

UKOPA Work in Progress Report Review of 2004 Activities

Activity	Progress	Key Contacts
ACDS MHSC Working Group on Pipelines	<ul style="list-style-type: none"> • R McConnell's involvement in HSE IFRLUP P5 succeeded in ensuring that the HSE pipeline risk assessment methodology had received due attention, and was recommended for inclusion in P6. • ACDS support for UKOPA proposals to progress the technical work programme following withdrawal of HSE due to resource constraints. • Support for the development and drafting of a codified approach for the application of pipeline risk assessment for LUP advice for publication as a supplement to BS PD 8010 and IGEN TD/1. 	M Harrison, P Davis, P Brown, R McConnell, J Haswell
Pipeline Emergency Plan Testing	<ul style="list-style-type: none"> • Successful initiation of ACPO Accredited PERO course with Sembcorp Utilities. • Following HSE withdrawal of amendments to PSR, completion of UKOPA documents recording i) work completed with respect to consultation, and i) identification of best practice. 	Emergency Planning Working Group
H,S&E Incidents	<ul style="list-style-type: none"> • Informal reports and discussion on incidents occurring in member companies. • Sharing of knowledge and learning. • Sharing good practice on HS&E management initiatives. 	R McConnell, P Jones
Risk Based Land Use Planning	<ul style="list-style-type: none"> • Strategic input to ACDS MHSC Working Group on Pipelines technical agenda on behalf of UKOPA – Technical work plan and codification of pipeline risk assessment. • Development of tool for prediction of probability of failure due to 3rd party damage. • Maintenance of database of developments in the vicinity of pipelines. • Proposals for of risk assessment of gasoline pipelines. 	R McConnell Risk Assessment Working Group
UKOPA Pipeline Fault Database	<ul style="list-style-type: none"> • Contract for update, development and maintenance of database for the period 2004 – 2005 awarded to Advantica. • Implementation of web-based updating and reporting. • Completion of updated mechanical damage limit state and failure frequency prediction tool by Advantica. 	R Ellis, Fault Data Management Group

3 rd Party Infringements	<ul style="list-style-type: none"> • Collation and assessment of UKOPA data - 3rd party infringements. • Presentation to and collaboration with HSE in relation to use of database in liaison with contractors/utilities and reduction in infringement rate. • One call systems. 	M Harrison, 3 rd Party Infringement Work Group.
BS PD 8010	<ul style="list-style-type: none"> • UKOPA support for publication of BS PD 8010. • Support for proposal for development of code supplement relating to codified approach for the application of pipeline risk assessment to LUP. 	J Haswell, P Docherty
New Initiatives/ Formal Consultations	<ul style="list-style-type: none"> • Railtrack Leases, Pipeline Rating Revaluation , Pipeline Emergency Repair Club, Safe Isolation of Plant. 	R Ellis, P Davis, D Cullen, P Jones, S Kennedy

Highlights:**Technical Presentations to UKOPA:**

Pipeline Risk Based Assessment Management Systems, Cees Voermans, Shell Global Solutions.

Sembcorp GIS Systems, Paul Docherty, Sembcorp Utilities.

Overview of PIG – Organisation and Activities, R Glenister, Pipeline Industries Guild.

Pipeline Integrity Systems, Salvador Vasquez, TUV NEL.

Corrosion Growth and the Role of Inspection, Paul Clayton and Julia Race, GE Energy.

Material Evaluation without Service Interruption, Paul Clayton and Julia Race, GE Energy.

Preliminary Review of CONCAWE Data for Application to UK Pipelines, J Haswell.

AC Corrosion of Pipelines – Two Case Histories, Chris Movely, HSE.

HSE's 5-Year Strategic Plan for Workplace Health & Safety to 2010 and Beyond, Issues for the Pipeline Industry, Steve Chatfield, HSE.

Presentations by UKOPA:

UK Pipelines – Safe Management and Operation, The need for Skills, to the Energy and Utility Skills Council, J Haswell

UKOPA 3rd Party Infringement Database, to PIG Technical Seminar, by M Harrison

Reviews/Updates:

Review of HSE Pipeline Consequence and Failure Frequency Prediction Models for P5 – R McConnell.

Initiatives:

Development of UKOPA database on 3rd Party Infringements (M Harrison).

Development of Supplements to BS PD 8010 and IGEM TD/1 Pipeline Codes – Application of Pipeline Risk assessment to LUP – RAWG.

Pipeline Emergency Materials and Equipment Register (D Cullen).

Coordinated input to Pipeline Rating Revaluation (P Davis).

Formal publication of work completed as part of consultations relating to amendments to PSR 96 (now withdrawn), to be used as references for future work relating to the European Pipeline Safety Instrument – EPWG.

UKOPA Prize 2004:

The UKOPA prize for the best academic achievement in the MSc in Pipeline Engineering at the University of Newcastle upon Tyne was awarded in 2004 to Paul Robinson and Amer Jaboob.

UKOPA Representation on External Committees:**ACDS MHSC Working Group on Pipelines**

- M Harrison (representing non-natural gas pipeline operators).
- P Brown (representing natural gas pipeline operators).
- P Davis (representing gasoline pipeline operators).
- R McConnell (UKOPA nominated independent).



United Kingdom Onshore Pipeline Operators' Association

J Haswell (Secretary, on behalf of UKOPA).

CAPEPLG (HSE)

N Jackson.

BSI PSE/17/2 (PD 8010)

J Haswell.

P Docherty (Sembcorp).

Safe Isolation of Plant and Equipment (HSE)

S Kennedy.

UKOPA Working Groups:

Emergency Planning Working Group

J Haswell (Chairman, PIE).

K Thomas (Huntsman).

M Thomson (BP).

N Jackson (Transco).

T Gillard (Shell UK).

R White (Total).

Risk Assessment Working Group

R McConnell (Chairman, UKOPA).

R Ellis (Shell UK).

N McNaughton (BP).

N Jackson (Transco).

P Davis (BPA).

J Haswell (PIE).

Pipeline Fault Data Management Group

R Ellis (Chairman, Shell UK).
R McConnell (UKOPA).
R Espinar (BP).
R Owen (Transco).
P Rycroft (HSE).
J Haswell (PIE).

3Rd Party Infringements

M Harrison (Chairman, Huntsman).
P Brown (Transco).
S Chatfield (HSE).

Future Plans**Ongoing Activities and Initiatives:**

Continued close working with the Regulator in development to and amendment of safety legislation.

Involvement in the development of European Legislation (PIMS, E-PIMS, Emergency Plan Testing, Land use Planning, Provision of Information to the Public.

Liaison with European Pipeline Organisations (Pipeline Federation, Marcogaz, Ethylene Operators Forum).

Development and enhancement of the UKOPA Pipeline Fault Database.

Development of the UKOPA Pipeline 3rd Party Infringement Database.

Continued support for and involvement in ACDS MHSC Working Group on Pipelines (including support for involvement in Product 6 and 7 of the HSE Implementation Project for the Fundamental Review of land Use Planning Project).

Preparation of supplements to BS PD 8010 and IGEM TD/1 for a codified approach to the application of pipeline risk assessment for LUP.

2005 Work Programme:

Completion of Approved and Resources Programme of Pipeline Risk Analysis Work:

- 1 Ground Movement – location-based impact on pipeline failure frequency.
- 2 Predictive Modelling:
Apply Limit State Function developed by Advantica for UKOPA to failure frequency predictions for 3rd party damage.

- 3 Mitigation Fault Tree Analysis.
- 4 Ethylene pipeline LUP Zones.
Recalculation of LUP zones using revised methodologies.
- 5 Spiked crude pipeline risk assessment.
Joint work with BP – calculation of LUP zones using revised methodologies.
- 6 Gasoline Pipeline Risk Assessment.
Develop hazard factor and risk assessment methodology for HSE and future reference.
- 7 Codified Approach – Application of Risk Assessment to LUP.
Development of supplements to pipeline codes BS PD 8010 and IGEM TD/1.

PERO Update Courses – Continued support and sponsorship.

Pipeline Emergency Materials and Equipment Register.

Expansion of UKOPA Pipeline Infringement Database.

Continued involvement in Rating Revaluation Forum.

UKOPA Paper – Pipeline Fatigue Analysis.

2006 Work Programme

Pipeline failure frequency prediction software development.

Support launch of BS PD 8010 and IGEM TD/1 code supplements.

Future Initiatives

Development of a Pipeline Risk Assessment Handbook.

Management of web-based pipeline fault and infringement databases.

Environmental Impact Assessment – Development of a risk based approach.