

UKOPA

UNITED KINGDOM ONSHORE PIPELINE OPERATORS' ASSOCIATION

Competency Framework

V 1.0 – June 2001

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UKOPA COMPETENCY FRAMEWORK

Section 1 - Management Framework

Context

UK pipeline safety legislation is goal setting, and requires that the duty holder demonstrates that duties have been addressed and undertaken. The pipeline safety management in the UK is subject to the Pipelines Safety Regulations 1996. These Regulations require that, in common with the UK HSAWA framework, that as a minimum all tasks (which involve operational duties and the supervision of operational duties) are carried out by a competent person.

Aim

To develop for the United Kingdom Onshore Pipeline Operators' Association a framework of technical competencies, which can be used to ensure individuals working on UK pipelines are able to do so safely and efficiently.

Purpose

The UKOPA Competency Management Framework provides the essential requirement for any pipeline operator to:-

- i) Select from a range of generic operational competencies those required to carry out work on the operator's pipelines, installations and equipment.
- ii) Define/identify competencies relevant for the safe operation of their assets / the assets they are managing.
- iii) Implement a practical assessment methodology against criteria proposed.
- iv) Record the competency assessment and status of each operative, and record on a database.

Scope

The competency framework currently covers safe working and supervision of safe working on pipelines.

Requirements

The UKOPA Competency Management Framework must:

- i) Be applicable to all interested participants.
- ii) Use generic competency models.
- iii) Provide scope for generic (but professional) assessments.
- iv) Be capable of recording the competency profiles and evidence for each participant.
- v) Provide guidance on the establishment of a consistent and independent assessment route common to different operators.
- vi) Be built using proprietary software.
- vii) Be easily updated.

Principles

- i) Use Microsoft Access for database recording, Excel for data analysis and Word for reporting.
- ii) Core competencies defined to reflect current core requirements, portfolio critically reviewed on an annual basis.
- iii) Competency categories to cover: Do, Supervise.
- iv) Competency to be assessed in accordance with theoretical knowledge, practical knowledge and sufficient experience.
- v) Theoretical knowledge is measured by recognized academic or industrial training courses.
- vi) Practical knowledge is measured by assessed compliance with / adherence to recognized competent practice within the industry.
- vii) Sufficient experience to cover a) immediate qualification requirements and b) renewed qualification requirements.

Components

The framework is comprised of:-

- i) Microsoft Access for database recording, Excel for data analysis and Word for reporting.
- ii) Generic competency profiles for HS&E and maintenance activities.
- iii) Guidance on the appraisal process.
- iv) A simple database for the recording of employee competencies.
- v) An employee competency report.
- vi) An employee held log book.

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**Section 2 –
Competency Register**

Generic Competencies – Maintenance

Ref. No.	Task	Comments
1.1	Purging Operations	Completed by K Curtis
1.2	Reliability Centred Maintenance	
1.3	PSSR Inspections	Completed by J Haswell
1.4	Live Working and Testing	
1.5	Hot Working	Completed by R White
1.6	Excavations	Completed by D Cullen
1.7	Mechanical Plant Isolation	Completed by D Cullen
1.8	Electrical Plant Isolation	Completed by D Cullen
1.9	Site and Route Documentation Systems	
1.10	Land Management – supervision of works	
1.11	Fork Truck Driving	
1.12	Incident Investigation and Control	
1.13	Auditing	
1.14	Route Inspection	Completed by J Haswell
1.15	Damage Detection	Completed by J Haswell
1.16	Coating Surveys and Inspection	
1.17	Leakage Surveys	
1.18	Internal Inspection	
1.19	Defect Assessment	Completed by J Haswell
1.20	Decommissioning of Pipelines	
1.21	Recommissioning of Pipelines	
1.22	Interpretation of Pipeline Drawings and Pipelines	
1.23	Hydrostatic Testing	Completed by J Haswell
1.24	Drying Methods	
1.25	Pigging Operations	
1.26	Metallic Welded Joint Inspection – NDT	
1.27	Maintenance of Crossings	
1.28	Repair of Pipe Coating	
1.29	Inspect Cathodic Protection Systems	Completed by D Cullen
1.30	Cathodic Protection Surveys	Completed by D Cullen
1.31	Backfilling and Reinstatement	
1.32	Maintenance of Sleeves	

Generic Competencies – HS&E

Ref. No.	Task	Comments
2.1	Use of Breathing Apparatus	Completed by R White
2.2	Use of Portable Gas Detection Equipment	
2.3	Risk Assessment	
2.4	Pesticide Control	
2.5	Health and Safety at Work Legislation	
2.6	HSE Engineering Safety Legislation	
2.7	Environmental Management and Control	
2.8	Contractor Control Procedures	
2.9	Accident and Incident Investigation	
2.10	Environmental Monitoring	
2.11	Able to determine relevant audit information of Safety / Audits	
2.12	Emergency Response	Completed by J Haswell
2.13	Permit to Work Systems	Completed by R White
2.14	Hazard Detection Tests	Completed by K Curtis

Specific Requirements – Equipment / Site

Ref. No.	Task	Comments
3.1	Valve and Actuation Systems	
3.2	Motors	
3.3	Standby Generation Equipment	Completed by D Cullen
3.4	Electrical Switchgear and UPS Systems	Completed by D Cullen
3.5	Filtration Systems	Completed by K Curtis
3.6	Metering Systems	
3.7	Heating Systems	
3.8	Process Control Computer	
3.9	Pressure Let-Down Systems	Completed by K Curtis
3.10	Heating and Ventilation Equipment	
3.11	Emergency Shut Down Systems	
3.12	Fire and Gas Detection Systems	Completed by K Curtis
3.13	Security Systems	
3.14	Lube Oil Systems	
3.15	Condition Monitoring Equipment	
3.16	Gas Quality Monitoring Equipment	
3.17	Compressed Air Systems	
3.18	Electrical Testing Equipment	
3.19	Electrical Equipment for Hazardous Areas	Completed by K Curtis
3.20	DC Systems	
3.21	Calibration Equipment	
3.22	Site Documentation Systems	
3.23	Communication Systems	Completed by R White

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**Section 3 –
Competencies**

1. Generic Profiles – Maintenance
2. Generic Profiles – HS&E
3. Specific Requirements – Equipment / Site