

Translation: Only the Danish document has legal validity.

*Order no. 46 of 15 January 2019
issued by the Danish Maritime Authority*

Order on the security of network and information systems of importance to the safety and navigation of ships¹

In pursuance of section 3(1)(ii), (v) and (vii), section 6(1)(iii) and section 32(9) of the Danish Act on safety at sea (*lov om sikkerhed til søs*), see Consolidated Act no. 1629 of 17 December 2018, the following provisions are laid down as authorised under section 1(1)(iii) of Order no. 744 of 24 June 2013 on the transfer of certain powers to the Danish Maritime Authority and on the right of appeal, etc.:

Part 1

Scope of application and definitions

Section 1. This Order lays down provisions on the security of network and information systems of importance to the safety and navigation of ships.

Section 2. For the purposes of this Order, the following definitions apply:

- (i) ‘operator of a maritime service’ means a public or private entity which is appointed by the Danish Maritime Authority as operator of a maritime service pursuant to section 3(1) and which performs tasks that use network and information systems of importance to the safety and navigation of ships.
- (ii) ‘network and information system’ means
 - a) an electronic communications network within the meaning of point (a) of Article 2 of Directive 2002/21/EC;
 - b) any device or group of interconnected or related devices, one or more of which, pursuant to a program, perform automatic processing of digital data; or
 - c) digital data stored, processed, retrieved or transmitted by elements covered under points (a) and (b) for the purposes of their operation, use, protection and maintenance.
- (iii) ‘security of network and information systems’ means the ability of network and information systems to resist, at a given level of confidence, any action that compromises the availability, authenticity, integrity or confidentiality of stored or transmitted or processed data or the related services offered by, or accessible via, those network and information systems.
- (iv) ‘incident’ means any event having an actual adverse effect on the security of network and information systems;
- (v) ‘risk’ means any reasonably identifiable circumstance or event having a potential adverse effect on the security of network and information systems.
- (vi) ‘the ISM Code’ means Regulation (EC) no 336/2006 of the European Parliament and of the Council of 15 February 2006 on the implementation of the International Safety Management Code within the Community and repealing Council Regulation (EC) no 3051/95 or Chapter IX of the Order on B or D Notices from the Danish Maritime Authority.
- (vii) ‘company’ means the owner of the ship or any other organisation or person, such as the manager or the bareboat charterer, who has assumed responsibility for the operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the ISM Code.

Part 2

Appointment of operators of maritime services

Section 3. The Danish Maritime Authority may appoint a public or private entity as operator of a maritime service.

Subsection 2. In making the appointment, the Danish Maritime Authority shall take into account:

- (i) the effect on the safety and navigation of ships;
- (ii) the application of network and information systems; and

¹ This order implements parts of European Parliament and Council Directive 2016/1148/EU of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, Official Journal 2016, no. L 194, p. 1.

(iii) whether an incident would have significant disruptive effects on ships and their navigation.

Subsection 3. In making the assessments under subsection (2)(iii), the Danish Maritime Authority shall take the following into account:

- (i) The number of users relying on the service.
- (ii) The degree and duration of the impact that incidents could have on economic and societal activities or public safety.
- (iii) The geographical area that could be affected by an incident.
- (iv) Whether a sufficient level of the service can be maintained by way of alternative means for the provision of that service.
- (v) Sector-specific factors.

Subsection 4. Vessel traffic services (VTS) and services provided by public authorities concerning automatic identification systems (AIS), transmission of correction signals to navigation systems, navigation warnings and Notices to Mariners (EfS) are regarded as operators of maritime services.

Subsection 5. The Danish Maritime Authority shall assess which entities to appoint pursuant to subsection (1) on a regular basis, but at least every two years.

Section 4. The Danish Maritime Authority shall revoke an appointment of an operator of a maritime service if the operator concerned no longer meets the criteria for being appointed.

Part 3

Companies and ships

Section 5. Companies operating ships that are covered by the ISM Code shall implement appropriate and proportionate technical and organisational measures to manage the risks posed to the safety of ships using network and information systems in accordance with the requirements of the ISM Code and the IMO's guidelines on maritime cyber risk management (MSC-FAL 1/Cir. 3)².

Subsection 2. The Danish Maritime Authority may order companies operating ships that are not covered by subsection (1) to implement measures pursuant to subsection (1) if they are using network and information systems that affect the safety and navigation of the ships.

Subsection 3. The measures pursuant to subsection (1) must be implemented no later than at the first annual verification of the company's document of compliance with the ISM Code after 1 January 2021.

Subsection 4. For companies appointed pursuant to subsection (2), the Danish Maritime Authority may, based on an assessment of the use and size of the ship, specify in its order the requirements for documentation of implementation of the measures.

Part 4

Requirements for operators of maritime services

Section 6. Entities appointed as operators of maritime services, see section 3, shall take:

- (i) appropriate and proportionate technical and organisational measures to manage the risks posed to the security of network and information systems used for the provision of such maritime service, which measures are to ensure a level of security of network and information systems proportionate to the risks posed;
- (ii) appropriate measures to prevent and minimise the impact of incidents that may adversely affect the security of the network and information systems used for the provision of such maritime service. The purpose is to ensure the continuity of the maritime service.

Subsection 2. Not later than two years after being appointed, operators of maritime services must be certified to an internationally recognised standard for network and information security management systems, such as DS/EN, ISO/IEC 27001 or the like.

Subsection 3. The Danish Maritime Authority must be notified of the operator's choice of standard pursuant to subsection (2) before the operator becomes certified to the standard.

Subsection 4. The certification must comprise the part of the operator's network and information systems on which the operator relies in order to provide the maritime service and where an incident would have a significant impact on the safety and navigation of ships.

Subsection 5. In the period from their appointment and until they have obtained certification, the operators of maritime services referred to in subsection (1) shall, at intervals of six months or less, submit a status report on the certification process to the Danish Maritime Authority.

² Reference is further made to the requirements concerning minimum standards for the ship security assessment laid down in Article 3, paragraph 5, of European Parliament and Council Regulation 725/2004/EC of 31 March 2004 on enhancing ship and port facility security.

Section 7. Certification of operators of maritime services must be in the form of accredited certification by a certification body accredited to the relevant standard. Accreditation must be provided by either the Danish Accreditation Fund (DANAK) or a similar accreditation body which is a signatory to the multilateral agreement of the European co-operation for Accreditation (EA) or of the International Accreditation Forum (IAF) concerning mutual recognition covering the relevant certification standard.

Subsection 2. Operators of maritime services shall submit a copy of the certificate and any appendices to the Danish Maritime Authority.

Subsection 3. Operators of maritime services shall promptly notify the Danish Maritime Authority if their certificate has been revoked or suspended or has lapsed.

Part 5

Notification, disclosure and publication of information

Section 8. Operators appointed pursuant to section 3 shall notify the Danish Maritime Authority and the Danish Centre for Cyber Security of incidents having a significant impact on the continuity of the maritime services they provide.

Subsection 2. Companies comprised by section 5 shall notify the Danish Maritime Authority and the Danish Centre for Cyber Security of incidents comprised by this Order where such incidents have an impact on the safety and navigation of ships.

Subsection 3. Notification of incidents must be given through the common digital solution for reporting incidents to public authorities in Denmark at virk.dk.

Section 9. Notification pursuant to section 8 must be given without undue delay and usually by the end of the first weekday after the operator established that the incident has a significant impact on the continuity of the maritime service.

Subsection 2. If all particulars required for the notification are not available to the operator at the time when the notification is given, the operator shall submit a partial notification containing the information available. A partial notification must be followed by a complete notification as soon as possible.

Section 10. Operators of other maritime services may on a voluntary basis notify the Danish Maritime Authority and the Danish Centre for Cyber Security of incidents having a significant impact on the performance of the maritime services they provide.

Section 11. After consulting the notifying operator, the Danish Maritime Authority may inform the public of specific incidents if public knowledge thereof is necessary to prevent an incident or to manage an ongoing incident.

Subsection 2. Information disclosed to the public pursuant to subsection (1) must not contain:

- (i) information on technical devices, procedures, operational and business matters or the like where the notifying operator claims that such information is of significant business importance to the operator;
- (ii) information which the Danish Maritime Authority deems to be of significant importance to national security or the defence of the realm;
- (iii) information which may endanger individuals or groups of people;
- (iv) confidential information; or
- (v) information on the circumstances of individuals.

Part 6

Exemption

Section 12. Within the scope of European Parliament and Council Directive 2016/1148/EC of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, the Danish Maritime Authority may allow derogation from the provisions of section 6(2) and section 7 on certification and accreditation where it is deemed to be compatible with the considerations underlying the said provisions.

Part 7

Penalty provisions

Section 13. Unless other legislation prescribes a more severe punishment, any person who

- (i) acts contrary to sections 5-9, or
- (ii) sets aside conditions for an exemption granted pursuant to section 12, is liable to a fine.

Section 14. Criminal liability may be imposed on companies, etc. (legal persons) under the rules of Part 5 of the

Danish Criminal Code (*straffeloven*).

Part 8

Entry into force, etc.

Section 15. This Order enters into force on 1 February 2019.

Section 16. This Order does not apply to the Faroe Islands and Greenland.

Danish Maritime Authority, 15 January 2019

PER SØNDERSTRUP

/ Esben Snoer Iversen