

Australian Hydrographic Office Digital Transformation Strategy

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The Australian Hydrographic Office (AHO) has commenced Project Muru to plan for, and deliver, the AHO's Digital Transformation Strategy.

By 2025, the AHO will deliver all its products and services in digital format, leveraging the advancements and flexibility offered by modern geospatial software and hydrographic standards, such as the International Hydrographic Organization's S-100 Universal Hydrographic Data Model.

The AHO Digital Transformation Strategy ("the Strategy") is the roadmap of activities to meet this objective.

Our highest priority remains the timely delivery of high-quality hydrographic data to ensure the safety of mariners and the marine environment.

With the development of advanced positioning and maritime sensors, increasing vessel numbers, larger vessels requiring more precise under keel clearance data, and the availability of increasingly sophisticated electronic navigation systems there has been a steady decline in the use of traditional paper nautical charts and publications.

Since 2018, the International Maritime Organization has mandated international shipping use Electronic Chart Display and Information Systems (ECDIS), and official electronic navigational charts (ENC) for primary navigation.

By 2025, a new ENC specification, S-101, will be available from the International Hydrographic Organization, offering more opportunities for the distribution and consumption of high-quality navigation data, beyond the current ENC standard, S-57.

The most notable change for Australian mariners will be to traditional paper charts, which will be replaced by a modern web service. This web service will allow 'on demand paper charts' to be generated and printed by customers or resellers from the most current electronic navigational chart data available. While the new format is likely to look and feel a little different, it will replicate the traditional paper chart experience as far as practicable.

From 2025, charts compiled to the new electronic navigational chart specification, S-101 will be rolled out to the chart product suite. S-101 is the biggest change to navigation products since the S-57 format was introduced in the 1990s. While we don't expect to see ships with S-100 capable ECDIS navigating Australian waters as early as this, our early production will support training for navigators and pilots, product improvements and the maritime industry in Australia, ensuring we are ready for the arrival of advanced S-100 ECDIS capable ships.