

Regulations of 10 July 2009 No. 998 on positioning and anchoring systems on mobile offshore units (Anchoring Regulations 09)

Legal basis: Laid down by the Norwegian Maritime Authority on 10 July 2009 under the Act of 16 February 2007 No. 9 relating to ship safety and security (Ship Safety and Security Act), sections 9, 14, 21, 45, 47 and 51, cf. Formal Delegation of 16 February 2007 No. 171 and Formal Delegation of 31 May 2007 No. 590.

EEA references: EEA Agreement Annex II Chapter XIX point 1 (Directive 98/34/EC).

Amendments: Amended by Regulations of 23 December 2010 No. 1821, 5 July 2016 No. 897, 24 January 2022 No. 118, 27 March 2023 No. 459.

Chapter 1 General provisions

Section 1

Scope of application

- (1) These Regulations apply to all units which have been registered or will be registered in a Norwegian register of ships.
- (2) For units to which a certificate, cf. section 6 of the Regulations of 4 September 1987 No. 855 on notification of newbuildings, survey, and certification, etc. of mobile offshore units, is issued in accordance with the Regulations of 4 September 1987 No. 857 on anchoring/positioning systems on mobile offshore units, these Regulations shall apply, with the exception of sections 14 and 16, when the certificate is renewed.
- (3) If the certificate is not maintained in accordance with the previously applicable Regulations of 4 September 1987 No. 857 on anchoring/positioning systems on mobile offshore units, the certificate will be withdrawn. In the case where a certificate is withdrawn, these Regulations shall apply.

Section 2

Definitions

For the purpose of these Regulations, the following definitions apply:

- a. *recognised classification society:* Any classification society with which the Ministry has entered into an agreement pursuant to section 41 of the Ship Safety and Security Act:
 1. American Bureau of Shipping (ABS)
 2. Bureau Veritas (BV)
 3. DNV
 4. Lloyd's Register of Shipping (LR)
 5. Nippon Kaiji Kyoaki (Class NK)
 6. Rina Services S.p.A (RINA).
- b. *extreme weather:* Cf. the definition given in ISO 19901-7 (2005), A.6.4.2.2. The combination of the 100-year wave and wind and the 10-year current can be employed if more accurate data on the location cannot be obtained.
- c. *unit:* A mobile platform, including drillships, equipped for drilling for subsea petroleum deposits, and mobile platforms for use other than drilling for subsea petroleum deposits.
- d. *adjacent to:* A unit is adjacent to another construction when:
 1. the gangway between the unit and construction is attached, or
 2. the unit is in danger of drifting into the construction after loss of all lines in the worst corner. The criterion is that the loss of all lines in the worst corner gives a safety factor(s) below 1.0, or
 3. the distance between the unit and the construction may be less than 10 m, when the transient movement is taken into account after loss of all lines in the worst corner.
- e. *MOU classification society:* A recognised classification society with which there is a supplementary agreement for carrying out inspections and surveys, etc. on mobile offshore units. The following societies are MOU classification societies:
 1. American Bureau of Shipping (ABS)
 2. DNV
 3. Lloyd's Register of Shipping (LR).
- f. *company:* cf. the definition given in section 4 of the Ship Safety and Security Act.
- g. *certified:*
 - (1) In respect of equipment and materials: Equipment which satisfies the requirements specified or materials complying with a recognised standard which are certified, approved or type-approved by:
 1. a Notified Body,
 2. an accredited certifying body,
 3. a recognised classification society,
 4. other public or private institution recognised by the Norwegian Maritime Authority, or

5. the administration of a country that has ratified the Safety of Life at Sea (SOLAS) Convention.
- (2) In respect of workmanship: Personnel who according to regulatory requirements are required to hold special qualifications for performing specific tasks and certified by:
 1. a recognised classification society,
 2. an accredited certifying body, or
 3. other public or private institution recognised by the Norwegian Maritime Authority.

h. *Safety Management System*: All systematic measures which the company is required to make to ensure that activities are planned, organised, performed and maintained in accordance with requirements laid down in or pursuant to the Act of 16 February 2007 No. 9 relating to ship safety and security and the Norwegian Maritime Code of 24 June 1994 No. 39.

Amended by Regulations of 5 July 2016 No. 897, 27 March 2023 No. 459.

Section 3

Mutual acceptance

- (1) Where these Regulations require that specific fittings, materials, devices, or types of equipment, etc. shall be acquired or be provided on board an offshore unit or where special construction or design requirements apply, the Norwegian Maritime Authority shall permit alternative solutions provided they have been documented by testing or otherwise to be at least as effective as those prescribed by these Regulations.
- (2) The Norwegian Maritime Authority shall accept the results of tests performed at recognised testing institutions, including testing institutions in other EEA countries. This acceptance shall be subject to the tests demonstrating appropriate and satisfactory results of a technical, professional and independent nature.

Section 4

Exemptions

The Norwegian Maritime Authority may, in individual cases and upon written application, grant exemption from the requirements of these Regulations. There must be special reasons that make such exemptions necessary and they must be justifiable in terms of safety. Exemptions are only granted where they do not contravene international agreements to which Norway has acceded.

Section 5

Documentation

The company shall be able to document compliance with the requirements of these Regulations. Documentation shall be sent or presented to the Norwegian Maritime Authority on request. The contents, scope and type of documents and the time of submission shall be decided by the Norwegian Maritime Authority.

Chapter 2

Technical requirements

Section 6

General design and functional requirements

- (1) The anchoring/positioning system shall keep the unit at its position.
- (2) The selected technical solutions shall, after an individual and joint assessment and need for future maintenance, give the best solutions.
- (3) The system shall be dimensioned to withstand the load that the selected solutions cause.
- (4) All equipment shall be prepared for easy maintenance and function testing.
- (5) No single error, including operator's error, shall lead to a failure or release.
- (6) All components of the anchoring/positioning system shall be certified by an MOU classification society.
- (7) Anchor chains shall as a minimum be manufactured according to DNV CN 2.6 (1985) or an equivalent standard.
- (8) The components of the anchoring/positioning system shall be delivered with the manufacturer's recommendations for maintenance and possible length of the lifetime of the design.

Section 7

Anchor winch

- (1) The anchor winch shall be dimensioned for every condition the unit is to be used in, cf. section 17 (2) and (3), as well have the pulling force needed to test the holding force of the anchor system statically in accordance with section 17 (1), yet not lower than 300 tonnes.

(2) The characteristic tension of the winch or its fundamentals shall not exceed 90% of the of the material yield point when subjected to a load equal to the breaking strength of the anchor line.

(3) The dimensioning of the winch with respect to the pulling force and brake systems shall be based on the pitch circle of the wildcat (cable lifter) and the third layer of the anchor line when the line is run from the drum.

(4) For winches without pawl, or where the pawl is not in accordance with section 8, the following shall apply:

The winch, when parked, shall have at least two independent holding brake systems engaged at any time. The total static holding force shall at least correspond to 120% of the breaking strength of the relevant anchor line. The weakest brake shall be able to hold at least 60% of the given breaking strength.

(5) For winches with pawl, and where the pawl is in accordance with section 8, the following shall apply:

The winch, when parked, shall have at least one holding brake system engaged at any time in addition to the pawl. The total static holding force shall at least correspond to the breaking strength of the relevant anchor line

(6) At least two independent brake systems shall be available at any time when the winch is operating. There shall be a dynamic brake system which is able to conveniently stop possible combined loads from the anchor line and anchor handling vessel during setting of the anchor at maximum speed, cf. the seventh and ninth paragraphs. The maximum forces that can occur when braking, shall not result in a utilisation of more than 85% of the materials yield stress limit, or 80% of the breaking strength of the material. The dynamic brake shall have a cooling system if necessary.

(7) The dynamic brake system shall be able to handle a speed of 1.5 m/s and 100 tonnes of exposed loads. In case of failure in the dynamic brake force, it shall be possible to stop by means of a static brake, cf. the twelfth paragraph.

(8) The permitted characteristics of speed/load to which the brake system can be exposed to during the setting of the anchor shall be documented and included in the operations manual.

(9) When engaged, the brakes of the anchor winch shall not be affected by any single error in the power supply or control system. If the power supply fails during operation of the winch, a remainder braking force of minimum 50% of the line's maximum braking strength shall instantly and automatically be engaged. The brake force shall be retained until the power supply and the control system is in operation.

(10) It shall be possible to release the brakes by means of stored energy in the course of 15 seconds in such a way that there is a controlled lowering and release of the entire anchor line during an emergency (emergency release). This shall be possible from a continuously manned control room. There shall be a safety system present (for example a protective cover) to prevent unintentional release of the anchor line. The anchor line shall not be able to puncture the hull in the case of an emergency release or lead to a further escalation of the incident.

(11) It shall not be possible to release the anchor line while risers for production are connected to the unit. A special safety system preventing this shall be provided. Emergency release shall nevertheless be possible with risers connected after a manual cancellation of the above safety system. A risk analysis as provided by the Norwegian Maritime Authority's regulations currently in force on risk analyses shall determine whether a disconnect mechanism for risers is necessary and which dimensioning accidental events necessitate such disconnection.

(12) During an emergency release it shall be possible to apply the static brakes once and release them again in a controlled manner. This at a speed of at least 2.5 m/s and with a load on the anchor line of at least 100 tonnes.

(13) There shall be a system which efficiently prevents the possibility of sparks resulting from emergency release from igniting gas. It shall be possible to document that the system has sufficient power, also in case of loss of generator for main and emergency power.

(14) It shall be possible to drop the entire anchor line at the most unfavourable angle of heel following damage, cf. section 21 of the Regulations of 20 December 1991 No. 878 on stability, watertight subdivision and watertight/weathertight means of closure on mobile offshore units.

(15) It shall be possible to pull the anchor line free from its fastening points/equipment without damaging the unit.

(16) The anchoring system shall be arranged in such a way that a minimum of additional loads in the anchor line will occur apart from the pure tensional strains.

(17) The anchor winch control system is a safety-critical system and shall comply with section 22 of the Regulations of 22 December 1993 No. 1239 on risk analyses for mobile offshore units.

(18) The anchor winches shall be delivered with a certificate from an MOU classification society which documents the following:

- a. manufacturer, designation of type and date of production
- b. type of anchor line and dimension/length which the winch is designed for
- c. static brake holding forces
- d. braking capacity during setting of the anchor, as specified in the seventh paragraph above
- e. remainder braking force (after failure in power supply)
- f. maximum pulling force of the anchor winch (steep force)

Section 8

Chain/steel rope stoppers and pawl mechanism

The chain/steel rope stoppers and pawl mechanism shall not prevent a possible emergency release in accordance with the tenth paragraph of section 7, and shall have the possibility of being released from a protected area by the winch, and from a continuously manned control room. The total static holding force of the chain/steel rope stoppers and pawl mechanism shall at least correspond to 120% of the breaking strength of the relevant anchor line.

Section 9

Fairleads

- (1) The characteristic tension in the fairlead as well as the fairlead's attachment to the unit shall not exceed 80% of the minimum specified yield tension when the anchor line is in the most unfavourable direction to the breaking point given in the operations manual. Overload of the fairlead shall not cause damage to the hull.
- (2) The fairleads shall have a minimum of 7 pockets and the groove width shall not exceed 1.7 times the chain diameter.
- (3) The fairleads shall, as far as technically and practically possible, have a mounting free of maintenance and have such a design that rubbing between the anchor line and other constructions, and unnecessary breaks in the anchor line are avoided.
- (4) The fairleads shall give as little extra strain on the anchor line as possible. The maximum allowable wear and friction shall be specified in the operations manual.
- (5) There shall be easy access to the fairleads for testing of functionality at sea. For permanently anchored units it shall also be possible to change the fairleads at sea.

Section 10

Dynamic positioning

If the unit is to keep its position by using dynamic positioning, the system shall be certified by a recognised classification society pursuant to MSC/Circ. 645 «Guidelines for dynamic positioning» of 6 June 1994 or an equivalent standard. The choice of equipment class shall be based on the consequences that any loss of position may have with regard to the operations the unit is intended to carry out.

Section 11

Thrusters-assisted anchoring

The system shall be in accordance with ISO 19901-7 (2005) if the unit is to keep its position by using thrusters-assisted anchoring. The system for thrusters-assisted anchoring shall be certified by a recognised classification society.

Section 12

Operation, instrumentation, signs and alarms

- (1) It shall be possible to operate the anchor winches from a well-separated separate operating house by the winch. From the operating house it shall be possible to survey the anchor handling vessel, anchor line, anchor winch and anchor chain/steel rope stoppers/pawl to ensure that a safe laying out and heaving in can be performed. The house shall be located so that it will not be hit by the anchor line in case of release of the whole length.
- (2) As a minimum there shall be instruments for reading the speed of the anchor line and line tension, as well as the length laid out at the local operating panel for the winch. The instruments shall have the relevant danger limits marked and give the necessary alarms for safe use.
- (3) A communications system shall be installed between the continuously manned control room and the operating house by the winch. The sound level in the operating house shall be such that communication can take place without problems. The sound level shall not exceed 75 dBA. It shall not be necessary to let go of operating handles in order to operate the communications system.
- (4) The continuously manned control room shall have instruments for reading the length laid out, and continuous reading and logging of line tension. The line tension shall automatically be saved and the information shall be accessible for at least the next 30 days. The minimum frequency for the recording of the line tension shall be twice per second. The instruments shall have the relevant danger limits marked (high and low tension) and give the necessary alarms for safe use (both visual and audible).
- (5) Instruments for reading the speed of the anchor line shall be installed at the continuously manned control room if the winches can be operated from this position. A remote monitoring system (in colour and good resolution) shall make it possible to survey the anchor handling vessel, anchor line, anchor winch and anchor chain/steel rope stoppers/pawl to ensure that a safe laying out and heaving in can be performed. The instruments shall have the relevant danger limits marked and give the necessary alarms for safe use.
- (6) When the remote operation system or remote release system is in use there shall be a dedicated sound and light signal at every winch to warn about rotating machinery. At locations where remote operation/release of the winch can

be carried out, a sign shall be put up with information that the alarm shall be sounded prior to remote operation of the winch.

Section 13

Testing of the new anchoring system

The following shall be performed and documented before the anchoring system is taken into use:

- a. function tests without stress of all anchor winches, chain/steel rope stoppers, pawl and brakes, etc.
- b. calibration of instruments
- c. pressure tests of hydraulic systems
- d. lowering of all anchor lines at top speed with tension in the anchor line for testing of the dynamic braking capacity of the winch
- e. testing of emergency release of all chain/steel rope stoppers, pawl and brakes under stress
- f. controlled lowering, stop and further lowering of anchor line by means of stored energy, cf. the tenth paragraph of section 7
- g. control of the maximum pulling force of the anchor winch
- h. control of the remainder braking force after failure in the power supply
- i. functional and redundancy testing of any thruster-assisted system or dynamic positioning system
- j. loss due to friction in the fairlead shall be measured and documented for each unit and each anchor line
- k. control and calibration of measuring systems for anchor line tension.

Chapter 3

Anchoring analysis

Section 14

The contents of the analysis

- (1) It shall be documented that the chosen anchoring system gives a secure and safe anchoring where the unit is to be used.
- (2) The premises, calculation methods and natural conditions that are used, including results of calculations, shall be given in the anchoring analysis. It shall be possible to document that the chosen calculation program is usable for the particular anchoring system and on the particular location.
- (3) The data needed in the anchoring analysis shall be available and be quality assured and verified through calibrated data from model experiments. This could be wind, current, wave drift, and mass and damping coefficients and transfer functions. This also applies for alterations which substantially changes the premises for the motion characteristics.
- (4) The calculations shall be prepared pursuant to the methodology given in ISO 19901-7 (2005). The premises and safety factors given in Annex B.2 in the standard shall be used in the analysis. In addition, the following shall apply:
 - a. the operation condition shall also be analysed for all units. The safety factors for consequence class 3 shall be met
 - b. all requirements in regard to the safety factors, including the requirement for the intact condition, shall be met if operation is to continue with one anchor line inoperable
 - c. units with production plants, equipment for storage, carriage or transfer of hydrocarbons to tankers shall use table B.2 of ISO 19901-7 (2005) Annex B. Calculations of a two line break shall be made, and satisfy the safety factors given in this table. As a minimum, the 10-year weather condition shall be used in the analysis of a two line break, but if operation in consequence class 3 is to be concluded before the 10-year weather condition is reached, the calculation of a two line break can be based on the maximum operation condition. Calculations of motion shall be made for the unit and constructions in the vicinity with regard to drift and collision. The calculations shall be made for extreme weather conditions including the most severe single failure for the unit and the floating construction in the vicinity respectively. After such an event the minimum distance between the unit and the floating construction tanker in the vicinity shall not be less than 10 metres
 - d. units close to another unit shall use table B.2 of ISO 19901-7 (2005) Annex B for the lines that are critical with regard to collision. For these lines, calculations of a two line break shall be made, and satisfy the safety factors given in this table. As a minimum, the 10-year weather condition shall be used in the analysis of a two line break, but if operation in consequence class 3 is to be concluded before the 10-year weather condition is reached, the calculation of a two line break can be based on the maximum operation condition. For lines that are not critical with regard to collision, the table in section 14 (4) (f) may be used. Calculations of motion shall be made for the unit and constructions in the vicinity with regard to drift and collision. The calculations shall be made for extreme weather conditions including the most severe single failure for the unit and the floating construction in the vicinity respectively. After such an event the minimum distance between the unit and the floating construction tanker in the vicinity shall not be less than 10 metres.

e. a 100-year return period for weather conditions, as described in ISO 19901-7 (2005), A.6.4.2.2, shall be used in all analyses. Characteristics for the season may be used for a non-permanent anchoring. Dynamic analyses shall be carried out.

f. table B.3 of ISO 19901-7 (2005) Annex B is replaced by the following:

	<i>Consequence class 3</i>	Consequence class 2	Consequence class 1
Intact	1.90	1.80	1.50
One-line-break	1.30	1.20	1.10
One-line-break, transient	1.10	1.10	1.05

g. the worst weather direction for each anchor line shall be analysed. Sectors with a greater extent than 30 degrees shall not be used.

h. all analyses shall have a summary which indicates any exemptions from the requirements, and operational conditions or premises that are of special signification or help on board. This includes maximum transient movement

i. thrusters may be used as an aid for reducing the anchor line forces pursuant to ISO 19901-7 (2005), with the following clarifications:

1. if the unit has an automated system, 70% of the thruster capacity is accepted when the system is operated manually

2. thrust with manual remote steering is not accepted for units stationed close to other constructions

j. vertical loads are accepted for some types of anchors, such as pile or suction anchors. When using drag anchors and drag embedded plate anchors, vertical loads on the anchor line at the point where the anchor line penetrates the sea bed are not permitted in the intact condition. After a single failure or double failure when there is a requirement for calculating this, limited vertical loads may be permitted when the attack angle (α) at the point where the anchor line penetrates the seabed is less than 50% of the calculated angle when the anchor line is shackled into the anchor (θ), cf. DNV-RP-E301 app f (2000)

k. a unit is in the vicinity (cf. ISO 19901-7 (2005) Annex B) if there is no time to evacuate the unit and other installations/constructions during the time it takes the unit to drift due to the existing weather conditions. A unit is only in the vicinity for the conditions where the weather comes from a critical sector with regard to a collision between the unit and other installations/constructions.

Amended by Regulation of 23 December 2010 No. 1821.

Chapter 4 Operation of the anchoring system

Section 15

Maintenance of the anchoring system

(1) The components in the anchoring/positioning system shall be inspected and maintained to ensure that the components can perform their defined functions throughout their lifetime. The components shall be inspected, maintained and re-certified in accordance with the manufacturer's recommendations and pursuant to the rules of a MOU classification society. In addition, the following shall apply:

a. anchor chains that are 20 years or older shall be re-certified at each intermediate survey (2.5 years) by use of magnetic particle testing (MPT) or equivalent on all available surfaces through the length of the chain. The same applies to anchor chains where more than 10% of the chain studs are loose with a gap of more than 0.5 mm

b. for anchor chains where the documentation reveals history of defects, cf. DNV-OSS-101 (April 2009) Ch. 3 Sec. 4 L404 last paragraph, the chain shall be re-certified annually by use of 100% NDT. This also applies to chains that are less than 20 years old

c. after more than one cold pressings of loose poles, an ultrasound control or equivalent control shall be conducted on the stud link

d. the wear and friction of the fairleads shall be tested annually and undergo an extended testing every 5 years, for verification in accordance with the fourth paragraph of section 9 and the first paragraph (j) of section 13.

(2) Even if the components of the anchoring system have validated certificates, this shall not exempt the company from its responsibility of examining the systems, and all the components, to ensure that further use is safe, discover possible defects or implement necessary actions.

(3) Instruments/equipment used for monitoring the anchoring/positioning system shall be checked, calibrated and function tested in accordance with the directions from the manufacturer when inaccurate measuring or defect equipment is suspected, and at least once a year. Calibration and function testing shall be carried out to such extent as to ensure correct readings are done throughout the whole area of application, and the error margin of exposed loads shall not exceed +/- 5%.

(4) The fastening of equipment to the anchor line shall be performed by personnel with the necessary documented training to perform such work.

(5) The company shall ensure and the offshore installation manager shall participate in ensuring, and be able to document, that those in charge of anchor handling and positioning have been given the required training in function and operation of the anchoring/positioning system. This requirement also applies to other personnel who inspect or maintain, and monitor or use equipment and instruments related to the anchoring/positioning system.

Amended by Regulation of 23 December 2010 No. 1821.

Section 16

Procedure of the anchoring operation

(1) Anchor handling shall not commence if the offshore installation manager or the masters of the anchor handling vessels find that the weather conditions are or may become so bad that the safety of the crew, unit or anchor handling vessel can be jeopardised or that the weather conditions may exceed the criteria on which the planning was based. After the start-up of the anchoring operation, changes that may affect the operation and the safety must be communicated continuously between those involved.

(2) The planning of the anchoring operation shall as a minimum include estimates and analyses of the forces which may arise on the unit, anchor handling vessel or anchoring equipment, including environmental loads such as wind, waves and currents. Risk assessments to identify critical conditions of the anchoring procedure, including interaction with the anchor handling vessel, shall be performed together with the relevant personnel from other participants. Easy-to-follow procedures for the operation shall be prepared and attention zones and criteria for conclusion shall be defined. Communication between the mobile offshore unit and the others involved shall be planned and the operation shall be preceded by a joint start-up meeting.

(3) Those responsible for the handling of anchors and positioning shall continuously check if the anchoring is in compliance with the premises given in the analysis. Furthermore, there shall be a system for documentation of the operation being carried out safely and that the operation is in accordance with the conditions laid down in these Regulations and the premises given in the anchoring and positioning calculations.

(4) The information necessary for the safe operation of the anchoring/positioning system shall be given in the operations manual. The consequences of failure in the positioning system shall be known. The guidelines necessary for the operation of the systems shall be given so that the safety is ensured and that the requirements in these Regulations are complied with at all times. The anchoring/positioning calculations shall be available and the involved personnel shall be familiar with the contents. Decisions concerning the anchoring/positioning system shall be based on the analysis.

(5) The unit shall have sufficient anchor line on board to pull the unit away from the location in the event of an emergency.

Section 17

Operation of the anchoring system

(1) When using drag anchors and plate anchors, the holding power is considered verified when the anchor lines have been tension tested to meet ISO 19901-7 (2005) B.2.3.8. The requirement for test tension can be reduced, provided that: When using drag anchors and drag embedded plate anchors, the installation tension of the anchors, measured at the point where the anchor line penetrates the seabed, shall at least be equal to estimated maximum line tension at the same point in accordance with the dynamic analysis for extreme weather conditions (survival condition in intact condition), cf. section 14. The installation tension may be reduced, provided that:

- a. the requirements of section 14 can be maintained after the dragging of any one anchor. The calculation of additional drag caused by an increase in line tension from the installation tension to the maximum estimated line tension shall be made in accordance with DNV-RP-E301 or similar standards. If calculations for sand bottoms are to be made, documented empirical methods may be used, provided that this provides an equivalent level of safety and that the safety factors specified in DNV-RP-E301 are used
- b. the geotechnical data used in the analyses are representative for the relevant anchoring area. The analysis shall use location specific geotechnical data for each anchoring location if the area is not homogeneous
- c. and this does not lead to a raised risk for other units in the vicinity
- d. a verification of correct anchor installation on the seabed is done.

(2) When operating, the anchor line tension shall during the use of drag anchors and plate anchors never exceed the tested anchor holding power. The operation shall be concluded before the anchor line tension reaches the tested anchor holding power. This shall be reflected in the detachment values given in the operations manual.

(3) When operating close to other structures, the permitted maximum line tension must not exceed 80% of the tested anchor holding power. The unit shall have necessary winch arrangements and adequate winch power on the windside to pull the unit away during the most unfavourable weather conditions the unit can operate under.

(4) In connection with each anchor handling, the anchor winch, chain/steel rope stopper, fairleads, instrumentation etc. shall be checked, and the entire anchor line shall be inspected visually. A visual inspection of the anchor, buoys, sinking elements etc. shall be conducted at each launching. The result shall be entered in the deck log or be documented in another fashion.

(5) A function test of the positioning system shall be performed at every new anchoring location. The result shall be entered in the deck log or be documented in another fashion.

(6) The emergency release system for all brakes shall through stored energy and with load be function tested at every new anchoring. If it can be shown to give a reliable result, it is acceptable that the functions can be verified through a physical full-scale simulation. A function test without the help of simulation shall be performed at least every 2.5 years. The result shall be entered in the deck log or be documented in another fashion.

(7) The anchor winch sprinkler facility for chain and wildcat shall be tested at every new anchoring. The result shall be entered in the deck log or be documented in another fashion.

(8) An updated listing of every component of the anchoring system shall be available on the unit and at the land organisation. The listing shall contain the age, quality, breaking strength, manufactures certificate, inspection certificate, possible re-certification date and re-certification agency of the different components of the anchoring system. The different components shall use a traceable identification system to ensure knowledge of where each component is located at any given time. It shall be possible to trace where the component has been used earlier and the history of the component, with regard to replacement, maintenance, inspections and breakage etc.

Amended by Regulation of 23 December 2010 No. 1821.

Chapter 5

Concluding provisions

Section 18

Entry into force

(1) These Regulations enter into force on 1 September 2009.

(2) Regulations of 4 September 1987 No. 857 on anchoring/positioning systems on mobile offshore units are repealed effective from 1 September 2009.