

PRO- 2.3 The future of digital charting

Submitted by: United Kingdom

Supported by: New Zealand, Australia, Spain

PROPOSAL

The Assembly is invited:

- to approve the request for the IHO to consider development of supplementary standards to support digital navigation for the sub-ECDIS community.**
- to approve the request to task the HSSC to setup a sub-ECDIS Project Team or Working Group to validate the requirement for international standards related to data format, display, encryption, and licencing for those vessels below the mandated ECDIS requirements.**
- to approve the request to inform the IMO of the establishment of the sub-ECDIS Project Team or Working Group highlighting the global trend to digital navigation, and if necessary, request the IMO to consider an update to the relevant resolutions.**

EXPLANATORY NOTE

1. The mission of the IHO is to create a global environment in which Member States provide adequate and timely hydrographic data, products, and services to ensure the widest possible use.
2. The IHO Vision is to be the authoritative worldwide hydrographic body which actively engages all coastal and interested States to advance maritime safety and efficiency and which supports the protection and sustainable use of the marine environment.
3. Every aspect of modern life is now driven by technology. Mariners use global navigation satellite services combined with electronic navigational charts (ENCs) and inertial navigation systems to determine where they are, in near real-time, to centimetric accuracy.
4. Shipping is steering rapidly towards a future underpinned by digital innovations, enhanced connectivity at sea and optimised data solutions, all of which are bringing about the next generation of navigation.
5. Development of digital chart production will allow increased focus on advanced digital services that meet the needs of today's seafarers.
6. Importantly, the past few years have seen a decline in demand for paper charts, driven partly by the SOLAS-mandated transition to ECDIS and by the growing benefits of digital products and services.
7. As we look to the future, the core purpose remains the safety of shipping activities and delivering the best possible navigation solutions for all users. This is becoming widely recognised that vessels with a single ECDIS or no ECDIS use unregulated electronic products and services for navigation. This growing trend should be of concern to us all and with the development of the new S-100 standards and mobile technology we are now in a position to offer accessible official digital solutions that will increase the safety of navigation for those below the ECDIS mandated sector.
8. Decarbonisation and digitalisation have been dominating the shipping industry in recent years and will continue to dominate in the future: shipping companies seek to reduce emissions and improve operational efficiency through investing in technological tools to forensically monitor their fleet.

9. Shipping companies seek to achieve this through optimisation in the short- and medium-term and using alternative fuels in the long-term. Examples where optimisation will benefit the customer/end user: better voyage planning and execution, post voyage review, reviewing vessel and fleet performance and negotiate better charter party terms.
10. This is very much true for the mandated ECDIS users; however, all Hydrographic Offices recognise this is only a small percentage of the total maritime users.
11. With the transition to S-100 Hydrographic Offices will need to produce many more digital data sets to fully support all the advantages of an S-100 ECDIS. With this increased workload, continuing to support the production of paper charts in a period where they are declining could become an unnecessary distraction.
12. During discussions at the IHO Council 6, several nations expressed concerns over leaving users of paper charts behind, especially those commercial vessel types with either a single ECDIS or no ECDIS who travel internationally.
13. To maximise the use of S-100 data beyond ECDIS the IHO need to ensure that their current standards can be used by all digital devices which will result in increased safety margins and operational optimisation available to all maritime users regardless of vessel size or type.