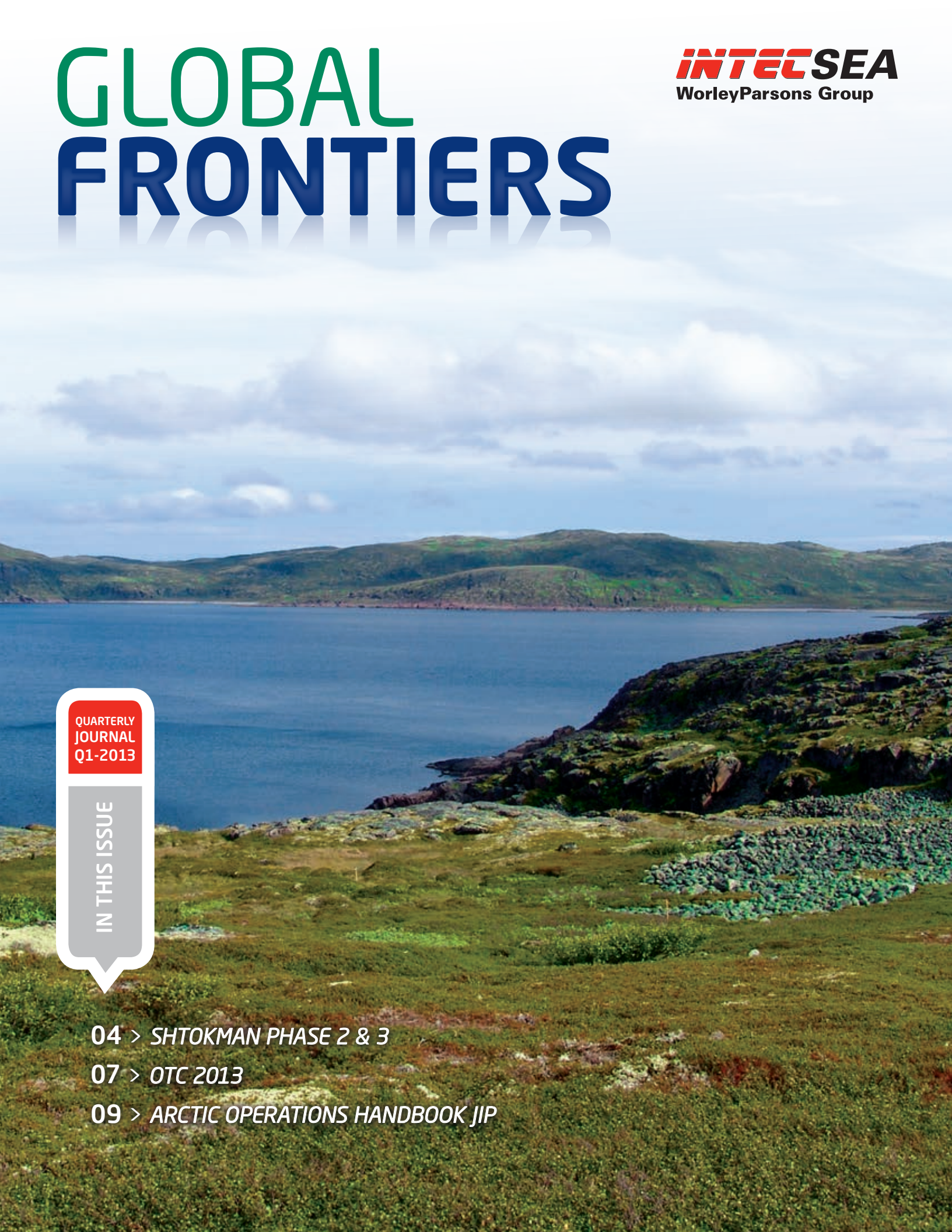
GLOBAL FRONTIERS

INTECSEA
WorleyParsons Group



QUARTERLY JOURNAL Q1-2013

IN THIS ISSUE

Inside this Issue

Published by

INTECSEA
15600 JFK Boulevard
9th Floor
Houston, TX 77032, USA

Managing Editor

Michelle Lang
michelle.lang@intecsea.com

Contact Information

www.intecsea.com/contact-us

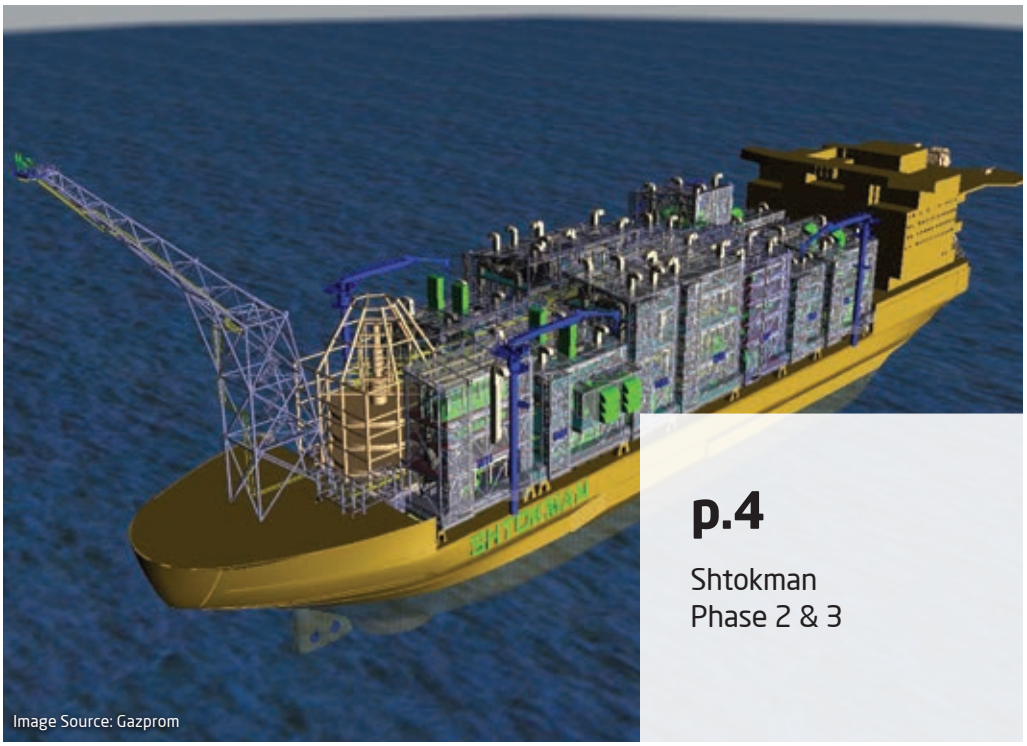


Image Source: Gazprom

Access the online version of this issue and view bonus content and resources at:
intecsea.com/global-frontiers

Scan the code below to view archived issues and subscribe to Global Frontiers.

Q1 - 2013

GLOBAL FRONTIERS

Front Cover Image:
The Murmansk Region, about 600 km southwest of the Shtokman project.

IMAGE COURTESY OF GAZPROM

Letter from the President

by Uri Nooteboom

The best is yet to come. I cannot predict what the industry capabilities will be in the future, but am fairly certain that in another generation the designs and technologies of today will seem downright prehistoric.

Earlier this year I had the opportunity to give a presentation at the Eastern Mediterranean Gas Conference in Cyprus on the subject of pipelines. I didn't want to make this overly technical as I would be hard pressed discussing serious pipeline design equations. So instead I commiserated about what we can expect from modern day deepwater pipelines against a historical backdrop on how we got to where we are today.

From my personal research on the history of pipelines, using the internet as an infallible source of knowledge and factoids, I discovered some interesting information which I would like to share with you. Mind you, this data will not enable you to become a better pipeline engineer or improve your knowledge base; but it might help you to reflect on the future state of pipeline capabilities.

So, here are some milestones as best I have been able to determine from unaudited sources:

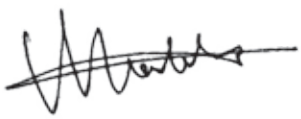
- Aqueducts to transport water over fairly long distances may have originated in the 7th century BC when the Assyrians built an 80 kilometer limestone aqueduct to provide water to their capital city Nineveh. (OK, an open aqueduct is not exactly a pipeline but it is one of the earliest known methods of manmade flow control, so I threw it in.)
- The earliest enclosed, pressurized pipeline may have been created in the 2nd century BC when the ancient Greeks built a 42 kilometer network of parallel terracotta pipelines, made up of 1 ft long sections to provide water to Athens. Maintaining flowing pressure depended on gravity, so the source needed to be higher than the delivery point. Since the pipeline was sealed and pressurized it was able to transverse valleys at lower elevations and allow the water to flow uphill. In theory the pipeline would have been able to cross over mountains as well, but without real pumping technology, commissioning of such a pipeline was not in the cards.
- The first industrial pipeline was claimed to be built in 1595 in Austria between Hallstad, a city known for its salt production, and Ebensee to transport brine. The 40 kilometer pipeline was constructed from 13,000 hollowed out tree trunks. This also classifies it as the first "trunkline".
- The first oil pipeline may have originated in Pennsylvania in the 1860s. It was a 2 inch diameter wrought iron pipeline between an oil field and a railroad station in Oil Creek.
- The first offshore pipeline may have been the PLUTO pipeline (Pipe Line Under The Ocean) laid across the English Channel during World War II to supply the allied troops with fuel during the invasion. It was a 3 inch diameter lead pipe installed off floating reels – first application of reeling technology.
- The first commercial offshore pipeline may have been a 10 inch gas pipeline installed in 1954 in the GOM in 4 - 10 meter water depth.

So, it took us more than 2,500 years to develop rudimentary plumbing technology to lay oil and gas pipelines in knee-deep water; and then within the timespan of a single career we developed the capability to install large diameter pipelines in the deepest waters on earth.

And the best is yet to come. I cannot predict what the industry capabilities will be in the future, but am fairly certain that in another generation the designs and technologies of today will seem downright prehistoric. Containment may take new forms altogether and not involve steel pipelines.

Non-metallic, flexible nano-materials not prone to hydrostatic collapse, or other containment technology we haven't even considered yet. Do we really need a physical conduit? Perhaps changing the molecular structure or using the subatomic energy of the surrounding earth or water would allow us to create a virtual pipeline containing the flow of oil and gas?

Don't use these predictions in your decision making process just yet. Wait until the movie is out for it to become reality. In the meantime this "history of pipelines" and any wild-guess extrapolation into the future may come in handy during the next game of Trivial Pursuit or to liven up the dinner conversation with some random statements of "knowledge"; say, did you know...?



Shtokman Phase 2 & 3

By Jeff Whipple, Manager of Projects SURF

Gazprom and its partners are working on the development of the Shtokman gas and condensate field in the Russian sector of the Barents Sea. Due to the harsh environment and likelihood of more sea ice as global warming continues, the complete field will be developed in three or more phases by means of subsea production systems tied back to floating production facilities (FSPOs).

For the Phase 2 and 3 developments the produced gas will be conditioned onboard the Phase 2 and 3 FSPOs and transported to the Russian mainland via single phase subsea pipelines. From the onshore plant the gas will be exported into the onshore transportation network or processed to Liquefied Natural Gas (LNG) for further transport to the end user locations. Condensate will be exported directly from the Phase 2 and 3 FPSOs by means of shuttle tankers.

IMAGE COURTESY OF GAZPROM

"While the magnitude of the project is very exciting, it comes with the type of technical challenges that engineers and project specialists love to address. It is a career-defining project."

The Shtokman field location is approximately 550 km from Teriberka village, which is the proposed site for the onshore facilities. The Shtokman site is characterized by harsh environmental conditions; including the potential for sea ice, icebergs, winter darkness, and Arctic lows (severe, intense storms). Water depth at the location is approximately 320-340m. Total field reserves are estimated at 3,900 GSm^3 of gas. The expected average daily production rate per phase will be 71.7 million Sm^3/day.

The Shtokman gas and condensate field development project is of strategic significance for Gazprom. The project implementation will become a pivotal point to form a new gas producing region on the Russian Arctic shelf. The Shtokman field will become a resource base for building up Russian pipeline gas and LNG supplies to the domestic and foreign markets.

The Front-End Engineering Design (FEED) is being completed by several centers of excellence. Working for Giprospetsgaz, a subsidiary of Gazprom, and starting in November 2010 the INTECSEA (Delft) office, supported by WorleyParsons (Houston) and INTECSEA (Houston), performed the FEED study for the Shtokman floater, which is ultimately designed for the harsh environment of the Barents Sea. It is designed to have minimal resistance in sea ice during both straight drift and reversal drift events, minimizing required station keeping forces. The vessel is able to disconnect, even under high ice loads from sea ice. Furthermore, the vessel is fully winterized, protecting personnel and equipment against extreme Arctic conditions. Assisted by a dedicated ice management system, this vessel achieves high up-time rates. On a separate contract with PeterGaz the INTECSEA (Delft) office performed the FEED for the export trunklines for Phase 2 and 3.

INTECSEA (Houston) led the development of the Subsea Production Systems (SPSs) FEED supported by INTECSEA (Perth) for riser design. INTECSEA (Delft) was the contract holder providing overall guidance, support, and link to the FSPO team. The SPS FEED scope was to design the Phase 2 and 3 subsea systems for gathering the production fluids from the production well centers and transporting to the respective FPSO. Each field or phase consists of eight production well sites for a total of four dual flowline loops attaching to the FSPO. Each flowline loop has two well sites each.

FSPO FEED was completed near the end of 2011 and moved into the next stage of review of Proekt. In Proekt the western-style FEED has been developed further by INTECSEA's sub-contractor CKBN, a Russian design institute, into the format required for review and acceptance by the Russian governmental authorities. The SPS FEED was completed in June 2012 with Proekt starting in September 2012 and finishing completion in January 2013.

As aptly expressed by the Project Manager, Dave Cram, "While the magnitude of the project is very exciting, it comes with the type of technical challenges that engineers and project specialists love to address. It is a career-defining project." The Shtokman project is an example of where WorleyParsons and INTECSEA offices around the world have come together pooling synergies and resources to provide timely solutions for our customer and shareholders. We are looking forward to continued collaboration on the future stages of the Shtokman project and working collaboratively on other projects for our customers using this successful model.

The Shtokman field location is approximately 550 km from Teriberka village, which is the proposed site for the onshore facilities.

IMAGE COURTESY OF GAZPROM

What may have seemed like abstract concepts prior to the meeting came to life as engineers gave presentations on leading technologies being utilized at INTECSEA.

Inaugural Global Technology Workshop

by Larry Forster

INTECSEA is a global organization focused on technology. We rely on technology to pull our team together as we complete our work. This past February, we took a step back and gave our technology a boost with a week-long, face-to-face meeting. For the first time, more than 30 participants from around the world joined in conversations, convening just down the road from the Woking offices at the Gorse Hill Hotel and Conference Center.

What may have seemed like abstract concepts prior to the meeting came to life as engineers gave presentations on leading technologies being utilized at INTECSEA. The presentations were followed by interactive discussions on the technical ideas, which resulted in a deeper understanding for all attending and sparked further inventive debate and conversation. We discussed how to generate business value from each of the concepts and defined tangible steps to take once we returned to our respective offices. Our sense was that we were generating high value each hour of the week and we hope to continue these workshops as recurring events.

Much of the week was spent in relatively intense sessions from early morning until late in the evening, but we also made an effort to continue conversations in a more relaxed atmosphere each evening. One day of sailing off the coast of Portsmouth provided a completely different perspective to our teamwork.

The workshop was closed with firm plans to bring the energy back to our respective locations. We are already seeing the ideas from the workshop spread further into the organization. In the Houston offices, four related "Lunch & Learn" sessions have already occurred and more are planned. Some topics will be presented later this year at conferences and local symposiums. Customer interest has also peaked which we expect will generate new activities shortly. Stay tuned!

John Allen and Phil Cooper (foreground) help bring focus to the day-long technical sessions.

Jonathan Caines (St. John's) and Richard Voight (Houston) enjoy some serious downtime.

WorleyParsons Group showcases integrated solutions at the 2013 Offshore Technology Conference (OTC)

by Ashley Helmer

The WorleyParsons Group, including INTECSEA, DelftaAfrik and Rosenberg, had a great showing at the 2013 Offshore Technology Conference (OTC) recently held in Houston, Texas. Attendance reached a three-decade high of 104,800, up 17% from last year, as offshore energy experts from around the world came together at the world's largest event focused on the development of offshore resources.

There was a great feeling of excitement and optimism at the conference, with a noticeable focus on emerging technologies such as subsea processing and the Norwegian offshore market. Collaboration was also a key theme throughout the week, as teams from WorleyParsons, INTECSEA, DeltaAfrik, and Rosenberg worked seamlessly together, sharing a booth in the main exhibition hall. The booth offered a great place for customers and colleagues to gather and discuss current challenges and future direction of the industry, and also attracted recent graduates and professionals looking to find out more about career opportunities with WorleyParsons. Several distinguished guests visited the booth throughout the week, including members of WorleyParsons Executive Committee and the Honorable Kathy Dunderdale, Premier of Newfoundland and Labrador, who stopped by to discuss growth opportunities in the province.

We achieved great success in our 2013 technical program, with nine papers being presented on topics ranging from "Real Time Subsea Fiber Optic Monitoring" to "Advances in Multiphase Flow CFD Erosion Analysis." Conference goers also had the opportunity to see several in-booth presentations which outlined the WorleyParsons Group's integrated offering.

In addition to the conference, we enjoyed tremendous success at this year's wine tasting party. Held on the first night of OTC, this party is quickly becoming one of the hallmark events of OTC week. This year's occasion attracted top executives and guests from companies such as Shell, BP, Chevron and more. The event also honored Ken Arnold (WorleyParsons Houston), who was presented with the 2013 Distinguished Achievement Award for Individuals from the OTC Committee for his outstanding leadership and extensive contributions to the E&P industry. Ken received the award at the annual OTC Dinner, where WorleyParsons and INTECSEA sponsored a table. Ken's many achievements include playing an integral role in the offshore industry's focus on safety through the development of recommended practices for offshore design and safety management, and developing approaches to both equipment sizing and facility project management that are still in use today. He also has been instrumental in the effort to establish oilfield facilities engineering as a recognized technical engineering specialty. Congratulations to Ken!

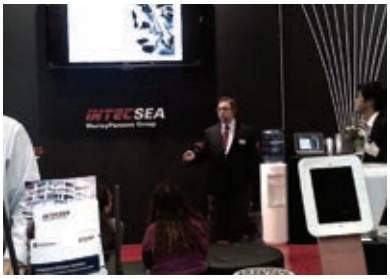
Finally, what would OTC be without the press? The Group was able to maximize exposure through publications and social media with good results. Press releases covering our comprehensive technical program and also the Premier's visit were picked up by major publications, including the daily newspaper distributed throughout OTC, and further promoted on our social media sites. Updated integrated solutions brochures were developed for and presented at the event, and INTECSEA's new website was also heavily promoted. The new site has an updated "look and feel," with additional content to reflect our growing capabilities. Booth attendees were also able to get a glimpse of our global project portfolio and expertise through our interactive kiosk. All of the press and media coverage, combined with the signage on the escalators in Reliant Center, ensured the WorleyParsons Group was well represented at the event.

Overall, OTC 2013 was a resounding success. Thanks to the teams from WorleyParsons, INTECSEA, DeltaAfrik, and Rosenberg for their hard work. We are already starting to think about next year's event, scheduled for May 5-8, 2014!

Collaboration was also a key theme throughout the week, as teams from WorleyParsons, INTECSEA, DeltaAfrik, and Rosenberg worked seamlessly together, sharing a booth in the main exhibition hall.

The Honorable Kathy Dunderdale, Premier of Newfoundland and Labrador, visits the WorleyParsons booth at OTC.

Vince Vetter presents an overview of the WorleyParsons *Select*/Full Field Development capabilities to the crowd.



CEO Andrew Wood and Kristin Færøvik, Managing Director of Rosenberg, meet with customers at the booth.

The Lan Do project provided many interesting challenges such as seabed terrain features and use of 13Cr pipeline material.

First Gas for TNK Lan Do

by Johan Samad

Confirmation visual of ILS on support base

Pipelay underway from Lan Tay platform

TNK Vietnam achieved first gas from their Lan Do subsea tieback development on October 7, 2012. This was the culmination of work being carried out by INTECSEA KL since start of the EPcm phase of the work in 2010.

Between June and September 2012, INTECSEA's KL team, with specialist support from Delft, was busy supporting TNK on the flowline installation campaign. There were some challenging moments during the offshore installation including a very late decision to shift the flowline route, causing some frantic design work, ahead of the Sapura3000 laybarge position. This called on close cooperation between INTECSEA's engineer onboard the vessel, the INTECSEA KL office engineering team, TNK's project management team in Vietnam, SapuraAcergy (the installation contractor), and its support vessels in the field. The repositioning included the need to prepare a level landing base on the uneven seabed for an In-Line Sled (ILS). This was constructed by an ROV using grout bags and concrete mattresses, following an assessment that the base would hold in place. The team was elated when it received confirmation that the ILS landed spot on the landing base without a hitch.

In late October, INTECSEA convened a Lessons Learnt workshop for the project, with the involvement of TNK staff, in Kuala Lumpur. The one day workshop captured a number of issues from the project that will serve to be useful for future EPcm type projects.

The Lan Do project provided many interesting challenges for INTECSEA due to the rocky outcrop features of the seabed terrain, as well as the use of 13Cr pipeline material with diode controlled cathodic protection.

The project is now in close-out mode, with finalization of all documentation in progress.

Trinidad and Tobago Energy Conference

Brian McShane, SVP Americas (center) and Mac McKee, Manager of Planning and Development (left) speak with a customer at the exhibition, held at the Hyatt Regency Trinidad, January 28-30, 2013.

As part of efforts to increase our profile in Trinidad, Tobago, and the Caribbean, WorleyParsons recently committed as a Silver Sponsor in the country's most prestigious and well-attended conference, the Trinidad and Tobago Energy Conference hosted by the Energy Chamber. The conference was considered the "the place to be" for the local and regional energy community. A number of WorleyParsons and INTECSEA existing and potential customers participated as speakers, sponsors, and/or exhibitors, further increasing our visibility and representation with key stakeholders and encouraging business sustainability.

To further strengthen our presence, a senior team from INTECSEA participated both as conference delegates, as well as exhibition representatives on the tradeshow floor. Additionally, a combined WorleyParsons and INTECSEA Caribbean capabilities document was developed for the conference and presented to attendees. The document speaks to our local and global capabilities, and has been designed to leave an accurate impression of the healthy range of services and offerings we have available to our customers. Our Silver Sponsorship included branded Sustainable Project Delivery/EcoNomics info cards in each of the 600+ bags given to attending delegates. Our brands were also featured on conference signs and a PowerPoint presentation, prevalently displayed throughout the conference.

Brian McShane, Mac McKee, and Michelle Lang (Global Marketing and Research Coordinator) represented INTECSEA, with WorleyParsons being represented by Sean Kellman (Location Director Caribbean) and Philip Julien (Director of Caribbean Operations). Philip was also a guest speaker at the conference.

Arctic Operations Handbook JIP

by Benny van der Vegte

In February of 2012 the Arctic Operations Handbook Joint Industry Project (JIP) began with a number of companies (see list on bottom right). INTECSEA is participating through the Delft office using knowledge and input from INTECSEA's worldwide Global Arctic Strategy Team.

The participating companies have the ambition to execute and support operations on a large scale in Arctic areas, for example installation and operation of oil and gas production facilities and pipelines. The term "Arctic" refers to areas where ice, permafrost, and low temperatures may influence offshore operations and field development, such as the Beaufort Sea, the Barents Sea, and the Caspian Sea.

Currently there is no standard for safe operations by service companies in Arctic offshore areas. To support the industry and ensure steps are taken towards minimizing environmental impact by the service capabilities, it was proposed to develop guidelines for such operations. This direction will be focused on dredging, trenching, pipe lay, installation, and decommissioning activities. Detailed design of facilities and equipment is not covered in this JIP as it is already supported through ISO 19906 for Arctic structures.

The development of guidelines and regulations in modern industry is functional (goal based) and depends on methods and technology used, in this case for Arctic operations. As part of the work scope, the JIP has taken the initiative to link with Class Societies, Arctic Governmental Authorities, and International Standards Organizations like ISO and IMO. The objective of the JIP is to carry out the necessary investigations to enable the formulation of guidelines for specific offshore contractors' skills and to contribute to internationally accepted standards and guidelines for Arctic operations. The investigations aim to better understand operational restraints in the Arctic environment and define best practice limitations, such that working seasons can be better assessed and hopefully increased with overall risks reduced.

Reflections on the Arctic Sea © 2008 Ville Miettinen

The project was awarded a subsidy from the Dutch Ministry of EL&I, in the framework of the Maritime Innovation Program. With it, the JIP participants have committed to issue an open source document to ensure that the work from this JIP is offered to the Arctic offshore community for further use. In particular it has the intent to be used as input for the preparation of official standards and guidelines.

The work comprises a GAP analysis on existing standards and guidelines and is currently being followed up by several pilot studies in which certain aspects are being investigated in more detail. Additional research is for instance performed in the Ice Stream, Ice Load, and environmental impact pilot studies. The JIP is expected to be completed by the end of 2013.

The Following companies are participants in the JIP:

- Allseas Engineering B.V.
- Bluewater Energy Services B.V.
- Canatec Associates International Ltd.
- Delft University of Technology
- Deltares
- GustoMSC B.V.
- Heerema Marine Contractors B.V. [Project Coordinator]
- Huisman Equipment B.V.
- Imares
- INTECSEA, The Netherlands
- MARIN
- MTI Holland B.V.
- Royal Boskalis Westminster N.V.
- Shell Global Solutions International B.V.
- TNO

Inside INTECSEA

We have a deep sense of responsibility to our communities, our environment and our people. Each day, employees in INTECSEA offices around the globe are taking part in activities and initiatives that build engagement, enhance relationships with communities, and help build a better future. Below are recent highlights:

INTECSEA Perth - Rottnest Channel Swim
A team of INTECSEA Perth employees participated in the open water swim from Cottesloe Beach to Rottnest (distance of 19.7 km) on February 23, 2013. The group raised over $5,000 for the Starlight children's charity and Silverchain, a charity in Western Australia that provides cancer patients and their families with home nursing and palliative care.

INTECSEA Woking - Comic Relief Week
Employees in the INTECSEA Woking office recently participated in Comic Relief Week (including Red Nose Day), March 11-15, 2013. Comic Relief is a charity which strives to create a world free from poverty, working in both the UK and in the world's poorest countries. Thanks to the generous support and efforts of many, the Woking team was able to donate over $1,300 towards the cause.

INTECSEA Woking - Netball Team
A team from INTECSEA Woking recently participated in a netball tournament which raised nearly $4,700 for the Chase Children's Hospice in Guildford. The team finished strong, especially considering this was their first time playing the game. Well done!

INTECSEA St. John's - Curling: From Pipelines to Hoglines
In March, the INTECSEA St. John's team took on WorleyParsons in a curling fun spiel where INTECSEA took home the gold. Congrats to the team and big thanks to Joe Cocker for designing the shirts for INTECSEA!

INTECSEA Houston - BP MS 150
On April 20-21, seven INTECSEA Houston employees participated in the two-day, 180 mile (Houston to Austin, Texas) bike ride which raised money for those living with Multiple Sclerosis (MS). Congratulations to Team INTECSEA!

Living Pink. Making Strides. Team INTECSEA.

by Dianna Phu

For more information on the American Cancer Society Making Strides Against Breast Cancer program, visit *http://makingstrides.acsevents.org*

Employees from INTECSEA's Houston North Office pulled together a strong showing of financial support for the American Cancer Society's Making Strides Against Breast Cancer 5k Walk on May 11, 2013. Team INTECSEA comprised 29 registered walkers and raised money in excess of $2,250, ranking in the Top 10 of registered companies for online fundraising towards the event (according to the ACS event website's listing of registered companies). The INTECSEA team partnered up with students from a local high school to spread awareness of breast cancer research, treatment and counseling options, and early diagnosis education. The INTECSEA team shirt, "Living Pink", was designed by one of the high school students, Luzdivina Ruiz, and was selected through a vote by the registered walkers from nine other design options submitted by the students.

Among the team's registered walkers was breast cancer survivor, Lisa Phu, sister-in-law to INTECSEA Senior Geologist and Team Captain, Dianna Phu. Lisa was diagnosed in 2008 with stage 2 breast cancer and underwent a mastectomy, followed by chemo and radiation therapy. She has been cancer-free now for 5 years. With the strength of family, the resources available from the American Cancer Society, and the support from groups like INTECSEA, we're "making strides" to improve the treatment of and recovery from this terrible disease.

INTECSEA "Takes it to the Limit" at the 2013 Subsea Tieback Conference & Forum

INTECSEA had a significant presence at the recent Subsea Tieback Conference and Forum in San Antonio, Texas. The event, which was held March 5th-7th at the Henry B. Gonzales Convention Center, is the most subsea-focused conference in the industry and presents a great opportunity to connect with our customers. With over 2,600 attendees this year marked the highest attendance to date for the conference and forum. In keeping with this year's theme, "Take it to the Limit," INTECSEA teams showcased our comprehensive technical and subsea capabilities to the market.

Over two days of sessions, speakers shared knowledge and collective experiences crucial to improving the quality, safety, and economics of the subsea tieback industry. One of the main benefits of the forum is that the sessions are presented in more of a "closed-door" environment in which the media is not allowed. This approach encourages more open conversation about projects, technology development, lessons learned, etc.

When speaking with Randy Seehausen, co-founder and current Treasurer of the Subsea Tieback Foundation, about the difference between Subsea Tieback and other conferences and forums, he stated "The Subsea Tieback (SSTB) Forum screens the best available project presentations in the industry and encourages the presenters to tell their lessons learned: good and not so good. This lends itself to more of a forum or workshop atmosphere as opposed to a conference. This honest project performance reporting is what separates the SSTB Forum from other industry events." He added, "Most people would say that the SSTB Forum is the best the industry has to offer for the subsea business... and the attendance numbers don't lie."

The conference and forum served as great exposure for our subsea processing capabilities, as the INTECSEA-sponsored Worldwide Survey of Subsea Processing Systems Poster was distributed to all attendees.

INTECSEA also hosted an alumni networking reception in which the team was able to reconnect with former employees, many of whom are now our customers. By hosting the event, the recruiting team is hoping to re-open and re-recruit these people (non-customers), as we know their capabilities and organizational "fit." Great job and thanks to Cayce Colley and Michelle Lang for putting the reception together.

Overall, INTECSEA had a great presence at the 2013 Subsea Tieback Conference and Forum - our teams are already gearing up for next year!

Attendees from INTECSEA Houston included (among others) Brian McShane, Ron Ledbetter, Randy Seehausen, Mac McKee, Michelle Lang, Bill Westcott, Gary LeMaire, Zoya Volkova, John Allen, Larry Forster and Cayce Colley (pictured)

INTECSEA and WorleyParsons present at AOG 2013

by Khian Sin Ong

The 2013 Australasian Oil and Gas Exhibition and Conference, known as AOG, was successfully held in Perth February 19-21, 2013, in conjunction with the Subsea Australasia Conference. With a stunning record of over 20,000 international visitors and 450 exhibitors from 20 countries, INTECSEA, co-branded with the WorleyParsons Hydrocarbon sector group, took part in the event with a booth display and the sponsorship of the Safety Session.

A total of five papers were also presented by INTECSEA and WorleyParsons key personnel to showcase our capability and innovative technical solutions in the industry. These included:

- Andrew Campbell (Perth): "Assessing turbidity currents for Canyon Crossing Suitability and practical engineering solutions"
- Larry Parkes (Perth): "Subsea cable 'gassing' phenomenon and steps to mitigate the problem"
- Kirk Mower (Perth): "Agile offshore planning and options analysis"
- Bernard Mackin (Perth): "Efficiency, Innovation, and Sponsorship - Strategies for meeting the demand for subsea talent"
- Richard Voight (Houston) and Scott Bufton (Houston): "To Heat or not to Heat: Is Electric Flowline Heating an Option for my Application?"

Speaking at the AOG Conference, Bernard Mackin, Senior Vice President ANZ offered, "The representation at the AOG has offered an enormous networking and business opportunity to showcase INTECSEA's engineering solutions at our booth and showcase our technical leadership to the industry through the numerous presentations at the Subsea Australasia Conference. The conference was well attended by industry leaders and provided INTECSEA an opportunity to strengthen our brand in the market and relationships with our customers."

INTECSEA staff networking with the customers at the booth

INTECSEA
WorleyParsons Group

GLOBAL FRONTIERS

To contact your nearest INTECSEA office,
visit **intecsea.com/contact-us**