

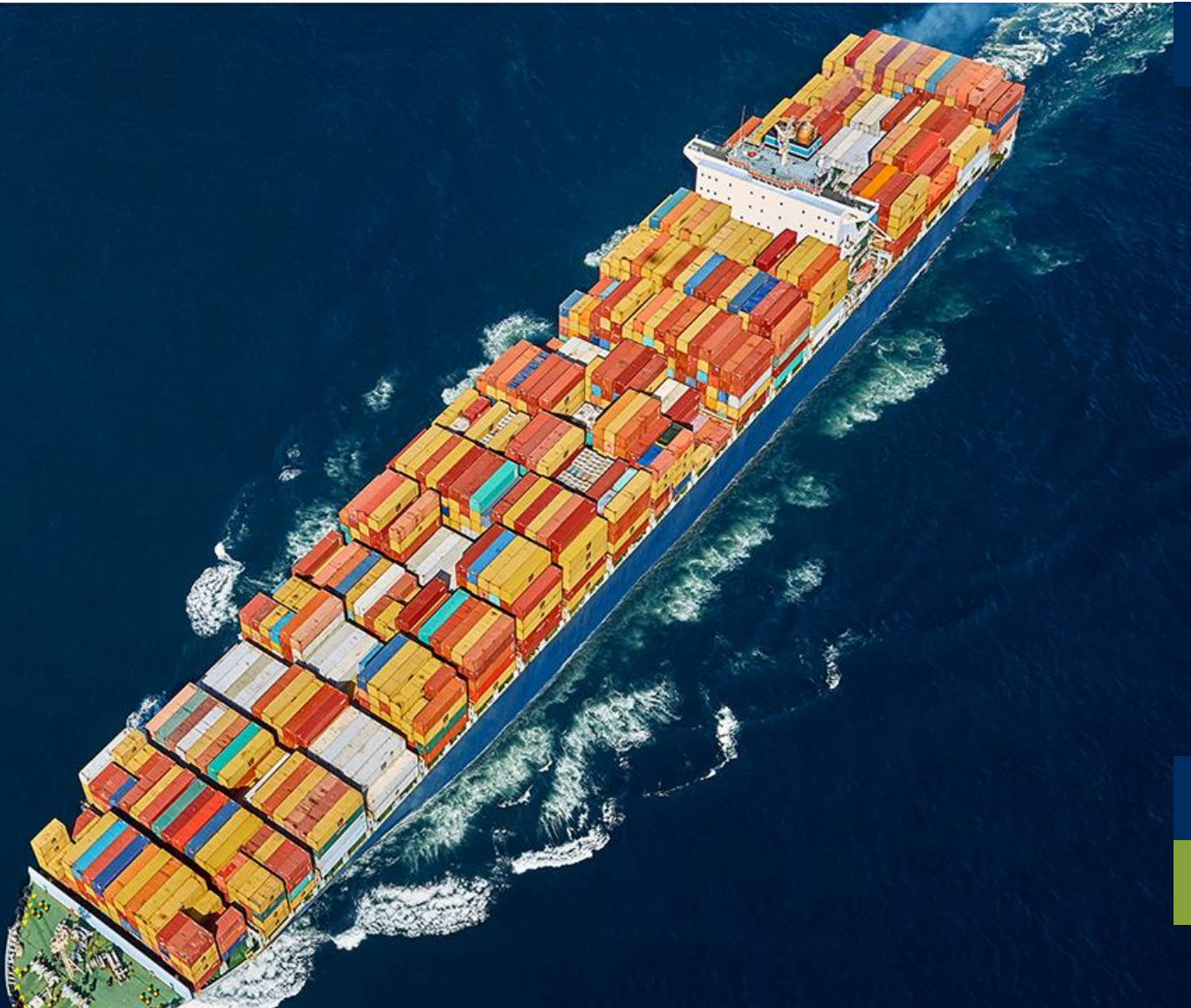


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# Digital Only Charting – NCWG 2023

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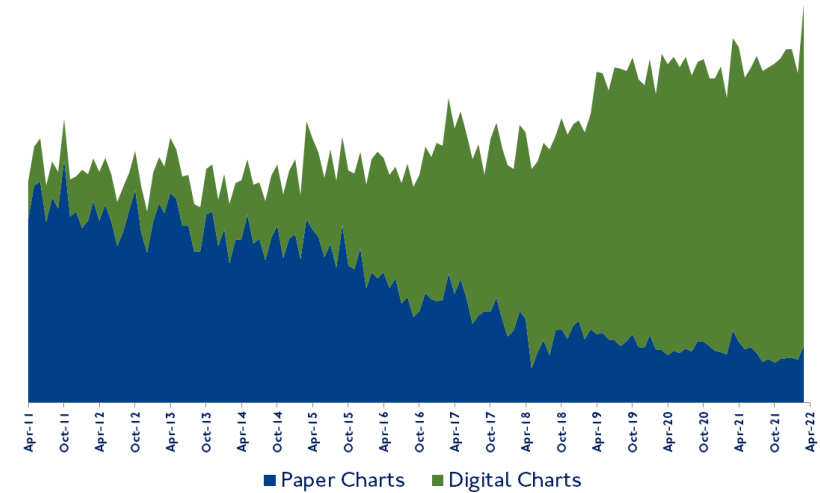


# Drivers for Change

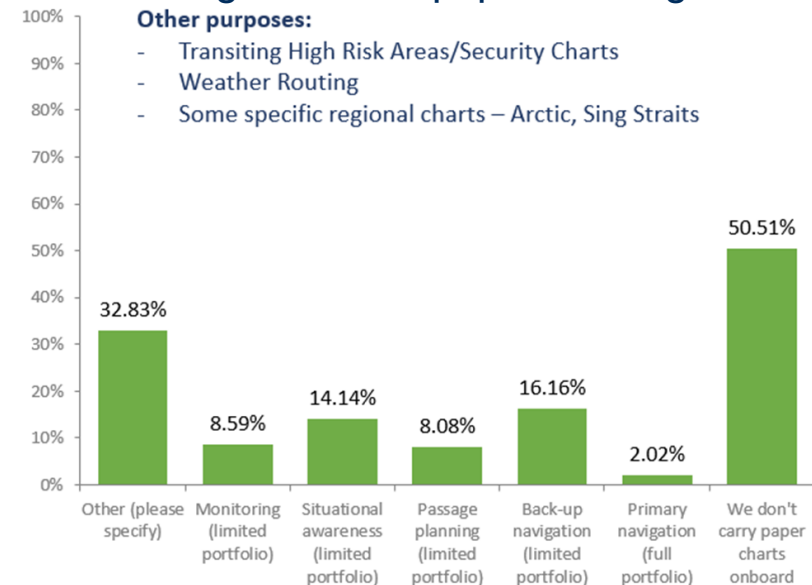
Although ECDIS mandation is complete, significant drivers still exist to move to digital navigation

- › Increasing user **demand** for digital charting
- › **Enhanced connectivity** at sea to support the demand for live streamed real-time digital navigation solutions
- › Future **regulatory changes** – IMO have agreed to have S-100 carriage compliant for digital navigation by 2026 and mandated by 2029
- › Hydrographic Offices, such as UKHO, needing to maintain paper charts, even if there is low demand, affecting capacity to fulfil **future** requirements and **S-100 data production**

### Switch from paper to digital charting



### Change of use of paper charting



## What has happened since?

- › We have engaged extensively with those affected, both UK and International
- › This was done by a mix of surveys, conversations and attendance at conferences and events
- › This highlighted the continued importance of paper charts, both for navigation and compliance
- › Without addressing this, continuing to exit to our original timescales would create unacceptable risk for mariners and those involved in safe navigation

### Q. What is your current view/position on the use of paper charts

	Seafarers – Commercial (237)
Have electronic charts but want to have paper charts as backup (redundancy/safety)	15%
Have electronic charts but must have paper charts for regulatory requirement	62%
Have electronic charts but prefer to use paper	6%
Only use paper charts onboard	17%
Don't have or use any charts	1%





# Paper Charts will continue

- › The future for navigation is digital
- › It is clear that despite the continued uptake of digital charting, there remains a core need for paper charts
- › The UKHO will continue to support this need. We will continue to assess changes in the market but no longer move ahead with the sunset of paper charts until this navigational reliance on paper charts for safe and compliant navigation ceases
- › We will not give timescales. Creating artificial timelines is not going to help the seafaring community – see later ECS solutions slides



## What are we focussing on?

- › We will now remain in paper chart production whilst safe navigation depends on it
- › We will continue to carefully assess the situation to ensure that production is aligned to market demand
- › We will look at how we produce and maintain the paper chart to identify where we can make changes which improve efficiency whilst still meeting mariner needs for safe, compliant navigation
- › We are now working with the IHO to shape recommendations on standards which would allow the creation of ECS solutions and consideration for regulations





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# ECS Solutions



# Intro

- › The problem for compliance below ECDIS is International and it is clear that there are a wide variety of vessel types and use cases
- › This is why we supported the creation of an IHO Project Team to bring International partners together to understand the problem and make recommendations on future standards to support the sub-ECDIS/ECS mariner
- › IHO Electronic Chart System (ECS) Project Team was established under the IHO Hydrographic Services & Standards Programme (HSSC), as part of the ENC Standards Maintenance Working Group.
- › As the IHO PT progress looking at this space, we wanted to be clear that this is targeting ECS solutions rather than changes to ECDIS or completely new solutions
- › We have talked about sub-ECDIS. In light of the above we will now talk about ECS solutions



# IHO ECS Project Team

Details of the Workplan and Membership can be found at the PT website at <https://iho.int/en/ecs-project-team>

The 1<sup>st</sup> meeting was in July 2023

Objectives are to assess and make recommendations on :

- identify and prioritize ECS navigation requirements.
- analyse their impacts on current IHO hydrographic standards.
- develop a set of recommendations/issues to be addressed by existing IHO bodies, external Organisations, and Member States





# What is the Project Team Doing Next?

- › The outline Work Plan has been agreed, the team will now break this down to create a detailed plan
- › We are keen to understand different segments and use-cases for ECS navigation and to be able to make informed decisions. The focus for this stage of the PT work is therefore information gathering:
  - › Collate and assess similarities and differences in current standards
  - › Survey key stakeholder groups through collaboratively agreed questionnaires

National Hydrographic Offices

Original Equipment Manufacturers

National Regulators

Trade Associations across different vessel types and covering different regions

Mariners



## How you can get involved?

- › First step is to complete the questionnaire which is being prepared for release by the IHO PT
- › Once results are analysed the PT will look for areas where there are either gaps or where a more detailed understanding is needed through for example 1:1 interviews, targeted workshops or further questionnaires
- › Both we and the PT are determined to ensure that we have coverage for different types and sizes of vessels and also a wide global response



**Thank you for listening to our update today, if you'd like to see what supporting resources are available you can find the following article on our website which is available for you to use and refer to**

<https://www.admiralty.co.uk/news/ukho-updates-ecs-digital-solution-and-admiralty-paper-chart-service>



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# Questions?