

UKOPA Fault Database Management Group

Minutes of Meeting (DRAFT)

Date 10th September 2003

Present:

Neil McNaughton	BP
Richard Espiner	BP
Roger Ellis	Shell
Rod McConnell	ABB
Jane Haswell	PIE
Robert Owen	Transco
Neil Jackson	Transco
Clive Ward	Advantica
Dave Browne	Advantica (am only)
Peter Davis	BPA (pm only)
Andrew Francis	Advantica (item 4 only)
Apologies	Peter Buckley (HSE), Ken Thomas (Huntsman)

Item 1: Membership changes

Neil Jackson introduced Robert Owen who will represent Transco at future meetings of FDMG.

There was no representative from Powergen. Roger Ellis to confirm status.

Terms of Reference: an updated version was distributed with the agenda, this was noted. All the items listed in the table accompanying the TOR would be discussed under subsequent agenda items.

Item 2: Application of the database to all MAHPs: JH Report

This report had been submitted to HSE some months ago. Jane described discussions with HSE and the feasibility of carrying out statistical tests to support utilising the UKOPA fault data for all MAHP's. During discussion between members it was noted that drawing inferences from sparse data would continue to be difficult but that the UKOPA fault database undoubtedly gave the best fault and failure history representation of UK MAHPs. It was agreed that Jane and Rod should review the position and recommend a way forward.

Item 3: Pipeline failure data report 2002 and publishing

Advantica presented key points from the draft 2002 Product Loss Incident Report and invited comments before its release. A number of points were covered including:

- Classification of the 2001 fault, how should this be classified to avoid raising concerns?
- Internal SCC and potential for a new category 'internal cracking due to town gas'
- Changes to UKOPA logo
- Consistency of dates
- Contents of table 2.1.2, could this include exposure by product?
- Consistency with CONCAWE terminology
- Define MAHP and refer to PSR 1996

- Treatment of faults and exposures prior to 1962
- Table 3 – ‘full bore’ ruptures
- More detailed summary (discussed, but no changes will be made)

Advantica (Dave Browne) agreed to incorporate the changes requested in a revised draft that would be circulated to members within 2 weeks of the meeting. [Post meeting note: one of the changes (to the Transported Products table) revealed some minor discrepancies in the data belonging to one of the members which will be explored before the next interim report.] Members will review revisions before the final version is submitted for publication on the UKOPA web site.

There was brief discussion of the term ‘full bore’ ruptures. HSE may be using a different interpretation and a further category might be warranted for UKOPA, to cover those incidents where a dimension of the rupture is larger than the full bore of the pipe. Advantica agreed to investigate the 7 incidents concerned and report back to Rod McConnell.

The plan was to resolve these issues and publish the failure data to the end of 2002 by mid-October 2003 via the UKOPA website. Advantica should send the finished report in .pdf format to the UKOPA secretary Phill Jones.

The issue of access to the master database was discussed. A preference was expressed for this to become accessible to members, and to contractors working on UKOPA research projects, under appropriate confidentiality arrangements. As an interim measure, Advantica will respond to requests on a case-by-case basis. Advantica will propose ways in which the data may be made more accessible.

Item 4: Comparison of predictive models and proposal to improve the fracture mechanics modelling of mechanical damage based on the historical work by Advantica and work by WS Atkins for HSE.

Peter Davis joined the meeting for the next agenda item.

Andrew Francis, Advantica, joined the meeting to clarify the purpose of the proposed work on mechanical damage modelling. (Previous meetings had covered the background and extensive discussion had taken place. This information is not covered here.) The proposal is for two phases, budget figures of £40K for phase 1 and £250K for phase 2. After discussion it was agreed that the need for the work still existed, and that Advantica should modify its proposal addressing only phase 1. It was requested that the proposal should ensure that the precise deliverables from the work and their benefit are made transparent, together with how the costs were derived. In particular the end deliverable in addition to the limit state equation should include look up tables which define the failure frequency for a range of typical UKOPA pipeline population, covering pipeline diameter, wall thickness and pressure. The end result is to generate a predictive model, which encompasses the best of the Atkins and Advantica historical work

Item 5: Addition of other pipelines Development of the proposal for a risk screening tool for applying to pipelines

Jane Haswell had prepared a briefing note on the risk screening tool for UKOPA which Rod McConnell is to address as part of work for the Risk Assessment Work Group.

Item 6: Database improvements

There was some discussion of the process of data collection. During the gathering phase, in preparation for the 2002 report, two of the members had mislaid their data and others had difficulty using the software because they use it so infrequently. It was noted that Advantica had recently completed a previous action to prepare and distribute help instructions for using the member software, however it was acknowledged that the process could still be improved. A specific request was made to provide members with a printable Excel version of the member data held by Advantica, prior to them submitting annual updates.

Advantica are to ensure that individual members had each got a copy of the data they had submitted to the end of 2002.

Advantica agreed to put forward suggestions that would make the process of data maintenance more effective.

Item 7: Contract

It was confirmed that there is still no formal contract in place covering the work being performed by Advantica and that this needed to be progressed. Advantica submitted a draft contract for the FDMG management and a separate licensing agreement to Roger Ellis, immediately following the meeting. [Post meeting note: both drafts are now being progressed between RE and Advantica]

Item 8: Ethylene pipeline blow down study by IC/SGSI and way forward

The paper has been accepted by I Chem E and will be published shortly. Advantica had been advised that the fracture mechanics work should be put on hold as the problem was now to be addressed using consequence models at lower pressures.

Summary of Actions

1. Roger Ellis to contact Powergen to confirm representation
2. Jane Haswell / Rod McConnell to review status of JVH report on MAHP applicability to all pipelines, and recommend a way forward.
3. Advantica to make requested changes to the 2002 draft report and circulate to members.
4. Members to provide feedback on revised report to Advantica (D Browne)
5. Advantica to investigate details of 7 full bore ruptures and provide information to Rod McConnell
6. Advantica to respond to requests for data access on case-by-case basis
7. Advantica to provide cost proposal for improvements to the database that will improve data access and maintenance.
8. Advantica to submit revised proposal on mechanical damage modelling.
9. Contract and license agreements to be progressed by Roger Ellis / Advantica.

Next meeting

Proposed 24th March 2004, Loughborough.

Clive Ward
8th October 2003