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

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

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 Dirkx
Chair of the Pipeliner Foundation
Pipeliner Foundation
The Netherlands

Dennis Keen
Head of Pipeline Integrity
Penspen
UK
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.
PIECE 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

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

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 Hoeckstra
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 Dirkx
Chair of the Pipeliner Foundation
Pipeliner Foundation, The Netherlands

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 Dirkx - 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

Closing Remarks from the Chair & Wrap up of Day One

Cocktail Reception
Drones and Unmanned Aerial Vehicles (UAV) for Real Time Panel Discussion
Determining repair sleeve requirement including Utilization of “digital data” for a comprehensive and Continuous assessment to identify & address where The RBBD approach assesses the risk due to (1) marine The application of the RBBD approach with the overall asset American Code Requirements that permit use of a Bayesian network modelling; Data processing and data management as key areas of Integrating drones and UAV into pipeline monitoring Quantify and qualify the risk Improve Safety by Reducing the Impact of External Advantage of monitoring in remote areas which are difficult 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

Risk Based Burial Depth (RBBD) 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 RBBD 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 RBBD method applied on submarine pipelines • The application of the RBBD approach with the overall asset Risk Based Inspection approach

Risks Based on 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.

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.

Inspection of un-scrapable pipelines under road crossings
Revalidating (Test and Inspection T&t) of un-scrapable 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

CRACKS, LEAKS & CORROSION MANAGEMENT
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 Hertele
Professor
Ghent University, Belgium

Dr. Henry Tan
Professor
University of Aberdeen, UK

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

12:20 Lunch Break
13:20 Coffee and Networking Break
Penspen is an energy services company that is committed to shaping the delivery of tomorrow’s energy by helping its clients engineer and operate their assets across the entire project lifecycle, maximising returns and delivering technical excellence.

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