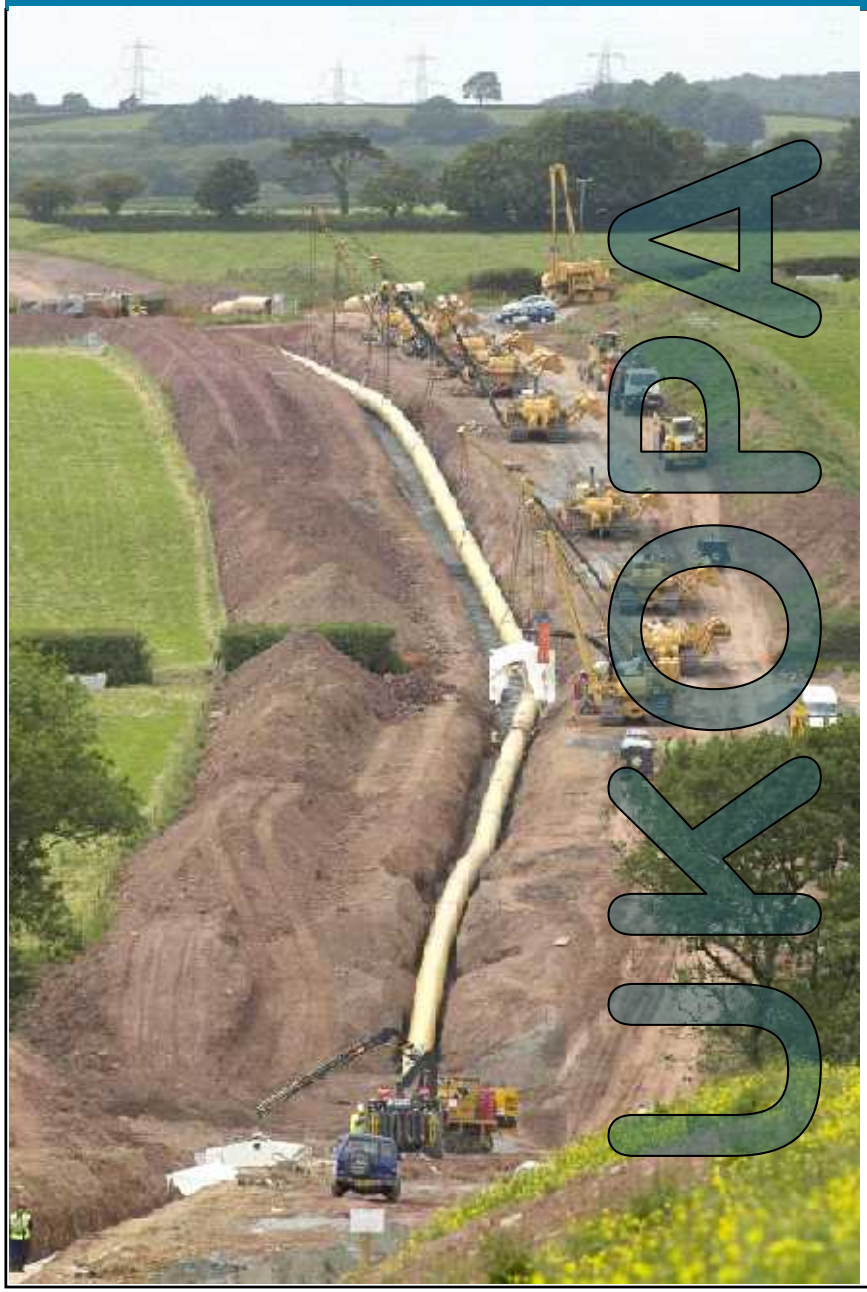
UKOPA

United Kingdom Onshore Pipeline Operators' Association



FDMG

Update
Feb 2014

Roger Ellis

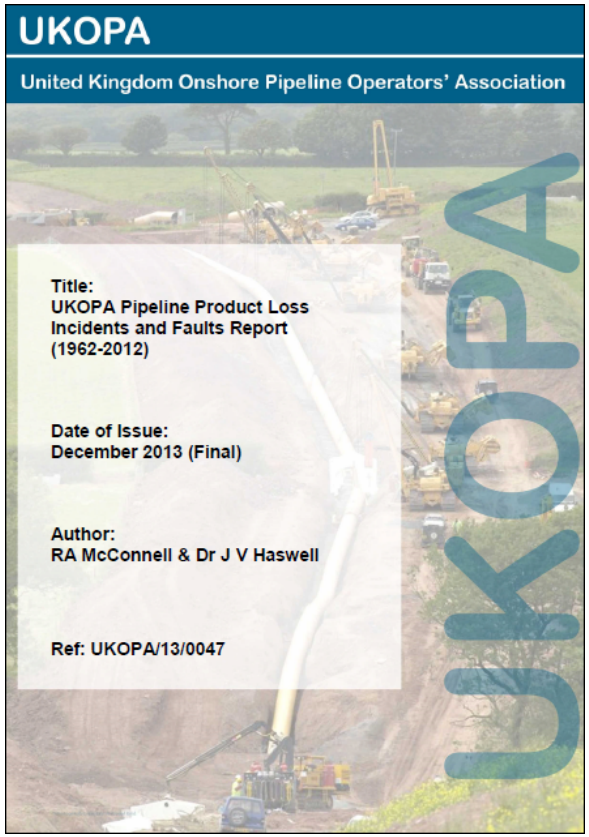
UKOPA/14/013

1.2 Purpose of the Database

The purpose of the database is to:

- record leak and fault data for UK Major Accident Hazard Pipelines,
- estimate leak and pipeline rupture frequencies for UK pipelines, based directly on historical failure rate data for UK pipelines,
- provide the means to estimate failure rates for UK pipelines for risk assessment purposes based on analysis of damage data for UK pipelines,
- provide the means to test design intentions and determine the effect of engineering changes (e.g. wall thickness of pipe, depth of burial, diameter, protection measures, inspection methods and frequencies, design factor etc.).

UKOPA Report 1962-2012

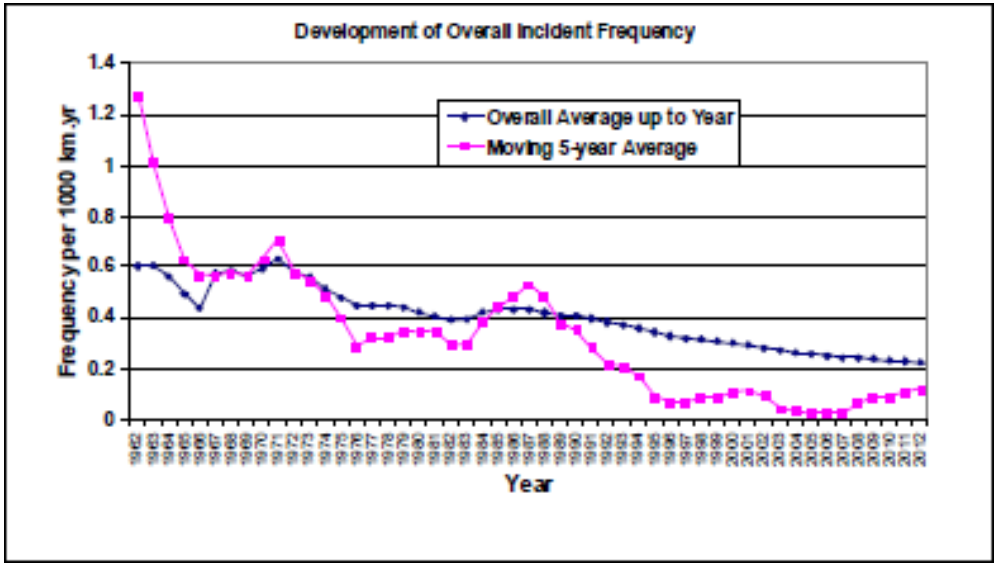


The overall failure frequency over the period 1962 to 2012 is 0.227 incidents per 1000 km.year, whilst in the previous report this figure was 0.230 incidents per 1000 km.year (covering the period from 1962 to 2011). The overall trend continues to show a reduction in failure frequency.

The failure frequency over the last 20 years is 0.080 incidents per 1000 km.year.

For the last 5 years the failure frequency is 0.122 incidents per 1000 km.year, whilst in the previous report this figure was 0.108 incidents per 1000 km.year (covering the 5 year period up to the end of 2011). The 5 year failure frequency shows a slight increase due to the 2 reported leaks which occurred during 2012.

This report also presents data for part-wall damage and defects known as fault data, and the statistical distributions derived for estimating pipeline failure probabilities due to external interference events.



2014 Database Activities

1. New Database Members, MAHPs

2. 2013 Faults/Failures required from members by end March. Teleconf 17 Feb

3. Include oil products from CONCAWE data

4. HSL pipeline work, LUP and update

5. Collecting onsite information (best practice)

6. Include ILI Dent data?