

## 15. Impact assessment

The Norwegian Maritime Authority (NMA), in consultation with the industry, has concluded that the current Regulations of 17 January 1978 No. 4 on cargo-handling appliances in ships and the Regulations of 13 January 1986 No. 31 on cranes used on ships in open waters for loading and unloading must be regarded as outdated. This is primarily due to the increasing technological advancement of modern lifting appliances and loose lifting gear. Where the regulatory framework is not aligned with the actual use of lifting appliances and loose lifting gear, this may give rise to safety risks on board.

The proposed new Regulations on lifting appliances, loose lifting gear and lifting operations on ships retain a number of provisions from the current legal framework. However, the NMA considers that several of the proposed amendments, updates and new requirements will result in administrative and financial consequences for the industry. In particular, the NMA has assessed measures relating to construction, the inspection regime and competence requirements, which may lead to additional costs for companies. It is therefore essential that these measures, which form the basis of the proposed Regulations, pursue objectives that justify the imposition of increased costs on companies.

The purpose of the proposed Regulations is to reduce various risks associated with lifting appliances and loose lifting gear on board ships. The NMA considers that the proposal will contribute to improved maritime safety, both for persons working on board and for material assets. This must also be viewed in light of "Vision Zero", which reflects the objective of zero fatalities and zero serious injuries on board. The expected costs resulting from the proposed Regulations are therefore considered to be outweighed by the anticipated safety benefits.

The NMA proposes that lifting appliances and loose lifting gear, as referred to in sections 4, 5, 6, 7, 9, 10, 11, 12 and 14, shall be designed in accordance with a recognised standard. With regard to such equipment, it is difficult to estimate any additional costs arising from the proposed construction requirements compared to the costs associated with the current construction requirements. Any additional costs will depend, inter alia, on the complexity and technology of the equipment. Furthermore, the proposed construction requirements are based, among other things, on input from the industry, where recognised standards are already widely used. This is expected to limit the negative economic impact on the industry.

Lifting appliances and loose lifting gear may, to a greater extent than before, be procured as off-the-shelf products. In many cases, this may result in cost savings compared to the current situation, where equipment must be adapted to detailed construction requirements.

Requirements are introduced for equipment-specific, documented training for operators of lifting arrangements for ROVs (section 29), operators of heave-compensated gangways (section 30) and operators of self-unloaders equipped with excavators (section 31). The documented training shall include a training syllabus and a documented competence assessment. The NMA considers that incorrect use of such equipment may have significant consequences, and the purpose of the training requirement is to reduce the risks associated with such operations. The requirement will entail that companies establish an overview, for example as part of the safety management system, demonstrating that the required training has been provided. It is assumed that the training will be carried out internally within the company and that the estimated costs will correspond to the time spent.

The NMA further proposes requirements for certificates of competence for operators of lifting appliances as a measure to reduce the risk of incidents caused by human error. Operators who do not already hold the necessary certificates of competence must complete the required certified training no later than three years after the entry into force of the new Regulations. The competence requirements set out in sections 27 and 32 are not proposed to apply to ships holding a passenger ship safety certificate or a cargo ship safety certificate.

Pursuant to section 33, the company shall ensure that any person working on board receives equipment-specific and vessel-specific training providing knowledge of the design, operation, intended use, maintenance and examination. Adequate guidance shall be provided on the limitations of the equipment and any

operational limitations in relation to the vessel. The NMA considers that this will provide practical safety training, enabling theoretical knowledge to be applied in practice. It is assumed that such training will be carried out internally within the company and that the associated costs will correspond to the time spent. In addition, there may be costs associated with documenting the training in the ship's safety management system and establishing a system to maintain and update the competence of individual operators.

The requirement for an initial examination by a competent company is considered to be a continuation of current law, and any additional costs associated with such initial examinations are therefore expected to be limited.

It is proposed in section 19, cf. section 22, that deck cranes, offshore cranes and other lifting appliances shall undergo annual examinations. All ships are already subject to requirements for annual examinations. However, under the current framework such examinations may be carried out by the crew. The proposed Regulations require that annual examinations be carried out by a competent company, thereby tightening the requirements as regards who may carry out such examinations.

The requirement for five-yearly examinations of lifting appliances pursuant to section 19, cf. section 23, is considered to be a continuation of section 18 of the current Regulations on cargo-handling appliances in ships. Any additional costs associated with five-yearly examinations are therefore expected to be limited.

The NMA has obtained cost estimates for annual and five-yearly examinations and assumes that costs will vary depending on the size and complexity of the lifting appliance, as well as the level of preventive maintenance. The estimates do not include the cost of parts, labour, dismantling of brakes, slew ring bolts, sheaves and similar components. The NMA assumes that the cost of additional work will vary depending on the maintenance carried out over the five-year period, and that such work is often performed by the manufacturer for larger offshore cranes. Travel costs must also be assumed to be additional.

Based on the estimates obtained, the annual examination of smaller deck cranes (3 to 5 tonnes) is estimated to cost between NOK 2,000 and NOK 6,500, depending on size, complexity and preventive maintenance. Travel time and travel costs are additional and will vary depending on the location of the vessel.

As the requirement for annual examinations of offshore cranes is a continuation of current law, the NMA assumes that the cost level for such examinations will remain broadly unchanged.

The requirement for initial examination of loose lifting gear is considered to be a continuation of section 14 of the current Regulations on cargo-handling appliances in ships, and any additional costs are therefore expected to be limited.

It is further proposed that loose lifting gear shall undergo annual examinations carried out by a person holding inspector qualification G11K. The purpose of this requirement is to reduce the risk of undetected weaknesses arising from use and external loads to which the equipment has been subjected. The NMA considers that such examinations will, in particular, contribute to safer working conditions for personnel on board. The cost of obtaining the G11K inspector qualification is estimated at approximately NOK 20,000.

Upon expiry of the transitional arrangements under section 45, it will no longer be possible to maintain individual approval as a competent person. Individuals currently approved as competent persons will instead be required to form part of a professional environment within a competent company. The discontinuation of the individual approval scheme may have significant administrative and financial consequences for those who currently hold such approval.