Guidance on
Competence Assurance and Assessment

Remote Systems & ROV Division

The International Marine Contractors Association (IMCA) is the international trade association representing offshore, marine and underwater engineering companies.

IMCA promotes improvements in quality, health, safety, environmental and technical standards through the publication of information notes, codes of practice and other documentation.

Members are self-regulating through the adoption of IMCA guidelines as appropriate. They commit to act as responsible members by following relevant guidelines and being willing to be audited against compliance with them.

There are five core committees that relate to all members:
◆ Competence & Training
◆ Contracts & Insurance
◆ Health, Safety, Security & Environment
◆ Lifting & Rigging
◆ Marine Policy & Regulatory Affairs

The Association is organised through four distinct divisions, each covering a specific area of members' interests – Diving, Marine, Offshore Survey and Remote Systems & ROV.

There are also five regions which facilitate work on issues affecting members in their local geographic area – Asia-Pacific, Europe & Africa, Middle East & India, North America and South America.

IMCA C 005 Rev. 3.1

This guidance was produced under the direction of the IMCA Competence & Training Committee.

Separate volumes exist for each of the IMCA technical divisions: IMCA C 002 (Marine) IMCA C 003 (Diving) IMCA C 004 (Offshore Survey) and IMCA C 005 (Remote Systems & ROV).

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Date	Reason	Revision
January 1999	Initial publication	
July 2003	Extended to include further positions	Rev. 1
November 2009	Review and update of tables, new positions included, client representative tables included	Rev. 2
January 2011	Technical updates; streamlining and consistency of language	Rev. 3
December 2016	Minor editorial changes made as part of IMCA's five-year review process	Rev. 3
June 2020	Minor amendments to terminology in the competence tables	Rev. 3.1

Guidance on Competence Assurance and Assessment: Remote Systems & ROV Division

IMCA C 005 Rev. 3.1 – June 2020

1 Introduction

1.1 Aims and Objectives

IMCA's guidance on competence assurance and assessment has been developed to provide offshore contractors with a framework on which to build their own competence schemes, thereby giving the offshore industry in general confidence that all personnel appointed to safety-critical and other relevant positions can carry out their jobs in an effective manner.

A competent workforce is more productive, operating with reduced risks, shorter downtime and fewer injuries. At the same time, all those involved know a rigorous assessment procedure is in place against which their skills, experience and knowledge will be measured. A competence framework also enables personnel to plan their career development, as it outlines to them the steps required in order to attain the required levels of competence for their current job function and future career path development.

This guidance therefore aims to:

♦ specify minimum standards for qualifications and, where applicable, minimum experience required to ensure that personnel are competent to fulfil their safety-critical and other relevant responsibilities and fulfil their roles;

♦ specify a competence assurance framework showing how proficiency can be developed, demonstrated, accepted and maintained;

♦ provide a reference document detailing the procedures, criteria and recording system to be applied when assessing the competence of personnel engaged in all positions but especially safety-critical positions.

1.2 Scope

This guidance document details a framework of competence assurance and assessment for personnel working for IMCA contractor (GCo/ICo/Co) members.

This guidance has been compiled by the IMCA Competence & Training committee using reports and recommendations provided by a series of specialist working groups.

When first published, the guidance covered a range of safety-critical positions within the offshore, marine and underwater engineering industry serving the oil and gas sector. In this context the term 'safety critical' is taken as describing a job or function where an individual's judgement, decision or action including a command, instruction or direction can influence the safety of other persons, property or the environment.

The IMCA competence framework is now being expanded to cover a wider range of non-safety-critical job functions, including client representatives, cooks and other catering personnel, and medics. It is envisaged that the framework will be developed to include further categories of job functions – both safety-critical and non-safety-critical. The expansion of the framework in this manner underpins the overall desire to be able to demonstrate competence for all job functions – not just safety critical ones.

1.3 Changes in this Revision

The IMCA guidance on competence assurance and assessment is regularly reviewed, by sector-specific workgroups, at IMCA seminars and workshops and through the association's technical committees, including technical updates based on developments in technology and operational practices, and changes to improve the consistency of format and wording between the various sectors. Specific changes are highlighted in the introduction to each of the technical divisions' competence tables.

2 Overview

2.1 Background

IMCA's competence assurance and assessment guidance was launched in January 1999. When launched, it set out an ambitious timetable for implementation, which included the allocation of all existing personnel into the scheme by January 2001 and the setting-up of ongoing assessment arrangements.

2.2 Implementation Guidance

The process for all new personnel entering the industry has been and is for them to enter at the basic grade for that job function. Existing personnel are subject to the ongoing assessment arrangements set out in this guidance.

Where appropriate, candidates may work towards demonstrating competence at a higher grade than their current competence grade – for example, a Surveyor Grade II may be permitted in appropriate circumstances to demonstrate competency in an aspect of the work of a Senior Surveyor before he or she is actually employed as such. This principle is designed to enable the 'fast tracking' of exceptionally able personnel who consistently perform at a level higher than their current grade.

It is essential that member companies also implement an appraisal system for their workforce. Performance appraisal and competence assessment are the main elements of the process whereby skills are assessed and personnel can develop their career in a systematic manner. Training needs are identified and opportunities for future roles are facilitated when an appraisal system and competence scheme operate in an integrated manner. IMCA does not currently provide guidance on an appraisal system as it is recognised that many member companies already have this in place for their onshore workforce and it is a relatively straightforward step to adopt the general principles for use in an offshore workplace.

2.3 Recording Progress

2.3.1 General Guidance

As people receive training, broaden their skill base, gain experience or attain more knowledge their ability to demonstrate their competence will be reviewed and assessed against specified criteria. Progress could be recorded in an *IMCA Record of Competence*. Each company's scheme would be expected to improve operational practice throughout the industry while encouraging both upward and lateral career progression.

2.3.2 Training Received in Simulators

It should be noted that special care may be required in recording progress where simulators, particularly ROV simulators, have been used in the training process. There is a complex relationship in value terms between hours of experience gained in a simulator and hours of experience gained offshore. This relationship is currently being charted in work conducted by IMCA's Simulator Workgroup. This group is attempting to define different kinds of simulator, particularly with reference to ROV operations, and also to define the value of time spent training in different simulators.

2.4 Auditing

As part of its scheme each company should have internal auditing arrangements in place to check compliance with these guidelines and ensure that all assessors apply the criteria in a consistent and appropriate manner. The internal auditing arrangements will usually be the same as those required by any external auditing programmes to which a member company subscribes. For example, the International Standards Organization (ISO) 9000, the International Safety Management Code (ISM), the Occupational Safety & Health Administration (OSHA) 188001 and BS 8800 are bodies, codes and standards which provide guidance on such subjects.

2.5   Review of the IMCA Competence Assurance and Assessment Framework

The specifications for particular competences are reviewed and updated regularly and the tables within this guidance updated accordingly. This updated release of the guidance documentation includes the revision of reference tables carried out in 2002 by the TCPC (now Competence & Training) committee and the subsequent comprehensive review conducted between 2007 and 2009.

3   Competence Assurance

IMCA's competence assurance and assessment guidance offers a range of criteria including academic and vocational qualifications, demonstrable experience, technical skills, medical certification and appropriate training.

Competence assurance is the process of collecting together the results of competence assessments and ensuring that these are consistent and auditable through internal and/or external verification.

Please see the front of each divisional volume for a list of identified job functions and for full details of all criteria to be applied in different operational sectors covered by the IMCA divisions: Marine, Diving, Remote Systems & ROV and Offshore Survey, as well as those competences in areas that do not fall under the remit of any one of the above IMCA technical divisions, such as those for catering or medical staff.

4 Competence Assessment

Competence assessment is the process of collecting evidence of an individual's performance, knowledge and attitude and reviewing this against specified competences.

4.1 'Core' or 'Common' Competences

Certain 'core' competences are considered essential to all personnel working at any level in the oil and gas industry and, as such, may be considered common to all job functions. These are: safety awareness; emergency situations; communication and interpersonal skills; and work-related activities. Knowledge and demonstrable skill levels in these competences will also vary with a person's seniority and level of operational responsibility.

4.2 'Key' Competences

For each job function there may be additional job-specific competences. These may be considered key competences, and as such, central to the job involved. To assess these competences, assessors apply specified criteria to determine whether a person has the required knowledge and can demonstrate their ability to complete the task. It is essential that an assessor undertakes to determine the level of competence of a candidate under the full range of circumstances which the candidate may face. Whilst in normal operations a candidate may appear to demonstrate the required competence for that role, an assessor should introduce other realistic and relevant measures to the process in order to ensure the full operating range of the role is assessed in an objective manner.

## 4.3 Logbooks and Competence Records

The *IMCA Record of Competence* covers personal details, qualifications, certificates, training, specialist experience and details of all competence assessments.

IMCA personnel logbooks include the *IMCA Record of Competence* pages:

- Auditor/Inspector's logbook
- Crane logbook
- Crane operator's logbook
- Diving inspection personnel logbook
- Diving supervisor's logbook
- Diving technician's logbook
- Dynamic positioning (DP) logbook
- Life support technician's logbook
- Offshore engineer's logbook
- Offshore manager's logbook
- Offshore safety adviser's logbook
- Offshore mariner's logbook
- Professional diver's logbook
- ROV personnel logbook
- Survey personnel logbook
- Workboat crew logbook

Every competence element carries a unique identifier or code (see below) which can be used in the *IMCA Record of Competence* by assessors when they 'sign off' the achievement of a specified competence.

for example:
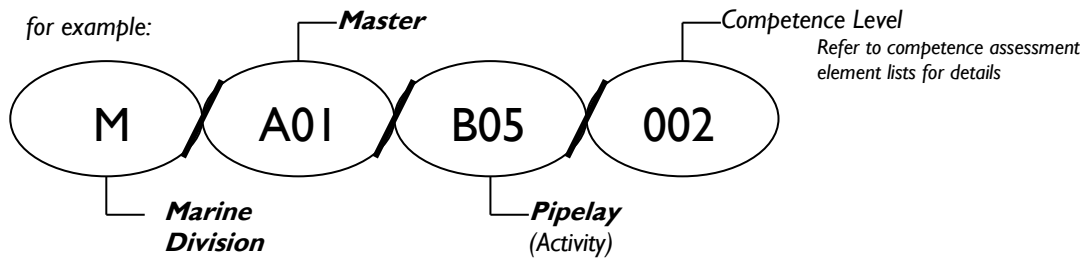
In some cases specific training courses may be recommended or considered essential for the achievement of certain competences. Likewise, in other cases e.g. diving supervision, there are minimum work experience requirements to be logged before competence can be assessed or recorded.

4.4 Assessment and Review

Assessors need to be satisfied that personnel have demonstrated their competence on the job. Generally such assessments are made with reference to 'in house' or industry-developed approved assessment or performance criteria. Section 5 provides additional guidance for assessors.

Assessors may be any supervisor or manager with the necessary knowledge and training to apply the criteria in a fair, consistent and objective manner. As part of their scheme every IMCA company should identify its own assessors and train them where required. They should also put in place an adequate grievance procedure. Guidance on assessor training is available (IMCA C 007).

In most cases competences will be reviewed automatically in the course of standard management evaluations and where job responsibilities, work sites, tasks or roles change.

To maintain client confidence in their in-house competence assurance and assessment schemes, contractors should audit their schemes to check the appropriate procedures are in place and work effectively.

Where personnel move employment to another IMCA member company, it may be appropriate for competences to be reviewed and reassessed by the new employer.

5   Assessors and Verifiers

The guidance proposes that all personnel demonstrate that they have the required competences for their specific job function. This is usually done by workplace assessors.

Assessors should be competent to carry out assessments of the personnel being assessed. They should be supervisors or managers with the necessary knowledge and experience to judge the competence being assessed. They should be a skilled, knowledgeable and objective judge of the competence of personnel and should also have been provided with suitable training on assessment.

Training for assessors should usually cover the following aspects:

♦   Identifying evidence and criteria against which to judge competence;

♦   How to plan assessments using different sources of evidence;

♦   Collecting and recording evidence;

♦   Making assessment decisions and recording assessment outcome;

♦   Providing feedback on assessment.

To carry out assessments successfully, both the person being assessed and the assessor need to be fully familiar with the assessment process.

The following points are normally considered to be good practice in conducting assessments:

♦   The assessor should provide a list showing both the elements of competence being assessed and the criteria against which they are to be assessed;

♦   The person being assessed should be able to demonstrate on a number of separate occasions that he/she can satisfactorily perform the task being assessed;

♦   The person being assessed should be observed, where appropriate, demonstrating the attainment of the competence by the assessor;

♦   The assessor should gather and record evidence (e.g. noting date and time observing candidate performing task);

♦   The person being assessed should receive prompt, accurate and constructive feedback on any assessment conducted.

A verifier may be used as part of a company's in-house audit arrangements. The role of the verifiers is quality control (QC) and quality assurance (QA) of assessments that have been completed offshore. QC is undertaken by checking the final assessment and ensuring compliance with the required criteria. QA is undertaken by checking that the way the final assessment was conducted was itself authentic and correct.

A verifier should:

♦   ensure that there is a uniform and consistent approach to and application of the assessment process;

♦   ensure that all assessors are assessing and applying competence guidelines to the same standard;

♦   provide support, advice and guidance to assessors;

♦   ensure that all assessments and records are accurate and complete;

♦   resolve problems with interpretation of performance criteria, range statements or underpinning knowledge;

♦   make recommendations as required for appropriate improvements to the company's competence programme.

Further guidance on the training of assessors is available in IMCA C 007 – *Guidance on assessor training*.

6 Competence Tables – Remote Systems & ROV Division

6.1 Contents

Code	Job Function	Assurance Tables (page)	Assessment Tables (page)
R20	ROV Superintendent	11	20
R01	ROV Supervisor	12	22
R11	ROV Tooling Supervisor	13	24
R02	ROV Senior Pilot/Technician	14	26
R12	ROV Senior Tooling Technician	15	29
R03	ROV Pilot/Technician Grade I	16	31
R13	ROV Tooling Technician Grade I	17	34
R04	ROV Pilot/Technician Grade II	18	36
R14	ROV Tooling Technician Grade II	19	39

6.2 Glossary of Terms and Abbreviations in the ROV Competence Tables

ISO   International Organization for Standardization

RIT   Remote intervention tooling

ROV   Remotely operated vehicle

QA   Quality assurance

QC   Quality control

6.3 Changes in this Revision

This IMCA competence guidance document provides a framework. Members will have developed schemes based upon this framework with their own numbering systems. Competences in this revision are comparable with existing competences under the same heading in previous revisions, but may have different numbers.

Tables 1 and 2 on page 10 show at a glance the numbering of the new ROV tables.

♦ The client representative tables have been removed and will be published as part of a separate set of competence tables for 'other' personnel not within the main IMCA technical disciplines;

♦ In order to achieve consistency across seniority and grades, a number of new competences have been added to ensure continuity between grades – in particular, *fault finding*, and *administration*;

♦ Some competences have changed numbers and positions within the tables to make the tables more consistent in layout, but the details remain unchanged.

6.3.1 Job Function R02: ROV Senior Pilot/Technician

◆ New competence R/R02/000/05 *fault finding* added

◆ Numbering of competences *technical* and *operational scope of work* has changed for consistency.

6.3.2 Job Function R12: ROV Senior Tooling Technician

◆ Numbering of competences for *technical* and *administration* has changed for consistency;

◆ Numbering of competences for *operational scope of work* and *project activities* has changed for consistency.

6.3.3 Job Function R03: ROV Pilot/Technician Grade I

◆ Numbering of competences for a*dministration* and for *specialist equipment* – changed for consistency with the numbering for the ROV Senior Pilot/Technician and ROV Pilot/Technician Grade II tables;

◆ Competence for *umbilical/tether termination* renamed to *technical (umbilical/tether termination)*.

6.3.4 Job Function R13: ROV Tooling Technician Grade I

◆ New competence R/R13/000/06 *technical* added;

◆ Numbering of competence for *fault finding* and *project activities* – numbering changed for consistency with the numbering for the ROV Senior Tooling Technician and ROV Tooling Technician Grade II tables.

6.3.5 Job Function R04: ROV Pilot/Technician Grade II

◆ New competence R/R04/000/05 *fault finding* added;

◆ New competence R/R04/000/08 *technical* added;

◆ Errors in numbering of competences corrected;

◆ Numbering of competences for *project activities* and *safe operating techniques* – changed for consistency with the numbering for the ROV Pilot/Technician I and ROV Senior Pilot/Technician tables.

Full listing of competences for job function R04: ROV Pilot/Technician Grade II:

◆ R/R04/000/01   *Safety*

◆ R/R04/000/02   *Emergency response*

◆ R/R04/000/03   *Communication and personnel skills*

◆ R/R04/000/04   *Preventative maintenance*

◆ R/R04/000/05   *Fault finding*

◆ R/R04/000/06   *Piloting an ROV (piloting/technical)*

◆ R/R04/000/07   *Administration*

◆ R/R04/000/08   *Technical*

◆ R/R04/000/09   *ROV systems*

◆ R/R04/000/10   *Project activities*

◆ R/R04/000/11   *Safe operating techniques*

6.3.6 Job Function R14: ROV Tooling Technician Grade II

◆ New competence R/R14/000/05 p*reventative maintenance* added;

◆ Competence R/R14/000/06 title *technical ability* becomes *technical;*

◆ New competence R/R14/000/07 a*dministration.*

ROV Senior Pilot/Technician		ROV Pilot/Technician I		ROV Pilot/Technician II	
Code	**Competence**	**Code**	**Competence**	**Code**	**Competence**
R/R02/000/01	Safety	R/R03/000/01	Safety	R/R04/000/01	Safety
R/R02/000/02	Emergency response	R/R03/000/02	Emergency response	R/R04/000/02	Emergency response
R/R02/000/03	Communication and personnel skills	R/R03/000/03	Communication and personnel skills	R/R04/000/03	Communication and personnel skills
R/R02/000/04	Preventative maintenance	R/R03/000/04	Preventative maintenance	R/R04/000/04	Preventative maintenance
R/R02/000/05	Fault finding	R/R03/000/05	Fault finding	R/R04/000/05	Fault finding
R/R02/000/06	ROV operations	R/R03/000/06	Piloting an ROV (piloting/technical)	R/R04/000/06	Piloting an ROV (piloting/technical)
R/R02/000/07	Administration	R/R03/000/07	Administration	R/R04/000/07	Administration
R/R02/000/08	Technical	R/R03/000/08	Technical (umbilical/ tether termination)	R/R04/000/08	Technical
R/R02/000/09	Operational scope of work	R/R03/000/09	Specialist equipment	R/R04/000/09	ROV systems
R/R02/000/10	Project activities	R/R03/000/10	Project activities	R/R04/000/10	Project activities
				R/R04/000/11	Safe operating techniques

Table 1 – Changes to ROV pilot/technician competence numbering and titles in this revision

ROV Senior Tooling Technician		ROV Tooling Technician I		ROV Tooling Technician II	
Code	**Competence**	**Code**	**Competence**	**Code**	**Competence**
R/R12/000/01	Safety	R/R13/000/01	Safety	R/R14/000/01	Safety
R/R12/000/02	Emergency response	R/R13/000/02	Emergency response	R/R14/000/02	Emergency response
R/R12/000/03	Communication and personnel skills	R/R13/000/03	Communication and personnel skills	R/R14/000/03	Communication and personnel skills
R/R12/000/04	Remote intervention tooling (RIT)	R/R13/000/04	Remote intervention tooling (RIT)	R/R14/000/04	Remote intervention tooling (RIT)
R/R12/000/05	Preventative maintenance (RIT)	R/R13/000/05	Preventative maintenance (RIT)	R/R14/000/05	Preventative maintenance (RIT)
R/R12/000/06	Technical	R/R13/000/06	Technical	R/R14/000/06	Technical
R/R12/000/07	Administration	R/R13/000/07	Administration	R/R14/000/07	Administration
R/R12/000/08	Project activities	R/R13/000/08	Project activities	R/R14/000/08	Project activities
R/R12/000/09	Operational scope of work	R/R13/000/09	Fault finding (RIT)		

Table 2 – Changes to ROV tooling technician competence numbering and titles in this revision

ROV Superintendent

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Competences of ROV Supervisor or ROV Tooling Supervisor	Satisfactorily completed all ROV Supervisor's or ROV Tooling Supervisor's competences
Nominally 180 days' offshore experience as ROV Supervisor with satisfactorily completed company assessments	Appropriate entries in logbook

ROV Supervisor

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Competences of ROV Senior Pilot/Technician	Satisfactorily completed all ROV Senior Pilot/Technician's competences
Nominally 180 days' offshore experience as ROV Senior Pilot/Technician with satisfactorily completed company assessments	Appropriate entries in logbook

ROV Tooling Supervisor

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Competences of ROV Senior Tooling Technician	Satisfactorily completed all ROV Senior Tooling Technician's competences
Nominally 180 days' offshore experience as ROV Senior Tooling Technician with satisfactorily completed company assessments	Appropriate entries in logbook

ROV Senior Pilot/Technician

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Nominally 360 days' offshore experience as ROV Pilot/Technician Grade I and 100 piloting hours as ROV Pilot/Technician Grade I	Suitable entries in logbook and satisfactorily completed company assessments
All competences of Pilot/Technician Grade I	Suitably completed entries in logbook

ROV Senior Pilot/Technician

ROV Senior Tooling Technician

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Nominally 360 days' offshore experience as ROV Tooling Technician Grade I	Suitable entries in logbook and satisfactorily completed company assessments
All competences of Tooling Technician Grade I	Suitably completed entries in logbook

ROV Pilot/Technician Grade I

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Nominally 180 days' minimum offshore experience as ROV Pilot/Technician Grade II and a minimum of 100 hours' piloting, of which 40 hours can be on simulators (Type A or Type B). This can include up to a maximum of 20 hours on Type B simulators	IMCA logbook – with appropriate entries and satisfactorily completed company assessments
Experience as ROV Pilot/Technician Grade II	Satisfactorily completed all ROV Pilot/Technician II competences

ROV Tooling Technician Grade I

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
Nominally 180 days' minimum offshore experience as ROV Tooling Technician Grade II	IMCA logbook – with appropriate entries and satisfactorily completed company assessments
Experience as ROV Tooling Technician Grade II	Satisfactorily completed all ROV Tooling Technician II competences

ROV Pilot/Technician Grade II

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
IMCA ROV Pilot/Technician II entry level	Meets criteria set out in IMCA R 002: ◆ Academic qualifications – certification ◆ Industrial experience – references

ROV Tooling Technician Grade II

Entry Level Criteria	Acceptance Criteria
Offshore medical	Current valid medical
Offshore survival course suitable for geographical area of work	Current valid certificate
IMCA ROV Tooling Technician II entry level	Meets criteria set out in IMCA R 002: ◆ Academic qualifications – certification ◆ Industrial experience – references

ROV Tooling Technician Grade II

ROV Superintendent

Code	Competence	Knowledge	Ability	Demonstration
R/R20/000/01	**Safety**	◆ Company safety management systems ◆ Encouragement and stimulation of accident reporting ◆ Encouragement of safety awareness in subordinates ◆ Thorough understanding of all applicable legislation relating to offshore operations referred to in company documentation ◆ Assessment of risks and development of risk control measures suitable for the work being undertaken	◆ Use company safety management system ◆ Prepare for and carry out emergency procedures ◆ Lead and promote safety briefings ◆ Plan and perform risk assessments for all safety critical areas in a work environment ◆ Management of safety aspects of work and appropriate onsite project related input ensuring the continued safety of the work	◆ Approved assessment by company official ◆ Logbook ◆ Sets an example on safety issues by demonstrating safety leadership
R/R20/000/02	**Emergency response**	◆ Effective handling of emergency situations ◆ Management of ROV team in such situations	◆ Take appropriate action in the event of an emergency situation and take lead role where appropriate ◆ Ensure ROV team and others understand and review their role in emergency situations	◆ Approved assessment by company official ◆ Logbook
R/R20/000/03	**Performance management**	◆ Training/assessment of all personnel involved in project	◆ Provide ongoing performance assessment of ROV team members onshore and offshore ◆ Properly apply company quality management systems ◆ Complete appropriate company documentation ◆ Collect and assess performance evidence and knowledge against agreed criteria	◆ Approved assessment by company official ◆ Logbook ◆ Commitment to continuous improvement

Code	Competence	Knowledge	Ability	Demonstration
R/R20/000/04	**Supervision**	◆ Managing the team to ensure safe, cost-effective and timely execution of the job ◆ Preparation of formal procedures	◆ Motivate personnel by effective communications, involving them in decisions, and by the delegation of work appropriate to the level of responsibility ◆ Adapt leadership style to take into account task needs, team and individual member needs ◆ Interface effectively with client	◆ Approved assessment by company official ◆ Logbook ◆ Establishment and maintenance of effective communication with client representative and onshore project team/manager
R/R20/000/05	**Project activities**	◆ Understanding of project performance requirements ◆ Understanding of project equipment operation procedures	◆ Project planning ◆ ROV dive planning ◆ Perform project management tasks, including scheduling and identifying critical pathways ◆ Reporting	◆ Approved assessment by company official ◆ Logbook

ROV Supervisor

Code	Competence	Knowledge	Ability	Demonstration
R/R01/000/01	**Safety**	◆ Organisation and management of safety of team ◆ Effective use of safety management system ◆ Planning and performance of risk assessments for all safety critical areas in a work environment ◆ Understanding of all applicable legislation relating to offshore operations referred to in company documentation ◆ Identification of key sections of safety management systems to address specific circumstances in an efficient manner ◆ Accident reporting	◆ Lead safety briefings to client and vessel crew as well as ROV tooling team ◆ Assess risks and develop risk control measures suitable for the work being undertaken ◆ Manage safety aspects of work and appropriate onsite project related input to ensure the continued safety of the work	◆ Approved assessment by company official ◆ Logbook ◆ Comply with company accident reporting procedures ◆ Commitment to safety through setting an example on safety issues and demonstrating safety leadership to subordinates and work colleagues
R/R01/000/02	**Emergency response**	◆ Effective handling of emergency situations ◆ Management of ROV team in such situations	◆ Take appropriate action in the event of an emergency situation and take lead role where appropriate ◆ Ensure ROV team and others understand and review their role in emergency situations	◆ Approved assessment by company official ◆ Logbook
R/R01/000/03	**Performance management**	◆ Training/assessing Pilot/Technician Grades I and II and Senior Pilot/Technician ◆ Completion of appropriate company-led documentation	◆ Review plans for assessing performance of ROV team members onshore and offshore ◆ Collect and assess performance evidence and knowledge against agreed criteria ◆ Assess and provide feedback to personnel during offshore tour	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R01/000/04	**Supervision**	◆ Organisation and management of the team ◆ Safe, cost-effective and timely execution of the job ◆ Preparation of formal procedures	◆ Motivate personnel by effective communications, involving them in decisions, and by the delegation of work appropriate to the level of responsibility ◆ Ensure that all technical, operational and safety documentation is kept updated. Allocate responsibility to appropriate personnel ◆ Adapt leadership style to take into account task needs, team and individual member needs ◆ Establish and maintain effective communication with client representative and onshore project team/manager ◆ Keep records up to date ◆ Interface effectively with client	◆ Approved assessment by company official ◆ Logbook
R/R01/000/05	**Project activities**	◆ Understanding of project performance requirements ◆ Understanding of project equipment operation procedures	◆ Project planning ◆ ROV dive planning ◆ Perform basic project management tasks ◆ Reporting	◆ Approved assessment by company official ◆ Logbook

ROV Tooling Supervisor

Code	Competence	Knowledge	Ability	Demonstration
R/R11/000/01	**Safety**	◆ Organisation and management of safety of team ◆ Effective use of safety management system ◆ Planning and performance of risk assessments for all safety critical areas in a work environment ◆ Understanding of all applicable legislation relating to offshore operations referred to in company documentation ◆ Identification of key sections of safety management systems to address specific circumstances in an efficient manner ◆ Accident reporting	◆ Lead safety briefings to client and vessel crew as well as ROV tooling team ◆ Assess risks and develop risk control measures suitable for the work being undertaken ◆ Manage safety aspects of work and appropriate onsite project related input to ensure the continued safety of the work	◆ Approved assessment by company official ◆ Logbook ◆ Comply with company accident reporting procedures ◆ Commitment to safety through setting an example on safety issues and demonstrating safety leadership to subordinates and work colleagues
R/R11/000/02	**Emergency response**	◆ Effective handling of emergency situations ◆ Management of ROV tooling team in such situations	◆ Take appropriate action in the event of an emergency situation and take lead role where appropriate ◆ Ensure ROV tooling team and others understand and review their role in emergency situations	◆ Approved assessment by company official ◆ Logbook
R/R11/000/03	**Performance management**	◆ Training/assessing Tooling Technician Grades I and II and Senior Tooling Technician ◆ Completion of appropriate company-led documentation	◆ Review plans for assessing performance of ROV tooling team members onshore and offshore ◆ Collect and assess performance evidence and knowledge against agreed criteria ◆ Assess and provide feedback to personnel during offshore tour	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R11/000/04	**Supervision**	◆ Organisation and management of the team ◆ Safe, cost-effective and timely execution of the job ◆ Preparation of formal procedures	◆ Motivate personnel by effective communications, involving them in decisions, and by the delegation of work appropriate to the level of responsibility ◆ Ensure that all technical, operational and safety documentation is kept updated. Allocate responsibility to appropriate personnel ◆ Adapt leadership style to take into account task needs, team and individual member needs ◆ Establish and maintain effective communication links with the offshore client ◆ Establish and maintain effective communication with client representative and onshore project team/manager ◆ Keep records up to date ◆ Interface effectively with client	◆ Approved assessment by company official ◆ Logbook
R/R11/000/05	**Project activities**	◆ Understanding of project performance requirements ◆ Understanding of project equipment operation procedures	◆ Project planning ◆ Perform basic project management tasks ◆ Reporting	◆ Approved assessment by company official ◆ Logbook

ROV Senior Pilot/Technician

Code	Competence	Knowledge	Ability	Demonstration
R/R02/000/01	**Safety**	◆ Awareness of legislation/guidance, e.g. reporting accidents – managing safety of team on night shifts ◆ Management of/incident/near miss reporting procedures	◆ Perform 'toolbox talk' meetings/briefings immediately prior to specific night shift operations ◆ Brief crew on safety matters paying particular attention to company's safety management system ◆ Communicate safety information to team members (only on night shifts) ◆ Effective use of company safety management system	◆ Approved assessment by company official ◆ Logbook ◆ Commitment to safety by setting an example on safety issues and demonstrating safety leadership to subordinates and work colleagues
R/R02/000/02	**Emergency response**	◆ Knowledge of emergency procedures ◆ Management of team during an emergency	◆ Take appropriate action in the event of an emergency situation ◆ Produce coherent and concise reports on emergency situations ◆ Co-ordinate all personnel directly and indirectly involved in an emergency situation	◆ Approved assessment by company official ◆ Logbook
R/R02/000/03	**Personal skills and communication**	◆ Can take responsibility for team when required ◆ Effective communication with all other team members ◆ Recognition of the abilities/ limitation of trainee staff and offering assistance and guidance ◆ Explanation and instruction of subordinates in the use of equipment and systems ◆ Explanation and instruction of subordinates in the use of equipment and systems	◆ Effective supervision and team leadership, particularly on night shift ◆ Take charge and show leadership abilities ◆ Directly supervise teams during night shift or when supervisor is absent	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R02/000/04	**Preventative maintenance**	◆ Thorough knowledge of ROV sub-systems ◆ Familiarity with possible modifications to equipment ◆ Familiarity with extraordinary fittings or installations ◆ Co-ordination of the upkeep of ROV system planned maintenance schedules	◆ Allocate maintenance tasks to appropriate technicians and ensure correct procedures are available at the location ◆ Re-order spares and consumables used according to company procedures ◆ Review and suggest improvements to planned maintenance system ◆ Ensure that records correctly completed and updated	◆ Approved assessment by company official ◆ Logbook
R/R02/000/05	**Fault finding**	◆ Knowledge of fault finding processes and correct diagnosis of faults ◆ Identification of hazards that could arise during fault finding	◆ Carry out and co-ordinate fault finding activities on ROV systems ◆ Locate and follow fault finding procedures for all technical systems within ROV system ◆ Report and record work carried out ◆ Brief team on hazards that could occur during fault finding activities	◆ Approved assessment by company official ◆ Logbook
R/R02/000/06	**ROV operations**	◆ Determination of weather and current conditions from information available	◆ Capable of assessing weather conditions and operational parameters for safe ROV operations ◆ Define and advise appropriate personnel of the limiting conditions for safe ROV operations ◆ Direct, support and instruct subordinate personnel in deteriorating weather conditions	◆ Approved assessment by company official ◆ Logbook
R/R02/000/07	**Administration**	◆ Familiarity with correct use of company format for report writing	◆ Produce clear, comprehensive written reports for onshore management and clients to company format ◆ Proven writing skills ◆ Capable of appropriate technical briefing at handover ◆ Ensure relief crew are fully and properly briefed ◆ Ensure correct completion of logs etc. produced by subordinate personnel	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R02/000/08	**Technical**	◆ Thorough understanding of underwater operations and equipment	◆ Provide instruction to less experienced personnel on underwater operations ◆ Provide instruction and supervision to less experienced personnel in maintaining equipment in operational status	◆ Approved assessment by company official ◆ Logbook
R/R02/000/09	**Operational scope of work**	◆ Thorough knowledge of operational scope of work for given project	◆ Discuss scope of work with clients, supervisors, peers and subordinate staff ◆ Suggest improvements/alterations to scope of work as required ◆ Capable of proactive involvement with projected scope of work to meet client requirements	◆ Approved assessment by company official ◆ Logbook
R/R02/000/10	**Project activities**	◆ Understanding of project equipment operation procedures	◆ Familiarisation ◆ Project planning ◆ ROV dive planning	◆ Approved assessment by company official ◆ Logbook

ROV Senior Tooling Technician

Code	Competence	Knowledge	Ability	Demonstration
R/R12/000/01	**Safety**	◆ Awareness of legislation/guidance e.g. reporting accidents – managing safety of team on night shifts ◆ Management of/incident/near miss reporting procedures	◆ Perform 'toolbox talk' meetings/briefings immediately prior to specific night shift operations ◆ Brief crew on safety matters paying particular attention to company's safety management system ◆ Communicate safety information to team members on night shifts ◆ Effective use of company safety management system	◆ Approved assessment by company official ◆ Logbook ◆ Commitment to safety by setting an example on safety issues and demonstrating safety leadership to subordinates and work colleagues
R/R12/000/02	**Emergency response**	◆ Knowledge of emergency procedures ◆ Management of team during an emergency	◆ Take appropriate action in the event of an emergency situation ◆ Produce coherent and concise reports on emergency situations ◆ Co-ordinate all personnel directly and indirectly involved in an emergency situation	◆ Approved assessment by company official ◆ Logbook
R/R12/000/03	**Personal skills and communication**	◆ Can take responsibility for team when required ◆ Effective communication with all other team members ◆ Recognition of the abilities/ limitation of trainee staff and offers assistance and guidance ◆ Explanation and instruction of subordinates in the use of equipment and systems	◆ Effective supervision and team leadership, particularly on night shift ◆ Take charge and show leadership abilities ◆ Directly supervise teams during night shift or when supervisor is absent	◆ Approved assessment by company official ◆ Logbook
R/R12/000/04	**Remote intervention tooling (RIT)**	◆ Thorough knowledge of RIT systems ◆ Thorough knowledge of technical and contractual requirements ◆ Familiarity with technical reporting techniques and formats	◆ Ensure that RIT equipment and systems are kept in full working order and in compliance with all technical and/or contractual requirements ◆ Keep continuous records of defects and problems with equipment ◆ Use records to plan refit and maintenance	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R12/000/05	**Preventative maintenance (RIT)**	◆ Organisation of RIT system planned maintenance schedules ◆ Familiarity with possible modifications to equipment ◆ Familiarity with extraordinary fittings or installations	◆ Allocate maintenance tasks to appropriate technicians and ensure correct procedures are available at the location ◆ Re-order spares and consumables used according to company procedures ◆ Review and suggest improvements to planned maintenance system ◆ Ensure that records correctly completed and updated ◆ Ensure that proper checks are made on equipment before and after dives	◆ Approved assessment by company official ◆ Logbook
R/R12/000/06	**Technical**	◆ Thorough understanding of underwater operations and equipment	◆ Provide instruction to less experienced staff on underwater operations ◆ Provide instruction and supervision to less experienced staff on maintaining equipment in operational status	◆ Approved assessment by company official ◆ Logbook
R/R12/000/07	**Administration**	◆ Familiarity with correct use of company format for report writing	◆ Produce clear, comprehensive written reports for onshore management and clients to company format ◆ Proven writing skills ◆ Capable of appropriate technical briefing at handover ◆ Ensure relief crew are fully and properly briefed ◆ Ensure correct completion of logs etc. produced by subordinate personnel	◆ Approved assessment by company official ◆ Logbook
R/R12/000/08	**Project activities**	◆ Understanding of project equipment operation procedures	◆ Familiarisation ◆ Project planning	◆ Approved assessment by company official ◆ Logbook
R/R12/000/09	**Operational scope of work**	◆ Thorough knowledge of operational scope of work for given project	◆ Discuss scope of work with clients, supervisors and subordinates ◆ Suggest improvements/alterations to scope of work as required ◆ Capable of proactive involvement with projected scope of work to meet client requirements	◆ Approved assessment by company official ◆ Logbook

ROV Pilot/Technician Grade I

Code	Competence	Knowledge	Ability	Demonstration
R/R03/000/01	**Safety**	◆ Awareness of legislation/guidance, e.g. reporting accidents ◆ Awareness of company safety management system and own role/responsibility	◆ Implement incident/near miss reporting procedures when necessary ◆ Adhere to offshore safety standards and maintain a safe working environment for self and others ◆ React appropriately to safety critical situations and knowledge of immediate action needed to minimise/eliminate them ◆ Work within company safety management system ◆ Participation in relevant safety related activities ◆ Appropriate use of correct PPE in all circumstances	◆ Approved assessment by company official ◆ Logbook ◆ Participation in relevant safety related activities
R/R03/000/02	**Emergency response**	◆ Knowledge of emergency procedures and processes ◆ Knowledge of the ROV team members' roles and responsibilities ◆ Thorough understanding of company emergency procedure documents and where to find them	◆ Handle emergency situations ◆ Recognise a potential or actual emergency situation and report it accordingly ◆ Describe own role in emergency situations and that of colleagues	◆ Approved assessment by company official ◆ Logbook ◆ Participation in drills
R/R03/000/03	**Personal skills and communication**	◆ Knowledge and understanding of English permitting good oral and written communication	◆ Establish and maintain good working relationships with both less experienced and more experienced colleagues – work as part of a team and assist others ◆ Assign tasks to subordinates and peers ensuring clear understanding and satisfactory completion ◆ Assist with ROV operations under supervision ◆ Assist the supervision of launch and recovery operations in full range of sea states ◆ Communicate with other team members	◆ Approved assessment by company official ◆ Logbook ◆ Participation in team based tasks, demonstrating the ability to work as peer and subordinate

Code	Competence	Knowledge	Ability	Demonstration
R/R03/000/04	**Preventative maintenance**	◆ Identification of hazards likely to arise during maintenance activity ◆ Risk mitigation procedures to be implemented prior to conducting maintenance on ROV systems	◆ Perform planned maintenance in accordance with operational requirements ◆ Discuss work to be undertaken with supervisor ◆ Carry out ROV system maintenance and complete planned maintenance schedules ◆ Report and record work done	◆ Approved assessment by company official ◆ Logbook
R/R03/000/05	**Fault finding**	◆ Fault finding processes and correct diagnosis of faults ◆ Identification of hazards that could arise during fault finding and maintenance procedures	◆ Locate and follow fault finding and maintenance procedures for electronic and mechanical systems within ROV system ◆ Report and record work carried out ◆ Maintain ROV control and navigational systems	◆ Approved assessment by company official ◆ Logbook
R/R03/000/06	**Piloting an ROV (piloting/technical)**	◆ Understand the use of navigation aids ◆ Piloting of the ROV in various types of operational circumstances ◆ Identification of environmental conditions affecting ROV operations ◆ Knowledge of typical work sites and ROV operations at work sites ◆ Knowledge of manipulator functions and duties ◆ Knowledge of pre and post dive checks	◆ Utilise all available navigation aids and operate ROV system; if assessor not present supervisor may be required ◆ Operation of the ROV when assessor not present ◆ Navigate an ROV to the work site, in a range of environmental conditions, fully utilising appropriate navigational aids ◆ Carry out a range of manipulator activities proficiently using a 5 or 7 function manipulator ◆ Carry out all general manipulator duties ◆ Carry out appropriate pre and post dive checks	◆ Approved assessment by company official ◆ Logbook ◆ Signed off copies of pre and post dive checklists
R/R03/000/07	**Administration**	◆ Understanding completion of documentation and logs ◆ Working knowledge of company QA and associated procedures	◆ Complete video logs and information indentation to client specifications ◆ Perform audio and video dubbing as required to company/client specification ◆ Ensure all recorded information fully complies with company QA/QC policies and procedures ◆ Capable of co-ordinating collection of dive records – video, audio and written	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R03/000/08	**Technical (umbilical/tether termination)**	◆ Tools and test equipment requirements ◆ Electrical and mechanical specifications for termination ◆ Risk assessment and other safety requirements specific to umbilical/tether termination ◆ Tests required before and after termination	◆ Prepare the work area, and select and prepare the equipment and tools ◆ Remove termination from vehicle and fit cable identification for re-fit, after it has been risk assessed ◆ Carry out electrical and mechanical umbilical/tether terminations ◆ Prepare re-termination, including testing as necessary, and correct handling of fibre optics, after it has been risk assessed ◆ Perform appropriate mechanical and electrical tests before reconnection, after it has been risk assessed	◆ Approved assessment by company official ◆ Logbook ◆ Completion of relevant documentation
R/R03/000/09	**Specialist equipment**	◆ Understanding of what specialist tools and equipment may be required for a range of defined tasks within the capability of the ROV system	◆ Remove, test, inspect and install specialist equipment ◆ Perform correct maintenance procedures ◆ Install additional equipment ◆ Plan sequence of operations, ensuring relevant authorisations, maintenance specifications and time limitations used under supervision	◆ Approved assessment by company official ◆ Logbook
R/R03/000/10	**Project activities**	◆ Understanding of project equipment operation procedures	◆ Demonstrate familiarisation ◆ Conduct project planning ◆ Develop ROV dive plans	◆ Approved assessment by company official ◆ Logbook

ROV Tooling Technician Grade I

Code	Competence	Knowledge	Ability	Demonstration
R/R13/000/01	**Safety**	◆ Awareness of legislation/guidance, e.g. reporting accidents ◆ Awareness of company safety management system and own role/responsibility	◆ Implement incident/near miss reporting procedures when necessary ◆ Adhere to offshore safety standards and maintain a safe working environment for self and others ◆ React to safety critical situations and what immediate action to be taken to minimise/ eliminate them ◆ Work within company safety management system ◆ Participate in relevant safety related activities	◆ Approved assessment by company official ◆ Logbook
R/R13/000/02	**Emergency response**	◆ Knowledge of emergency procedures ◆ Knowledge of the ROV team members' roles and responsibilities ◆ Thorough understanding of company emergency procedure documents and where to find them	◆ Handle emergency situations ◆ Recognise a potential or actual emergency situation and report it accordingly ◆ Describe own role in emergency situations and that of colleagues	◆ Approved assessment by company official ◆ Logbook
R/R13/000/03	**Personal skills and communication**	◆ Determination of sea state, recognising when conditions deteriorate and taking appropriate action under supervision	◆ Establish and maintain good working relationships with colleagues of all levels of experience – works as part of a team and assists others ◆ Assign tasks to subordinates ensuring clear understanding and satisfactory completion ◆ Hand over to colleagues before leaving worksite ◆ Communicate with other team members ◆ Assist the supervision of launch and recovery operations in full range of sea states	◆ Approved assessment by company official ◆ Logbook
R/R13/000/04	**Remote intervention tooling (RIT)**	◆ Good knowledge of remote intervention tooling systems	◆ Ensure that RIT equipment and systems are kept in full working order and in compliance with all technical and/or contractual requirements	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R13/000/05	**Preventative maintenance (RIT)**	◆ Identification of hazards likely to arise during maintenance activity	◆ Ensure that RIT equipment is checked against appropriate checklists before and after a dive ◆ Organise and follow planned maintenance, keeping complete technical records and logs ◆ Discuss work to be undertaken with supervisor ◆ Carry out RIT system and complete planned maintenance schedules ◆ Report and record work done	◆ Approved assessment by company official ◆ Logbook
R/R13/000/06	**Technical**	◆ Knowledge of the fundamentals of standard tooling interfaces as described in ISO 13628-8 and an understanding of how the setting of hydraulic pressures relates to subsequent tooling forces and torques and calibration ◆ Understanding of the principles of hydraulic and basics of electrical control of standard tools	◆ Identify components of standard tooling and describe their functions ◆ Perform general and preventative maintenance tasks (under supervision) ◆ Perform pressure settings and derive subsequent forces and torques from calibration certificates ◆ Identify and assist with change-out and fitting of tools to the ROV	◆ Approved assessment by company official ◆ Logbook
R/R13/000/07	**Administration**	◆ Working knowledge of company QA and associated procedures	◆ Ensure all recorded information fully complies with company QA/QC policies and procedures ◆ Ensure that spare parts, materials etc. are available when required	◆ Approved assessment by company official ◆ Logbook
R/R13/000/08	**Project activities**	◆ Understanding of project equipment operation procedures	◆ Familiarisation ◆ Project planning	◆ Approved assessment by company official
R/R13/000/09	**Fault finding (RIT)**	◆ Knowledge of fault finding techniques for RIT systems and diagnosis of faults ◆ Identification of hazards that could arise during fault finding and maintenance procedures	◆ Locate and follow fault finding and maintenance procedures for electronic systems within RIT system ◆ Report and record work carried out	◆ Approved assessment by company official ◆ Logbook

ROV Pilot/Technician Grade II

Code	Competence	Knowledge	Ability	Demonstration
R/R04/000/01	**Safety**	◆ Awareness of legislation ◆ Awareness of company safety management system ◆ Knowledge of own role and responsibilities ◆ Basic understanding of regulations ◆ Understanding of company safety management system ◆ Identification of different areas in the workplace and the risks associated with each	◆ Locate all relevant health, safety and quality procedures at the worksite ◆ Participate in an offshore safety induction ◆ Follow safety instructions and use correct appropriate safety equipment for all deck and worksite operations	◆ Approved assessment by company official ◆ Logbook
R/R04/000/02	**Emergency response**	◆ Knowledge of emergency procedures ◆ Knowledge of the ROV team members' roles and responsibilities ◆ Ability to describe own role in emergency situations and that of colleagues	◆ Read and demonstrated an understanding of company emergency procedure documents and where to find them ◆ Raise alarm and to alert others	◆ Approved assessment by company official ◆ Logbook ◆ Participation in drills
R/R04/000/03	**Personal skills and communication**	◆ Knowledge and understanding of English permitting good oral and written communication ◆ Recognition of personal limitations and requests assistance from others when necessary without undue disruption and willing to offer assistance when needed	◆ Establish and maintain good working relationships with immediate team members ◆ Use of clear, concise and correct verbal communications with supervisor ◆ Work as part of a team and assist others ◆ Communicate with other team members	◆ Approved assessment by company official ◆ Logbook
R/R04/000/04	**Preventative maintenance**	◆ Awareness of requirements ◆ Assistance of colleagues when required with planned maintenance	◆ Describe why and when planned maintenance is needed ◆ Assist in preparing work area ◆ Determine what system isolations are required at the work area ◆ Determine relevant tools for work to be undertaken, under supervision	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R04/000/05	**Fault finding**	◆ Fault finding processes ◆ Identification of hazards that could arise during fault finding	◆ Locate and follow fault finding procedures for all systems within ROV system ◆ Report and record work carried out	◆ Approved assessment by company official ◆ Logbook
R/R04/000/06	**Piloting an ROV (piloting/technical)**	◆ Describe the function of standard ROV controls and their use in navigating the ROV ◆ Understanding of use of sonar ◆ Awareness of changes in ranges/ scales ◆ Understanding of use of acoustic positioning systems used by ROVs	◆ Navigating an ROV to work site in normal environmental conditions ◆ Familiarity with ROV controls ◆ Utilise navigational aids in order to direct and assist in piloting ROV	◆ Approved assessment by company official ◆ Logbook
R/R04/000/07	**Administration**	◆ Understand importance of documentation and logs ◆ Knowledge of company QA and associated procedures	◆ Record ROV dive information onto dive logs ◆ Able to complete dive records – video, audio and written ◆ Record video information on to video tape in the required format ◆ Audio dub video material in real time utilising correct terminology and specified procedures	◆ Approved assessment by company official ◆ Logbook
R/R04/000/08	**Technical**	◆ Knowledge of fundamentals of ROV system and subsystems, to include vehicle, launch and recovery system, and topside control system ◆ Understanding of fundamental hydraulic, electric and electronic principles	◆ Identify all the main components of the ROV system and describe their functions, e.g. winch, A-frame/crane, topside control components ◆ Perform general maintenance tasks (under supervision) ◆ Identify and assist with changing major hydraulic, electronic and electrical components ◆ Ability to assemble tools needed in change out, including personal protective equipment	◆ Approved assessment by company official ◆ Logbook
R/R04/000/09	**ROV systems**	◆ Testing, maintenance and operation of ROV system under supervision ◆ Understanding of power up/power down safety sequence	◆ Assist with the completion of pre-dive checks of an ROV ◆ Assist with the launch of an ROV in normal environmental conditions ◆ Assist with completion of post dive checks of an ROV	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R04/000/10	**Project activities**	◆ Understanding of project equipment operation procedures	◆ Familiarisation ◆ Project planning ◆ ROV dive planning	◆ Approved assessment by company official ◆ Logbook
R/R04/000/11	**Safe operating techniques**	◆ Understanding of safety and environmental requirements during launch and recovery and deck operations	◆ Describe correct/safe operation of launching system ◆ Describe roles of ROV team members during launch and recovery operations ◆ Describe the environmental effects of and limitations to launch and recovery operations	◆ Approved assessment by company official ◆ Logbook

ROV Tooling Technician Grade II

Code	Competence	Knowledge	Ability	Demonstration
R/R14/000/01	**Safety**	◆ Awareness of legislation ◆ Awareness of company safety management system ◆ Knowledge of own role and responsibilities ◆ Basic understanding of regulations ◆ Demonstration of safe work practices ◆ Attendance of worksite specific induction ◆ Understanding of company safety management system ◆ Identification of different areas in the workplace and the risks associated with each	◆ Locate all relevant health, safety and quality procedures at the worksite ◆ Participated in an offshore safety induction ◆ Follow safety instructions and use appropriate safety equipment for deck and worksite operations	◆ Approved assessment by company official ◆ Logbook
R/R14/000/02	**Emergency response**	◆ Knowledge of emergency procedures ◆ Knowledge of the ROV team members' roles and responsibilities ◆ Ability to describe own role in emergency situations and that of colleagues	◆ Read and demonstrate an understanding of company emergency procedure documents and where to find them ◆ Raise alarm and to alert others	◆ Approved assessment by company official ◆ Logbook
R/R14/000/03	**Personal skills and communication**	◆ Recognition of personal limitations and requests assistance from others when necessary without undue disruption and willing to offer assistance when needed	◆ Establish and maintain good working relationships with immediate team members ◆ Use clear, concise and correct verbal communications with supervisor ◆ Work as part of a team and assist others ◆ Communicate with other team members	◆ Approved assessment by company official ◆ Logbook

Code	Competence	Knowledge	Ability	Demonstration
R/R14/000/04	**Remote intervention tooling (RIT)**	◆ Reading and understanding of RIT manuals, compliance with instructions ◆ Performance of pre and post dive checks on RIT ◆ Ability to follow planned maintenance routines on RIT	◆ Assist the RIT operation ◆ Complete valve movement sheets ◆ Follow maintenance routines (under supervision) ◆ Assemble tools needed in change out, including personal protective equipment ◆ Hook up mechanically, hydraulically and electronically to the ROV (under supervision) ◆ Attach RIT to ROV and test on site (under supervision)	◆ Approved assessment by company official ◆ Logbook
R/R14/000/05	**Preventative maintenance (RIT)**	◆ Awareness of requirements ◆ Assistance of colleagues when required with planned maintenance	◆ Describe why and when planned maintenance is needed ◆ Assist in preparing work area ◆ Determine what system isolations are required at the work area ◆ Determine relevant tools for work to be undertaken, under supervision	◆ Approved assessment by company official ◆ Logbook
R/R14/000/06	**Technical**	◆ Knowledge of fundamentals of ROV tooling systems ◆ Basic knowledge of ROV systems including vehicle, launch and recovery system, and topside control system ◆ Understanding of fundamental hydraulic, electric and electronic principles	◆ Identify all the main components of the ROV system and describe their functions, e.g. winch, A-frame/crane, topside control components ◆ Identify all main components on the ROV and describe their function ◆ Perform general maintenance tasks (under supervision)	◆ Approved assessment by company official ◆ Logbook
R/R14/000/07	**Administration**	◆ Understand importance of documentation and logs ◆ Knowledge of company QA and associated procedures	◆ Ensure all recorded information fully complies with company QA/QC policies and procedures ◆ Ensure that spare parts, materials etc. are available when required	◆ Approved assessment by company official ◆ Logbook
R/R14/000/08	**Project activities**	◆ Understanding of project equipment operation procedures	◆ Familiarisation ◆ Project planning	◆ Approved assessment by company official ◆ Logbook