

Industry Standard for Marine Operations in Offshore Oil and Gas

28.11.2024

- Guard Vessel
- Man-over-board contingency vessel
- Emergency Response and Rescue Vessel (ERRV)



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Background

In 2021, the Danish Maritime Authority's (DMA) guidance no. 60190¹ on support vessels was repealed. Subsequently, Emergency Response and Rescue Vessels are hereafter regulated solely under the Offshore Safety Act.

This industry standard defines the offshore industry's common minimum requirements for safety, health, environment, and manning for the specified vessel types.

The standard has been developed as a joint industry standard between Danish Offshore and Danish Shipping.

¹ <https://www.retsinformation.dk/eli/retsinfo/1997/60190>

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Introduction

The standard covers three main task descriptions which are structured so that subsequent requirements build on the requirements set out for the preceding task description. A vessel that meets the minimum requirements for the task of a Rescue vessel thus also meets the minimum requirements for a Traffic coordination vessel.

The industry standard defines the common minimum requirements for safety, health, environment, and manning in the offshore industry and there may be additional company specific requirements from the individual operator that a shipping company must comply with.

Definitions

- A **“Guard Vessel”** is a vessel that assists with traffic monitoring and traffic advice at obstacles - e.g., exposed cables and pipelines, wellheads, platforms, constructions, and other risks for example navigation, fishing vessels, and contractor vessels or where bottom trawling and trawling with near-bottom gear, etc. can pose a risk.
- A **“Man-Over-Board Contingency Vessel”** is a vessel that assists with man overboard emergency response in activities involving a reduced number of people.
- An **“Emergency Response and Rescue Vessel (ERRV)”** is a vessel required for performing activities according to BEK 833 15/07/2018² and is part of the installation’s emergency response plan. The installation’s safety and health statement may indicate the need for additional equipment and describe whether the vessel can simultaneously perform other tasks.

² <https://www.retsinformation.dk/eli/lta/2018/833>

1 Scope

- 1.1 This industry standard applies to “Guard Vessels” that conduct traffic monitoring and traffic advisory services in Danish maritime areas.
- 1.2 This industry standard applies to “Man-Over-Board Contingency Vessels” that carry out man overboard rescue operations in Danish maritime areas
- 1.3 This industry standard applies to “Emergency Response and Rescue Vessels (ERRV’s)” as described in Chapter 8 of the Regulation on Emergency Preparedness, etc. in connection with offshore oil and gas activities, etc.

2 Applicable to Guard Vessels

- 2.1 It is a prerequisite for serving as a Guard Vessel that the vessel has a valid fishing or cargo ship certificate issued by the vessel’s flag state or the classification society acting on behalf of the flag state. The vessel’s operating area must cover the area in which the vessel is to operate. The vessel should be capable of safely remaining near the work area in weather conditions up to Beaufort 9.
- 2.2 The deployment period for each crew member should not exceed 28 days.
- 2.3 The crew must be able to communicate in English or a Scandinavian language.
- 2.4 The bridge crew must:
 - Be able to communicate in English and Scandinavian languages to provide qualified advice to other users of the maritime area.
 - Have an understanding of and knowledge of the tasks and work performed by other operators in the area.
 - Have an understanding of the fishing activities and types of fisheries in the area to provide competent advice to other actors. The advice should consider the nature of the fishery and seasonal variations, the working methods of the involved vessels, and any limitations related to their work.
 - Be able to provide qualified safety advice to minimize inconveniences for other actors in the area.
 - Be able to coordinate and make operational agreements to ensure full protection of offshore activities with minimal disruption to other activities in the area.
 - Have proper knowledge of nearby ports, installations, shipping routes, traffic separation schemes, fishing areas, seasonal variations in traffic, fishing, shooting ranges, construction works, meteorological conditions, and other factors that may influence traffic in the area.
- 2.5 The crew of a Guard Vessel with a 24-hour watch must consist of at least 4 people at all times, ensuring proper rested watch crew is maintained at all times.
- 2.6 The Guard Vessel has no formal authority but acts as a guard and advisor on how other actors can and should navigate, fish, and operate safely concerning offshore activities in the area. Violations or deviations from the advice that potentially increase the risk to personnel and/or equipment must be logged and documented for reporting to relevant authorities, etc.

3 Applicable to Man-Over-Board Contingency Vessels

In addition to points 2.1, 2.2, and 2.3, a Man-Over-Board Contingency Vessel must also meet the following requirements:

- 3.1 The crew of a Man-Over-Board Contingency Vessel must always consist of at least 5 people, ensuring proper watchkeeping and MOB response capabilities as prescribed in the vessel's crewing requirements. However, there must be a minimum of 2 persons trained as MOB boat crew at all times.
- 3.2 The Man-Over-Board Contingency Vessel must be equipped with direction-finding equipment suitable for the types of PLBs used.
- 3.3 The Man-Over-Board Contingency Vessel must be equipped with a MOB boat along with necessary equipment and arrangements for safe and effective deployment and recovery from the water. If the Man-Over-Board Contingency Vessel already has an MOB boat due to international or national requirements, it can be used provided it also meets the requirements in 3.4 – 3.7. The MOB boat must comply with the requirements of the LSA Code but does not need to be type-approved unless it is included in the vessel's safety certificate and is on a European-flagged vessel.
- 3.4 Boarding and disembarking from the MOB boat must be possible in a safe and secure manner while the boat is in the water or in the launching arrangement.
- 3.5 The MOB boat must at minimum:
 - be at least 6 meters long.
 - have a console with a steering wheel, throttle control, and motor instruments.
 - have a minimum of 60 horsepower and a suitable VHF radio for communication with the MOB vessel and other vessels.
 - be equipped with life jackets with PLB for the MOB crew.
 - be equipped with thermal protective suits for the MOB crew.
- 3.6 The MOB boat crew must be able to demonstrate training according to applicable requirements for relevant offshore emergency response courses. MOB boat crew must ensure their MOB boat competencies by minimum conducting relevant MOB training exercises before and during their assignment.
- 3.7 There must be procedures outlining how each crew member should act in the event the Man-Over-Board Contingency Vessel needs to evacuate persons from the sea. This includes procedures for both retrieval and subsequent assistance aboard the vessel.

4 Applicable to Emergency Response and Rescue Vessel (ERRV)

In addition to points 2.1, 2.2, 2.3, 3.4, and 3.5, an Emergency Response and Rescue Vessel must also meet the following requirements

4.1 Generally

- 4.1.1 The ERRV must be equipped with propulsion machinery ensuring the vessel can sail at least 10 knots, and a backup machinery ensuring the vessel can sail at least 4 knots under calm weather conditions.
- 4.1.2 The bridge of the ERRV must be designed and laid out to ensure the Master always have unobstructed visibility over the rescue zone, the vessel's side within the rescue zone, the helicopter pickup area, and the area for landing rescue baskets while maneuvering the vessel.

4.2 Rescue Areas/Mean of rescue

- 4.2.1 The rescue zone should preferably be located amidships and should have a length of not less than 10 meters. The rescue zone must be illuminated and clearly marked with a highly visible color stating "RESCUE ZONE".
- 4.2.2 The vessel's side at the rescue zone must ensure an efficient and safe way of coming alongside and recovery of persons can be carried out efficiently and safely.
- 4.2.3 The deck width in the rescue zone should be a minimum of 3 meters. Cargo rails in the rescue zone may be acceptable if they do not obstruct rescue operations. The deck height above the water surface in the rescue zone should, as far as possible, not exceed 2.5 meters.
- 4.2.4 Rescue nets must be mounted on each side of the vessel for use in the rescue zone. The nets should be positioned 0.25 meters away from the vessel's side to make climbing easier. The nets must extend at least 1 meter below the water surface and be equipped with weights in the lower part.
- 4.2.5 The bulwark in the rescue zone must have openings to facilitate the boarding of persons from the water. There should be at least 2 openings on each side of the vessel, each approximately 2 meters wide and supported in the middle.
- 4.2.6 The bulwark in the rescue zone must be equipped with fittings and safety harnesses with lines attached to safety hooks for connection to lifelines or fittings in the rescue zone, ensuring the crew's safety against falling overboard while recovering individuals from the water.
- 4.2.7 The ERRV must have a designated illuminated helicopter winch zone, which should be at least 5 meters in diameter. The area must be free of raised obstacles or objects and should be painted in a highly visible yellow color. The winch zone must have a non-skid surface for safe helicopter operations.
- 4.2.8 The ERRV must have a rescue arrangement and crane capable of lifting at least 5 persons on board simultaneously.
- 4.2.9 The ERRV must have a reception area with a registration station and a registration system.
- 4.2.10 The ERRV must have suitable, approved survival or immersion suits in a quantity corresponding to the number of crew members.
- 4.2.11 The ERRV must have four (4) lines with helicopter harnesses to retrieve people alongside the vessel.
- 4.2.12 The ERRV must have an appropriate number of life jackets for rescued persons and the vessel's crew, as well as approved inflatable life jackets for crew members who are on deck during operations.
- 4.2.13 The ERRV must have at least two (2) high-intensity spotlights, one of which must have a power of at least 100,000 lumens and be fully remote-controlled from the bridge.
- 4.2.14 The vessel must be equipped with radio direction finders for maritime VHF channels and the frequency 121.5 MHz.

4.3 Treatment/Living Area

- 4.3.1 The treatment room must be designed and equipped according to the requirements for vessel's hospital in Notices B from the Danish Maritime Authority, taking into account the number of persons the vessel is intended to accommodate. However, the floor area in the treatment room must not be less than 15m².
- 4.3.2 The treatment room must be equipped with medications, equipment, and inventory according to the Danish Medicine Chest B MFAG B. The minimum quantity of medicine should be determined considering the number of people the vessel is intended to accommodate.

There must be procedures for:

- Step-by-step and life-saving first aid
- Treatment of various types of shock conditions

- Warming of hypothermic persons
- Treatment of burns
- Treatment of lacerations and fractures
- Drowning accidents
- Removal of chemicals from persons
- High-energy trauma
- Prioritization of multiple casualties

4.3.3 The ERRV must have capacity to accommodate the total number of people who may be on board the facility that the vessel is assisting. Accommodation for rescued persons must be arranged to ensure that at least 20% can lie down and 80% can be provided with seating. This may include the vessel's accommodation or corridors, provided there is sufficient aisle space.

4.3.4 There must be adequate rooms with toilets, handwashing facilities, and shower facilities, including outdoor shower.

4.3.5 There must be adequate space for safe stretcher transport of sick and injured individuals between the rescue zone, treatment room, resting areas, and helicopter collection area.

4.3.6 A separate, enclosed area or room for deceased persons.

4.3.7 Blankets and warm clothing for the number of individuals the vessel is intended to rescue.

4.3.8 There must be facilities to prepare and distribute hot drinks to the rescued individuals.

4.4 Technical Installations

4.4.1 There must be a suitable heating system in the accommodation for rescued individuals, and the capacity should be sufficient to maintain a room temperature of at least 20 °C under all conditions.

4.4.2 The accommodation must be ventilated in such a way that adequate air exchange is ensured under all conditions, including during rescue operations, when doors, portholes, skylights, and similar openings are closed.

4.4.3 In the treatment room, ventilation must be designed so that air from it cannot escape into other parts of the accommodation.

4.4.4 The Emergency Response and Rescue Vessel must be equipped with communication devices at the rescue zone and helicopter collection area. The system should be operable from all maneuvering positions.

4.5 Fast Rescue Craft (FRC)

4.5.1 The ERRV must be equipped with at least one FRC and associated equipment, as well as launching and recovery arrangements approved according to SOLAS and LSA Code requirements for such a vessel.

4.5.2 The FRC must be equipped with a suitable VHF radio system to communicate with the ERRV and other vessels.

4.6 Training

4.6.1 The crew of the ERRV must demonstrably be trained according to applicable requirements for relevant offshore emergency response courses and must conduct training according to ERRV Standards, ensuring at least an education level equivalent to OPITO's ERRV Management Guidelines / NORSOK or equivalent recognized standards.

4.6.2 There must be procedures detailing how individual crew members should act in the event the vessel needs to evacuate people from the sea. This applies to both the collection process and subsequent assistance on board.

4.7 Crew

4.7.1 The ERRV must adhere to the individual offshore installation's emergency response plan.

4.7.2 The crew of an ERRV must consist of a minimum of 6 persons at all times.

4.8 Inspection and Certification

4.8.1 For ERRV's, an attestation document must be prepared and issued by the classification society. The validity of this document is 5 years, unless there are changes to the vessel's construction or other alterations that were a prerequisite for the document's issuance.

4.9 The ERRV's equipment with medications and first aid procedures

4.9.1 In addition to the required equipment, the following must also be available: shock blankets, bedpans, body bags, vomit bags, towels, hand sanitizer, disinfectant hand wipes, sterile gloves, stretcher trolleys, ship stretchers, vacuum mattresses.

5 Contact

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