Being aware that the implementation of Electronic Chart Display and Information Systems (ECDIS) has given rise to confusion in regard to ECDIS training, an industry group, organised and coordinated by The Nautical Institute and comprising leading international shipping industry organisations, held a series of meetings in order to produce this guidance on issues of training and competency for ECDIS.

The 2010 amendments to the STCW Convention for ECDIS training will not take full effect until 2017. Therefore in accordance with best practice it is recommended that approved ECDIS training be undertaken as soon as practical to ensure that all bridge watchkeeping officers meet all the competencies required by STCW prior to sailing on a ship fitted with ECDIS.

It is recognised by all signatories to this guidance that ECDIS, as defined by the International Maritime Organization (IMO), when implemented will be one of the most important navigation and decision support tools. The complexity of ECDIS should be recognised and the ability of a watchkeeping officer to be competent and confident in operating ECDIS as part of the shipboard navigational system is essential for safety, security and protection of the marine environment.

The regulatory requirements for Generic Training and Familiarisation in ECDIS are covered by various international instruments including the IMO STCW Convention, the ISM Code, SOLAS and also by national laws. The industry also recognises that compliance with these regulations including the required competencies are increasingly being examined by external parties including Port State Control, insurance inspectors, charterers and accident investigators.

The industry organisations recognise the following definitions for ECDIS Training:

**Generic ECDIS Training**: ECDIS training to ensure that navigators can use and understand ECDIS in the context of navigation and can demonstrate all competencies contained in and implied by STCW 2010. Such training should ensure that the navigator learns to use ECDIS and can apply it in all aspects of navigation, including the knowledge, understanding and proficiency to transfer that skill to the particular ECDIS system(s) actually encountered on board, prior to taking over navigational duties. This level of training should deliver the competencies at least equivalent to those given in IMO Model Course 1.27

**Familiarisation**: Following the successful demonstration of competencies contained in the Generic ECDIS Training, familiarisation is the process required to become familiar with any onboard ECDIS (including backup) in order to assure and demonstrate competency onboard any specific ship’s ECDIS installation, prior to taking charge of a navigational watch.
The industry further endorses the following issues pertaining to ECDIS training:

- All watchkeeping officers must be competent in the use of the onboard ECDIS prior to taking charge of a navigational watch. An implicit element of continual competence is the ability to demonstrate that competence.
- Familiarisation pertains to any ECDIS onboard including any backup systems. This includes any pertinent information required for the safe operation of the ECDIS including all updates and alterations.
- Focus should be upon achieving and demonstrating the necessary competencies, rather than time spent on training or achieving certification alone.
- There are a wide range of training methods and tools available that can be used, alone or in combination, that may contribute to a navigator’s competency.
- Familiarisation should be structured, specific to the onboard equipment and its arrangements and should be complementary to generic ECDIS training.
- In order to meet the competencies identified in the IMO Model course (1.27) “The Operational Use of Electronic Chart and Information Display Systems (ECDIS)” the minimum training time is unlikely to be less than the IMO recommended 40 hours, and assessment of competency should be conducted by a suitably trained instructor/assessor.
- The competencies contained in Model course 1.27 should, for trainee OOWs, be incorporated into the STCW Officer of the Watch II-1 Navigation at the operational level training.
- The requirement for familiarisation is recognised under the provisions of section 6.3 & 6.5 of the ISM Code which requires not only effective training, but familiarisation of equipment and regulations with respect to safety and emergency related duties.
- Pilots should be able to demonstrate the competencies contained in Model Course 1.27, however pilots should not be expected to meet familiarisation requirements.
- It is recognised that manufacturer provided tools for structured onboard familiarisation will enhance and possibly add value to onboard ECDIS.

**Recommendations:**

1. Ship operators are recommended to recognise the critical importance of ECDIS for navigational safety and ensure that crew competency is achieved and maintained.

2. ECDIS trainers should take the contents of this document into account and ensure that their courses deliver at least the competencies for navigators which have been identified by the IMO.

3. Equipment manufacturers should take the contents of this document into account, are urged to recognise their role in the familiarisation process and to work with ship operators to meet their needs.

4. Flag States are encouraged to note this document and to consider its content when developing requirements and guidance for ECDIS.

5. Port States and other inspection/auditing authorities are encouraged to provide appropriate ECDIS training to their staff.

**Supported by:**

- INTERTANKO
- InterManager
- MAIF
- BIMCO
- OCIMF
- The Nautical Institute
- GLobal ME
- International Chamber of Shipping
- IFSMA
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