

Pipeline Inspection Engineer Grade II

S30 and S35

The following should be read and used in conjunction with the information pack 'Competence Assurance & Assessment: Introduction for Experienced Freelance Personnel'.

Evidence Required

- Competence appraisal:** ♦ at Pipeline Inspection Engineer Grade II level
- Work records:**
- ♦ one proof of attendance at an offshore safety induction
 - ♦ copy of event listing produced by the candidate
 - ♦ copy of video log and events QC check sheet completed by the candidate
- Witness testimonies:**
- ♦ one example of the candidate following safety instructions
 - ♦ one example of the candidate using the online event logging software
 - ♦ one example of the candidate using the offline event processing software
- Essential knowledge:** ♦ written answers to Pipeline Inspection Engineer Grade II questions
- Curriculum Vitae** ♦ detailing offshore trips, work scope, clients, regions etc.

IMCA Framework Requirements

The competence assurance and assessment framework developed by IMCA (the International Marine Contractors Association) sets out a number of elements for each safety-critical position. The following table shows how competence can be demonstrated against each element.

Code	Demonstration	Covered by
S/S30/000/01 Safety	Participation in offshore safety induction Ability to follow safety instructions and use appropriate safety equipment for deck and outside operations Ability to follow muster calls, shipboard drills and exercises Demonstrates an understanding of company health, safety, environmental and quality procedures	R, CA (a) CA(a), WT, Q6 CA(a), WT, Q5 CA(a), WT, Q4
S/S30/000/02 Emergency Procedures	Thorough understanding of company emergency procedure documents and where to find them Ability to recognise a potential or actual emergency situation and report it accordingly Ability to describe own role in emergency situations and that of colleagues	CA(a), Q4 CA(a), Q1,3 CA(a), WT, Q5
S/S30/000/03 Behavioural Factors	Establishment and maintenance of good working relationships with both junior and senior colleagues Ability to use clear, concise and correct verbal communication with colleagues and others Ability to recognise personal limitations and effectively seek advice	CA(b) R, CA(b) CA(b)
S/S35/000/06 Software	Ability to set up the technical software for recording and processing pipeline event data	WT, Q11
S/S35/000/08 Data Acquisition	Ability to operate event logging software and accurately record events Ability to monitor video quality and adequacy of coverage Ability to recognise in real-time those events which fall outwith supplied criteria of non-conformance (anomalies)	CA(d), (e), WT CA (f) CA(d), WT

Code	Demonstration	Covered by
S/S35/000/09 Data Processing	Ability to use offline event processing software Ability to identify from video those events which fall outwith supplied criteria of non-conformance (anomalies)	CA(g) CA(d), WT
S/S35/000/10 Data Management	Ability to maintain accurate and up to date processing and quality control logs	R, CA(f)
S/S35/000/10 Technical Knowledge	Ability to recognise standard structural features of subsea pipelines, flowlines and umbilicals Demonstrate an understanding of ROV sensors commonly utilised during pipeline inspection	CA(d) WT, Q7

Q Question (written answer required)

CA Competence Appraisal Form

R Record of work; document or product

WT Witness Testimony

Sample Achievement Record

Candidate name:

First assessor name:

	Assessment Decision	Approval of Internal Verifier/ Competence Focal Point
Safety		
Emergency Procedures		
Behavioural Factors		
Software		
Data Acquisition		
Data Processing		
Data Management		
Technical Knowledge		

Comments:

First assessor signature: Date:

Verifier signature: Date:

Sample Competence Appraisal

The appraiser must have observed the appraisee completing the task before completing the relevant section. Where necessary a number of different appraisers may be used to complete the form fully.

Appraisee name:

Task	Feedback to Appraisee	Appraiser <i>(Print name, sign and date)</i>
<p>a) Demonstrate general safety/emergency awareness, familiarisation with worksite and ability to identify hazards.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>b) Maintain effective teamwork and communication.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>c) Demonstrate basic IT skills including Office packages and data management and basic CAD skills for charting.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>d) Recognise standard seabed conditions and pipeline / subsea structure engineering features both real-time and from video.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>e) Understand and operate online data acquisition systems plus survey and events data sources.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>f) Monitor video quality and coverage as per workscope / procedures and keep progress and QA logs updated.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		

Task	Feedback to Appraisee	Appraiser <i>(Print name, sign and date)</i>
<p>g) Access, display, and list both events and survey data using relevant software packages.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>h) Understand and interpret both raw and processed events / survey data.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>i) Demonstrate an understanding of cartographic presentation and data sets presented on survey charts.</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>		
<p>Projects</p> <p>Indicate which Projects you have participated in during the last 12 months. Specify project work-scope.</p>		
<p>Projects</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>	<p>N.B. Feedback should be based on projects detailed above</p>	
<p>Hardware/Software</p> <p>Indicate which Hardware/Software you have used during the last 12 months</p>		
<p>Hardware/Software</p> <p>Performance is exceptional <input type="checkbox"/></p> <p>Performance is competent and dependable <input type="checkbox"/></p> <p>Additional skills or experience required <input type="checkbox"/></p>	<p>N.B. Feedback should be based on Hardware/Software detailed above</p>	

Appraisee comments:

Appraisee signature:

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Date:

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Essential Knowledge – Sample Questionnaire

1 What is the definition of 'near miss' incident?

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2 List the most important hazards encountered when working offshore.

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3 For your worksite describe in detail how any safety incidents are reported.

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4 Where can you find the company emergency procedure documents for your worksite?

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5 Upon hearing a vessel/installation muster alarm, describe the actions that should be taken by the survey team?

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6 What are the aims of a toolbox talk?

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7 What are the main types of inspection equipment to be found on a ROV pipeline and/or subsea structures inspection programme?

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8 What are the main types of still image capture?

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9 What is a dive plan and who is responsible for its production?

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10 What checks might you undertake at the start of your shift?

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11 Explain the importance of software being correctly installed and function tested, and problems arising if not done correctly.

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12 Why is it important to have the correct headers and video overlays?

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13 What methods are available to you for determining whether a pipeline is in suspension?

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14 What are the major items of data that are to be recorded upon finding an item of debris during a typical ROV pipeline inspection?

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15 During the review of pipeline inspection data what are the main items of data to be confirmed?

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