Version: 01.09.2023

# RULES

# FOR THE CLASSIFICATION AND CONSTRUCTION OF MOBILE OFFSHORE DRILLING UNITS

# PART XVII LIFE-SAVING APPLIANCES

ND No. 2-020201-026-E



St. Petersburg 2023

# RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF MOBILE OFFSHORE DRILLING UNITS

Rules for the Classification and Construction of Mobile Offshore Drilling Units (the MODU Rules) of Russian Maritime Register of Shipping (RS, the Register) have been approved in accordance with the established approval procedure and come into force on 1 September 2023.

The present Rules are based on the latest version of the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms, 2022, taking into account the amendments and additions developed immediately before publication.

The procedural requirements, unified requirements, unified interpretations and recommendations of the International Association of Classification Societies (IACS) and the relevant resolutions of the International Maritime Organization (IMO) have been taken into consideration.

The Rules set down specific requirements for MODU, consider the recommendations of the Code for the Construction and Equipment of Mobile Offshore Drilling Units, 2009 (2009 MODU Code) (IMO resolution A.1023(26), as amended) and supplement the Rules for the Classification and Construction of Sea-Going Ships and the Rules for the Equipment of Sea-Going Ships.

The Rules are published in the following parts:

Part I "Classification";

Part II "Hull";

Part III "Equipment, Arrangements and Outfit";

Part IV "Stability";

Part V "Subdivision";

Part VI "Fire Protection";

Part VII "Machinery Installations and Machinery";

Part VIII "Systems and Piping";

Part IX "Boilers, Heat Exchangers and Pressure Vessels";

Part X "Electrical Equipment";

Part XI "Refrigerating Plants";

Part XII "Materials";

Part XIII "Welding";

Part XIV "Automation";

Part XV "Safety Assessment";

Part XVI "Signal Means";

Part XVII "Life-Saving Appliances";

Part XVIII "Radio Equipment";

Part XIX "Navigational Equipment";

Part XX "Equipment for Prevention of Pollution".

**REVISION HISTORY** (purely editorial amendments are not included in the Revision History)

For this version, there are no amendments to be included in the Revision History.

#### 1 GENERAL

- Application, definitions and explanations related to the types of mobile offshore 1.1 drilling units are specified in Section 1, Part I "Classification" of the Rules for the Classification and Construction of Mobile Offshore Drilling Units1.
- Unless provided otherwise in this Part, the life-saving appliances of MODU as well as of surface units and drilling ships and also their arrangement, installation and technical supervision shall comply with all applicable requirements of General Regulations for the Classification and Other Activity, Part I "Survey Regulations" and the International Life-Saving Appliances Code adopted by IMO resolution MSC.48(66), considering the amendments in force on the date of construction of the ship<sup>2</sup>.
- Life-saving appliances and launching arrangements, and also their equipment items shall be reliable in use during operation under intended climatic conditions.

<sup>&</sup>lt;sup>1</sup> Hereinafter referred to as "the MODU Rules". <sup>2</sup> Hereinafter referred to as "the LSA Code".

#### **2 SURVIVAL CRAFT**

#### 2.1 EQUIPMENT OF SURFACE UNITS

- **2.1.1** Each surface unit shall be provided on each side with one or more fire-protected lifeboats of an aggregate capacity sufficient to accommodate the total number of persons on board. Alternatively, the Register may accept one or more free-fall lifeboats capable of being free-fall launched over the end of the unit, of such aggregate capacity as will accommodate the total number of persons on board.
- **2.1.2** In addition to the requirements of <u>2.1.1</u>, each surface unit shall be provided with a liferaft/liferats complying with the requirements of Chapter IV, the LSA Code, capable of being launched on either side of the unit and having an aggregate capacity sufficient to accommodate the total number of persons on board.

If liferafts cannot be readily transferred for launching on either side of the unit, the total capacity of the liferafts available on each side shall be sufficient to accommodate the total number of persons on board.

**2.1.3** Where the survival craft are stowed in a position which is more than 100 m from the stem, the surface unit shall carry, in addition to the liferafts required by <u>2.1.2</u>, a liferaft stowed as far forward or aft, or one as far forward and another as far aft, as is reasonable or practicable.

Such liferafts shall be securely fastened so as to permit manual release.

#### 2.2 EQUIPMENT OF SELF-ELEVATING MODU, COLUMN-STABILISED MODU

**2.2.1** Each MODU shall be provided with fire-protected lifeboats, installed in at least two widely separated locations on different sides or ends of MODU.

The aggregate capacity of the lifeboats installed in such locations shall be sufficient to accommodate the total number of persons on board if:

- .1 all the lifeboats in any one location are lost or rendered unusable;
- **.2** all the lifeboats on any one side, any one end, or any one comer of the unit are lost or rendered unusable.
- **2.2.2** In addition, each MODU shall be provided with liferafts complying with the requirements of Chapter IV, the LSA Code, of an aggregate capacity sufficient to accommodate the total number of persons on board.

If the liferafts cannot be transferred for launching on any side of the MODU, the aggregate capacity of the liferafts available on each side shall be sufficient to accommodate the total number of persons on board.

**2.2.3** In the case of a self-elevating MODU where, due to its size or configuration, lifeboats cannot be installed according to <u>2.2.1</u>, the aggregate capacity of the lifeboats may be sufficient to accommodate the total number of persons on board.

In this case, the liferafts required by <u>2.2.2</u> shall be served by launching appliances complying with the requirements of 6.20.5, or by marine evacuation systems complying with the requirements of Sections 6.1 or 6.2, accordingly, the LSA Code, as amended.

- **2.2.4** For MODU the keels of which have been laid on or after 1 January 2020 or which are at a similar stage of construction, the average body mass of the lifeboat occupant shall be assumed to be 95 kg, with a corresponding seat radius of 265 mm. Where it can be demonstrated that the average body mass of the lifeboat occupants differs from 95 kg, the Register may permit that it is increased or decreased accordingly. The seat width shall be adjusted by 4 mm for each 1 kg difference in average body mass.
- **2.2.5** The Register permits to reduce the total number of survival craft when MODU being towed have the incomplete number of personnel on board.

In this case, the number of survival craft complying with the requirements of this Part shall be sufficient to accommodate the total number of persons on board the MODU in tow.

7

#### 2.3 EQUIPMENT OF DRILLING SHIPS

**2.3.1** Drilling ships shall be provided with survival craft according to the standards for oil tankers carrying cargo having a flashpoint not exceeding 60 °C as required by Section 4, Part II "Life-Saving Appliances" of the RS Rules for the Equipment of Sea-Going Ships<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Hereinafter referred to as "the RS Rules/E".

۶

#### **3 EQUIPMENT OF MODU WITH RESCUE BOATS**

- **3.1** Each MODU and each drilling ship shall be provided with at least one rescue boat complying with the requirements of Chapter V, the LSA Code.
  - When installed on a MODU, the lifeboat cannot be accepted as a rescue boat.

#### **4 PERSONAL LIFE-SAVING APPLIANCES**

## 4.1 EQUIPMENT OF MODU, SURFACE UNITS AND DRILLING SHIPS WITH LIFEJACKETS

- **4.1.1** A lifejacket complying with the requirements of Section 2.2, the LSA Code, shall be provided for every person on board the MODU, surface unit or drilling ship.
- **4.1.2** In addition to the requirements of <u>4.1.1</u>, each unit or each ship shall be provided with lifejackets for the watch keeping personnel, and also a sufficient number of lifejackets shall be located in accessible places for the members of industrial personnel who may be on duty in locations where their lifejackets are not readily accessible. In addition, sufficient lifejackets shall be available for use at remotely located survival craft positions.
- **4.1.3** Additional lifejackets for the maximum permissible number of helicopter passengers shall be provided in way of helideck.
- **4.1.4** Each lifejacket shall be fitted with a light complying with the requirements of 2.2.3, the LSA Code.

#### 4.2 EQUIPMENT OF MODU, SURFACE UNITS AND DRILLING SHIPS WITH LIFEBUOYS

**4.2.1** At least eight lifebuoys complying with the requirements of Section 6.2, the LSA Code, shall be provided on each MODU, surface unit or drilling ship.

The number and location of lifebuoys shall be such that they are placed in the open and be readily accessible.

Surface units and drilling ships shall be provided with lifebuoys according to Table 4.2.1.

Table 4.2.1

Length of unit in metres	Minimum number of lifebuoys
Under 100	8
100 and under 150	10
150 and under 200	12
200 and over	14

**4.2.2** Not less than one-half of the total number of lifebuoys shall be provided with self-igniting lights complying with the requirements of 2.1.2, the LSA Code, with approved source of power.

Not less than two of these shall be also provided with self-activating smoke signals complying with the requirements of 2.1.3 of the LSA Code and be capable of quick release from the navigating bridge, main machinery control room, or a location readily available to operating personnel.

Lifebuoys provided with lights and those with lights and smoke signals shall be equally distributed along the accessible portions of the perimeter of the unit or ship and shall not be provided with lifelines (refer to 4.2.3). Lifebuoys fitted with self-igniting lights or self-activating smoke signals shall be located outside hazardous areas.

- **4.2.3** At least two lifebuoys in widely separated locations shall be provided with a lifeline, the length of which shall be at least one-and-a half times the distance from the deck of stowage to the waterline at light draught or 30 m, whichever is greater. For self-elevating units, consideration shall be taken of the maximum height above the waterline, and for other units the lightest operating condition. The lifeline shall be so stowed that it can easily be run out with lifebuoy.
- **4.2.4** Each lifebuoy shall be marked in capital letters of the Roman alphabet with the name and port of registry of the unit or ship.

## 4.3 EQUIPMENT OF MODU, SURFACE UNITS AND DRILLING SHIPS WITH IMMERSIONSUITS

**4.3.1** Each unit shall carry an immersion suit complying with the requirements of 2.3, the LSA Code, and of appropriate size, for each person on board.

In addition, a sufficient number of immersion suits shall be stowed in suitable locations for those persons who may be on duty in locations where their immersion suits are not readily accessible; and sufficient immersion suits shall be available for use at remotely located survival craft positions.

- **4.3.2** Immersion suits may be omitted if the MODU and surface units are constantly in operation in warm climates (region between 30°N and 30°S).
- **4.3.3** Drilling ships shall be provided with immersion suits according to the standards for cargo ships according to requirement 3 of regulation III/32, SOLAS-74.
- **4.3.4** In lieu of immersion suits as required by <u>4.3.1</u>, an anti-exposure suit complying with the requirements of 2.5, the LSA Code, of an appropriate size, shall be provided for every person assigned to crew of the rescue boat or assigned to a marine evacuation system.

## 5 LIFEBOATS, LIFERAFTS AND RESCUE BOATS ARRANGEMENT. LAUNCHING STATIONS

- **5.1** Muster stations shall be provided as close to the embarkation stations as possible. Each muster station shall have sufficient space to accommodate all persons assigned to muster at that station to muster at that station, but at least 0,35 m² per person.
- **5.2** Muster and embarkation stations shall be readily accessible from accommodation and work areas.
- **5.3** Muster and embarkation stations shall be adequately illuminated by lighting supplied form the main and emergency sources of power required by Part X "Electrical Equipment" of the MODU Rules.
- 5.4 Alleyways, stairways and exits giving access to the muster and embarkation stations shall be adequately illuminated by lighting supplied form the main and emergency sources of power required by Part X "Electrical Equipment" of the MODU Rules.
- **5.5** Davit-launched lifeboats and liferafts muster and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.
  - **5.6** Lifeboats and liferafts embarkation arrangements shall be so designed that:
- .1 lifeboats can be boarded by their full complement of persons within 3 min from the time the instruction to board is given;
  - .2 lifeboats can be boarded and launched directly from the stowed position;
- .3 davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with <u>6.6</u>;
- .4 where necessary, means shall be provided for bringing the davit-launched liferafts against the unit's side and holding them alongside so that persons can be safely embarked.
- 5.7 At least two widely separated fixed metal ladders or stairways shall be provided extending from the deck to the water surface. The fixed metal ladders or stairways and water surface in their vicinity shall be adequately illuminated by lighting supplied form the main and emergency sources of power required by Part X "Electrical Equipment" of the MODU Rules.
- **5.8** If fixed ladders cannot be installed, alternative means of escape with sufficient capacity to permit all persons on board to descent safely to the waterline shall be provided.
- **5.9** Launching stations shall be in such positions as to ensure safe launching having particular regard to clearance from any exposed propeller or steeply overhanging portions of the hull. As far as possible, launching stations shall be located so that lifeboats and liferafts can be launched down the straight side of the unit, except for:
  - .1 survival craft specially designed for free-fall lunching;
  - .2 survival craft mounted on structures intended to provide free launching.
- **5.10** The rescue boat embarkation and launching stations shall be such located that the rescue boat can be boarded and launched in the shortest possible time.
- **5.11** Lifeboats, liferafts and rescue boats arrangement as well as launching stations of drilling ships shall comply with the requirements of Chapter III, SOLAS-74.

#### 6 STOWAGE OF LIFEBOATS, LIFERAFTS AND RESCUE BOATS

- **6.1** Survival craft shall be located so as to provide easy access to these craft embarkation stations and into all embarkation hatches as well as the maximum distance from hazardous spaces and areas.
  - **6.2** Each lifeboat or liferaft shall be stowed:
- .1 so that neither they nor their stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;
  - .2 as near the water surface as it is safe and practicable;
- .3 in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in not more than 5 min;
- **.4** as far as practicable, in a secure and protected place to prevent their damage by fire and explosion.

Each lifeboat or liferaft shall be stowed fully equipped as required by 4.1.5, the LSA Code, as amended.

- **6.3** If possible, the unit shall be so arranged that lifeboats attached to launching appliances are protected from damage by heavy seas.
  - **6.4** Lifeboats shall be stowed attached to launching appliances.
- **6.5** Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.
- 6.6 Davit-launched liferafts shall be stowed within reach of the lifting hooks, unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in Part V "Subdivision" of the MODU Rules, for any damaged condition or by unit motion or power failure.
- **6.7** Every liferaft, other than those specified in <u>2.1.3</u>, shall be stowed with the weak link of its painter permanently attached to the unit and with a float-free arrangement complying with the requirements of 4.1.6, the LSA Code, so that the liferaft floats free and, if inflatable, inflates automatically when the unit sinks.
  - **6.8** Rescue boats shall be stowed:
- .1 in a state of continuous readiness for launching in not more than 5 min; if of an inflated type, in a fully inflated condition at all times;
  - .2 in a position suitable for launching and recovery;
- .3 so that neither the rescue boat nor its stowage arrangement will interfere with the operation of any other survival craft at any other launching station;
  - .4 in compliance with 6.1 6.7, if they are also lifeboats.
- **6.9** On drilling ships lifeboats, liferafts and rescue boats shall be stowed in compliance with the requirements of Chapter III, SOLAS-74.

#### 7 LIFEBOATS, LIFERAFTS AND RESCUE BOATS LAUNCHING AND RECOVERY ARRANGEMENTS

- **7.1** Launching appliances complying with the requirements of 6.1, the LSA Code, as applicable, shall be provided for all lifeboats and davit-launched liferafts. Notwithstanding the requirement of 6.1, the LSA Code, for column-stabilised MODU, launching appliances shall be capable of operating at the heel and trim resulting from any damaged condition under Part V "Subdivision", the MODU Rules.
- **7.2** Launching and recovery arrangements shall be such that the appliance operator on the unit is able to observe the lifeboat or liferaft at all times during launching and lifeboats during recovery.
- **7.3** Only one type of release mechanism shall be used for similar survival craft carried on board the unit.
- **7.4** Preparation and handling of lifeboat or liferaft at any one launching station shall not interfere with the prompt preparation and handling of any other lifeboat or liferaft or rescue boat at any other station.
- **7.5** Falls, where used, shall be long enough for the lifeboat or liferaft to reach the water with the unit under unfavourable conditions such as lightest transit or operational condition or any damaged condition, as described in Part V "Subdivision", the MODU Rules.
- **7.6** During preparation and launching, lifeboats and liferafts, their launching appliance and the area of water into which it is launched shall be adequately illuminated by lighting supplied form the main and emergency sources of power required by Part X "Electrical Equipment" of the MODU Rules.
- **7.7** Means shall be available to prevent any discharge of water onto lifeboats and liferafts during abandonment.
- **7.8** All lifeboats required for abandonment by the total number of persons permitted on board, shall be capable of being launched with their full complement of persons and equipment within 10 min from the time the signal to abandon the unit is given.
- **7.9** Manual brakes of a launching appliance shall be so arranged that the brake is always applied unless the operator, or a mechanism activated by the operator, holds the brake control in the "off" position.
- **7.10** Each lifeboat or liferaft shall be so arranged as to clear each leg, column, footing, brace, mat and each similar structure below the hull of a self- elevating MODU and below the upper hull of a column-stabilised MODU in an intact condition.
- **7.11** In any case of damage specified in Part V "Subdivision", the MODU Rules, lifeboats with an aggregate capacity of not less than 100 % of persons on board shall, in addition to meeting all other requirements for launching and stowage contained in the present Part, be stowed so as to be capable of being freely launched.
- **7.12** During MODU design particular consideration shall be given to the location and orientation of lifeboats and liferafts in order that clearance of the unit is achieved in an efficient and safe manner having due regard to the capabilities of survival craft.
- **7.13** Notwithstanding the requirement of 6.1.2.8 of the LSA Code, the speed of launching shall not be more than 1 m/s.
- **7.14** Launching arrangements for rescue boats shall meet the requirements of 7.1 7.13.
- **7.15** Rapid recovery of the rescue boat shall be possible when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, rapid recovery shall be possible when loaded with its full complement of equipment and a crew consisting of at least 6 persons.
- **7.16** Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.

15

#### **8 LINE-THROWING APPLIANCES**

**8.1** Each MODU and surface unit shall be provided with one set of a line- throwing appliance complying with the requirements of 7.1, the LSA Code.

#### 9 RADIO EQUIPMENT FOR LIFE-SAVING APPLIANCES

- **9.1** Each lifeboat of MODU and surface unit shall carry a two-way VHF radiotelephone apparatus. In addition, at least two such apparatus shall be available on each MODU and surface unit, so stowed that they can be rapidly placed in any liferaft. All two-way VHF radiotelephone apparatus shall meet the requirements of IMO Resolutions A/809(19) and MSC.149(77).
- **9.2** Each lifeboat of MODU and surface unit shall carry a survival craft search and rescue locating device. In addition, at least two survival craft search and rescue locating device shall be available on each MODU and surface unit, so stowed that they can be rapidly placed in any liferaft. All survival craft search and rescue locating device shall meet the requirements of 7.1, the LSA Code.
- **9.3** On drilling ships, the radio equipment for life-saving appliances shall meet the requirements of 2.1 of the regulation I/6, Part B, SOLAS-74.

Russian Maritime Register of Shipping

#### Rules for the Classification and Construction of Mobile Offshore Drilling Units Part XVII Life-Saving Appliances

FAI "Russian Maritime Register of Shipping" 8, Dvortsovaya Naberezhnaya, 191186, St. Petersburg, Russian Federation www.rs-class.org/en/