

Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

Description Training

OPITO has been setting standards for the oil and gas industry since 1991 to help improve workforce safety and competence - over 350,000 people per year train to OPITO Standards across the globe.

In partnership with industry stakeholders, OPITO identifies the needs and requirements for new and improved training and competence standards for both onshore and offshore. O Opito produce world-class, industry-driven standards that are recognised globally and we ensure that your approved training providers deliver training in compliance with these standards.

Learning outcomes of the Digital BOSIET (with CA-EBS) Program content / Workload

Unit Code	Unit Title
OIS-69	Safety Induction - Digital delivery
OIS-348	Helicopter Safety and Escape CA-EBS - Digital Delivery
OIS-71	Sea Survival and First Aid - Digital Delivery
OIS-72	Firefighting and Self Rescue - Digital Delivery

Unit Code	OIS-69
Title	Safety Induction - Digital delivery
Guided Learning Hours	30 minutes
OUTCOMES	
1. Outcome: Typical offshore oil and gas activities	
The learner will understand:	
CRITERIA	
1.1 Typical offshore oil and gas activities	
1.2 Formation, finding and exploitation of oil and gas; how hydrocarbons are formed, found and produced	
1.3 Types of offshore installations, specialist vessels and their main functions and features; to include:	
1.3.1 Drilling – jack-up, semi-sub, drill ship	
1.3.2 Production - oil and gas, gas, fixed, floating	
1.3.3 Construction – heavy lift, pipe laying	
1.3.4 Accommodation – flotel	

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Rev. 01.22022022

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1.3.5 Specialist vessels – standby, support, diving support.
1.4 The offshore environment, to include:
1.4.1 Remote nature
1.4.2 Harsh conditions
1.4.3 Proximity of various environments
OUTCOMES
2. Outcome: The main offshore hazards
The learner will understand:
CRITERIA
2.1 A hazard, risk and control measure
2.2 Accident statistics when compared with other industries
2.3 Offshore hazards and comparative risk levels to include:
2.3.1 Pressure hazards, to include: oil/gas reservoir, process/drilling pipework, water/gas injection, gas and compression
2.3.2 Motion hazards, to include: drilling tubulars, exposed machinery parts, moving heavy equipment and manual handling
2.3.3 Chemical hazards, to include: drilling chemicals, reservoir fluids/gases (including H ₂ S), process chemicals and solvents
2.3.4 Electrical hazards, to include: maintenance of electrical equipment, faulty electrical equipment
2.3.5 Gravity hazards, to include: working under suspended loads, working at heights and slips and trips
2.3.6 Noise hazards, to include: working in process areas, drilling areas, helicopter areas and noise exposure levels
2.3.7 Hazardous atmospheres, to include an explanation of how areas are designated hazardous zones
2.3.8 Confined space hazards, to include the following characteristics: limited openings for entry or exits, confined spaces when working inside containers or vessels and unfavourable natural ventilation
OUTCOMES
3. Outcome: The potential environmental impact of offshore installation operations
The learner will understand:
CRITERIA
3.1 Environmental impact and statistics

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Rev. 01.22022022

8hrs

OUTCOMES
4. Outcome: The principles of managing safety on offshore installations
The learner will understand:
CRITERIA
4.1 The multiple barriers model and systems in place to prevent hazards from contacting targets, including: 4.1.1 Safe Systems of Work (SSOW) 4.1.2 Personal Responsibility for Safety (PRFS) 4.1.3 Safety observation programmes
OUTCOMES
5. Outcome: Hazard effects and consequences; their associated risks, and how they are controlled
The learner will understand:
CRITERIA
5.1 The hierarchy of control and how control measures are implemented offshore 5.2 Risks and implementation of control measures to include: 5.2.1 Reservoir/pipe work isolation 5.2.2 Blowout preventers (BOP) 5.2.3 Training on handling tubulars 5.2.4 Guarding of machinery 5.2.5 MSDS/ chemical and dust protection 5.2.6 Electrical isolation 5.2.7 Fall protection 5.3 The consequences of failing to control the risks
OUTCOMES
6. Outcome: Key offshore installation safety regulations and the basic concept of these regulations
The learner will understand:
CRITERIA
6.1 How offshore safety is regulated to include: 6.1.1 Applicable legislation 6.1.2 Legislative requirements 6.1.3 Legal responsibilities 6.1.4 Role of industry organisations 6.1.5 Documenting the safety management systems 6.2 The hierarchy of legislation

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Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

6.3 Directives
6.4 Safety Case regulations to include:
6.4.1 Identification of major hazards, risks and control measures
6.4.2 How safety is audited
6.4.3 Acceptance by the health and safety regulator
6.4.4 Verification of safety critical systems
6.4.5 Performance standards
6.5 The duties of the employer and employees and the concept of ALARP
6.6 How goals are set for prevention/protection and emergency response, emergency response planning and performance standards
6.7 The role of the Health & Safety Authority to include:
6.7.1 Scope
6.7.2 Activities
6.7.3 Powers of the Health & Safety Inspector
6.8 Relevant ISO standards, to include ISO14001
6.9 Industry expectations of personal safety behaviour, to include:
6.9.1 The industry's expected standards for safety
6.9.2 Typical behavioural safety tools
OUTCOMES
7. Outcome: Key information and policies to ensure the health, safety and wellbeing of those living and working offshore.
The learner will understand:
CRITERIA
7.1 Fitness requirements and medical standards
7.2 The procedure for taking prescribed medicines offshore
7.3 Identify alcohol and substance abuse policies
7.4 Offshore requirements and welfare to include:
7.4.1 Administration requirements
7.4.2 Requirements on arrival on an offshore installation
7.4.3 Items permitted/not permitted offshore

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8hrs

- 7.4.4 Installation induction
- 7.4.5 Safety constituencies
- 7.4.6 Role of safety representatives and safety committees
- 7.4.7 Responsibilities of employers
- 7.4.8 Employee line of reporting
- 7.4.9 Cabin/laundry/bond
- 7.4.10 Recreation/smoking
- 7.4.11 Getting on with others

- 7.5 Working routines to include:
 - 7.5.1 Procedures
 - 7.5.2 Work authorisation
 - 7.5.3 Personal Protective Equipment (PPE)
 - 7.5.4 Maintaining a safe workplace
 - 7.5.5 Waste disposal

- 7.6 Involvement in safety to include:
 - 7.6.1 Observation systems
 - 7.6.2 PTW
 - 7.6.3 Toolbox talks
 - 7.6.4 Safety meetings
 - 7.6.5 Drills and exercises
 - 7.6.6 Additional emergency response duties
 - 7.6.7 Getting involved

- 7.7 Communicating safely, including lines of communication

- 7.8 What to do when not satisfied with response to safety communication to include:
 - 7.8.1 Contacting immediate supervisor
 - 7.8.2 OIM
 - 7.8.3 Safety Representative
 - 7.8.4 Health & Safety Regulator

- 7.9 Injuries and illness to include:
 - 7.9.1 Reporting incidents, accidents, near misses and illnesses
 - 7.9.2 The role of the offshore medic
 - 7.9.3 First aid arrangements offshore
 - 7.9.4 Investigation of incidents and accidents
 - 7.9.5 Preventing a recurrence
 - 7.9.6 Support available to relatives in the event of illness/injury/major incident/evacuation

Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

Unit Code	OIS-348
Title	Helicopter Safety and Escape CA-EBS - Digital Delivery
Guided Learning Hours	3 hours 15 minutes
OUTCOMES	
1 Outcome: Helicopter Travel	
The learner will understand:	
CRITERIA	
1.1 Pre-flight briefings	
1.2 The procedures and requirements for pre-boarding, safe boarding, in-flight and safedisembarkation including:	
<ul style="list-style-type: none"> 1.1.1 Arrival time 1.1.2 Correct dress 1.1.3 Documentation 1.1.4 Prohibited articles 1.1.5 Check-in procedures 1.1.6 Safe boarding 1.1.7 Pre-flight video 	
OUTCOMES	
2. Outcome: Helicopter Emergencies	
The learner will understand:	
CRITERIA	
2.1 Informing the crew of suspected or observed helicopter emergencies, to include:	
<ul style="list-style-type: none"> 2.1.1 Discovering a fire 2.1.2 Smoke 2.1.3 Fuel leaks 2.1.4 Abnormal conditions which the crew may not be aware of 	
2.2 In-flight procedures to include:	
<ul style="list-style-type: none"> 2.2.1 Don hood – ensure survival suit is zipped up 2.2.2 Check seat belt is tight, and life jacket is secure 2.2.3 Following crew instructions 	
2.3 Aircraft basic flotation characteristics	
2.4 Aircraft escape routes for ditching and emergency landing	
2.5 Independent action	
2.6 Survival techniques following ditching and emergency landing either on land or in water	

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Rev. 01.22022022

8hrs

2.7	How to don an aviation transit suit (of a type typically used in the region/area of operations) compressed air breathing system (CA-EBS) and an aviation lifejacket
2.8	Actions in preparation for a helicopter ditching and emergency landing, including brace positions for the range of seating locations and harness types
2.9	Helicopter evacuation, to include: 2.9.1 Locate 2.9.2 Release (on-command) 2.9.3 Evacuating through nominated exits and push-out windows: on-water, underwater and capsize. 2.9.4 Impact attenuating seats, to include purpose and operation of seat and evacuation technique (demonstration not required, this will be achieved by the use of video Or slides)
2.10	Emergency equipment onboard the helicopter, including stowage location of aviation liferaft, operation and entry
2.11	Initial actions on boarding the aviation liferaft i.e. how to use mooring lines, deploying the sea anchor, raising the canopy and raft maintenance
2.12	Use of aviation liferaft equipment and secondary actions on boarding the aviation liferaft, to include e.g. posting lookouts, activating the radio beacons and first aid
Note: Secondary actions do not need to be demonstrated	
OUTCOMES	
3. Outcome: Use of Compressed Air Emergency Breathing System (CA-EBS)	
The learner will understand:	
CRITERIA	
3.1	The principles of compressed air emergency breathing systems (CA-EBS)
3.2	The principles of other typical emergency breathing systems (EBS) used in the oil and gas industry (i.e. re-breather systems)
3.3	The components and elements of the CA-EBS, including: 3.3.1 Hose (if fitted) 3.3.2 Mouthpiece 3.3.3 Cylinder 3.3.4 Demand Valve 3.3.5 Pressure indicator 3.3.6 On/Off ratchet/knob (if fitted)

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- 3.3.7 On/Off Status Indicator (if fitted)
- 3.3.8 Purge button
- 3.3.9 Nose clip (if fitted)
- 3.3.10 Charging Port

- 3.4 The operation of the compressed air EBS equipment in conjunction with other survival equipment:
 - 3.4.1 Life jacket
 - 3.4.2 Survival suit (including importance of correctly sized suit)
 - 3.4.3 Personal Locator Beacon (PLB)

- 3.5 The hazards associated with compressed air EBS:
 - 3.5.1 Medical hazards associated with lung over-expansion injuries
 - 3.5.2 Gasp reflex associated with cold water entry shock
 - 3.5.3 Coughing
 - 3.5.4 Dislodged mouthpiece (accidental or intentional)
 - 3.5.5 Accidental or deliberate loss of air including purging and hazards of incorrect purging
 - 3.5.6 Running out of air

- 3.6 The pre-donning checks on the life jacket and compressed air EBS, including:
 - 3.6.1 Pressure indicator reading
 - 3.6.2 Appropriate on/off status indicator (if fitted)
 - 3.6.3 Ratchet knob on/off (if fitted)

- 3.7 How to don the life jacket complete with compressed air EBS:
 - 3.7.1 Ensuring life jacket waist belt is not twisted (if fitted)
 - 3.7.2 Fastening of life jacket
 - 3.7.3 Adjustment of waist belt to ensure correct fit
 - 3.7.4 Engagement of crotch strap ensuring a correct fit and roll away and securing of excess webbing (if fitted)
 - 3.7.5 Ensure CA-EBS mouthpiece is correctly fitted
 - 3.7.6 Ensure CA-EBS hose is correctly fitted (where appropriate)

- 3.8 Deployment of CA-EBS, including:
 - 3.8.1 One handed deployment of the mouthpiece and nose clip in accordance with manufacturers' guidelines
 - 3.8.2 How to achieve a good seal around mouthpiece
 - 3.8.3 How to purge water from the mouthpiece
 - 3.8.4 How to recover a dislodged mouthpiece

Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

3.8.5 Use of demand valve
OUTCOMES
4. Outcome: Use of Compressed Air Emergency Breathing System (CA-EBS) The learner will perform:
CRITERIA
4.1 The pre-donning checks on the life jacket and compressed air EBS, including: <ul style="list-style-type: none">4.1.1 Pressure indicator reading4.1.2 Appropriate on/off status indicator (if fitted)4.1.3 Ratchet knob on/off (if fitted)
4.2 How to don the life jacket complete with compressed air EBS: <ul style="list-style-type: none">4.2.1 Ensuring life jacket waist belt is not twisted (if fitted)4.2.2 Fastening of life jacket4.2.3 Adjustment of waist belt to ensure correct fit4.2.4 Engagement of crotch strap ensuring a correct fit and roll away and securing of excess webbing (if fitted)4.2.5 Ensure CA-EBS mouthpiece is correctly fitted4.2.6 Ensure CA-EBS hose is correctly fitted (where appropriate)
4.3 Deployment of CA-EBS, including: <ul style="list-style-type: none">4.3.1 One handed deployment of the mouthpiece and nose clip in accordance with manufacturers' guidelines4.3.2 How to achieve a good seal around mouthpiece4.3.3 How to purge water from the mouthpiece4.3.4 How to recover a dislodged mouthpiece4.3.5 Use of demand valve
OUTCOMES
5. Outcome: Practical Helicopter Escape Techniques The learner will perform:
CRITERIA

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Rev. 01.22022022

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- 5.1 Donning of an aviation transit suit, an aviation lifejacket, compressed air emergency breathing system (CA-EBS) equipment and conducting integrity checks of the CA-EBS equipment, including buddychecks
- 5.2 Deploying (left and right hand) and breathing from CA-EBS equipment at atmospheric pressure in dry conditions
- 5.3 Actions to take in preparing for a helicopter emergency landing
- 5.4 Following instruction from the crew, location of CA-EBS equipment and evacuation from a helicopter using a nominated exit, following a controlled emergency descent to a dry landing (conducted in helicopter simulator at poolside on dry land)
- 5.5 Actions to be taken in preparing for an in-water ditching including location of exit, deploying and breathing from CA-EBS equipment at atmospheric pressure in dry conditions (conducted in helicopter simulator at poolside on dry land)
- 5.6 Dry evacuation, using a nominated exit, to an aviation life raft from a helicopter ditched on water (and, on instructions from the aircrew, operation of a push out window), assisting others where possible and carrying out initial actions on boarding the aviation life raft, to include: mooring lines, deploying the sea anchor, raising the canopy and raft maintenance
- 5.7 Escaping through a window opening which is underwater, from a partially submerged helicopter (without operation of a push out window)
- 5.8 Escaping through a window opening which is underwater, from a partially submerged helicopter (with operation of a push out window)
- 5.9 Escaping through a window opening which is underwater, from a capsized helicopter (without operation of a push out window)
- 5.10 Inflation of an aviation lifejacket, deployment of a spray visor and boarding of an aviation life raft from the water

OUTCOMES

6. Outcome: Additional CA-EBS Training (In-Water)

The learner will perform:

CRITERIA

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- 6.1 Deploying CA-EBS (above the water surface) and breathing from the CA-EBS in a pool, face down in shallow water (at a maximum depth of 0.7m, measured at the chest)
- 6.2 Deploying CA-EBS (below the water surface, face down in a pool in shallow water) and clearing the mouthpiece by exhaling under the water surface (at a maximum depth of 0.7m, measured at the chest)
- 6.3 Deploying CA-EBS (below the water surface, face down in a pool in shallow water, using opposite hand to previous exercise) and clearing with purge button under the water surface (at a maximum depth of 0.7m, measured at the chest)
- 6.4 Deploying CA-EBS (above water surface), in a pool and breathing from CA-EBS underwater in a vertical position (at a maximum depth of 0.7m, measured at the chest)
- 6.5 Deploying CA-EBS (underwater), in a pool and breathing from CA-EBS underwater in a vertical position (at a maximum depth of 0.7m, measured at the chest)
- 6.6 Deploying CA-EBS (underwater), in a pool, breathing from CA-EBS underwater, and moving along a horizontal rail for a period of no less than 30 seconds, including a change in direction (at a maximum depth of 0.7m, measured at the chest)

Unit Code	OIS-71
Title	Sea Survival and First Aid- Digital Delivery
Guided Learning Hours	2 hours 30 minutes
OUTCOMES	
1. Outcome: Evacuation Methods and Procedures	
The learner will understand:	
CRITERIA	
1.1 Typical types of offshore installation emergencies to include floating installations such as FPSOs and drilling rigs	
1.2 Station bills	
1.3 Various means of escape	
1.4 Actions to be taken prior to, during and after selective evacuation or escape from an offshore installation	

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- 1.5 Installation emergency knowledge required of all personnel onboard, to include:
 - 1.5.1 Typical layout of installations (escape routes, temporary refuge, muster locations, abandonment locations, access routes including helideck, bridge landing points and tertiary escape points)
 - 1.5.2 Installation alarms and communications (locations, use and appropriate response)
 - 1.5.3 The possibility of devolved command within the installation’s organizational structure and appropriate procedures and actions should this occur
 - 1.5.4 The need for and use of personal protective equipment (PPE) e.g. gloves, torch, smoke hoods, survival/abandonment suits and donning a life jacket etc
- 1.6 The SAR organisation, means of escue from the sea and survival craft and actions to take during rescue
- 1.7 Rescue by helicopter – winchman duties, the hi-line, double lift and single lift (as a minimum: the single lift to be demonstrated practically)
- 1.8 The importance of appropriate personal clothing
- 1.9 Methods of rescue i.e. standby vessel, FRC, MRRD, net, basket and ladder (this may be achieved by the use of video or slides)
- 1.10 The various types of survival craft (TEMPSC) – freefall/single/twin
- 1.11 The function and capabilities of TEMPSC (e.g. air supply, fire protection, buoyancy)
- 1.12 The procedure for mustering, boarding and strapping in, including the safety precautions during lowering and release, emergency equipment and supplies
- 1.13 The various methods of tertiary escape (this may be achieved by the use of video or slides) to include:
 - 1.13.1 Knotted rope
 - 1.13.2 Scramble net
 - 1.13.3 Davit-launched life raft
 - 1.13.4 Ladders
 - 1.13.5 Person descending escape devices

Note: Minimum of one of the above methods is to be demonstrated practically

OUTCOMES	
1	Outcome: Emergency First Aid The learner will understand
CRITERIA	

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Rev. 01.22022022

8hrs

2.1	First aid arrangements
2.2	Types of injuries, to include:
2.2.1	Bleeding/burns (immediate action)
2.2.2	Chemical contact
2.2.3	Exposure to the elements (heat and cold)
2.3	Prioritising actions
2.4	Immediate first aid actions suitable for use prior to the arrival of the medic / first aider, to include:
2.4.1	Assessing the situation – do not put yourself (or others) in danger.
2.4.2	Making the area safe
2.4.3	Assess all casualties and attend to any unconscious casualties.
2.4.4	Send for help as soon as possible.
2.5	Raising the alarm
2.6	Assessing the situation
2.7	Checking the area is safe
2.8	Checking airways, breathing and industry recognised first aid practice*
(*) Industry recognised first aid practice – this may vary depending on first aid practice guidelines adopted in different countries/regions.	
2.9	Putting the casualty in the recovery position
OUTCOMES	
3. Outcome: Muster and actions upon boarding a survival craft (TEMPSC)	
The learner will perform:	
CRITERIA	
3.1 Mustering, donning a life jacket, boarding and strapping in as a TEMPSC passenger (the craft then to be lowered into water and released).	
OUTCOMES	
4. Outcome: Sea Survival and emergency In-water actions	
The learner will perform:	
CRITERIA	

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

4.1 Water entry (stepping off poolside, maximum 1m height) and the precautions when entering the water

4.2 The fitting of a helicopter rescue device, subsequent lifting and (simulated) entry into a rescue helicopter including:

- 4.2.1 Single strop, double strop or basket (minimum of one method to be demonstrated practically)
- 4.2.2 Body posture
- 4.2.3 Aircraft entry

In-water survival techniques, to include:

4.3 individual (swimming, HELP, wave slap protection) and group survival techniques (towing, chain, huddle and circle), followed by rescue by one of the recognized methods available offshore.

4.4 Boarding a marine life raft from the water and carrying out initial actions, to include mooring lines, deploying the sea anchor, raft maintenance and secondary actions, to include posting lookouts, activating the radio beacons and first aid equipment

(Note: Instructors need only explain secondary actions i.e. no need for instructors or learners to demonstrate).

OUTCOMES

5. Outcome: Immediate First Aid Actions

The learner will perform:

CRITERIA

- 5.1 Raising the alarm
- 5.2 Assessing the situation
- 5.3 Checking area is safe
- 5.4 Industry recognized first aid practice*

* Industry recognised first aid practice – this may vary depending on first aid practice guidelines adopted in different countries/regions

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Unit Code	OIS-72
Title	Firefighting and Self Rescue- Digital Delivery
Guided Learning Hours	1 hour 45 minutes
OUTCOMES	
1. Outcome: Common causes of offshore fires and actions to be taken The learner will understand:	
CRITERIA	
<p>1.1 The common causes and nature of fires onboard offshore oil and gas installations with an emphasis on electrical, domestic and welding related fires</p> <p>1.2 The “triangle of combustion” and how fire can spread, to include: conduction, convection and radiation</p> <p>1.3 Media to include water, dry powder, foam and CO2</p> <p>1.4 The purpose of fixed fire and gas detection and firefighting systems</p> <p>1.5 Actions and precautions to take in areas where these systems are deployed in respect of those having an effect on a person’s health and safety i.e. deluge, halon (and halon replacement extinguishant), CO2, and the urgent need to evacuate the area if the extinguishant has been released</p> <p>1.6 Action to take on discovering a fire (installation emergency procedures) with emphasis on:</p> <p>1.6.2 Raising the alarm</p> <p>1.6.2 Explain locations of portable handheld firefighting equipment (types to be used during practical session)</p> <p>1.6.3 Evacuation to designated area.</p> <p>1.7 The operation of handheld portable fire extinguishers, small bore fire hose reels, fire blankets and their use against actual Class A and Class B fires as appropriate</p>	
OUTCOMES	
2 Outcome: Self-rescue equipment and techniques The learner will understand:	
CRITERIA	

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Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)

8hrs

2.1 The selection of smoke type hoods
2.2 The donning of smoke type hoods
2.3 Self-rescue techniques with and without respiratory protection from areas which are being subjected to smoke and heat
2.4 Small group escape techniques with respiratory protection from an area which is being subjected to smoke and heat
OUTCOMES
3 Outcome: Raising the alarm and operation of hand-held extinguishers The learner will perform:
CRITERIA
3.1 Raising the alarm on discovery of a fire
3.2 Correct operation of handheld portable fire extinguishers in extinguishing Class A or Class B fires. (See scope).
OUTCOMES
4. Outcome: Outcome: Self-Rescue Techniques The learner will perform:
CRITERIA
4.1 Techniques with a smoke hood or partial blindfold from areas where delegate visibility is reduced
4.2 Self-rescue techniques with a smoke hood or partial blindfold from areas where delegate visibility is completely obscured This exercise may be achieved by conducting exercises in darkness or by using “blacked out” smoke hoods or partial blindfolds. Note: smoke hoods to be used incosmetic smoke only
4.3 Small group escape techniques with a smoke hood or partial blindfold from areas where delegate visibility is completely obscured concluding with a muster exercise This exercise may be achieved by conducting exercises in darkness or by using “blacked out” smoke hoods or partial blindfolds. Note: smoke hoods to be used incosmetic smoke only.

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Rev. 01.22022022

8hrs

Practical training

Practical training areas designed to enable each learner to individually, or as part of a team, to view, hear and practise the following:

- 1) Dry evacuation into an aviation liferaft on water from a helicopter trainer.
- 2) Escape from a partially submerged helicopter trainer through an exit that is underwater.
- 3) Escape from a capsized helicopter trainer and use of a lifejacket.
- 4) Evacuate from a helicopter trainer following an emergency dry landing.
- 5) Operation of emergency exits and push-out windows of a type currently found on helicopters operating offshore.
- 6) Donning of compressed air emergency breathing system equipment and an aviation lifejacket
- 7) Operation and use of compressed air emergency breathing system
- 8) Operation of an aviation liferaft.
- 9) The donning of a permanent buoyancy life jacket.
- 10) The use of a helicopter lifting device and winching to a simulated rescue aircraft.
- 11) The boarding of a marine life raft from the water
- 12) In-water procedures, including individual and group survival techniques, followed by rescue by one of the recognised methods available offshore.
- 13) Mustering, boarding and strapping in as a TEMPSC passenger (the craft then to be lowered into water to float and be released).
- 14) The use of portable fire extinguishers on a range of fires of surface area 0.1 m² to 1.0 m² against the following:
 - a) Class A fire
 - b) Class B contained spill.
- 15) The donning and wearing of a smoke hood in an area that can be smoke logged using cosmetic smoke.
- 16) Dedicated concreted area with adequate drainage to allow the delivery of all firefighting exercises for 16 learners, instructors and support staff.

Training Organization Form

Digital Learning (Live-streaming)

Training Methodologies

The methods to be used will be expository, demonstrative and participatory / active.

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Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

Training Methodologies

The methods to be used will be expository, demonstrative and participatory / active.

a) Online Training (theoretical component):

The theoretical component of the training is carried out on an e-learning platform. Trainees must register and complete the training before taking the face-to-face training at the training centre.

After registering for OPITO T-BOSIET Digital Delivery, the Learner receives access to the e-learning by e-mail. With this, the theoretical part should be studied at home. This will take 8 hours, on average. Before you are allowed to participate in the practical exercises, you will first get a Safety Induction Assessment, an assessment about the theoretics. When you have passed this, you may do the practical exercises.

Until the practical day, you can complete the e-learning. By arrival at the training centre we check if you have completed the e-learning successful.

kindly note: When you have completed the e-learning, you must follow the practical day within 3 months.

b) On-site training (practical component):

The methodology of the practical component of training is predominantly participatory and is based on the realization of practical situations (demonstrations / exercises).

Learning Assessment Methodologies

Learning outcomes of the BOSIET (with CA-EBS)

CEDROS must ensure that all trainees pass the theoretical component of the training before undertaking the practical component

Unit Code	Unit Title	Assessment Methodologies
OIS-69	Safety Induction - Digital delivery	Students will take a written test at the end of the Unit OIS-69 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.
OIS-348	Helicopter Safety and Escape CA-EBS - Digital Delivery	Assessment Guidance for Outcomes 1-3 Students will take a written test at the end of the Unit OIS-348 as a method of verifying that they have achieved all learning outcomes.

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Rev. 01.22022022

8hrs

		<p>The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.</p> <p>Assessment Guidance for Outcome 4-6</p> <p>The practical evaluation of the training is carried out by carrying out the practical exercises, covering all the specific criteria. Students must successfully complete the practical exercises. The assessment method will be practical observation using the observation grid used to record the individual learning of each trainee</p> <p>Note 1: CA-EBS equipment must not be worn during exercises 5.6 thru 5.10</p> <p>Note 2: In addition to theoretical learning, demonstrations for HUET Exercises detailed in criteria 5.6 to 5.9, must be provided using video footage.</p>
OIS-71	Sea Survival and First Aid - Digital Delivery	<p>Assessment Guidance for Outcome 1 and 2</p> <p>Students will take a written test at the end of the Unit OIS-71 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.</p> <p>Assessment Guidance for Outcomes 3-5</p> <p>The practical evaluation of the training is carried out by carrying out the practical exercises, covering all the specific criteria. Students must successfully complete the practical exercises. The assessment method will be practical observation using the observation grid used to record the individual learning of each trainee</p>
OIS-72	Firefighting and Self Rescue - Digital Delivery	<p>Assessment Guidance for Outcomes 1 and 2</p> <p>Students will take a written test at the end of the Unit OIS-72 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.</p>

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Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

		<p>Assessment Guidance for Outcomes 3 and 4</p> <p>The practical evaluation of the training is carried out by carrying out the practical exercises, covering all the specific criteria. Students must successfully complete the practical exercises. The assessment method will be practical observation using the observation grid used to record the individual learning of each trainee.</p> <p>Learners must successfully complete all practical exercises in order to achieve this Unit.</p> <p>(1) All practical sessions involving the use of the fire equipment must include the appropriate procedure on discovering a fire with emphasis on raising the alarm.</p> <p>(2) The learning outcomes of this standard will be satisfied when each learner practices the operation and use of each of the following types of fire extinguisher:</p> <ul style="list-style-type: none">(a) Water or foam(b) CO₂(c) Dry chemical <p>(3) Although class A and B fuels must be used for demonstration fires by staff, simulation using LPG may be used for learner practical exercises</p>
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Pedagogical resources / Spaces and equipment

To carry out the theoretical component of the course, trainees must have a computer with internet access. Trainees will be provided with instructions for accessing the Moodle and Zoom platforms.

- On the Moodle platform, the trainee will have the training support materials available: Training manual, videos, other relevant documents for learning and the assessment test.
- The Zoom platform will allow you to carry out the live-streaming sessions.

The practical component of the training will take place at CEDROS facilities.

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Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

Equipment

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

- 1) Aviation and marine lifejackets
- 2) Cosmetic smoke generator
- 3) Sufficient Compressed Air Emergency Breathing System (CA-EBS) Equipment or life jackets/ transit suits with integrated CA-EBS.
- 4) O2
- 5) Method of charging compressed air cylinders
- 6) Fire blanket
- 7) First Aid Equipment
- 8) Fuels and props (Class A and B fires)
- 9) Helicopter rescue device (of a type used regionally offshore)
- 10) Helicopter Underwater Escape Trainer(s) c/w removable exits
- 11) Hose reel
- 12) Health and safety figures on accident statistics
- 13) Installation emergency organisation chart (examples)
- 14) Location aids suitable for training purposes (e.g. dummy radio beacons and pyrotechnics)
- 15) Mannequins and cleaning equipment
- 16) Marine liferaft and ancillary equipment
- 17) Permit to Work (examples)
- 18) Personal Protective Equipment (PPE)
- 19) Portable Extinguishers – water/foam, CO2 and dry chemical
- 20) Rescue equipment
- 21) Aviation liferaft and ancillary equipment
- 22) Smoke hoods (plus a different type of smoke hood for demonstration purposes)
- 23) Products on task-based risk assessment, lifting and mechanical handling, PRfS, and Permit to Work
- 24) STOP/START/TOFS information
- 25) Marine survival suit (also known as immersion suit or abandonment suit). This suit is insulated.
- 26) An aviation transit suit: to include actual transit suits used in region/area for helicopter transfers
- 27) Pool training suits
- 28) TEMPSC and ancillary equipment
- 29) One actual Tertiary Escape System and video/slide presentation of others
- 30) Torches
- 31) Video – Pyrotechnics
- 32) Video – Hypothermia
- 33) Winch for use during simulated helicopter rescue
- 34) Sufficient diving equipment for HUET safety divers
- 35) PLB Video – where applicable

Target Group:

This training programme is designed to meet the initial offshore safety and emergency response training requirements for personnel new (or returning) to the offshore oil and gas industry who will be supplied with a

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Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

compressed air emergency breathing system (CA-EBS) during offshore helicopter travel and who choose to complete the underpinning knowledge of the BOSIET programme via the BOSIET (with CA-EBS) on-line programme.

Learner pre-requisites for the Digital Delivery of BOSIET (with CA-EBS):

Learners must complete all online elements contained in the BOSIET (with CA-EBS) on line programme prior to attending an OPITO-approved training centre to be formally assessed against all learning outcomes.

Total Training Duration: 8hrs

Validity: 4 years

Specific characteristics of training

a) Registration process

- **Place / time of the training** - The training takes place at the CEDROS facilities in Palmela (Rua Vale de Craveiros CCI 8807 2950-731 Quinta do Anjo). Training will take place between 9:00 am and 6:00 pm, any changes will be communicated. The trainee should consult his email, where he will receive confirmation of his registration and details of the training.

- **Prerequisites** - The learner must consider the fulfillment of the prerequisites according to the training program of the course, when applicable.

- **Medical requirements** - Trainings can be physically demanding, all participants who participate in this training must be able to participate fully. It is the trainee's responsibility to notify CEDROS if they have any medical condition or disability that we need to be aware of, for the safety of the trainee and CEDROS.

In the registration phase, trainees must ensure that they send the medical certificate or declaration, before participating in the training:

- ✓ Valid and updated offshore medical certificate; or
- ✓ Medical certificate approved by the employer equivalent to the offshore medical certificate; or
- ✓ Medical screening - by filling in a form provided by CEDROS and approved by Opito.

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Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

On the day of the training, learners have to fill in the medical declaration, before the start of the training, to self-assess their physical and mental health status and indicating they have read and understood a written statement regarding the physical and potentially stressful nature of the programme, and the need for learners to be in good health.

- **Photographic Record Identification Document** - The learner must make sure that on the training day he / she brings with him a valid identification document (e.g.: citizen card, passport, etc.) to show the trainer at the beginning of the training and to do the recognition of the learner
- **Equipment** - Most of the equipment used in the training is provided by CEDROS, however the learner must bring some Personal Protective Equipment, including safety boots, gloves and appropriate clothing. Other equipment can be considered in the confirmation email of the training action. If the trainee does not have any equipment, he must communicate to CEDROS, in order to solve the situation.
- **Hygiene** - The trainee has changing rooms at his disposal, where he can change his clothes and have a bath. We recommend that you bring a change of clothes, slippers, towel and hygiene products.
- **Overnight / Meals** - CEDROS has a partnership with local accommodation close to the training center (<http://www.casadaspipas.pt>), where the learner can stay (meals not included).

On the training day, CEDROS offers coffee breaks to the trainees. Lunch is the learner 's responsibility, there are several local restaurants, on the day of the training more information will be given to the learner ´s about the nearby restaurants.

b) Equal training opportunities

CEDROS is committed to provide all learners with equal opportunity with regard to access to training, regardless of gender, nationality, ethnicity, religious belief, political affiliation, marital status, age or disability. The following clarifies some conditions for access to training, considering particular situations.

- **Disability** - When a learner has some type of disability / physical limitation, he / she must inform CEDROS upon registration, so that we can provide the necessary support and follow-up during the training. However,

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Description Sheet

Digital Delivery of BOSIET with Compressed Air Emergency Breathing System (CA-EBS)



Rev. 01.22022022

8hrs

there are courses in which some physical strength is required to carry out the practical component of the course, in which case the criteria must be analyzed and the effective possibility of compliance with the CEDROS technical team must be verified for health and safety reasons.

- **Literacy** - Learners who have difficulties in terms of language / literacy, must communicate to CEDROS at the time of registration, so that it verifies the possibility of guaranteeing, during the training, the support through the presence of a designated person which will assist in terms of reading and / or writing, during the training and in carrying out the evaluation process.

- **Language / Language** - If the learner's mother tongue is not the same as the one in which the training is given, they must have a minimum level of understanding and conversation to integrate the training. We recommend that the trainee has a B1 level, according to the Common European Framework of Reference for Languages (Levels: A1 / A2 Basic User | B1 / B2 Independent User | C1 / C2 Advanced User).

Evaluation review process:

The learner's evaluation process can be revised whenever justified, it can occur at the trainee's request or if any non-conformity is detected.

The review of the learner's evaluation process is carried out as follows: the evaluation test is reviewed by another OPITO trainer of the respective course, and there may be the need to repeat the practical component, through the reassessment of the exercises with another trainer.

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