the Anowara-Fouzdarhat 42" Gas Transmission Pipeline Project, was built in three spreads under three separate contracts with the Gas Transmission Company Limited, the Government of Bangladesh (GOB)-owned mid-stream monopoly utility. The pipeline will evacuate re-gasified LNG (R-LNG) from Floating Regasification and Storage Unit (FSRU) to feed into the national grid. GOB is currently importing 200 MMCFD of LNG that will in the near future increase to 500 MMCFD to supplement the current 3.2 BCFD domestic production to meet growing demand of natural gas. Given Bangladesh's population density, one of the highest in the world, and the riverine topography dotted by numerous water sheds, the construction of this high-diameter pipeline with sharp twists and turns along an extremely difficult right-of-way has indeed been a great challenge. Local community and land easement rights issues figured prominently almost all along the pipeline route. PEAL completed its work successfully in all three spreads with an outstanding safety record.

### **Quanta Services Chosen for Enbridge's Pipeline Project**

Quanta Services, Inc. has been selected by Enbridge Pipelines Inc. for three spreads of phase two of the Canadian section of the Line 3 Replacement Programme, the largest project in Enbridge's history. Quanta's scope of work includes the construction and installation of approximately 236 miles (380 km) of new 36" diameter crude oil mainline pipe, which will begin in White City, Saskatchewan and continue to Brandon, Manitoba. Quanta's construction on the project is expected to achieve substantial completion in the first half of 2019.

### **Saipem Awarded USD 800M in Onshore Contracts**

Amongst a number of onshore E&C contracts, Saipem has been awarded a contract by Saudi Aramco in Saudi Arabia for procurement and construction in relation to the South Gas Compression Plant Pipelines project for the development of the Haradh gas plant (HdGP), located in the east of the country. The project comes under the Southern Area Energy Efficiency Programme. The scope of work encompasses the construction of a system of pipelines of various diameter, with an overall length of over 700 km, and includes flowlines, trunklines and transmission lines, as well as associated facilities for the transportation of gas from various points of storage and distribution inside the plant. A further contract has been awarded by ExxonMobil Iraq Limited for the DS6 project for the debottlenecking of the West Qurna field, in the south east of Iraq. The

works will have a duration of 23 months and will mainly be executed in the Rumahila fabrication yard, owned by Saipem. Saipem has also been awarded a contract for engineering services and the acquisition of permits for construction work in relation to the laying of pipes for the transportation of gas to Serbia.

### **Sicim's Involvement in the KPC Gas Debottlenecking (KGDBN) Project**

Recently, the KPO (the consortium of EN 29.25%, British Gas at 29.25%, Chevron at 18%, Lukoil at 13.5% and the KazMunayGas company at 10%) announced an investment of approx. USD 20 billion for the extension and a series of modifications of the Karachaganak Plant at Aksai, Kazakhstan where Sicim already operated in the early 2000s. The Karachaganak field, one of the largest in Kazakhstan, is located near the city of Aksai (650 km north-east of Atyrau, not far from the Russian border), and the area is known for extreme cold conditions from November to February with temperatures reaching as low as -40°C under the effect of the "Buran", the wind that descends directly from the Arctic. Sicim has been recently awarded the contract called KPC Gas Debottlenecking (KGDBN) intended to increase production of condensates and natural gas that are exported through the Russian Network. The value of the works commissioned to Sicim amounts to about USD 240 million over a 26 month schedule. Considering the dimensions and the technical, environmental and logistical characteristics, this project represents the largest and most complex industrial project ever carried out by Sicim in Kazakhstan and one of the largest in the world. Sicim is also heavily involved in the development of the offshore field north of the Caspian named Kashagan developed by the NCOC Consortium, which includes ENI, Exxon Mobil, Shell, Total, ConocoPhillips, Inpex and KazMunayGaz (KMG); and in the onshore field of Tengiz, developed by Tensizchevroil (TCO), consisting of Chevron with Exxon Mobil, KazMunayGas and LukArco.



# London Convention Retrospective

The Annual Convention is a unique opportunity for IPLOCA's members, media partners and guests to gather together, to hold business meetings, network and socialise, accompanied by their spouses. Over 530 participants took part this year in London, of which close to 20% were first-time attendees. Particular thanks go once again to our sponsors, without whom an event of such stature would not be possible.

Highlights of the week's programme included two days of Open General Meetings – see pages 16 & 17 - as well as numerous cultural and social functions, including the

President's Dinner in the Guildhall and the popular golf day held under perfectly blue skies. The conference hotel, the Park Plaza Westminster Bridge London, was particularly well located for access to many of the best attractions.

Our Destination Management Company had put together a superb tour programme and selected places of interest to give both an enjoyable and culturally rewarding experience. Particularly poignant moments in history were re-lived when visiting Churchill's Cabinet War Rooms, the Imperial War Museum, the Tower of London and Princess Diana's fashion story in Kensington Palace.



## Post-convention Questionnaire

We are grateful to the small number of participants (89 in total) who took the time to complete and submit the post-convention questionnaire.

Your feedback is important to help us develop future conventions, and to give participants the opportunity to express their opinion on any part of the programme. We encourage more attendees to provide us with their feedback after future events. Overall, the convention programme was well rated, with the business, social and cultural parts all being rated slightly higher compared to the last four

conventions; 88% of respondents said they were able to network as expected and over 95% said they would recommend the convention to other colleagues. The content of the whole week was considered to be well balanced, with attendees continuing to appreciate the OGMs, and confirming their interest in a presentation on a local topic, and on the work of IPLOCA's committees.

The convention app was greatly appreciated by all users, although we received a few suggestions to help improve its use at future conventions. Around 90% of respondents downloaded and logged into the app this year which represents a slight increase of 2% compared to last year's convention.



## Maats/Liebherr Golf Tournament

Maats and Liebherr would like to thank everyone who played in the golf tournament which was held at Foxhills Golf Club on Wednesday 12 September:

"The weather was kind to us, although a bit chilly, but a good day was had by all. The tournament was a great success and your support is very much appreciated.

We look forward to seeing you at the 2019 IPLOCA Convention in Bangkok and hope you will join us for another great day on the golf course."

### Congratulations to all trophy winners, namely:

**First Place** - Team 13: Roberto Castelli, Stefano Protogene, Oliviero Corvi, Loredana Pernici

**Second Place** - Team 16: Geoff Connors, Tony Fernandez, Doug Fabick, Sean McNally

**Third Place** - Team 3: John Leask, Liz Evans, Mick Wilson, Rod Hardy

**Nearest the Pin Men:** Sami Ghandour

**Longest Drive Ladies:** Charlotte Hardy

**Longest Drive Men:** Kevin Allen

## New Honorary Member Honoured!

At the Final Banquet in London, Marja Maats-Westerhof received the Honorary Membership certificate from Andrew Ball, on behalf of Wilhelm (Willem) Maats, who passed away unexpectedly on 29 September 2016.

An overview of Willem's contribution to the association, and the pipeline industry as a whole, can be found on page 8 of the September 2018 edition of this newsletter.

## Photo Gallery

The photos on the following pages, along with many others, will be available on a convention USB card, to be mailed out to all attendees late November/early December.















# Open General Meetings

## New Elements

During the OGMs, pre-scheduled 10-minute Business to Business (B2B) one-on-one meetings were offered for the first time to delegates with the following host companies: Fluor, Kalpataru, Richie Bros., Saudi Aramco, Shell and TransCanada Mexico.

Convention participants also had the possibility to attend informative poster sessions with CRC-Evans, Gulf Publishing Company, LaValley Industries, Perma-Pipe, RSK Group and Shawcor.

Feedback from participants was enthusiastic, and constructive comments received will help us better structure these sessions in advance of next year's convention. The B2B meetings were particularly appreciated for "a quick and effective contact with potential clients".

We look forward to seeing everyone next year in **Bangkok** for our 53<sup>rd</sup> Annual Convention from **30 September to 4 October 2019**.



# Guest Speakers at the London Convention

Many thanks to our guest speakers for their contributions during the OGMs on Thursday and Friday. Copies of their presentations are available at [www.iploca.com/conventionspeakers](http://www.iploca.com/conventionspeakers)



**Jack Russell**  
Archaeology Lead, Tideway  
**The Archaeology of the Thames  
Tideway Tunnel**



**Jose M. de la Torre**  
Senior Corporate QHSE Manager,  
Trans Adriatic Pipeline  
**Dynamic Risk Assessment: Getting  
to the Point - Risk Perception in  
the Pipeline Industry**



**Namik Aliyev**  
Project Coordinator,  
SOCAR Midstream Operations  
**South Caucasus Pipeline Expansion  
(SCPX) Project**



**Robert Jones**  
President, TransCanada Mexico  
**Leadership and Challenge of the  
Sur de Texas Project**



**Jonathan Green**  
Executive Director, Business  
Development & Strategy,  
IMAP Global Sàrl  
**Trends in Global Upstream, Energy  
Efficiency and Sustainable Energy**



**Dr. Saltuk Duzyol**  
CEO, TANAP Natural Gas  
**Lessons Learned from Mega  
Pipeline Projects**



**Daniele Ripari**  
Telecommunications Engineer Lead,  
SAIPEM S.p.A.  
**Approaching the Smart Pipeline**



# Presentation of Awards in London

Three awards were presented in London - further information on the entries is available on our website, along with the list of submissions received.

## The 2018 IPLOCA Health and Safety Award

sponsored by Chevron

The award is in recognition of members' initiatives aimed at improving health and safety in the pipeline industry.

This year's award was given, in the presence of Anne Lapworth of Chevron Products U.K. Ltd., to **Bonatti - J&P AVAX S.r.l. JV.**, represented by Oliviero Corvi, in recognition of their "T-Rex" & Safety Revolution model, a more stable sideboom that features an advanced control system.

The Adjudication Committee made their choice for a number of reasons including that the project shows management commitment, solves an industry problem, ties-in with the "Man & Machine" subject, is an innovative technology and has the potential to become an industry standard.

The runners-up were:

- **SPIECAPAG**, represented by Bruno Pomaré, for the Safety Tag for lifting parts initiative: a relatively simple, cheap,

and highly visible solution that helps the operator to identify when a pin has dropped from a lifting device.

- **TEKFEN Construction & Installation Co. Inc.**, represented by Levent Kafkasli, for the "Off-the-job" Safety campaign that focuses on the local communities and families affected by pipeline construction, aiming to raise awareness of the dangers of construction sites and off site hazards. The campaign and associated booklet were written specifically for a non-technical audience.



Sue Slijivic, Bruno Pomare, Levent Kafkasli, Oliviero Corvi, Anne Lapworth



## The 2018 IPLOCA Excellence in Project Execution Award



Andrew Ball, Doug Evans, Criss Shipman, John Tikkanen, Fatih Can

The biennial Excellence in Project Execution Award is given in recognition of an outstanding project execution in onshore or offshore pipeline or facilities construction.

In the presence of IPLOCA President, Andrew Ball and Fatih Can, Chair of the Innovation Committee, the 2018 Excellence in Project Execution Award was presented to **Gulf Interstate Engineering Company**, represented by Doug Evans and Criss Shipman, for the Sabal Trail Transmission project, a 515-mile interstate NG P/L System on a geographically complex and environmentally sensitive route, with numerous workspace constraints.

One runner-up was named:

**Shawcor**, represented by John Tikkanen for the Sur de Texas - Tuxpan Coating Project, a 690 km pipeline with over 56,000 field joint coatings carried out under a tight deadline.



## The 2018 IPLOCA Environmental Award

sponsored by Shell



Sue Sljivic, Leonardo Gravina, Thomas Jung, Mustafa Abusalah, Loek Vreenegoer

**This award is presented every second year, in recognition of a significant achievement in reducing the impact on the environment during the construction of pipeline projects.**

The Environmental Adjudication Committee decided to present the award, in the presence of Loek Vreenegoer of Shell, to **Consolidated Contractors Group S.A.L.**, represented by Mustafa Abusalah, for their Go-Green 100% Portable Power Cabin. This solar powered mobile cabin can be used as part of the site establishment activities to power communication and mobile equipment for offices

and camps. The committee chose this winner because the initiative demonstrates management commitment with a long term vision, shows cost savings (fuel reduction), solves problems that every contractor has and it is easy to adopt. It is scalable and could easily be expanded and applied everywhere.

The Committee also named two runners-up:

- **Max Streicher GmbH & Co. KG aA**, represented by Thomas Jung, for the Streicher drilling fluid RECYCLE plant that reduces the volume of solid waste by 20% using a mobile recycling system, hence reducing transport and waste disposal costs.
- **Sicim**, represented by Leonardo Gravina, for the use of Biologically Degradable Lubricants, a pilot project to convert over 100 items of construction equipment to a biodegradable lubricant, minimising the risk of pollution in the event of a spill.

Thank you to all those who participated in the 2018 awards and we encourage all members to prepare and submit entries for 2019, which, in addition to the IPLOCA Health & Safety Award sponsored by Chevron, will include the IPLOCA Corporate Social Responsibility Award sponsored by Total and the IPLOCA New Technologies Award sponsored by BP.

Submissions are required by May 2019 and further information will be available on [www.iploca.com](http://www.iploca.com).

## HSE & CSR Committee

**The HSE & CSR Committee met at the Crowne Plaza in Geneva on 22 October. The meeting was planned to coincide with the Health & Safety Workshop and the Fall Session of the Novel Construction Initiative.**



The Committee Chair, Sue Sljivic, welcomed **Filippo Levati**, QHSE Manager-Corporate at Sicim S.p.A., as a new member of the committee. Filippo has 17 years' experience in HSE and in the pipeline industry and has been with Sicim for just over 10 years, starting in the role of Corporate Overseas HSE Coordinator. In 2012 he was

nominated as company representative on the independent Supervisory Board, with responsibilities in compliance, internal auditing and implementation of the code of ethics. He is responsible for setting QHSE guidelines and programmes and their roll-out to the entire organisation through adequate



personnel commitment and people management.

During the meeting **Christophe Mansuy** was thanked for his contributions to the work of the committee. In June he had had to step down from the committee due to his new responsibilities as President of SPAC.

## Health & Safety Workshop and Webcast

This year's Health & Safety Workshop, "Saving Lives in the Pipeline Industry", was held in Geneva on 23 October, just before the Novel Construction Initiative Fall Session.

For the second time, these events were also available on a webcast. Close to 50 participants attended the workshop and 30 people took advantage of the webcast option. Positive feedback was received by many of the webcast users who appreciated the quality of the service, allowing them to participate when they were not available to travel to the venue. Behind one webcast registration was actually a group of eight participants from PIH. PIH shared this photo internally and with IPLOCA, saying that all the attendees found the webcast extremely worthwhile and informative and would welcome future webcast opportunities. The company also said, "We believe that these initiatives allow industry professionals, whether they are just starting their career path or have decades of knowledge, to all have a global vision on real life experiences from within the pipeline industry. It is these experiences that will in effect save lives, providing cost effective and innovate solutions that will take today's ideas into tomorrow's reality."

In spite of substantial efforts made by the pipeline industry in health and safety, IPLOCA members still reported 9 fatalities for 2017, most of them considered as being preventable by the IPLOCA HSE & CSR Committee. Using members' experience and data, the 2018 workshop covered technical and organisational aspects of safety with a specific focus on fatal events reported.

The agenda included presentations from the winner and runners-up of the 2018 IPLOCA Health & Safety Award sponsored by Chevron, as well as a session by Executive Consultant, Filip Coumans on "7 Insights into Safety Leadership: How safety leadership impacts the prevention of serious injuries and fatalities." The morning ended with a detailed evaluation, by Martin Geer of RSK Group, of the Root Cause Analysis of fatalities in the pipeline industry, based on the fatalities reported by IPLOCA Members in the



PIH employees following the workshop via webcast.

2017 HSE Statistics Report. Please refer to Martin's article that follows, for further details. During the afternoon attendees had the opportunity to perform a Root Cause Analysis on real case scenarios. Copies of all the workshop presentations are available at [www.iploca.com/hseworkshop](http://www.iploca.com/hseworkshop).

### Future Modifications to HSE Statistics Form

The HSE & CSR Committee would like to advise all members that the following changes will be made to the HSE Statistics Form in 2019, so that you can prepare to collect the appropriate data as of 1<sup>st</sup> January:

#### New content question 15

- Does your company have a carbon/energy reduction policy?
- Does your company have a water management policy?
- Does your company have a waste reduction policy?

#### New question 16

- Do you produce an annual CSR report?  
If yes, is it in line with a recognised standard?

If yes, which one?

**Question 16 b** (currently 17 b) will have an additional box for ISO 45001.

## Health, Safety and Environment Shared Experiences Platform

**"Sharing learnings is essential to collective knowledge." You may remember this statement from Alan Quilley, if you participated in last year's Health & Safety Workshop!**

The Committee is grateful to all members who contribute to

the Health & Safety Shared Experiences Platform. Over 250 documents have been uploaded since its launch in June 2016. Thanks go to the following companies for their latest contributions: Denys, Petronas, Price Gregory and Sicim. All documents are grouped according to specific categories and under "Lessons Learned" or "Safety Alerts". Share and learn by taking a look at [www.iploca.com/safetyplatform](http://www.iploca.com/safetyplatform), and help us achieve our target of 500 documents!

# Accident Investigations and Root Cause Analysis

Martin Geer, RSK Group plc

**Every year people are killed or injured while they are at work and as reported at this year's IPLOCA Health & Safety Workshop, "Saving Lives in the Pipeline Industry", IPLOCA members reported 9 fatalities during 2017.**

Learning from these sad events by carrying out detailed investigations to obtain the root cause of the accident will provide a deeper understanding of the risks associated with your work activities and are key to developing and refining your organisations Health & Safety Management System.

Established analysis systems look beyond human behaviour and proportioning blame and instead aim to determine the root causes within a company's Health & Safety Management System by identifying failures in the processes leading up to the incident at management system level.

This is achieved by looking at procedures that were supposed to prevent the accident from happening. The key aim is to prevent reoccurrence and provide a permanent solution that avoids repetitive non-conformity. A detailed investigation also sends out a strong message in relation to the workforce and enforcing authorities that you are committed to the safety of those affected by your operations.

The severity of the accident will be key in determining the scope of any investigation, but the overall process should be consistent and follow the requirements within your management system following key stages such as:

- **Responding immediately** by coordinating an emergency response; notifying emergency teams, enforcing authorities and attending to the direct needs at the accident scene, and also securing the site and isolating the working area to ensure that a thorough investigation can be carried out. The aim being to preserve the integrity of the scene and to be able to gain a clear understanding of the conditions at the time.
- **Gathering information**, focusing on collecting as much data and evidence about the incident as possible. Questioning witnesses about what they saw and collecting as much accurate information as possible about exactly what happened. During this time, the investigation team should also gather key documents, from plant and equipment logs to photos of the

accident scene, identifying any gaps in the information and attempting to fill those gaps through additional investigation. It is essential that the investigation remains impartial and the questioning is neutral and refrains from allocating responsibility or blame.

- **Performing the Root Cause Analysis.** At this stage, the investigation team should have access to all available information and is able to determine what happened and how and be able to determine a probable cause. The aim is to obtain the root cause which can be defined as an initiating event or failing from which all other causes or failings arise. Root causes are generally management, planning or organisational failings.
- Developing an accurate **Investigation Report** that contains all the facts so that everyone involved in the investigation is working from the same controlled documented information and can refer to it when required. The report should include all the documentation obtained during the investigation and include a summary of what happened, and the conclusions drawn from the investigation process.
- **Sharing the findings and making improvements.** The key value of an accident investigation is to help prevent future accidents from happening. It is vitally important to share the findings and recommendations from your investigation. This will ensure that the conditions that contributed to the accident are clearly comprehended, deeper insights about the gaps in the health and safety management system are understood and, in the future, personnel are encouraged to make the right choices, thus, encouraging a change in the health and safety culture from the top down.

In conclusion, Root Cause Analysis is a key tool in identifying the true cause of an accident and helps refine the health and safety management system to a point where risks are mitigated through gap analysis and preventative measures are implemented at an early stage. Blaming individuals is ultimately fruitless and sustains the myth that accidents are unavoidable when the opposite is true. The systematic approach of root cause analysis creates an environment where lessons can be learnt from an unnecessary accident, providing safeguards for workers in the future.

# Innovation Committee

## Novel Construction Fall Session



Over 60 delegates from around the world participated in a Novel Construction meeting held at the Crowne Plaza hotel in Geneva on 24-25 October, and around 30 also participated via webcast, which was really appreciated by those who could not attend the session.

On the morning of 24 October, presentations were made by IPLOCA members and invited speakers on their novel

products and initiatives with the aim of improving pipeline design and construction. These included the following topics and speakers:

- **Wakecap Innovative Safety Solution**  
Hassan Albalawi, Wakecap
- **Can We Still Innovate in the Onshore Lines Protections?**  
Yannick Jouveaux, Overpipe
- **Offshore Meets Onshore: Trenchless Solutions for Pipeline Landfalls\***  
Michael Lubberger, Herrenknecht AG
- **A Decision Support Tool for Best Possible Coating Selection during Trenchless Pipe Installations**  
Thierry Kerzehro, GRT Gaz
- **The Interaction of Cathodic Protection with Coatings on Pipelines**  
Thomas Kaiser & Thomas Loffler, DENSO GmbH
- **Advancements in Field Joint Coatings for Onshore and Subsea Pipelines**  
Somaieh Salehpour, Shawcor Ltd
- **Increased Safety and Efficiency Utilising Mechanical Grapple Technology in Pipe Handling\***  
Jorge Prince and Jason LaValley, LaValley Industries

\* Articles on these initiatives follow this report and copies of the presentations and videos are available on [www.iploca.com/novelsession](http://www.iploca.com/novelsession).

## “The Road to Success” updates

In the afternoon, group work sessions on “The Road to Success” app took place to review existing/new chapters to be completed and new subjects to be developed.

The following morning the working groups presented their discussions, specifically covering their group composition, comments on the app, chapters being developed, proposed

new subjects, work assignments and completion milestones, and targets for the next Spring Session. We would like to thank all of those who participated in these work sessions. If you would like to take part in this stimulating and interactive initiative, please contact the appropriate group leader or [gregoire.demontmollin@iploca.com](mailto:gregoire.demontmollin@iploca.com).

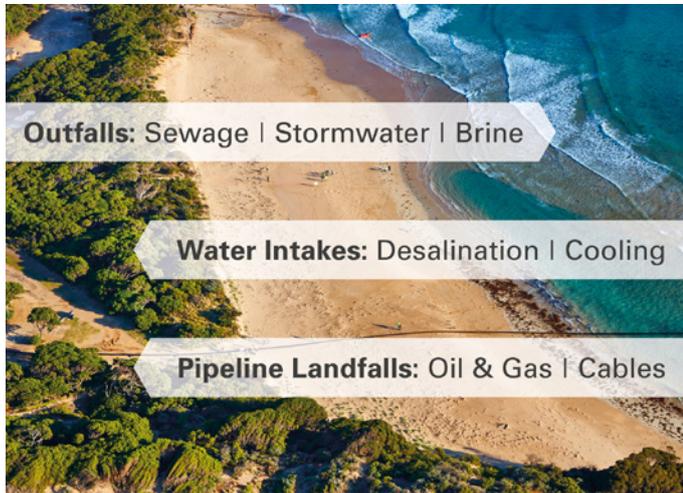
We look forward to meeting you again in the Spring, from 3 to 4 April 2019 in Madrid, Spain.

Working Groups	Leader (Company)	Email
Health & Safety	Alain Gauthiez (Spiecapag)	<a href="mailto:alain.gauthiez@spiecapag.com">alain.gauthiez@spiecapag.com</a>
Earthworks & Crossings	Paul Andrews (Fluor)	<a href="mailto:paul.i.andrews@fluor.com">paul.i.andrews@fluor.com</a>
Welding & NDT	Gustavo Guaytima (TransCanada)	<a href="mailto:guaytima_gustavo@transcanada.com">guaytima_gustavo@transcanada.com</a>
New Trends & Innovation	Mustafa Abusalah (C.C.C.)	<a href="mailto:mabusalah@ccc.net">mabusalah@ccc.net</a>
Coatings	Somaieh Salehpour (Shawcor)	<a href="mailto:somaieh.salehpour@shawcor.com">somaieh.salehpour@shawcor.com</a>
Environment	Sue Sljivic (RSK)	<a href="mailto:ssljivic@rsk.co.uk">ssljivic@rsk.co.uk</a>
Logistics	Bruno Pomaré (Spiecapag)	<a href="mailto:bruno.pomare@spiecapag.com">bruno.pomare@spiecapag.com</a>
Pre-commissioning	Vincenzo Calabria (SICIM)	<a href="mailto:v.calabria@sicim.eu">v.calabria@sicim.eu</a>
Bending	Geert Dieperink (Maats)	<a href="mailto:dieperink@maats.com">dieperink@maats.com</a>

# Going Under the Sea:

## Shore Approaches with Herrenknecht Technology

Michael Lubberger, Herrenknecht AG



Shore approaches fit for multiple applications.

**When it comes to sea outfalls, intakes and landfalls, trenchless technologies can be used independently from rock or soil conditions or the shape of the coastline. Pipe jacking, segmental lining, Direct Pipe® and HDD offer crucial advantages, compared to open-cut solutions.**

As shore approaches often take place in protected areas, trenchless technologies reduce the jobsite footprint and impact on the local wildlife to a minimum. Further, pipelines may be laid in regions with high shipping traffic, without affecting shipping or tourism. As multiple parameters play a role, Herrenknecht offers varying approaches, fitting to the individual circumstances of each project. Segmental lining applies mainly in projects where long distances need to be crossed, i.e. more than two km. Due to the complexity of the tunnel boring machine (TBM), the tunnel inner diameter only starts from at least 2,5m. This tunnel lining method uses individual precast concrete segments. The individual segments are transported through the completed part of the tunnel and assembled by the erector to form closed rings directly behind the TBM. The TBM is equipped with hydraulic thrust cylinders which push the shield forward from the last built tunnel ring. After finishing the tunnel drive, the pipeline will be pulled/pushed into the tunnel.

Pipe jacking is also a tunnelling construction method for the installation of a concrete cased tunnel. The tunnel boring machine and the concrete pipes behind it are advanced up to the target shaft with the help of a hydraulic jacking frame

in the launch shaft. The pipe jacking technology is mainly used for installation lengths of up to two km.

In the HDD method, pipelines are laid in three stages. First, a pilot bore is carried out from the launch point. In the second step, the borehole diameter is gradually enlarged with a reamer. In most cases, the bore hole is supported by a bentonite suspension which at the same time serves as the transport medium for the excavated material. Finally, the pipeline is installed by pulling a prefabricated pipestring into the borehole. Target-oriented implementation of customer-specific requirements is part of Herrenknecht's daily business. This includes corrosion-proof equipment for sea outfall projects directly along the coastline. Other specialised rigs can even be dismantled in such a way, that they can be transported by helicopter. Direct Pipe® combines the advantages of microtunnelling and HDD technology. In one step, a prefabricated pipeline is installed simultaneously to the excavation of the borehole. This allows speedy and highly economic installation of pipelines with lengths of more than 1,900 m.

Located between the coasts of Texas and Mexico, the Sur de Texas-Tuxpan gas pipeline is Mexico's first offshore gas transport pipeline and was one of the largest offshore pipelines under construction in the last years. 90% of the new pipeline is offshore and was built within the scope of three sea outfall projects with Herrenknecht technology: two with the Direct Pipe® method (No. 1 and No. 3 on map) and one with pipe jacking (No. 2 on map).



Project description of the Texas-Tuxpan Gas Pipeline.

The first Direct Pipe® outfall ended in late 2017 in Brownsville, Texas. The best daily performance was 120 m in 12 hours. In Tamiahua (near Tuxpan), Mexico, after 700 m another DP-MTBM precisely reached its final position on the seabed in July 2018. Last, but not least, the third outfall near Altamira, Mexico, was also a success: measuring 2,246 m it is the longest pipe jacking project ending with a subsea recovery.



## Increased Safety and Efficiency Using Mechanical Grapple Technology in Pipe Handling

Jorge Prince, LaValley Industries

**Pipe handling has been an integral part of the pipeline construction process since the earliest days of pipelining. From offloading rail cars, stringing along the right-of-way and lowering in the trench, moving and positioning pipe has always been at the heart of pipeline operations.**

During these earliest days of pipelining, workers using cranes or excavators equipped with chains and straps would unload trucks and position pipe along the trench. Pipe needed to be lifted dead centre and workers would guide the pipe into position by hand or with the use of tag lines. Although effective, this method has proven to have several significant drawbacks:

- First, field personnel are often placed in danger zones as they must manually guide the pipe into place.
- Second, chains and straps can fail or be secured improperly causing the pipe to fall during lift.
- Lastly, the load is free-swinging which can be very hard to control especially in poor weather conditions such as snow, rain or high winds.

Approximately twenty-five years ago vacuum lifter attachments were introduced to pipe stringing operations.

This allowed the industry to move away from utilising labour intensive cranes towards more efficient excavator-based lifting. Although a significant improvement, this method did not fully address many of the existing drawbacks found in traditional methods.

In 2005, LaValley Industries surveyed the pipeline construction landscape and saw an unmet need for



a new pipe handling method. This analysis led to the design of the DECKHAND® pipe handling system and the creation of the mechanical grapple method of pipe handling. In this method, a single operator utilises the DECKHAND attachment from the comfort and safety of the excavator cab to stockpile, load/unload trucks or position pipe along the trench during pipe stringing operations.

The DECKHAND is pinned to the excavator and powered by the excavator's auxiliary hydraulic circuit. Its mechanical design allows it to securely hold the pipe joint and its load locking hydraulic valve design ensures that the pipe is gripped securely during lifting regardless of hydraulic pressure.

The protective wear pads on its arms protect coated pipe from damage. Its slew ring and pinion rotational design guarantees that the load is always under control and never free swinging. Its hydraulic tilt and shift functions allow the operator to navigate uneven terrain

with ease and position pipe with absolute precision. These features even allow the operator to lift pipe from an off-centre position lending additional versatility to the pipe stringing process. Using the mechanical grapple method, pipe is handled solely by the excavator operator removing workers from danger zones and reducing operational costs.

The load is always under total control and never free swinging which allows contractors to work in inclement weather including high winds with ease. As the pipe is mechanically gripped, working in conditions with snow or ice is simple without requiring workers to prepare the pipe surface in preparation of lifting.

"I created DECKHAND with safety in mind, but also wanted to make handling pipe faster and easier than ever before," states LaValley Industries' founder and CEO Jason LaValley. "It has been extremely rewarding to witness the safety and operational improvements the DECKHAND has brought to jobsites around the world."



with a dinner in a private area of a new restaurant. On Tuesday the programme included presentations by representatives of American Augers, Caterpillar Inc., Dyno Nobel, Laurini Officine Meccaniche Srl, Pluspetrol Peru, Polyguard Products, Serpetbol Peru and Vacuworx.

Members of the group who stayed on in Lima were offered a private dinner at another recently inaugurated restaurant that had live entertainment.

Special thanks to all the sponsors and organisers of this very successful event that raised the awareness of IPLOCA's initiatives and its power to bring many people together from all different countries.

## Regional meeting

Lima, 9 October

**A Latin American Regional Meeting was held at the JW Marriott Hotel in Lima, Peru on Tuesday, 9 October, hosted by Regular Members, G.D.I. and Serpetbol Peru.**

IPLOCA Directors, Giacomo Bonfanti, Gonzalo Montenegro, Daniel Fernandez and IPLOCA Executive Secretary, Juan Arzuaga were available to discuss IPLOCA initiatives and issues pertinent to the region. On Monday afternoon, attendees had the opportunity to participate in a tour including a Peruvian pass horses show in Hacienda Mamacona. The day ended



# Upcoming Events

2019

## PLCA 71<sup>st</sup> Annual Convention

6-10 February - Fernandina Beach, FL, U.S.A.  
[www.plca.org](http://www.plca.org)

## Pipeline Coating

12-14 February - Vienna, Austria  
[www.ami.international/events/event?Code=C950](http://www.ami.international/events/event?Code=C950)

## Midstream Oil and Gas Congress

18-19 February - Thessaloniki, Greece  
[mogc.eu](http://mogc.eu)

## PPIM – Pipeline Pigging and Integrity Management

18-21 February - Houston, TX, U.S.A.  
[www.clarion.org](http://www.clarion.org)

## Horizontal Directional Drilling Academy

25-26 February - Tempe, AZ, U.S.A.  
[hddacademy.com](http://hddacademy.com)

## Offshore Pipeline Technology Conference

26-28 February - Amsterdam, The Netherlands  
[energy.knect365.com/offshore-pipeline-technology](http://energy.knect365.com/offshore-pipeline-technology)  
*20% discount for IPLOCA members*

## DCA 58<sup>th</sup> Convention

5-10 March - Nassau, Bahamas  
[www.dcaweb.org](http://www.dcaweb.org)

## PIG – The Pipeline Industries Guild Annual Dinner

12 March - London, U.K.  
[www.pipeguild.com](http://www.pipeguild.com)

## Pipeline Technology Conference

19-21 March - Berlin, Germany  
[www.pipeline-conference.com](http://www.pipeline-conference.com)

## Hannover Messe

1-5 April - Hannover, Germany  
[www.hannovermesse.de](http://www.hannovermesse.de)

## IPLOCA Novel Construction Initiative Spring Session

3-4 April - Madrid, Spain  
[www.iploca.com/novelsession](http://www.iploca.com/novelsession)



## Pipeline Opportunities Conference

9 April - Houston, TX, U.S.A.  
[pipeline-opportunities.com](http://pipeline-opportunities.com)

## Pipeline & Energy Expo

9-11 April - Tulsa, OK, USA  
[pipelineenergyexpo.com](http://pipelineenergyexpo.com)

## Offshore Technology Conference

6-9 May - Houston, TX, U.S.A.  
[2019.otcnet.org](http://2019.otcnet.org)

## PLCAC 65<sup>th</sup> Annual Convention

12-16 May - Ottawa, ON, Canada  
[www.pipeline.ca](http://www.pipeline.ca)

## EPOCH - Exploration and Production Offshore Congress Hub

16-17 September - Thessaloniki, Greece  
[www.oilepoch.com](http://www.oilepoch.com)



## IPLOCA 53<sup>rd</sup> Annual Convention

30 September - 4 October  
Bangkok, Thailand

## Other Important IPLOCA Dates

### Member News for IPLOCA March 2019 Newsletter

15 January - Deadline for submissions  
[newsletter@iploca.com](mailto:newsletter@iploca.com)

### Member News for IPLOCA June 2019 Newsletter

15 April - Deadline for submissions  
[newsletter@iploca.com](mailto:newsletter@iploca.com)

# IPLOCA Yearbook

## 2018-2019

Letter from the Publisher

**At the end of November, the 52<sup>nd</sup> edition of the IPLOCA Yearbook was distributed worldwide to the desks and in the field offices of pipeline companies.**

The IPLOCA Yearbook is available in hardcopy and a quarterly updated version can also be accessed on your mobile phone at [mobile.iploca-yearbook.com](http://mobile.iploca-yearbook.com)

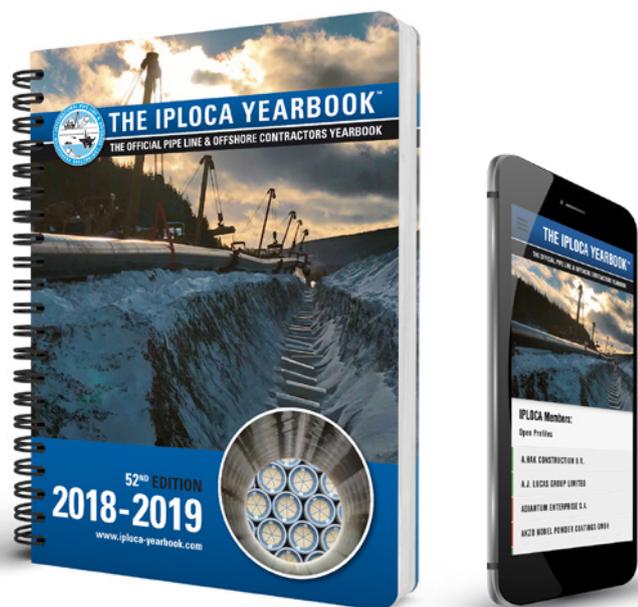
Do not hesitate to send us the addresses of the persons to whom you wish us to send a copy of the IPLOCA Yearbook. Additional printed copies can be obtained on request: [www.iploca-yearbook.com](http://www.iploca-yearbook.com).

We hope this edition will again meet your expectations but we always appreciate your comments and suggestions.

Please continue to send any company updates (address changes or contact names) to [listing@iploca-yearbook.com](mailto:listing@iploca-yearbook.com) and be sure to also send a copy to [sarah.junod@iploca.com](mailto:sarah.junod@iploca.com). In this way we will be able update all our mailing lists and the membership database.

We wish all our readers a joyful, festive season with the prospect of a safe and healthy New Year.

Pieter & Peter Schoonenberg  
**Publishers IPLOCA Yearbook**  
Pedemex B.V.



The IPLOCA Yearbook is available in hardcopy and also available on your mobile phone at [mobile.iploca-yearbook.com](http://mobile.iploca-yearbook.com)

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Editorial opportunities are available for IPLOCA Members.  
Contact: [jacqueline.tempel@iploca.com](mailto:jacqueline.tempel@iploca.com).

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# IPLOCA Board of Directors

2018-2019



**Left to right front row:** Yasar Giregiz, Andrew Ball, Iosif Panchak, John Tikkanen, Oliviero Corvi, Adam Wynne Hughes, Juan Arzuaga. **Second row:** Daniel Fernandez, Albert Zakhem, Sue Sljivic, Khulud Halaby, Doug Evans, Kelly Osborn. **Third row:** Alberto Barbieri, Gonzalo Montenegro, Leon Richards, Ma Chunqing, Steve Sumner, Jacquelin de La Porte des Vaux, Najib Khoury. **Fourth row:** Fatih Can, Giacomo Bonfanti, Doug Bailey, Bill Solomon, Tim Zboya. **Inset:** Johan Van Wassenhove.

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## Executive Secretary

**Juan Arzuaga**

\*appointed by the Board of Directors

October 30th, 2018 - Edmonton (CA)  
NEW HAMMER demonstration

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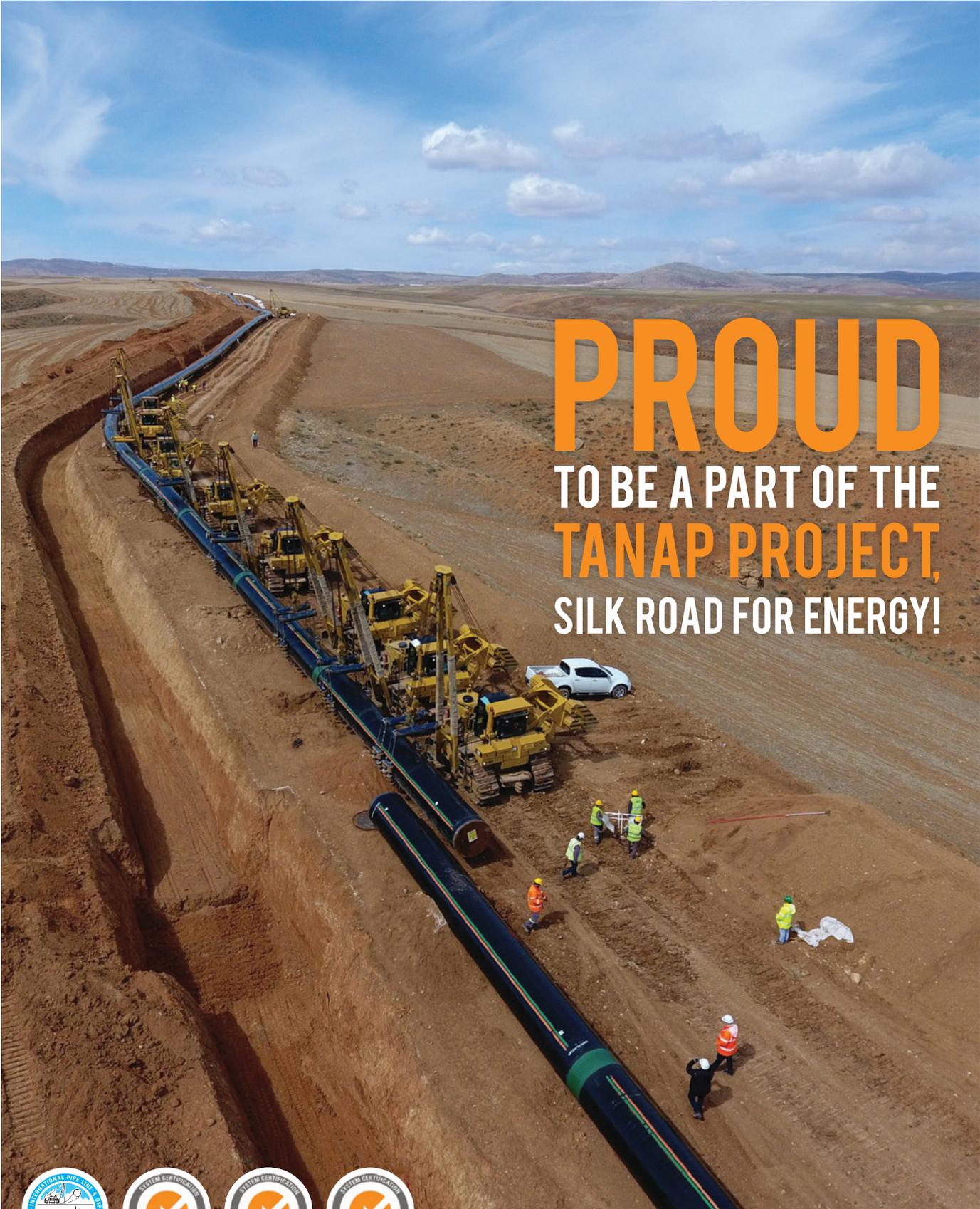


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