

## A brief summary of the current status of ECDIS

SOLAS Chapter V regulation 19.2.1.4 states that all ships shall have

*"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 ECDIS may be accepted as meeting the carriage requirements of this subparagraph."*

In order to meet this requirement an ECDIS must:

1. Meet the requirement of **Resolution A.817(19)** adopted by the IMO on 23 November 1995 – *Performance Standards for Electronic Chart Display and Information Systems (ECDIS)*
2. Be Type Approved against **IEC 61174** (Second Edition Oct 2001) – the *International Standard for ECDIS – Operational and performance requirements, methods of testing and required test results*.
3. Be fitted with an approved back-up in accordance with **Appendix 6 to Resolution A.817(19)**.
4. Be used with official ENC's for the entire voyage
5. Be used with the latest weekly chart updates

**Unless all the above can be met, paper charts must be used to meet carriage requirements.**

Navmaster Professional has been developed to meet the above standards and is in the final stages of work prior to being submitted to DNV for Type Approval.

The following points are important from a practical viewpoint:

1. It is not just the ECDIS software that must be Type Approved but the entire system – processor, display, housing (console), which must be ergonomic and meet additional IMO and IEC standards.
2. For a paperless bridge, the backup requirement is a second, independently powered, Type Approved ECDIS (subject to the views of the flag state authority).
3. Adequate ENC coverage is becoming available for European waters but is patchy elsewhere. Where ENC's are not available, ARCS may be used. Where ARCS are used, a backup folio of paper charts (approved by the flag state authority) must be carried.

The main factor that has limited the take-up of Type Approved ECDIS is the lack of ENC chart data. It is worth noting that the Electronic Nautical Chart (ENC) required for ECDIS must be issued by, or under the authority of, a national hydrographic office – not by private chart manufacturers (eg C-Map or Transas) which produce charts in similar format.

A non-type approved ECDIS (or ECS) such as Navmaster Professional is attractive because:

1. It costs much less than Type Approved ECDIS
2. It is easy to retrofit standard PCs at low cost
3. The safety and efficiency benefits of ECDIS can be achieved immediately
4. Vessel crews can gain familiarity and training in ECDIS operation before going "paperless".

PC Maritime has taken the view that it is more important to “get it right” by incorporating user feedback into our development and ensuring that our ECDIS has all the required facilities, prior to achieving Type Approval. Type Approval “locks” the system and makes it difficult to respond to new requirements.

We are in the final stages of the work required and will soon submit Navmaster for Type Approval.

We will also continue to offer non-Type approved ECDIS at a lower cost – ie Navmaster Professional.

Please visit our website if you would like further background information at  
<http://www.pcmaritime.co.uk>