



MPA  
SINGAPORE

## EQUIVALENCE REGARDING DIGITAL CHARTS, NAUTICAL LIST OF LIGHTS AND OTHER DIGITAL NAUTICAL PUBLICATIONS

**No. 29 of 2006**

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**Applicable to:** This circular is for the attention of shipowners, shipmanagers, masters and officers of Singapore-flag ships.

### *Background*

1.Regulations V/19.2.1.4 and V/27 of SOLAS 74 require that all ships carry adequate and up-to-date charts and nautical publications on board necessary for the intended voyage. Regulation V/19.2.1.4 further states that "*an electronic chart display and information system (ECDIS) **may** be accepted as meeting the chart carriage requirements*".

2.As the wording of the regulations is not explicit (i.e. the use of "*may*") in the acceptance of electronic charts and nautical publications, we have been receiving queries from various shipowners regarding the use of electronic versions of nautical publications, eg. List of Lights, Tide Tables and other nautical publications, onboard their vessels in lieu of paper versions. With the improved reliability and availability of officially-issued electronic charts and nautical publications, their usage is expected to increase in the future.

3.This circular serves to spell out Singapore's position on the use of digital nautical charts and publications.

*Equivalence regarding Digital Charts, Nautical List of Lights and other Digital Nautical Publications*

4. For the acceptance of ECDIS and electronic versions of nautical publications, the following recommendations based on SOLAS requirements shall be complied with:

- .1. the charts and publications must be issued officially or authorized by a government;
- .2. charts and publications must be recognized by the Flag State (Singapore);
- .3. the products must meet the requirements of marine navigation;
- .4. the products must be kept up to date; and
- .5. adequate back-up (see below) so that the safety of navigation is not compromised.

5. The equivalent arrangement shall be subject to the following conditions:

.1. Electronic Chart Display and Information System (ECDIS).

- .1. The ECDIS shall meet the Performance Standards for ECDIS as per resolution A.819(19), as amended by MSC.64(67) Annex 5 and MSC.86(70) Annex 4;
- .2. The ECDIS shall be type approved by an appropriate authority;
- .3. The ECDIS shall use official and up-to-date electronic charts, eg. Electronic Navigational Charts (ENC) or Raster Navigational Charts (RNCs); and
- .4. The ECDIS shall be provided with back-up arrangements. The following are accepted as fulfilling the backup arrangements:
  - i. an appropriate folio of up-to-date nautical charts; or
  - ii. a second type-approved ECDIS; or
  - iii. a type-approved electronic backup arrangement for ECDIS mode of operation (using ENC).

## 2. Electronic versions of Nautical Publications, List of Lights, Tide Tables and other nautical publications.

.1 The electronic versions shall be issued officially by an Administration, authorized hydrographical organization or another relevant approved organization;

.2 The digital publications shall be available to the Officer of the Watch (OOW), without limitations, from the bridge;

.3 The computer shall be dedicated for the digital publications and shall be connected always to the main and emergency power supplies; and

.4 For backup, the digital publications shall be installed on another computer on board which shall also be made available to the OOW in a short period of time.

.3. All digital software and hardware shall comply with the recommendations of MSC/Circ.891 *Guidelines for the onboard use and application of computers*. A copy of the MSC circular is attached for reference.

6. Further, for clarification of para. 5.2.1, we could accept the electronic versions of charts and publications issued by a country pertaining to geographical areas of another country only if the first country regularly receives official data from the second country to update its charts and publications for the second country. Arrangements for regular and accurate updates shall be provided.

7. The acceptance of the equivalence for the above electronic products should be carried out on a case-by-case basis where shipping lines would apply to the Flag State (Singapore) for acceptance. All applications should be addressed to Ship Safety Department, Shipping Division, MPA.

8. Queries relating to this circular should be directed to Mr Ong Hua Siong

(Tel: 6375 6210).

KHONG SHEN PING

DIRECTOR OF MARINE

MARITIME AND PORT AUTHORITY OF SINGAPORE

[Annex A](#)