

**Notes of Risk Assessment Working Group Meeting held on 12
December 2011 at Newcastle University**

Final as approved by RAWG

RAWG/11/035

Present:-

Neil Jackson	-	National Grid (chairman)
Roger Ellis	-	Shell
Barry MacKay	-	Scotia Gas Networks
Phil Hall	-	BP Grangemouth
Graham Goodfellow	-	GreyStar UK
Mike Acton	-	GL Noble Denton
Neil Macnaughton	-	Ineos
Robert Neil	-	Ineos
Richard Espiner	-	BP
Ian Gathergood	-	BP
Marc Harzenmoser	-	SwissGas
Rod McConnell	-	Independent Consultant

Robert Neil, Ineos is taking over from Neil Macnaughton, who is moving to BP, and Ian Gathergood BP has taken over from Phil Hall. Marc Harzenmoser is joining UKOPA on behalf of Swiss gas operators. The chairman welcomed the new members.

1 Apologies

Peter Davis	-	BPA
Grant Rogers	-	Wales & West Utilities
Nancy Harmer	-	OPA
Robert Owen	-	National Grid
Barry Dalus	-	Northern Gas Networks
Jane Haswell	-	PIE

2 Notes of last meeting

There were no comments, and the notes of the meeting were approved.

Action 1 – Note of the March 2011 and September 2011 to be issued to RAWG membership.

3 Matters arising

Action 1 – Notes of March meeting

Complete.

Action 2 – GL Noble Denton survey on fixed wing vs helicopter aerial surveillance
Mike Acton has received responses from all but 3 participant companies (Wales & West, Total and Sabic). GLND will email these companies stating that if no objections are received by the end of the week, permission will be deemed to be granted as agreed by RAWG.

Action 2 – GLND to email outstanding 3 participants stating permission will be deemed if objections not received this week.

Action 3 – Geoff Leach presentation on man-made ground movement to HSE/HSL.

Complete. Geoff Leach presented at meeting on 2nd November. See item 5.

Action 4 – Neil Jackson to investigate legal aspects locating new wind farms

Complete. NG legal department have confirmed that there is no specific legislation that covers this situation. Members suggested that PSR 15 and HASAW would apply in the event of pipeline damage. Discussed later under item 11.

Action 5 – Neil Jackson to raise the issue of location of new wind farms near pipelines with Tony Hetherington of HSE

Complete. Issue raised at main UKOPA meeting. Discussed later under item 11.

Action 6 – Jane Haswell, Mike Acton and Graham Goodfellow to develop a proposed programme for Update to TD/2 for approval by RAWG

Discussed under item 6.

Action 7 – Neil Jackson to arrange a date for a meeting with HSE/HSL to agree the programme to update TD/2 following approval by UKOPA RAWG.

Complete. Meeting with Peter Harper held after the main UKOPA meeting in October. Peter Harper accepted that, due to public comment timescales, TD/2 cannot be published until the end of 2012.

Action 8 – Marked-up version of TD/2 to be prepared incorporating amendments already agreed and indicating areas where revisions were required.

Complete. See item 6.

Action 9 – Rod McConnell to provide complete dataset from the new fault database to GLND and Penspen.

GLND have received the full dataset for use in the depth of cover analysis. Penspen have the fault dataset to end 2009 and have been informally advised that there are no additional fault data points in 2010.

Action 3 – Rod McConnell to confirm that no additional faults have been received in 2010.

Action 10 – GLND to update depth of cover analysis including investigation of different curve fits, for both the full dataset and an appropriate shorter period (20, 30 or 40 years).

Complete. Discussed further under item 9.

Action 11 – Graham Goodfellow to supply information on pipeline damage statistics to Rod McConnell for inclusion in the 2010 report.

Complete. Data on Weibull fits added to draft fault report.

Action 12 – Jane Haswell to reconvene Dent Group and invite UKOPA companies to nominate representatives

No further progress from last meeting.

Action 4 – Neil Jackson to discuss with Jane Haswell and circulate request for nominations to main UKOPA meeting.

*Action 13 – Jane Haswell to prepare submission to UKOPA Management Council to request funding approval for proposed work on fatigue assessment of dents (SCFs) - **Complete.***

Action 14 – Mike Acton and Robert Owen to prepare a final version of the proposal for risk ranking of pipeline sleeves (including cost breakdown) for submission to the UKOPA Management Council for approval.

Complete. Proposal issued on Friday 9th December so not reviewed by members prior to meeting.

Action 5 – Members to review proposal and return comments to Neil Jackson and Mike Acton

Action 15 – Neil Jackson to circulate draft response on impact assessment of the proposed inclusion of gasoline in PSR to RAWG members for comment.

Complete. Peter Davis has issued the response to HSE.

Action 16 – Barry Dalus to issue requests for proposals for calculation of emergency planning distances to GLND (natural gas) and Rod McConnell (other fluids).

Ongoing. RAWG agreed that a common approach by all operators would be preferable but that it was for EPWG to decide what that approach was before RAWG would support with methodology/calculations.

Action 6 – Neil Jackson to discuss getting EPWG to agree a common philosophy with Barry Dalus.

4 HSE “Issues of Concern” update

Neil Jackson described efforts to reach agreement on the wording of a joint statement which HSE plan to issue to local planning authorities for guidance regarding the approach and misuse of risk assessment as set out in TD/2 and PD 8010 Part 3 in land use planning cases. However this had proved difficult and HSE are will now issue the guidance without endorsement from UKOPA. The final version is a letter signed by J Murray (RAWG-11-033) which has no mention of UKOPA.

5 Feedback from Meeting with HSL on 2 Nov 2011

Jane Haswell and Rod McConnell met with Zoe Chaplin at HSL – see RAWG/11/032. Though useful, it was not as productive as earlier meetings, and a more structured liaison with HSE/HSL is proposed for future meetings.

6 Review of work programme to update TD/2

Jane Haswell has issued a program for the update to TD/2 and progressed revision of Appendix 4 (Failure Frequencies). Peter Harper has sent a list of comments on TD/2 – extensive revisions to Appendix 3 (Summary of HSE LUP Methodology) will require further discussion with HSE as they extend current published guidance on ALARP by introducing the term “trivial risk”.

Action 7 – Neil Jackson agreed to set up a review meeting for progressing the work on updating TD/2.

Action 8 – Neil Jackson agreed to set up a meeting with HSE to discuss their detailed proposed changes to TD/2.

7 Updating of FFREQ

Neil Jackson described the conclusions of a telephone conference to review the required updating of the damage distributions and hit rates in FFREQ. FFREQ is still the preferred program for 3rd party failure rates. GL Noble Denton are continuing to review how FFREQ can be updated.

8 Slabbing

Neil Jackson described the recent letter from HSE (RAWG-034) and letter from HSL to HSE along with comments on GL Noble Denton work (RAWG-036). HSE panel have now agreed that risk reduction factors of 0.15 for concrete slabbing and 0.125 for slabbing + marker tape are applicable for LUP assessments provided an accepted code for slabbing design is agreed. The meeting agreed that the GLND reduction factors should be included in the updated version of TD/2.

Action 9 - Graham Goodfellow agreed to ask Andy Young to produce an initial estimate of the work required to produce a UKOPA code for slabbing design.

9 Depth of Cover

Mike Acton described the latest report from GLND report 10074 Draft 4 dated 30 November 2011 (RAWG-11-037). They are now able to assess hit rates for the last 20 years.

Action 10 - GLND to re-issue the depth of cover report with Fig 4 normalised at 1.1 m rather than average depth 1.4 m, and update the matching hit rate values included in Executive Summary. RAWG members are then asked to make any final comments before issue to HSE. The new curve will then be included in the update to TD/2.

10 Fault Reporting and Database

Rod McConnell gave a brief update on the Fault database. Updated versions of fault data have been sent to HSL and GLND. The 8th leak report up to end 2010 has now been issued. A number of new contacts for fault data have been nominated by participating companies.

Action 11 - Roger Ellis agreed to convene a Fault Database Management Group meeting in Q1 2012.

11 Wind Turbines Meeting 6 October

Neil Jackson described the meeting on Wind Turbines (RAWG/11/031), and the work done by MMI for HSE. He suggested it would be helpful to publish a report (e.g. IPC 2012 in Calgary) on the risk assessment work on wind turbines as they affect buried pipelines.

Action 12 - Graham Goodfellow agreed to discuss the possibility of a joint paper with Bob Andrews (ex BMT Fleetech, now MACAW) and specific RAWG members.

12 AOB

Neil Macnaughton described information on the Jaipur vapour cloud explosion (VCE) which occurred when an in-plant pipeline failed - he suggested this mode may be applicable to cross-country pipelines. Rod McConnell described HSL CFD

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work (unpublished) which showed that potential consequences of a VCE in a populated area could be very severe, but that the risk was one to two orders of magnitude lower than the risks from pool fires, and so are not significant for LUP zone assessments.

13 Date of Next Meeting

22nd March 2012 at Ambergate.

14 UKOPA Prize Presentation

Neil Jackson subsequently presented Michael Uloko (Penspen) with the 2012 UKOPA prize and plaque.

R A McConnell
16 December 2011
UPDATED March 2012

Table of Actions		
No	Actions	By
1	Rod McConnell to ensure updated notes of the March and September meetings are issue to RAWG membership.	RMcC
2	GLND to email outstanding 3 participants stating permission will be deemed if objections not received this week.	MA
3	Rod McConnell to confirm that no additional faults have been received in 2010.	RMcC
4	Neil Jackson to discuss reconvening the Dent Group with Jane Haswell and circulate request for nominations to main UKOPA meeting.	NJ
5	Members to review sleeve ranking proposal and return comments to Neil Jackson and Mike Acton.	All
6	Neil Jackson to discuss getting EPWG to agree a common philosophy with Barry Dalus.	NJ
7	Neil Jackson agreed to set up a review meeting for progressing the work on updating TD/2.	NJ
8	Neil Jackson agreed to set up a meeting with HSE to discuss their detailed proposed changes toTD/2.	NJ
9	Graham Goodfellow agreed to ask Andy Young to produce an initial estimate of the work required to produce a UKOPA code for slabbing design.	GG
10	GLND to re-issue the depth of cover report with Fig 4 normalised at 1.1 m rather than average depth 1.4 m, and update the matching hit rate values included in Executive Summary.	MA
11	Roger Ellis agreed to convene a Fault Database Management Group meeting in Q1 2012.	RE
12	Graham Goodfellow agreed to discuss the possibility of a joint paper with Bob Andrews and specific RAWG members.	GG