NOPSEMA
Australia's offshore energy regulator

GUIDANCE NOTE

Crane Operator Competence

Document No: N-09000-GN0955 A208207

Date: 24/06/2021

1. Purpose

The purpose of this guidance note is to describe competency assurance for offshore crane operators working in the Australian offshore petroleum industry in Commonwealth and Victorian designated coastal waters. General guidance on competency assurance for facility operators is described in NOPSEMA's previously published information paper (N-06300-IP1038).

2. Background

The responsibility for the crane specific training and the overall competence of the offshore crane operator remains with the operators of offshore facilities.

The term "offshore crane" may be applied to various types of cranes, for example:

- Subsea knuckle boom crane on a diving support vessel
- 4000t Mast crane on a heavy lift construction vessel
- Electrical overhead crane in the thruster room of a floating production storage and offtake vessel
- Diesel-hydraulic lattice boom pedestal crane on a production platform
- Pneumatic hoist above a turbine on a semi-submersible drilling vessel.

The offshore cranes are specified, by the facility operator, to fulfil specific mechanical handling applications.

As illustrated in the examples above, there is a variety of crane configurations and functional uses at offshore facilities. Consequently, it should be understood that there is no single qualification or license for operating all types of offshore cranes.

3. Current requirements for offshore crane operators

NOPSEMA regulates according to an objective-based regime. In relation to offshore crane operator competency, the onus is placed upon the operator to ensure safe operations, rather than a government administered system of accreditation.

A unit of competency, by itself, may not satisfy the requirements of the facility competency assurance process.

Legislative requirement

Schedule 3 to the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* requires, in Clause 9(2)(f), that the operator of a facility must:

'*provide all members of the workforce, in appropriate languages, with the information, instruction, training and supervision necessary for them to carry out their activities in a manner that does not adversely affect the health and safety of persons on the facility*'.

Because of this objective based approach to safety, the existing Commonwealth and Victorian state legislation has no specific requirement for the certification of a crane operator to operate a crane on an offshore petroleum facility.

Regulation 2.9 of the Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009 also states that:

'The safety case for a facility must describe the means by which the operator will ensure that each member of the workforce at the facility has the necessary skills, training and ability:

(a) to undertake routine and non-routine tasks that might be given to him or her'.

(b) to respond and react appropriately, and at the level that might be reasonably required of him or her, during an emergency

These requirements apply to every member of the workforce on the facility, including crane operators.

In other words, it is ultimately the responsibility of the operator of the facility to ensure that a crane operator is competent to operate a crane on an offshore facility in a safe manner.

3.1. Offshore crane operator competency system

To meet the requirements outlined above, the operator of the facility should develop and implement an offshore crane operator competency system, which assures the competency for operating their specific offshore cranes. These requirements should detail the:

- experience and training prerequisites
- training needs at the facility
- competency assessment processes including verification of competency on a specific crane. This includes assessment of competence to conduct pre-use examinations of the crane
- re-training and competency re-assessment requirements
- retention and maintenance of training & assessment records
- ongoing monitoring and regular review and improvement of the offshore crane operator competency system
- the competency of assessors responsible for the training and assessing of offshore crane operator's skills.

Operators should also consider the following:

- Use of onshore simulators for initial training or competency re-assessment
- Engagement with the crane OEM to assist developing the competency required

- A staged approached for competency development
- The additional complexity of rigging and load handling on vessels compared with onshore rigger and dogman work
- The competency system may take into account the availability and practicality of offshore crane operator training, however training and skill development should form part of the competency system.

Facility operators may consider including training and/or qualifications from other geographical areas of work, including overseas, in addition to OEM instructions, in their competency systems.

Good practice for crane operators may be found in codes, standards and guides, for example:

- API Recommended Practice – RP 2D-2 – "Training for Offshore pedestal-mounted crane riggers, operators, and inspectors"
- HSE UK publication - OMHEC training standard 03-2003 - "Training Standard Crane Operator and Banksman offshore"
- HSE UK publication – "Technical guidance on the safe use of lifting equipment offshore" – HSG 221
- Norwegian Standard, NORSOK-R0003N, "Safe use of lifting equipment":
  - G5 – Offshore crane
  - G20 – Fixed hydraulic / knuckle boom cranes
- OPITO Standards for Offshore Crane Operator Stages 1 through 3 for subsea vessel, fixed structure and floating structure lifting
- IMCA Guidance on the use of Simulators - IMCA C 014 Rev. 4.1
- Unit of competence PMASUP305A Operate Offshore Cranes for offshore lifting operations.

Note: The PMASUP305A unit of competence was developed by an offshore oil and gas industry working group, which included a number of current offshore crane drivers. To gain recognition for a national unit of competence, the assessment needs to be performed by a registered training organisation (RTO).

Administration of RTOs is managed by TGA; NOPSEMA does not have any involvement with appointment, endorsement or recognition of RTOs. Furthermore, NOPSEMA does not endorse or recommend particular training courses or certificates.

It must be stressed, however, that since the operator of the facility is responsible for the crane operator competence, certified training should complement the operator's system and should not be used or seen as being used as an attempt to transfer the operator's responsibility to others.

Example

A person holding a crane driver certificate for a land-based crane issued in Australia under the national certification system may require additional offshore-specific training and competency assessment before being allowed to operate a crane on an offshore facility. It is up to the operator of the facility to determine on a case-by-case basis, under their offshore crane driver competency system, what additional training and competency assessment the person would require.