

2019 Vice Chair Nomination for the International Hydrographic Organization (IHO) – Hydrographic Services and Standard Committee (HSSC)

United Kingdom's Candidate for Vice Chair HSSC

Mr Thomas Mellor CMarTech, FIMarEST

Chairman IHO Electronic Navigational Chart Maintenance Working Group (ENCWG)

UK Hydrographic Office, Head of OEM Technical Support and Digital Standards



IHO Working Groups

Thomas has held numerous officer positions within the technical working groups of the IHO spanning the last 14 years. His most recent appointment as Chairman of the IHO Electronic Navigational Chart Maintenance Working Group a position he has held since its formation in February 2015. The group has overall responsibility for all the current IHO standards used in the production, display and security of ENCs and their use in ECDIS. In his role as IHO ENC WG Chairman, he advises OEMs on the safe implementation of IHO standards and their use in navigational equipment. His technical expertise is also called upon by notified bodies conducting ECDIS type approval of equipment to arbitrate on the correct implementation of IHO standards.

Thomas was instrumental in identifying serious shortcomings in the display of ENC data using ECDIS. Based on his extensive investigation into ECDIS anomalies in November 2011, HSSC accepted his recommendation to produce new editions of IHO S-52 Presentation Library v4.0 and S-64 ENC Test data. [ref. TSMAD22/DIPWG3 08.8A]

In a previous role as Vice-Chairman of the IHO Digital Imaging and Portrayal Working Group, Thomas was designated with overall responsibility for the group's most critical task; the extensive revision of the IHO S-52 Presentation Library and S-64 ENC test datasets. Here, Thomas led a highly skilled, multi-national expert panel to conduct the revision, comprising key shipping industry stakeholders, HOs, ECDIS manufacturers and notified bodies. In addition to fixing the known ECDIS anomalies issues, Thomas sought to address many of the presentational and usability issues mariners were experiencing using ENC and ECDIS. The new presentation library now addresses the main complaint mariners had with ECDIS navigation, the overuse of alarms for charted features. After the publication of S-52 and S-64, Thomas worked on the technical drafting of International Electrotechnical Commission (IEC) standard 61174 - Electronic Chart Display and Information System (ECDIS) Operational and performance requirements, methods of testing and required test results, published in August 2015.

Thomas has continually provided detailed guidance to the shipping industry on the changes to IHO standards and the significant safety benefits to be had by upgrading ECDIS software. He has written extensively about the subject and has many articles published in leading news outlets describing the safety benefits of ECDIS <https://www.admiralty.co.uk/news/blogs/s-57-and-the-latest-iho-standards>

He has also provided technical guidance for PSC inspectors during the most recent concentrated inspection campaign focusing on the safety of navigation to ensure compliance with SOLAS regulations and to guarantee ECDIS equipment is kept updated to the latest IHO standards.

Thomas supports the UK Maritime and Coastguard Agency with technical advice and guidance on issues related to safety of navigation; this supports UK policy development and informs input to the International Maritime Organization.

As a member of the former IHO Transfer Standard Maintenance and Applications Development Working Group (TSMAD), Thomas was involved with profiling many of the ISO standards to develop S-100, including drafting the first edition of S-101 product specification. This work with TSMAD also saw Thomas develop the very first IHO XML Tidal Harmonic transfer format.

International Expertise

His duties as the Head of OEM Technical Support and Digital Standards at the UK Hydrographic Office (UKHO) sees him responsible for the UKHO technical programme, providing consultancy to ECDIS OEMs and third-party developers using ADMIRALTY Maritime Data Solutions in their applications. This allows him to use his extensive knowledge of IHO technical standards to help developers building e-Navigation products.

Thomas has provided bespoke technical consultancy to major international shipping organisations helping to develop ECDIS best practice guidance Chemical Distribution Institute (CDI) and the Oil Companies International Marine Forum (OCIMF). In addition, he has supported INTERTANKO (the International Association of Independent Tanker Owners) in developing their Guide to Safe Navigation (including ECDIS).

Thomas is an internationally renowned technical expert and thought leader in digital navigation and ECDIS. Over the period of the IMO ECDIS mandate, he has run the UKHO's ADMIRALTY 'Living with ECDIS' seminar programme, providing an authoritative voice and bringing clarity to a complex regulatory area. Thomas now leads their current programme of [ADMIRALTY 'A Future with ECDIS' seminars](#).

Education and Employment

Thomas graduated from the University of East London with a BSc in Surveying and Mapping, initially employed by Thales Geosolutions as an Offshore Surveyor in the Oil and Gas sector. This equipped him with a sound knowledge of geotechnical and geophysical surveying practices in addition to developing his expertise in specialised GIS systems.