

Product title: Offshore Emergency Response Team Member Initial Training

Product code: 4500

Product type: OPITO Standard

**Product category:** Oil and Gas / Specialist Emergency Response / Helideck and Emergency Response

Teams

Date of last update: 19/05/2023 - Date of last update field added to product spec

#### Who is the Product for?

This Product is for personnel who are appointed to, or to be appointed to, the role of an Offshore Emergency Response Team Member.

The purpose of this Product is to set out the basic training, further practice and assessment requirements for Offshore Emergency Response Team Members which will be conducted at an onshore training centre. The learner should recognise that this is only part of a broader training programme. There will also be company and installation-specific emergency response training, most of which will be conducted offshore on a regular basis as offshore drills and exercises.

#### Appointment of OERTMs

The Installation, MODU or vessel Duty Holder is responsible for ensuring that personnel appointed to Offshore Emergency Response Team Member (OERTM) role has received sufficient training and gained relevant experience to undertake the role(s) competently and safely.

The Duty Holder must ensure that, apart from the provision of onshore training:

- a) Workplace training is provided and workplace competence assessment is conducted, AND
- b) Additional Specialist Training e.g. confined space or working at height (WAH) training (where required by duty holder) is provided before the OERTM is appointed to the role.

### **OPITO-certified OERTM Training**

- (1) The OERTM Initial Training which will be conducted at an onshore training centre
- (2) The OERTM Further Training this programme involves updating and refreshing relevant knowledge and undertaking emergency response training not able to be conducted offshore

#### Workplace Training and Assessment

In addition to the onshore-based training, company and site-specific training and assessment will typically be conducted offshore.

OERTM emergency response training that can be conducted offshore will be conducted on a regular basis during drills and exercises. Workplace OERTM Competence guidance for duty holders is specified in the OERTM Workplace Competence document.

Note: This Product does not include practical training for accommodation fires involving ventilation fire in compartments where backdraft potential exists. Other specialist training exists in this area and should be undertaken where deemed necessary.

#### What does this Product cover?

This Product aims to equip the learner with the necessary knowledge, understanding and skills to perform the role of Offshore Emergency Response Team Member effectively.

# How can you successfully achieve this Product?

To achieve the Offshore Emergency Response Team Member Initial Training the learner will need to complete the 3 mandatory units.

#### What could this Product lead to?

Offshore Emergency Response Team Member Further Training or Offshore Emergency Response Team Leader Initial Training

#### What are the entry requirements?

There are no formal prerequisites for the OERTM training programme.

### **Medical entry requirements**

Training activities contained within this Product may include physically demanding and potentially stressful elements. All personnel who participate in such activities must be capable of participating fully.

Therefore, OPITO-approved training centres are required, as a minimum, to ensure that prior to participating in practical exercises the learner is declared fit, in that they

- a)Possess a valid, current offshore medical certificate or
- b)Possess an operator approved medical certificate or
- c)Undergo medical screening by completing an appropriate medical screening form provided by the OPITO-approved Centre

The OPITO-approved Centre shall keep a record of the learners' declaration(s) of fitness in accordance with their document control policy(s) or procedures. This information, along with summary details of the type of physical activities the learner will be asked to perform, will be given to learners by the OPITO approved Centre and, if applicable, to their sponsoring company as part of the joining instructions. The responsibility for declaring any current or pre-existing medical conditions that could have adverse effects to the individual's state of health while undertaking the training and/or assessment activities lies with the learner and/or company sponsoring the learner. Where doubt exists regarding the fitness of any learner, the OPITO-approved Centre must direct the individual to consult a medical officer familiar with the nature and extent of the training.

Note: Practical exercises must be designed and delivered solely to meet this Product and must not place on the learners any demands other than those required to meet the Product.

#### Country Specific if applicable?

N/A

#### How is this Product assessed?

The details outlined are an overview of an OPITO Product, which is part of the OPITO Product Portfolio and is owned by the organisation These Products carry the OPITO logo.

Please note, Products are subject to change in line with OPITO's policy of continual improvement.

#### Working together to develop a safe and skilled energy workforce

Learners will be assessed against the outcomes specified in accordance with the assessment guidance detailed in each unit.

# Are there any ratios that must be adhered to for the delivery of this Product?

OERTM Initial Training - Minimum learners 5, and Maximum 12

The following ratios indicate the maximum number of learners to be supervised by one Instructor at any one time during each activity.

Theory 1:12 Demonstrations 1:6 Practical Exercises 1:6

**Note:** For the OERTM and OERTM Further Training programmes, the maximum learner numbers and theory ratio may be exceeded to accommodate company/installation emergency response teams. However, practical exercise supervision ratios must not be exceeded.

# What are the Guided Learning Hours?

32 hours

An approximate ratio of 25% theory to 75% practical is appropriate for this training programme.

# What staff resources are required to deliver this Product?

#### **Instructional training** staff must:

- (a) Fully understand the requirements of this industry standard.
- (b) Possess occupational expertise and have proven experience in firefighting and emergency response operations at supervisory level.
- (c) Have been trained in training delivery and training assessment techniques.
- (d) Hold an industry-recognised assessor qualification.
- (e) Participate in an ongoing training and development programme which ensures that they are aware and knowledgeable of relevant industry requirements and changes to requirements.

**All staff** will have the appropriate competencies to conduct or assist (as appropriate) with the element of training being undertaken.

OPITO Centres must have an auditable training programme in place to ensure instructors keep up-to-date with relevant current offshore practices and changes.

### What facilities and equipment are required to deliver this Product?

#### **Facilities**

It is important to ensure that the full range of facilities is made available to ensure delegates get the most out of their training. The following facilities criteria must be adhered to:

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**Practical training** areas so designed to enable each learner to, as part of a team, participate fully in the following:

- (a) Using fire hose, hose fittings, hydrants, hose branches, portable monitors, hose running and branch handling on walkways and stairways, against two or more of the following:
- I. Class A contained fire (mandatory requirement)
- II. Class B contained spill fire
- III. Class B flowing fire
- IV. Class C (gas) fire
- (b) Isolating fuel valves on a hydrocarbon pressure-fed fire whilst using water for structural and personal protection
- (c) Using foam producing equipment against a Class B hydrocarbon flowing and contained spill fires
- (d)Donning and wearing working duration breathing apparatus on open and enclosed multi level structure(s).

There must be at least one multilevel structure with a minimum of 3 levels, with open and enclosed spaces on each level.

The following requirements must be met for operations across multiple levels in a single structure.

- I. Being smoke-logged and heated using cosmetic, real smoke and fire
- II. Being accessed internally and externally by the use of stairs, fixed ladders and walkways
- III. Containing
- i. internal Class A contained fire(s), Class B contained spill fire(s), Class B pressure-fed fire(s) and
- ii. external Class B pressure-fed fires, Class B contained spill fire(s) Class B flowing fires and Class C (gas) fire(s)
- IV. Allowing realistic firefighting operations to be conducted
- (e) Firefighting and protecting a structure housing a simulated pressure vessel and associated pipework.
- (f) Confined space [for confined space incident]
- (g) Rescue of casualties from elevated work area with restricted access (height of between 2-4 metres)

Note: Class B fires: For environmental purposes, smoke suppression or clean-burn systems are acceptable for reducing smoke during Class B fire exercises

### Firewater Reservoir Tank/Vessel

Firewater reservoir of sufficient capacity to enable all firefighting exercises to be completed.

# **Firewater Pumping Capability**

- 1. Firewater pumping capacity adequate to supply practical fire exercise areas at full training capacity.
- 2. Firewater pumping system back-up capability to supply adequate pressurised water to the exercise area in the event of the main pump/s failure.
- 3. Adequate controls and safety arrangements to shut off fuel to fires in event of fire water failure.
- 4. Low firewater pressure alarm or a means of monitoring firewater pressure.

### **First Aid Facilities**

Appropriate first aid facilities and equipment as specified in the training centre's risk assessments, and sufficient staff trained in the use of the facilities and equipment.

All facilities must be maintained and where appropriate, inspected and tested in accordance with current standards/legislation and manufacturers recommendations. Risk assessments must be conducted and documented for all training facilities and equipment.

#### **Equipment**

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The following equipment, of a type in use regionally on offshore oil and gas installations is required to meet the needs of the training programme exercises.

## **Firefighting Equipment**

- (a) Hand adjustable foam-producing fire monitors
- (b) Dry powder and CO2 cart/trolley
- (c) Portable extinguishers:
- i. Water
- ii. dry powder
- iii. foam
- iv. CO2.
- (d) Fire hoses
- (e) variety of branches: aspirated and non-aspirated
- (f) foam inductors
- (g) water fire hose reel
- (h) fire-lighting equipment for lighting fires safely

### Other equipment

- (i) Stretchers
- (j) Harnesses
- (k) Slings
- (I) working duration breathing apparatus and cylinders
- (m) breathing apparatus entry control equipment
- (n) first aid equipment
- (o) resuscitation equipment
- (p) casualty simulators
- (q) Fire fighting PPE
- (r) Chemical spill kit
- (s) Chemical Personal Protective Equipment (PPE)
- (t) Torches/flashlights

All equipment must be maintained, and where appropriate, inspected and tested in accordance with current standards/legislation, guidance and manufacturers recommendations

# What is the validity of this Product?

2 years

Please note: If the expiry date on the learners previous certificate is within 3 months prior of the course enrolment date then the date of the new certificate should correspond with the expiry date of the existing/previous certificate unless stated otherwise by the Duty Holder or Asset Owner or Operator.

### **Product Summary**

# **Product Structure:**

To achieve the Offshore Emergency Response Team Member Initial Training the learner will need to complete the 3 mandatory units.

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#### Working together to develop a safe and skilled energy workforce

Unit Code	Unit Title
OIS-12	The Role of the Offshore Emergency Response Team Member
OIS-13	Incident Response
OIS-14	Practical Exercises for the OERTM

# **Unit Summary**

Unit Code	OIS-12
Title	The Role of the Offshore Emergency Response Team Member
Guided Learning Hours	See GLH at Product level
Assessment Guidance	Centres must ensure that learners receive all theoretical learning specified in each Unit Outcome prior to any practical assessment taking place.
	Centres must also be able to demonstrate that learners have achieved an understanding of the information and concepts detailed in each of the Unit Outcomes. This may be achieved through a variety of methods, including but not limited to: group or individual discussion, verbal or written questioning, scenarios, virtual simulation, and eLearning.
Assessment/Evidence Requirements	Records of assessment referencing all outcomes, must be securely maintained.

OUTCOMES		CRITERIA	
		1.1	The elements of teamwork and their application to offshore emergency response teams, to include:
			1.1.1 the role and key responsibilities of the OERTM
	Outcome: The role of		1.1.2 the role and key responsibilities of the OERTL, including sub-leadership
1	teamworking and communications in emergency		1.1.3 maintaining the safety of the OER team
	response The learner will understand:		1.1.4 Human factors that may affect the safety of the OER team and individual team members.
		1.2	The elements of effective communication, to include:
			1.2.1 typical communication hierarchy and processes during an incident
			1.2.2 various communication methods and their limitations, including:

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		<ul> <li>i) runners</li> <li>ii) hand signals</li> <li>iii) radios</li> <li>iv) telephone</li> <li>v) vocal</li> <li>1.2.3 control requirements to include designated ER radio channels.</li> </ul>
Outcome: Offshore emergency response arrangements The learner will understand:	2.1	Typical offshore emergency response arrangements, to include:  2.1.1 key legislation relevant to OERTM role in region of operations  2.1.2 emergency alarms and procedures  2.1.3 emergency and incident planning including hazard recognition  2.1.4 levels of emergency and response to include: preparedness, response actions, and recovery  2.1.5 emergency management roles (individual and team roles)  2.1.6 incident control centres  2.1.7 emergency communication protocols.  2.1.8 importance of familiarisation with company/asset specific emergency response arrangements  Hazards, hazard recognition and mitigation associated with typical fire and non-fire incidents, to include:  Fire:  2.2.1 rotating machinery  2.2.2 electrical  2.2.3 pressure-fed  2.2.4 chemical including methanol and oxidising agents  2.2.5 explosives  2.2.6 accommodation, galley and laundry  2.2.7 fire behaviour in relation to backdraft and flashover

2.2.8 hazardous areas including processing, drill floor/well test area and fabrication shop

#### Non-fire:

- 2.2.9 unignited gas releases
- 2.2.10 unignited fuel spillages
- 2.2.11 chemical spill
- 2.2.12 radiation incident
- 2.2.13 toxic gas release and asphyxiates
- 2.2.14 cryogenic release (i.e. LNG)
- 2.2.15 electrical incident
- 2.2.16 confined space incident
- 2.2.17 working at height incident
- 2.2.18 medical emergency
- 2.2.19 ERT involvement with the Heli-deck Team
- 2.3 Incident planning and progress monitoring, to include:
  - 2.3.1 typical Safety Case/ER plans
  - 2.3.2 the various stages of emergency response
  - 2.3.4 key emergency assessment points including dynamic risk assessment and 360-degree assessment
  - 2.3.5 establishing the layout of the incident area and boundaries
  - 2.3.6 access and egress planning
  - 2.3.7 location of fire and emergency equipment
- The purpose, operation, performance and 2.4 limitations of typical fixed fire-fighting systems offshore, including:

#### **Active Systems:**

- 2.4.1 fire pumps
- 2.4.2 deluges
- 2.4.3 sprinklers
- 2.4.4 monitors

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	2.4.5 foam
	2.4.6 gaseous systems
	2.4.7 water mist
	2.4.8 chemical
	Passive Systems:
	2.4.9 blast and fire walls
	2.4.10 passive fire protection
	2.4.11 bulk heads/compartmentation
2.5	ER team familiarization of significant changes to structural layout of installation/vessel e.g. during commissioning or decommissioning.

Unit Code	OIS-13			
Title	Incident Response			
Guided Learning Hours	See GLH at Product level			
Assessment Guidance	Assessment Guidance for Outcome 1 - 3			
	Centres must ensure that learners receive all theoretical learning specified in each Unit Outcome prior to any practical assessment taking place.			
	Centres must also be able to demonstrate that learners have achieved an understanding of the information and concepts detailed in each of the Unit Outcomes. This may be achieved through a variety of methods, including but not limited to: group or individual discussion, verbal or written questioning, scenarios, virtual simulation, and eLearning.			
	Assessment Guidance for Outcomes 4 and 5			
	Centres must ensure that learners receive all theoretical learning specified in each Outcome prior to any practical assessment taking place.			
	Following theoretical learning and demonstration of practical exercises by the centre, learners will be observed undertaking practical exercises covering all the criteria specified.			
	Learners must successfully complete all practical exercises in order to achieve this Unit.			
Assessment/Evidence Requirements	Records of assessment referencing all outcomes, must be securely maintained.			

OUTCOMES	CRITERIA
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- Typical OER team mobilisation 1.1 procedures.
- 1.2 Key elements in incident brief, including:
  - 1.2.1 location and type of incident
  - 1.2.2 purpose and objectives of entry
  - 1.2.3 safe access and egress
  - 1.2.4 process conditions and associated local hazards
  - 1.2.5 active work sites
  - 1.2.6 people in area
  - 1.2.7 fire protection and detection systems in operation
  - 1.2.8 potential effects of incident on infrastructure (ie. FRP grating)
  - 1.2.9 weather conditions including prevailing wind
  - 1.2.10 communication processes
  - 1.2.11 incident withdrawal arrangements
  - 1.2.12 types and donning of PPE for different incidents i.e. chemical and firefighting PPE
- Considerations and actions whilst entering 1.3 and working in the incident area, to include:
  - 1.3.1 dynamic risk assessment, including but not limited to:
  - i) team safety considerations
  - ii) discovering casualties
  - iii) effects of the incident on the area
  - iv) maintaining access and egress
  - 1.3.2 movement through the incident area, to include:
  - i) door entry procedures
  - ii) upright (BA shuffle)
  - iii) crawl
  - iv) descend/ascend stairs and ladders
  - 1.3.3 effective communications

**Outcome: Incident response** procedures, protocols and

The learner will understand:

activities

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	1.4	<ul> <li>1.3.4 Human behaviours during emergency response, including: <ol> <li>i) effects of heat and humidity</li> <li>ii) stress affecting decision making</li> <li>iii) loss of orientation/location</li> <li>iv) physical limitations</li> <li>v) sources of assistance available during emergency</li> </ol> </li> <li>Incident conclusion including: <ol> <li>1.4.1 making the area safe</li> <li>1.4.2 preparation for next incident response</li> <li>1.4.3 post incident debrief</li> <li>1.4.4 potential investigation requirements</li> </ol> </li> </ul>
Outcome: Search and rescue procedures The learner will understand:	2.1	Typical search and rescue procedures, equipment and techniques, involving the following:  2.1.1 installation and module design, to include:  i) open/closed modules  ii) differing heights/levels  iii) congested/confined  iv) ascending/descending ladders and stairs  2.1.2 methods of access and egress  2.1.3 maintenance of means of escape  2.1.4 varying range of visibility, to include one of each of the following search and rescue scenarios:  i) without BA and no smoke  ii) with BA and no smoke  iii) with BA and smoke
Outcome: Casualty recovery procedures	3.1	Casualty recovery, to include: 3.1.1 initial casualty assessment and
The learner will understand:		recovery

	3.1.2 importance of getting the case	-
	to a safe area for further assessments.  3.1.3 situations where essential fire.	
	might be carried out by OERTM	St alu
	3.1.4 sources of available specialis aid support	st first
	3.1.5 casualty handling equipment stretchers, harnesses, slings)	(i.e.
	Select and operate of firefighting 4.1 equipment and media to extinguish including:	fires,
	Fire types:	
	4.1.1 responding to, and extingu the following common fire types:	ishing
	i) class A (solids)	
	<ul><li>ii) class B (hydrocarbon liquids) flowing and pressure-fed)</li></ul>	(spill,
	iii) class C (gases).	
	Equipment:	
Outcome: Selecting and operating	4.1.5 using portable fire equipme include:	nt, to
firefighting equipment	i) dry chemical extinguishers	
The learner will perform:	ii) hose reels,	
	iii) hose branches	
	iv) monitors	
	4.1.6 using foam equipment, to in-	clude:
	i) inductors	
	ii) branches	
	iii) compound containers	
	iv) flushing after use.	
	4.1.7 hose operations, to include:	
	i) running out and under-running	
	ii) connecting to ancillary equipment	ent
	iii) routing through: walkways, stairways and inside modules	

		<ul><li>iv) adding and replacing lengths of hoses</li><li>v) making up following use of hoses.</li></ul>
		Media:
		4.1.8 using the following firefighting media:
		i) water
		ii) foam
		iii) CO2
		iv) dry chemical
	5.1	Use breathing apparatus control board procedures, to include:
		5.1.1 setting up the BA control board in a safe location
		5.1.2 calculation of working durations and whistle times
		5.1.3 using BA control board tally procedures
Outcome: Safely operating 5 working duration breathing apparatus	5.2	Operation, donning and wearer checks of working duration breathing apparatus*, to include:
The learner will perform:		5.2.1 pre-operational checks
The learner will perform.		5.2.3 wearer checks, to include face seal
		5.2.4 donning
		5.2.5 operation
		5.2.6 whistle check
		5.2.7 monitoring usage in the incident area – gauge checks
		5.2.8 cylinder handling
		5.2.9 recording requirements

Unit Code	OIS-14
Title	Practical Exercises for the OERTM
Guided Learning Hours	See GLH at Product level

Assessment Guidance	Centres must ensure that learners receive all theoretical learning specified in each Outcome prior to any practical assessment taking place.
	Following theoretical learning and demonstration of practical exercises by the centre, learners will be observed undertaking practical exercises covering all the criteria specified.
	Learners must successfully complete all practical exercises in order to achieve this Unit.
	Practical exercises used must include appropriate combinations of all of the following scenarios:
	Fire-related Incidents:
	(a) Accommodation (multi-level) including galley or laundry fires
	(b) Process area (open and closed) including internal and external high
	pressure and pool fires
	(c) Machinery space including engine room/plant room
	(d) Fabrication area including workshop/paint store
	(e) Closed containers or cylinders exposed to fire.
	Non fire related incidents:
	(f) Unignited gas and liquid releases
	(g) Chemical incident
	(h) Confined space incident
	(i) Working at height incident with restricted access
	Each learner must be involved in at least one scenario covering all 3 levels of a multi-level structure and must include casualty recovery and hose management, with a charged hose.
	Notes for i)
	(1) Height must be a minimum of 2 metres and a maximum of 4 metres
	(2) Basic rescue exercise without specialist support involving non- suspended casualty.
	(3) Restricted access would involve the use of equipment such as ladder, access hatch, stretcher.
	(4) Elevated work area examples include scaffolding, crane operator cabin, elevated maintenance area etc.
Assessment/Evidence Requirements	Records of assessment referencing all outcomes, must be securely maintained.

OUTCOMES	CRITERIA	
Outcome: Handling practical fire and non-fire related incidents  The learner will perform:	How to select and operate the correct firefighting equipment and media to extinguish different types of fires	

	1.2	Breathing apparatus control board procedures
	1.3	How to identify and don the appropriate emergency response PPE required for the OER team member
	1.4	Operate don and wearer checks of working duration breathing apparatus
	1.5	Participle in an incident brief
	1.6	Selection and use of correct portable fire-fighting equipment
	1.7	Select, operation and flushing of foam firefighting equipment
	1.8	Extinguish different types of fires and securing the area
	1.9	Effective communication with OERTL and OER team members during an incident
	1.10	The key considerations and actions whilst entering and working in the incident area
	1.11	Correct search and rescue procedures and techniques
	1.12	The correct steps involved in initial casualty assessment and recovery
	1.13	Participate in a post-incident debrief and ensure operational readiness

# **ABOUT OPITO**

OPITO is the global, not-for-profit, skills body for the energy industry. For over three decades the company has ensured safety is at the forefront of operations, with more than 375,000 people trained every year.

### Links

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