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§ 33
Entry into force

These regulations enter into force on 2 February 1987.

Regulations of 17 December 1986 concerning field moves and towing of mobile offshore units and concerning towing system and mooring of supply ships at such units

Nr. 2319

Laid down by the Norwegian Maritime Directorate pursuant to the Act of 9 June 1903 No. 7 relating to Public Control of the Seaworthiness of Ships, etc., §§ 11, 9a, 35 and 42, cf. Royal Decrees of 12 October 1962, 5 April 1963, 1 December 1978 and 25 May 1984, and Formal Delegations of 15 January 1979 and 6 June 1984.

§ denotes Section

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Chapter I
General

§ 1
Definitions

For the purpose of these regulations, the following definitions shall apply:

1. *Unit:* Mobile platforms, including drilling ships, equipped for drilling for subsea petroleum deposits, and mobile platforms for other use than drilling for subsea petroleum deposits.
2. *Owner:* Whoever contracts and/or is responsible for the operation of a unit.

Kilde: Sjøfartsdirektoratet
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3. *Internal control:* All systematic measures to be taken by the owner in order to ensure that the activity is planned, organized, run and maintained in accordance with the requirements laid down in and pursuant to Acts and regulations, and also requirements and recommendations issued by the control institutions and recognized survey institutions concerned when carrying out control on behalf of the authorities.
4. *System audit:* Planned and systematic review of systems to ensure that these are established, followed and maintained as specified.
5. *System:* Formalized collection of mutually co-ordinated procedures.
6. *Verification:* Investigation/examination to confirm that an activity, product, or service is in accordance with specified requirements.
7. *Approved:* Approved by the Norwegian Maritime Directorate.

§ 2
Application

These regulations shall apply to units which are registered or which will be registered in a Norwegian Register of Ships.

§ 3
Responsibility

1. It rests with the owner to ensure that the provisions of these regulations are complied with. The owner shall also ensure that whoever works for him, either in person, through employees or through independent contractors or subcontractors, complies with the provisions of these regulations. Furthermore, it rests with the owner to see to it that equipment, etc. is maintained in a safe operational condition and in compliance with the regulations at all times.
2. The owner shall make the required arrangements and give the platform manager the necessary instructions by means of the operation manual or similar, so that the platform manager, as part of the day to day operation, can ensure that the operational requirements are complied with.

§ 4
Drawings, etc.

1. One copy of the following drawings and information shall be submitted to the Norwegian Maritime Directorate:
   - 1.1. Arrangement drawing of the main towing system and emergency towing system. The drawings shall show, in detail, rigging and dimensions of the towing systems. It shall be possible to identify the individual components in such a way that safe working load (SWL) and breaking load appear.
   - 1.2. Calculations of towing resistance, wind forces, etc. in accordance with the criteria contained in these regulations.
   - 1.3. Curves showing how fast the platform will drift without towing connections depending on environmental loads, and whether the platform is at field move draught or operational draught.
   - 1.4. Calculations of all bollard arrangements with attachments.
   - 1.5. Procedures for rigging of main and emergency towing.
   - 1.6. Arrangement drawing of mooring arrangement for supply ships, etc. The individual components of the arrangement shall be indicated with type, safe working load (SWL) and breaking load.
2. Drawings and information shall be submitted before the work is commenced. For a unit purchased from abroad for registration under Norwegian flag, drawings and information shall be submitted before the unit is put into operation under Norwegian flag.

3. It rests with the owner to ensure that corrected drawings are submitted in those cases where alterations are made during the building period.
4. Before being submitted to the Norwegian Maritime Directorate, drawings, information, etc. referred to in this section, shall be checked by the owner through the system of internal control.

§ 5
Approval – system audit – verification

1. The documentation referred to under § 4, will normally not be subject to approval by the Norwegian Maritime Directorate.
2. The documentation submitted will normally be used for information and for use in connection with possible approaches from the owner concerning interpretation, evaluation of equivalent solutions and deviations. The documentation may furthermore be used in connection with system auditing and verification.
3. System auditing may be carried out by the Norwegian Maritime Directorate in order to check that the owner and whoever might be carrying out work on his behalf, have the required system and use it in such a way that the regulations are complied with.
4. Verification may be carried out by the Norwegian Maritime Directorate during the phases of construction and operation in order to ensure that activities, products or services which come under these regulations are in accordance with specified requirements.
5. The conditions mentioned in these regulations may be required verified to the extent the Norwegian Maritime Directorate finds necessary prior to the first issuance of certificates and at subsequent renewals of the certificates.

Chapter II
Field moves, towing and towing system

§ 6
Towing and field moves

1. Towing or field moves by means of a mobile offshore unit's own propulsion machinery shall not take place without prior notification to the Norwegian Maritime Directorate.
2. Towing or field moves by means of a mobile offshore unit's own propulsion machinery shall be carried out in accordance with the international and Norwegian rules and regulations in force at the time in question.[1] The towing/field moves shall take place in such a way that it causes the least possible encumbrance in the area. Special regard shall be had to fishing and shipping.
3. Essential personnel only may remain on board self-elevating units during towing. All necessary safety measures shall be taken.
4. When making a field move (not more than 12 hours between possible jack-up locations) with a self-elevating unit, those positions where jacking up of the unit is possible and safe, shall be indicated in the track marked on the chart. Maximum distance between these jack-up locations shall be such that it is possible to tow and jack up in the indicated position within 12 hours. The necessary towing force shall be calculated with due regard to expected current, wind and weather conditions. Necessary information to carry out such calculations shall be contained in the operations manual.
5. Prior to start of each 12 hour towing period mentioned in subsection 4 above (for self-elevating units), there shall be a favourable weather forecast for the following 72 hours for the waters in question. There shall further be a weather forecast showing that the conditions for the next 12 hours after jacking down will be within the maximum allowable environmental conditions given in the operations manual. Otherwise jacking down shall not be commenced.

6. Prior to commencing an ocean tow (more than 12 hours between possible jack-up locations) of a self-elevating unit, a special permission shall be obtained from the Norwegian Maritime Directorate.
7. The operations manual shall contain instructions as to how a tow normally shall be carried out as well as detailed check lists or similar providing the necessary information on preparations, weathertight and watertight closing, calculations, etc. to be carried out prior to and during a tow and a field move. In addition, the following background information shall be included in the operations manual:
   - limiting data on each mode of operation during the towing/field move, such as maximum load, wave height, wave period, wind, current, draught, temperature, etc.
   - complete resistance curves for wind, current and waves up to maximum environmental conditions for calculation of the total towing resistance which the unit will be exposed to during towing, from which it shall be possible to calculate necessary towing force and number of towing vessels(tugs), and also speed of drifting under extreme weather conditions.

[1] Regulations of 6 February 1978 concerning towing assistance.

§ 7
Requirements for the towing system

1. All semi-submersible and self-elevating units shall be provided with a main towing system, emergency towing system and narrow water towing system.
2. During towing in calm weather and no current, there shall always be available at least necessary towing force (or combined towing force and self propulsion) to achieve a speed of at least 5 knots for semi-submersible units and at least 3 knots for self-elevating units. Further, there shall be sufficient force to hold still and manoeuvre the unit safely against a wind of 20 m/sec. with associated wave and current of 2 m/sec.
3. If the unit cannot comply with the requirements in subsection 2 above by means of it own propulsion system, it shall employ towing vessels(tugs) having the necessary towing force.[1]
4. The main towing system shall be arranged for one and two towing vessels(tugs), and in special cases for three.
5. The emergency towing system shall be arranged for two towing vessels(tugs). This may be arranged by using the ordinary anchor line, or a similar system.
6. The narrow water towing system shall be arranged in such a manner and for such a number of towing vessels(tugs) that safe towing and maneouvering can be carried out.
7. The loads for which the towing system is approved and dimensioned shall be given in the operations manual.
8. If a break occurs during ocean towing, emergency towing and narrow water towing, it shall be possible to quickly establish a new towing connection in a safe manner under all weather conditions. Planned methods shall be given as background material in the operations manual.
9. The main towing system shall be dimensioned for at least the towing force which is necessary to:
   - keep a speed of 5 or 3 knots (cf. subsection 2 above) in calm waters
   - hold the unit still against a wind speed of 20 m/sec. with associated waves and a current of 2 m/sec.

   The main towing system shall, however, be dimensioned for 75 tons.
10. Construction of the towing system
    10.1. The main towing system shall consist of at least:
    - Two attachments to the unit
    - Two chain/wire connections to the unit
    - One triangular plate or equivalent (if a towing vessel(tug) is used)

- Two «weak links»
- Shackles for connections

10.2. The attachments to the unit shall be dimensioned with a safety factor of 3 in relation to the yield strength of the material, taking into account a towing direction of 0° – 90°, off centerline both sides.

10.3. Where a bridle is used, the attachments for this shall be as far apart as possible.

10.4. The position, construction and arrangement of the attachments shall be such that it is reasonably easy and quick to change the chain/wire connection in calm waters.

10.5. The towing pennants shall consist of chain or steel wire rope, or a combination of these. Where the connection is subject to specially heavy wear and tear (e.g. hawserhole), a chain shall be used.

10.6. Each chain-/wire connection shall have a breaking strength of at least 3 times the static bollard pull of the towing vessel(tug) and normally a length approximately equal to the distance between the two towing attachments.

10.7. The towing pennants and «weak link» shall be fitted with «hard eyes».

10.8. When one towing vessel(tug)) is used, a «towing heart» (triangular plate) or equivalent shall be used when connecting the chain/wire connection mentioned in subsection 10.1 above. Allowable bollard pull is then equal to that per tug, calculated according to subsection 10.6. above.

10.9. The shackles in both ends of the chain/wire connection and in both ends of the «weak link» shall have a breaking strength which is higher than the breaking strength of the strongest part of the towing system.

10.10. «The weak link» shall be the weakest part of the complete towing system. The length ought to be approx. 40 – 60 metres so that connection to the towing vessel (tug) can be executed at a safe distance from the unit. The breaking strength should be approx. 2 – 3 times the maximum allowable static bollard pull. «The weak link» shall be placed between the chain/wire connection (or triangular plate) and the towing line of the tug.

10.11. It shall be possible to retrieve the chain/wire connection in case one part of the towing system should break. This retrieving system may consist of a line from each chain/wire connection to a winch or crane on the deck of the unit and the line from it shall have sufficient capacity to retrieve the combined load of the chain/wire connection with shackles and «weak links» and 150 metres of towing wire of the heaviest type normally used for towing the unit. (If there are water depths of more than 150 m within the towing area in question, and there is a need to change towing wire, calculations shall be based on the relevant maximum water depth). After retrieving the chain/wire connection, it shall be possible to demount a damaged towing line under all weather conditions, and also to change «the weak link» if necessary.

10.12. The following spare parts shall be on board the unit during ocean towing:

- One chain/wire connection (complete)
- Three shackles for «the weak link»
- Three «weak links».

11. Equipment which is part of the towing system such as wire, chain, shackles, etc. shall be supplied together with a factory (test) certificate (as for components for hoisting gear).

12. Alternative systems
Alternative towing systems giving the same operational safety may be used.

[1] Cf. Regulations of 6 February 1978 concerning towing assistance for drilling platforms and other mobile units of similar construction when navigating in Norwegian territorial and inner waters.

Chapter III
Mooring of supply ships, etc.

§ 8
Mooring of supply ships, etc.

1. The unit shall be so constructed and have such proper fender systems, buoyage systems or similar arrangements as to make safe transfer of persons and goods to or from the unit possible without creating hazards for platform, vessel, persons or goods. Alternative ways for mooring and safe transfer of persons and goods shall exist.
2. Vessels shall not moor, be moored or remain alongside the unit if wind and weather conditions create dangers for the vessel or the unit.
3. The mooring arrangement for the supply ship shall be such that the risk of the supply vessel coming into contact with the unit's legs, columns, etc. is reduced to a minimum, and such that the risk of break is as small as possible, e.g. by means of a strong «constant tension» winch.

Chapter IV
Miscellaneous provisions

§ 9
Deviations

1. The Norwegian Maritime Directorate may deviate from the requirements of these regulations where special reasons make this necessary or reasonable.
2. If the requirements of the coastal state and the requirements of these regulations are incompatible, the Norwegian Maritime Directorate may deviate from the requirements to the extent this is deemed justifiable.

§ 10
Penalty

Wilful or negligent violation of these regulations is punishable by fines pursuant to the General Civil Penal Code of 22 May 1902 No. 10, § 339 subsection 2, provided no stricter penalty is applicable pursuant to other statutory provisions.

§ 11
Entry into force, etc.

1. These regulations enter into force on 2 February 1987.
2. As from the same date, §§ 24 and 25 of the Norwegian Maritime Directorate's Regulations of 13 January 1986 concerning building and operation of mobile drilling platforms and other mobile offshore units for use other than drilling for subsea petroleum deposits, which are registered or which will be registerd in a Norwegian register of ships, are repealed.