

4th Pipeline Maintenance and Integrity Management for Oil & Gas Industry

12th – 14th of October 2016
Amsterdam, The Netherlands



Understanding major challenges in pipeline integrity and adopting Optimal Maintenance Strategies for Smooth Operations



SPEAKER PANEL

Christophe Romain
Drones Lab Leader
Engie
France

Houssam Sabry
Manager Inspection & Corrosion
Abu Dhabi Gas Liquefaction Company Limited (ADGAS)
UAE

Khaled Faisal Al-Harbi
Stationary Equipment Engineer
Saudi Aramco
Saudi Arabia

Johan Lidstrom
Pipeline Specialist
Swedegas
Sweden

Prof. Stijn Hertelé
Professor
Ghent University
Belgium

Dr. Henry Tan
Professor
University of Aberdeen
UK

Mark Eggleston
Director
Philip Townsend Associates
Belgium

Justin James Abramovich
International Sales Account
Manager for Europe & Asia
PLIDCO, USA

Ruurd Hoekstra
Maintenance Director
Nord Stream
Switzerland

Dr. Giuseppe Giunta
Coordinator, Transmission Lines
System Engineering
Eni
Italy

Bart Koppens
Manager Pipeline Inspection and Integrity
Rotterdam-Rijn Pijpleiding (RRP)
The Netherlands

Romke Bijker
Offshore Advisor & Director
BBL Company/ACRB/Witteveen + Bos
The Netherlands

Mohammad J. Al Qahtani
Pipeline Operations Engineer
Saudi Aramco
Saudi Arabia

Cindy Dirx
Chair of the Pipeliner Foundation
Pipeliner Foundation
The Netherlands

Dennis Keen
Head of Pipeline Integrity
Penspen
UK

Topics to be addressed

- **Vibroacoustic technology** for Pipeline Monitoring
- **Drones and Unmanned aerial vehicles** for pipeline Monitoring
- **External Safety** approach and **Risk** mitigation
- **Risk Based Burial depth** for offshore pipelines
- Controlling **Stress Crack Corrosion (SCC)**
- Improve **safety** by reducing the impact of **external corrosion**
- Protection against
- **Right data** for effective **Integrity** management
- **Asset Integrity Management** systems
- Asset Integrity **Benchmarking** using **Process Safety** parameters

Benefits of attending

- Direct **networking** with selected senior decision-makers from global leading operating companies in Pipeline industry
- Expertise **exchange** of knowledge and experience
- Participation in **thought-provoking Panel Discussions** featuring high-level experts
- Case-studies of best practices in a **business - friendly** environment



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4th Pipeline Maintenance and Integrity Management for Oil & Gas Industry



12th of October
Interactive Workshop

12th – 14th of October 2016
Amsterdam, The Netherlands



Hosted By



15:30 Registration & Welcome Coffee
16:00 Opening Address from the Workshop Leader - Penspen
Dennis Keen
Head of Pipeline Integrity
Penspen, UK

PIPELINE INTEGRITY MANAGEMENT SYSTEM

- 16:15 **The Central Role of Risk Assessment when Developing a Pipeline Integrity Management System**
- Workshop will comprise a series of exercises to be completed by the participants. The exercises will include a simple risk assessment followed by exercises defining how this information is used to identify the measures that can be introduced to develop the design, operation, inspection and maintenance, repair and emergency response.

17:45-
18:30 Closing Remarks from the Workshop Leader,
Coffee and Networking

Prospero Events Group produces and organizes business conferences for the Energy industry in Europe.

Our Mission

Our mission is to provide our clients with the opportunity to exchange strategic information. We are committed to producing innovative and industry tailored conferences dedicated to helping you achieve business excellence and gain the competitive advantage. Our service is about bringing the right people at the same time and place in order to create an opportunity to do business and exchange knowledge through quality business networking with industry top decision makers.

4th Pipeline Maintenance and Integrity Management for Oil & Gas Industry



13th of October
Conference Day One

12th – 14th of October 2016
Amsterdam, The Netherlands



8:30 Registration & Welcome Coffee

9:00 Opening Address from the Chairman

PIPELINE MONITORING TECHNOLOGY

- 9:10 **Vibroacoustic Technology for Monitoring Pipelines**
- Real-time continuous monitoring of pipeline integrity
 - Leak detection
 - Monitor for 3rd party damages
 - Pig tracking
 - Long term monitoring
 - Applications in Upstream/Downstream scenario
- Dr. Giuseppe Giunta
Coordinator, Transmission Lines System Engineering
Eni, Italy

ASSET INTEGRITY MANAGEMENT

- 9:50 **Asset Integrity Benchmarking using Process Safety Parameters**
- Process Safety benchmarking using CCPS standards (American Institute of Chemical Engineers)
 - Asset Integrity and inspection standards module
 - Applicability to Pipeline Maintenance and Operation
 - How benchmarking can improve pipeline safety and cost

Mark Eggleston
Director
Philip Townsend Associates, Belgium

10:30 Coffee & Networking Break

- 11:00 **The Lessons Learnt from 16 Years of Pipeline Integrity Management System Audits**
- Management System Audits performed by Penspen since 2000
 - History and methodology
 - Benchmarks Used
 - Results
- Dennis Keen
Head of Pipeline Integrity
Penspen, UK

SAFETY, RISK & RELIABILITY MANAGEMENT

- 11:40 **External safety approach & the risk mitigation measures of RRP**
- History and background
 - Failure mechanism and failure frequency
 - Principles Quantitative Risk Analysis
 - Risk Situation
 - Mitigating measures
 - Strict supervision
 - Practical example
- Bart Koppens
Manager Pipeline Inspection and Integrity
Rotterdam-Rijn Pijpleiding (RRP), The Netherlands
- 12:20 Lunch Break
- 13:20 Coffee and Networking Break
- 13:50 **Swedegas PICO-system**
- Manage indications from direct assessment
 - Manage indications from ILI
 - Risk areas
 - PICO in different stages
- Johan Lidstrom
Pipeline Engineer
Swedegas, Sweden

- 14:30 **Innovative Approaches to Preserve Pipelines During Low Demand**
- Flow Optimisation
 - Pipelines Scraping
 - Corrosion Inhibition and Biocide Injections
 - Cathodic Protection (CP) and Coatings
 - Washout protections and Encroachments

Mohammad J. Al Qahtani
Pipeline Operations Engineer
Saudi Aramco, Saudi Arabia

- 15:10 **Controlling Stress Crack Corrosion**
- Main causes of SCC
 - Choosing materials not susceptible to SCC at design and construction phase
 - Control of Stress
 - Control of Environment

Houssam Sabry
Manager Inspection & Corrosion
Abu Dhabi Gas Liquefaction Company Limited (ADGAS), UAE

15:50 Coffee and Networking Break

OFFSHORE PIPELINES

- 16:20 **Nord Stream: 5 Years of Reliable Offshore Pipeline Operations**
- Nord Stream as a pioneer: successful transition from project to operations company
 - Pipeline integrity management strategy: long-term plan and risk-based approach
 - Regular maintenance and inspection for safe operation of an offshore pipeline
 - Continuous innovation: new pipeline repair clamp

Ruurd Hoekstra
Maintenance Director
Nord Stream, Switzerland

BRIDGING THE KNOWLEDGE GAP

- 17:00 **Knowledge Transfer and Education within the Pipeline Industry**
- Education for Master for Pipeline Technology
 - Initiatives to attract young professionals to our industry
 - Filling the Gap - What to do with Generation X
 - Discussion - Best practices from participants

Cindy Dirx
Chair of the Pipeliner Foundation
Pipeliner Foundation, The Netherlands

- 17:40 **Panel Discussion**
How to address the generation gap - gen x, gen y etc.
- How companies are dealing with the generation gap - effort put in to attract young professionals
 - Efforts to improve skills of gen x
 - Cooperation between universities and oil & gas industry
 - Talent development

Moderator:
Cindy Dirx - Pipeliner Foundation, The Netherlands

Panelists:
Stijn Hertele - Ghent University, Belgium
Khaled Faisal Al-Harbi - Saudi Aramco, Saudi Arabia
Bart Koppens - Rotterdam-Rijn Pijpleiding, The Netherlands
Mark Eggleston - Philip Townsend Associates, Belgium
Dr. Henry Tan - University of Aberdeen, UK

18:20 Closing Remarks from the Chair & Wrap up of Day One

18:30-19:30 Cocktail Reception

4th Pipeline Maintenance and Integrity Management for Oil & Gas Industry



14th of October
Conference Day Two

12th – 14th of October 2016

Amsterdam, The Netherlands



8:30 Registration & Welcome Coffee

9:00 Opening Address from the Chairman

OFFSHORE PIPELINES

9:10 Risk Based Burial Depth (RBBB) and offshore pipeline integrity management

- What to do if an existing submarine pipeline is non-compliant with the burial requirements ?
- Quantify and qualify the risk
- The RBBB approach assesses the risk due to (1) marine hazards (2) seabed mobility & (3) free spans
- Use of actual shipping data based on AIS records, and long term incident databases
- Cases studies of the RBBB method applied on submarine pipelines
- The application of the RBBB approach with the overall asset Risk Based Inspection approach

Romke Bijker

Offshore Advisor & Director

BBL Company/ACRB/ Witteveen+Bos, The Netherlands

DRONES FOR PIPELINE MONITORING

9:50 Drones and Unmanned Aerial Vehicles (UAV) for Real Time monitoring of Pipelines

- Integrating drones and UAV into pipeline monitoring operations
- Advantage of monitoring in remote areas which are difficult to access for human
- Improves pipeline monitoring at reduced costs
- Monitor pipelines over long distances

Christophe Romain

Drones Lab Leader

Engie, France

10:30 Business Card Exchange and Coffee Break

This time slot is an opportunity dedicated specifically to strengthen your business connections by sharing your contact information with the industry peers present

CRACKS, LEAKS & CORROSION MANAGEMENT

11:00 Alternative Methods of Pipeline Repair

- Hot tapping, line plugging and use of mechanical repair sleeves
- Definition of a repair sleeve according to API 6H/6X Specification on End Closures, Connectors and Swivels
- American Code Requirements that permit use of a mechanical repair sleeve and its design methodology
- Determining repair sleeve requirement including diameter, length, pressure, temperature, seal selection and body material.

Justin James Abramovich

International Sales Account Manager for Europe & Asia
PLIDCO, USA

11:40 Improve Safety by Reducing the Impact of External Corrosion on Pipelines

- Proactive prevention of corrosion defects from growing to a size that ultimately impacts a pipeline's structural integrity
- Continuous assessment to identify & address where corrosion has occurred, is occurring or may occur
- Repairing corrosion defects
- Correcting the causes of corrosion

Prof. Stijn Hertelé

Professor

Ghent University, Belgium

12:20 Lunch Break

13:20 Coffee and Networking Break

ASSET INTEGRITY MANAGEMENT

13:40 Panel Discussion

Challenges of obtaining the right data for effective integrity management

- Data processing and data management as key areas of technology development
- Optimisation of data management
- Difficulties in differentiating between relevant vs irrelevant data
- Utilization of "digital data" for a comprehensive and flexible platform as support throughout pipeline lifecycle
- Effective analysis leading to reduce operational costs and risk of failure

Moderator :

Mark Eggleston - Philip Townsend Associates, Belgium

Panelists:

Dr. Henry Tan - University of Aberdeen, UK

Dr. Giuseppe Giunta, Eni, Italy

Christophe Romain, Engie, France

Bart Koppens - Rotterdam-Rijn Pijpleiding, The Netherlands

Stijn Hertele - Ghent University, Belgium

Dennis Keen - Penspen, UK

14:20 Making the Best Use of Available Pipeline Data for Integrity Management

- Standard methodology for obtaining, analyzing and application of integrity data;
- Integrity data in pipeline maintenance decision making;
- Overcoming issues due to the lack of integrity data standard;
- Bayesian network modelling;
- Integrating industry experiences with real-time inspection data and corrosion/erosion knowledge.

Dr. Henry Tan

Professor

University of Aberdeen, UK

15:00 Inspection of un-scrappable pipelines under road crossings

- Revalidating (Test and Inspection T&I) of un-scrappable pipelines under road crossings is a challenge
- Revalidation solution for this challenge which is the Guided Wave Inspection Technology
- Guided Wave Inspection Technology can be the best and optimum revalidation (test and inspection) method, based on the pipeline and road conditions and specification
- Test Assessment and Evaluation

Khaled Faisal Al-Harbi

Stationary Equipment Engineer

Saudi Aramco, Saudi Arabia

15:40 Closing Remarks from the Chair & Wrap up of Day Two

15:50 Afternoon Coffee and Networking

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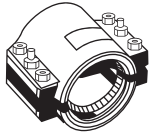
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We have over 60 years of experience helping our clients develop new energy assets by providing customised engineering and total program management services, and by assisting them with the rehabilitation of existing energy assets to maximise productivity and efficiency.

Penspen was founded in the UK in 1954 as Spencer & Partners and has grown to become a global organisation with major offices in London, Aberdeen, Houston, Villahermosa, Abu Dhabi, Bangkok and Singapore.

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PIGGING PRODUCTS & SERVICES ASSOCIATION The Pigging Products and Services Association (PPSA) was formed in 1990 and has 120+ members representing the pigging industry from over 20 countries around the world.

PPSA plays a major role in providing information and sourcing pigging equipment and services for the pipeline industry and responds to hundreds of enquiries each year through its web site www.ppsa-online.com. It provides a free technical information service and runs seminars on pigging.

Its aims are, To promote the knowledge of pigging by providing a channel of communication between the members themselves, and with users and other interested parties.

EUROPEAN GAS HUB European Gas Hub is an online information platform for analysis and forecasts of the European natural gas sector. We identify and source market reports and analysis of the European gas market. We cover natural gas, LNG, coal, and electric power.



EUROPEAN GAS HUB
YOUR GATEWAY TO THE EUROPEAN GAS INDUSTRY

CEDIGAZ Cedigaz is an international association dedicated to natural gas information, created in 1961 by a group of international gas companies and the Institut Français du Pétrole (IFP Energies Nouvelles).

It is based near Paris. Cedigaz has more than 100 members in 40 countries. Cedigaz' goals consist in gathering, compiling and analysing worldwide economical information on natural gas, LNG and unconventional gas in an exhaustive and critical way. The information that consist in gathering, compiling and analysing worldwide consist in gathering, compiling and analysing worldwide economical information on natural gas, LNG and unconventional gas in an exhaustive and critical way. The information that Cedigaz deals with touches on all activities and aspects of the gas industry (exploration, reserves, production and processing, transportation, trade, storage, distribution and consumption of natural gas). Cedigaz diffuses the information in its periodic bulletins, surveys and online databases.

Website: www.cedigaz.org