Requirements for risk assessments on Norwegian vessels

Purpose

The purpose of Instructions to Class (IC) 4-2017 is to make clear how the requirements for risk assessments on Norwegian vessels are to be interpreted.

Furthermore, the Norwegian Maritime Authority (NMA) wishes to underline that it is the national legislation implementing the Maritime Labour Convention, 2006 (MLC), including chapter 4.3 on health and safety protection and accident prevention, that decides how shipowners with Norwegian vessels shall operate in order to comply with the requirements of the Convention.

Application

IC 4-2017 applies to passenger and cargo ships which are registered in a Norwegian ship register and are delegated to Recognized Organizations (ROs).

Definitions

«Risk assessment»: The general rule for Norwegian ships is that hazards on board shall be identified. When the hazard has been identified, an assessment of the risk represented by the hazard shall be made.

There are also more specified rules for risk assessments in Regulations No. 8 (see under References below) concerning chemicals and biological agents, mechanical vibration, noise and artificial optical radiation, and a special risk assessment related to pregnancy, birth and breastfeeding.
References

- Agreement of 1 June 2002 between the Ministry of Trade, Industry and Fisheries and ROs concerning surveys of ships registered in a Norwegian ship register (the Agreement) paragraphs 2.2, 2.3 and 2.7, cf. Annex I section 3.5 and II section 3.4.
- Regulations of 1 January 2005 No. 8 on the working environment, health and safety of persons working on board ship (hereinafter Regulations No. 8).
- MLC chapter 4.3 on health and safety protection and accident prevention.

Background

There is a need to ensure that the ROs interpret the rules for risk assessments on Norwegian ships in a unified manner, so that the NMA rules do not differ, in practice, depending on which RO is verifying compliance with Regulations No. 8. This will in turn benefit the shipowners because the ROs’ application of the rules will be more foreseeable to them.

Item 1: The general rule for risk assessment

The general rule for risk assessment on Norwegian vessels is stipulated in Regulations No. 8 section 2-2. Section 2-1 of the Regulations, however, merely stipulates general guidelines for the application of the Regulations, and is not a general rule for assessing risk.

Any hazard on board shall be identified and an assessment of the risk represented by the hazard shall be made. Such risk assessment shall be made on a regular basis and whenever

a) new working equipment or new technology is introduced;

b) other modifications are made to the organisation or planning of work, which may effect the health and safety of persons working on board.

The results of risk assessments shall be documented in writing.

If a risk to the safety and health of persons working on board is identified, necessary measures shall be taken to eliminate or reduce the hazards.

Item 2: Special risk assessment related to pregnancy, birth and breastfeeding

There is a special rule for risk assessment related to pregnancy, birth and breastfeeding in Regulations No. 8 section 8-4.

The master or the company shall ensure that a special assessment is made of the probability of any harmful factors of the working environment posing a risk of injury to a person working on board who is pregnant, has recently given birth or is breastfeeding. The assessments shall be repeated at regular intervals and whenever there is any change in conditions which may influence the risk of
injury to the person working on board. Where such risk is identified, the master or the company shall ensure that any harmful factors are determined, assess the overall risk of injury and decide which protective and safety measures to take.

The person working on board shall be notified of the results of the assessment.

**Item 3: Special risk assessment related to chemicals and biological agents**

There is a special rule for risk assessment related to chemicals and biological agents in Regulations No. 8 section 11-4.

Any exposure to chemicals and biological agents which poses a health risk to persons working on board shall be identified. When such exposure has been identified, an assessment of the risk posed by the exposure shall be made. For activities involving exposure to several different chemicals and biological agents, the risk shall be assessed on the basis of the aggregate and combined risk of the chemicals and biological agents.

The risk assessment shall be performed at regular intervals and whenever there is a change in conditions which may affect the exposure to chemicals and biological agents for persons working on board.

**Item 4: Special risk assessment related to mechanical vibration**

There is a special rule for risk assessment related to mechanical vibration in Regulations No. 8 section 14-6.

The exposure of persons working on board to mechanical vibration shall be assessed.

Measurements of the level of exposure to vibration shall be carried out if necessary.

The level of exposure to mechanical vibration may be assessed by means of observation of specific work operations and reference to relevant information on the probable magnitude of the vibration corresponding to the equipment or the types of equipment used in the particular conditions of use, including such information provided by the manufacturer of the equipment. Such assessment is not the same as a measurement, which requires the use of specific apparatus and appropriate methodology.

The risk assessments, as well as measurements found necessary, shall be repeated on a regular basis and shall be carried out by qualified personnel with competency in vibration measurements and assessments thereof. If the company lacks qualified personnel, the employer shall use external services or persons.

Sections 14-4, 14-5, 14-7 and 14-8 of Regulations No. 8 are relevant only when measurements of the level of exposure shall be carried out, cf. section 14-6 first paragraph. However, the general rule for follow-up measures stipulated in section 2-2 paragraph three of the Regulations shall in any case apply.

**Item 5: Special risk assessment related to noise**

There is a special rule for risk assessment related to noise in Regulations No. 8 section 15-3.
Risk assessments of the noise levels to which the persons working on board are exposed, shall be carried out. This implies that noise measurements according to IMO Resolution MSC.337(91) on protection against noise is not sufficient to uphold the NMA rules on protection against noise. In addition, the shipowner shall comply with the NMA rules implementing Directive 2003/10/EC on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise). The noise exposure on board may change when the ship is put into operation, and there may be changes in the noise exposure due to ship reconstructions, new work equipment or machines on board, etc. that result in more noise than initially calculated. The requirements for noise limits, noise measurements, methods of measurement, measuring equipment and personnel to carry out the measurements are a part of the risk assessment. The risk assessments shall be updated on a regular basis, and new risk assessments shall always be carried out when significant changes affect the noise exposure or when the results of health surveillance show it to be necessary.

**Item 6: Special risk assessment related to artificial optical radiation**

There is a special rule for risk assessment related to artificial optical radiation in Regulations No. 8 section 16-4.

The extent to which persons working on board are likely to be exposed to artificial sources of optical radiation shall be identified and documented, and any risks to their health and safety arising from artificial optical radiation shall be assessed. Assessment, calculation and measurement of exposure in accordance with section 16-5 shall be a part of the risk assessment. The risk assessment shall be updated on a regular basis, particularly with regard to changes which affect the exposure to artificial sources of optical radiation or organisation of work which may affect the risk, or if the results of health surveillance, cf. section 16-10, show it to be necessary.

Instruction manuals for artificial optical radiation equipment may not replace a risk assessment according to section 16-5. An instruction manual may, however, be of help when preparing the risk assessment.

**Item 7: There is no requirement for risk assessment related to quality of rest**

There is no rule for risk assessment related to fatigue or the quality of rest in Regulations No. 8.

The Ship Safety and Security Act\(^1\) sections 23 and 24, supplemented by detailed rules in Regulations of 26 June 2007 No. 705 on hours of work and rest on board Norwegian passenger and cargo ships, etc., shall ensure that persons working on board have adequate rest hours and do not work excessive hours. In addition, the Ship Safety and Security Act section 25 and Regulations of 15 September 1992 No. 707 on the accommodation and catering service on ships shall contribute to the quality of rest for persons working on board.

When Regulations No. 8 section 2-3 first paragraph subparagraph e stipulates that the shipowner shall ensure that the persons working on board have had adequate rest, it does not mean that a risk assessment shall be made. The provision is part of the requirement for adequate arrangement and organisation of work in section 2-3 and shall ensure that the persons working on board have had

---

\(^1\) Act of 16 February 2007 No. 9 relating to ship safety and security (Ship Safety and Security Act)
sufficient rest in accordance with the Ship Safety and Security Act section 24 and Regulations of 26 June 2007 No. 705 on hours of work and rest on board Norwegian passenger and cargo ships.

---000---