



Luxembourg, December 19th 2011

Circular CAM 09/2011

O/Ref. : VS/91870

Subject : ELECTRONIC CHART DISPLAY and INFORMATION SYSTEM (ECDIS)

To : All Accredited Shipping Managers, ship owners, ship operators and designated persons of Luxembourg flagged ships, Recognised Organisations (ROs) and Recognised Security Organisations (RSOs).

- INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA (SOLAS)**

According to the recent amendments to SOLAS Chapter V - Safety of Navigation - adopted by IMO Resolution MSC.282(86) and in force as of January 1st, 2011, the use of ECDIS will soon become mandatory on board all vessels (Annex 1). The breakdown per type, size and category of ships, e.g. existing or new building is shown in the following table.

SHIP TYPE	SIZE	NEW BUILDINGS	EXISTING SHIPS
PASSENGER SHIPS	> = 500 GRT	Constructed on or after 1 July 2012	Constructed before 1 July 2012: Not later than the first survey (*) on or after 1 July 2014
TANKERS	> = 3 000 GRT	Constructed on or after 1 July 2012	Constructed before 1 July 2012: Not later than the first survey (*) on or after 1 July 2015
CARGO SHIPS OTHER THAN TANKERS	> = 50 000 GRT	Constructed on or after 1 July 2013	Constructed before 1 July 2013: Not later than the first survey (*) on or after 1 July 2016
	> = 20 000 GRT < 50 000 GRT	Constructed on or after 1 July 2013	Constructed before 1 July 2013: Not later than the first survey (*) on or after 1 July 2017
	> = 10 000 GRT < 20 000 GRT	Constructed on or after 1 July 2013	Constructed before 1 July 2013: Not later than the first survey (*) on or after 1 July 2018
	> = 3 000 GRT < 10 000 GRT	Constructed on or after 1 July 2014	

(*) Refer to the unified interpretation of the term "first survey" referred to in SOLAS regulations (MSC.1/Circ.1290).

Until the dates mentioned above, the use of a type-approved ECDIS on board of existing ships flying the Luxembourg flag, as the primary means of navigation will be accepted by the Commissariat aux Affaires Maritimes (CAM) provided that the relevant chart information is available as an Electronic Navigational Chart (ENC) and back-up arrangements are in place at all times.

For back-up purposes, the following arrangements are currently accepted:

- an appropriate folio of up-to-date paper nautical charts (APC)¹;
- a second type-approved ECDIS connected to the main and emergency source of power

¹ For the definition of an appropriate folio of up to date paper charts refer to IMO Resolution MSC.232 (82).

Both primary and back-up ECDIS equipments must be fully independent and type-approved in accordance with IMO Resolution A.817(19), as amended by Resolutions MSC.64(67) Annex 5 and MSC.86(70) Annex 4 and the IEC 61174; the testing standard developed by the International Electro-technical Commission (IEC).

Likewise, ECDIS equipments must be in compliance with the Marine Equipment Directive (MED) 96/98/EC as amended.

Moreover, when sailing in waters not covered by ENC charts or when no up-to-date ENC charts are available for the intended voyage, a folio of updated paper nautical charts must be used.

The updating of paper charts must be carried out at the same interval as presently provided by means of notices to mariners, issued by an authorised hydrographical office or other relevant government institution.

- **INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS (STCW)**

ECDIS and other electronic charting systems have become increasingly important in ship navigation in modern times and are widely used either as a primary navigation tool or as an aid to navigation.

However, without adequate and appropriate training of seafarers, these systems can not be operated to their full potential and may, under certain circumstances, even increase the hazard to navigation.

According to Regulation I/14 of the STCW Convention as amended, the Company² shall be responsible for ensuring that the ship is manned at all times in compliance with the Safe Manning Document (SMD), not only by properly qualified but also certified seafarers.

Identical requirements are also laid down in the International Safety Management (ISM) Code - the company must ensure that regardless of their category and/or function, seafarers serving on board cargo or passenger ships, tankers, high-speed craft (HSC) or mobile offshore and drilling units (MODUs) meet the requirements for additional training, experience and certification.

- **ECDIS generic training**

For the Luxembourg maritime administration, an ECDIS training programme based on the IMO ECDIS model course 1.27 (Annex 2) and approved by a Maritime Administration of an European Union Member State will be duly recognised as meeting the ECDIS generic training requirements.

- **ECDIS ship specific equipment training**

The ECDIS programme training should relate to the specifics - make and model - of the equipment fitted on board the ship where Masters and/or Navigation Officers will be serving. Obviously, a specific training course must be attended for any different system.

For vessels flying the Luxembourg flag and already equipped with an approved ECDIS equipment, Masters and Officers with navigation responsibilities must have followed the above mentioned courses and hold the relevant certificates. Additionally, companies are required to amend their ISM documentation in order to provide adequate familiarisation with the equipment present on board.

² Company is the entity responsible for the management of the ship in accordance with the ISM Code. For ships that are not required to comply with the ISM Code, Company is the entity as defined in STCW Convention Regulation I/1.25).

Whereas both the training and the assessment provided by training institutions and maritime academies in the use of ECDIS is not required for those people who serve exclusively on board ships that are not fitted with ECDIS, the CAM strongly recommends shipowners and/or management companies to enrol all the seafarers with navigation responsibilities (at management or operational level) in such courses, the sooner the better.

You are requested to ensure adequate dissemination of this information within your company (CSO's) and to the Masters and SSO's of concerned Luxembourg flagged vessels.



(s) Robert BIWER
Government Commissioner
for maritime affairs

Encs:

ANNEX 1 - IMO RESOLUTION MSC.282(86) - AMENDMENTS OF CHAPTERS II-1, V AND VI OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA 74, AS AMENDED

ANNEX 2 - MODEL COURSE 1.27 OPERATIONAL USE OF ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEMS (ECDIS), 2010 EDITION

ANNEX 1

**RESOLUTION MSC.282(86)
(adopted on 5 June 2009)**

**ADOPTION OF AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR
THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING FURTHER article VIII(b) of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention"), concerning the amendment procedure applicable to the Annex to the Convention, other than to the provisions of chapter I thereof,

HAVING CONSIDERED, at its eighty-sixth session, amendments to the Convention, proposed and circulated in accordance with article VIII(b)(i) thereof,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the Convention, the text of which is set out in the Annex to the present resolution;
2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 July 2010, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;
3. INVITES SOLAS Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2011 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the Convention;
5. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its Annex to Members of the Organization, which are not Contracting Governments to the Convention.

ANNEX

**AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF
LIFE AT SEA, 1974, AS AMENDED**

**CHAPTER II-1
CONSTRUCTION – STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY
AND ELECTRICAL INSTALLATIONS**

**Part A-1
Structure of ships**

Regulation 3-5 – New installation of materials containing asbestos

- 1 The existing text of paragraph 2 is replaced by the following:

“From 1 January 2011, for all ships, new installation of materials which contain asbestos shall be prohibited.”

**Part C
Machinery installations**

Regulation 35-1 – Bilge pumping arrangements

- 2 The following new paragraph 2.6.3 is added after the existing paragraph 2.6.2:

“2.6.3 Provisions for the drainage of closed vehicle and ro-ro spaces and special category spaces shall also comply with regulations II-2/20.6.1.4 and II-2/20.6.1.5.”

**CHAPTER V
SAFETY OF NAVIGATION**

Regulation 19 – Carriage requirements for shipborne navigational systems and equipment

- 3 In paragraph 2.1, the existing subparagraph .4 is replaced by the following:

“.4 nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage. An electronic chart display and information system (ECDIS) is also accepted as meeting the chart carriage requirements of this subparagraph. Ships to which paragraph 2.10 applies shall comply with the carriage requirements for ECDIS detailed therein;”.

4 In paragraph 2.2, the new subparagraphs .3 and .4 are added after the existing subparagraph .2 as follows:

“.3 a bridge navigational watch alarm system (BNWAS), as follows:

- .1 cargo ships of 150 gross tonnage and upwards and passenger ships irrespective of size constructed on or after 1 July 2011;
- .2 passenger ships irrespective of size constructed before 1 July 2011, not later than the first survey* after 1 July 2012;
- .3 cargo ships of 3,000 gross tonnage and upwards constructed before 1 July 2011, not later than the first survey* after 1 July 2012;
- .4 cargo ships of 500 gross tonnage and upwards but less than 3,000 gross tonnage constructed before 1 July 2011, not later than the first survey* after 1 July 2013; and
- .5 cargo ships of 150 gross tonnage and upwards but less than 500 gross tonnage constructed before 1 July 2011, not later than the first survey* after 1 July 2014.

The bridge navigational watch alarm system shall be in operation whenever the ship is underway at sea;

.4 a bridge navigational watch alarm system (BNWAS) installed prior to 1 July 2011 may subsequently be exempted from full compliance with the standards adopted by the Organization, at the discretion of the Administration.”

* Refer to the Unified interpretation of the term “first survey” referred to in SOLAS regulations (MSC.1/Circ.1290).

5 After the existing paragraph 2.9, the new paragraphs 2.10 and 2.11 are added as follows:

“2.10 Ships engaged on international voyages shall be fitted with an Electronic Chart Display and Information System (ECDIS) as follows:

- .1 passenger ships of 500 gross tonnage and upwards constructed on or after 1 July 2012;
- .2 tankers of 3,000 gross tonnage and upwards constructed on or after 1 July 2012;
- .3 cargo ships, other than tankers, of 10,000 gross tonnage and upwards constructed on or after 1 July 2013;
- .4 cargo ships, other than tankers, of 3,000 gross tonnage and upwards but less than 10,000 gross tonnage constructed on or after 1 July 2014;
- .5 passenger ships of 500 gross tonnage and upwards constructed before 1 July 2012, not later than the first survey* on or after 1 July 2014;

- .6 tankers of 3,000 gross tonnage and upwards constructed before 1 July 2012, not later than the first survey* on or after 1 July 2015;
- .7 cargo ships, other than tankers, of 50,000 gross tonnage and upwards constructed before 1 July 2013, not later than the first survey* on or after 1 July 2016;
- .8 cargo ships, other than tankers, of 20,000 gross tonnage and upwards but less than 50,000 gross tonnage constructed before 1 July 2013, not later than the first survey* on or after 1 July 2017; and
- .9 cargo ships, other than tankers, of 10,000 gross tonnage and upwards but less than 20,000 gross tonnage constructed before 1 July 2013, not later than the first survey* on or after 1 July 2018.

2.11 Administrations may exempt ships from the application of the requirements of paragraph 2.10 when such ships will be taken permanently out of service within two years after the implementation date specified in subparagraphs .5 to .9 of paragraph 2.10.”

* Refer to the Unified interpretation of the term “first survey” referred to in SOLAS regulations (MSC.1/Circ.1290).

CHAPTER VI CARRIAGE OF CARGOES

- 6 The title of chapter VI is replaced by the following:

“CARRIAGE OF CARGOES AND OIL FUELS”

Regulation 1 – Application

- 7 At the beginning of paragraph 1, the words “Unless expressly provided otherwise,” are added and the existing word “This” is replaced by the word “this”.

Regulation 5-1 – Material safety data sheets

- 8 The existing text of the regulation is replaced by the following:

“Ships carrying oil or oil fuel, as defined in regulation 1 of Annex 1 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, shall be provided with material safety data sheets, based on the recommendations developed by the Organization*, prior to the loading of such oil as cargo in bulk or bunkering of oil fuel.”

* Refer to the Recommendations for material safety data sheets (MSDS) for MARPOL Annex I oil cargo and oil fuel, adopted by the Organization by resolution MSC.286(86), as may be amended.

SUB-COMMITTEE ON STANDARDS OF
TRAINING AND WATCHKEEPING
43rd session
Agenda item 3

STW 43/3/1
4 May 2011
Original: ENGLISH

VALIDATION OF MODEL TRAINING COURSES

Model course – Operational use of Electronic Chart Display and Information Systems (ECDIS)

Note by the Secretariat

SUMMARY

Executive summary: This document provides a revised draft model course on the operational use of Electronic Chart Display and Information Systems (ECDIS)

Strategic direction: 5.2

High-level action: 5.2.2

Planned output: 5.2.2.5

Action to be taken: Paragraph 4

Related document: STW 40/14

1 The Sub-Committee, at its fortieth session noted that consequent to the adoption of the Manila Amendments to the STCW Convention and Code, the model course related to ECDIS would need to be reviewed and updated. Accordingly, the Sub-Committee instructed the Secretariat to take the necessary steps to revise and update this existing model course and to submit it to the Sub-Committee for validation in due course.

2 The preliminary revised draft of this model course reviewed and updated by Australia and the United States was forwarded to members of the validation panel by the Secretariat for their comments. Relevant comments on the draft course have been received from the validation panel and have been incorporated as appropriate.

3 The final revised draft model course is set out in the annex.

Action requested of the Sub-Committee

4 The Sub-Committee is invited to consider the above information and take action as appropriate.

**Model
Course**

1.27

**Operational use of
Electronic Chart Display and Information
Systems (ECDIS)
(2010 Edition)**



IMO

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