



NorthStandard

# ECDIS Training Assessment (ETA) - Learning from the Data

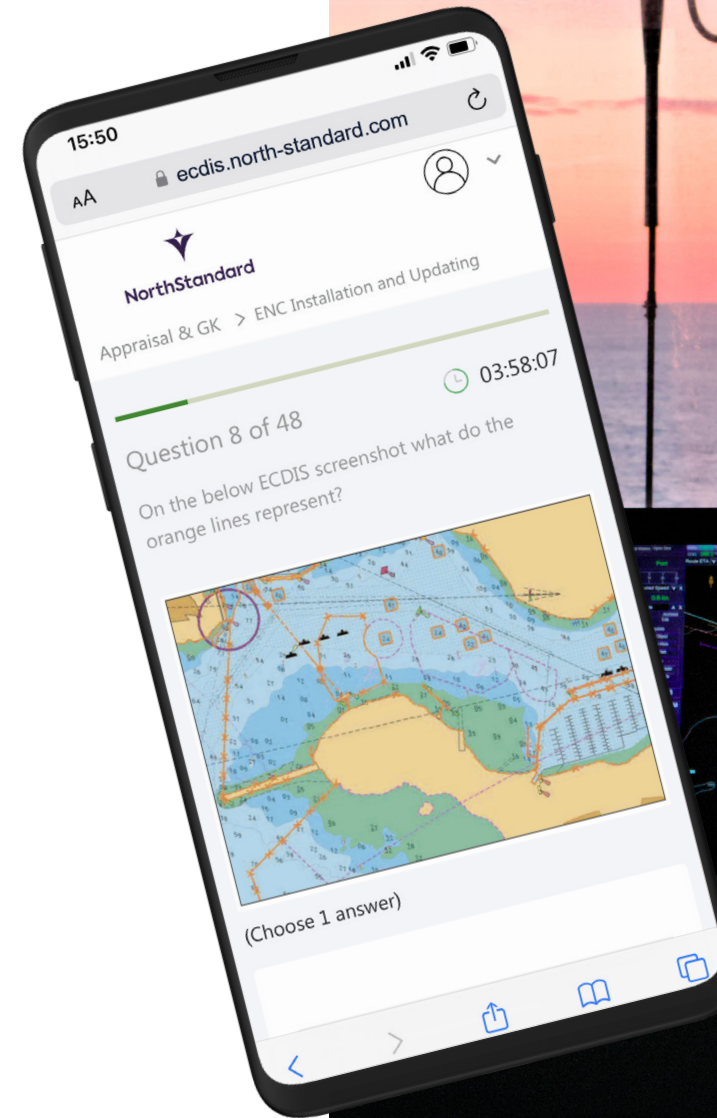
Bridge Team Knowledge Explored



## NorthStandard launched our ECDIS Training Assessment (ETA) in February 2024.

The platform is designed to support bridge teams' ECDIS knowledge and skills with comprehensive, relevant, and tailored training that supplements the mandatory and generic requirements.

Since launch, bridge teams have undertaken over 5,000 assessments, giving us significant data to analyse.





ECDIS is a really powerful tool to improve navigational safety, support situational awareness and reduce time-consuming chart updates. However, improper use by crews can turn this tool into a nightmare.

Fail to set the safety contour and/or safety depth up correctly, and alarms and indications don't function as expected. Fail to keep your charts up to date, and you have a potential navigational disaster on your hands that could cause the loss of life and an environmental catastrophe!

It's therefore paramount that crews have an excellent understanding of how to use the system in order to derive the biggest benefits from the technology.

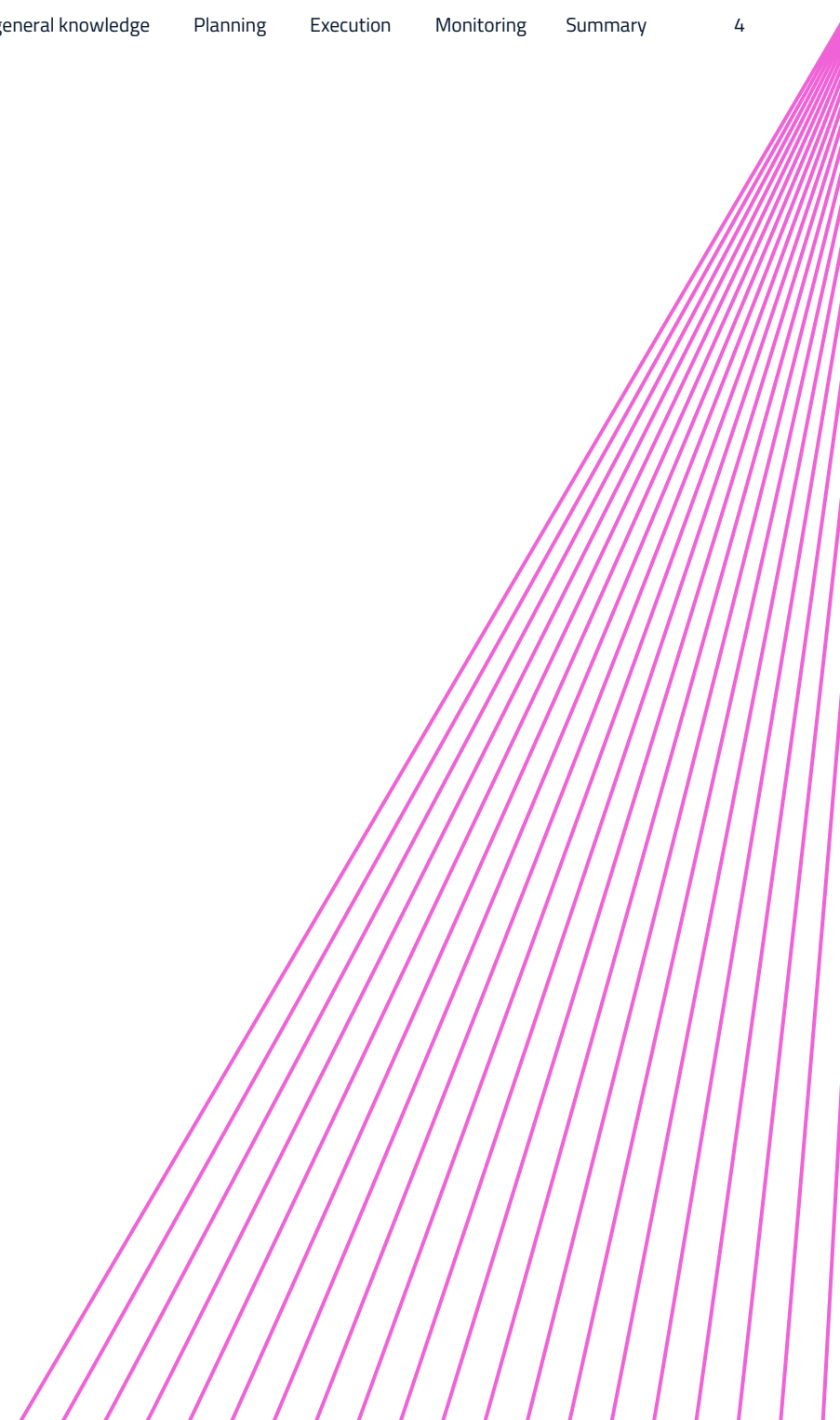
**The ETA from NorthStandard gives shipping companies an insight into crews' ECDIS competence at a granular level, never seen before.** Helping to identify their training needs and suggest training materials will support their learning and mitigate risk well before an accident can occur.



**Tom Mellor**  
HEAD OF TECHNICAL PARTNERING, UKHO

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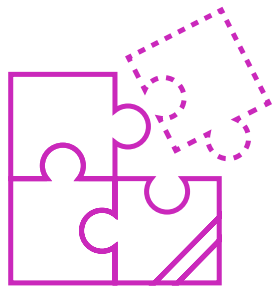
# Overview



# Executive summary of ETA data findings

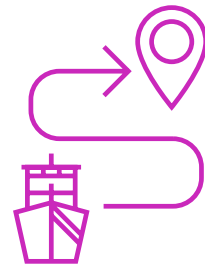
This report evaluates bridge teams' proficiency in using Electronic Chart Display and Information Systems (ECDIS). Key findings include significant knowledge gaps in core areas, potentially impacting safety and operational efficiency.

## Key findings:



### ECDIS knowledge gaps

- Around a third of bridge teams lacked understanding of critical ECDIS features – including datum discrepancies and ENC updates – posing risks to positional accuracy and navigational safety.
- Many teams struggled to recognise differences in ENC data from various cartographers and misunderstood ENC's presentation library.



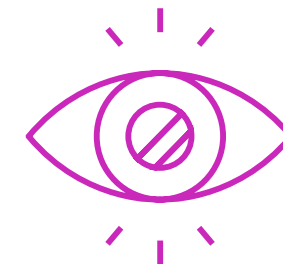
### Passage planning and safety

- Nearly half of bridge teams failed to prioritise the correct ENC scale during planning, increasing the risk of missing navigational features.
- Overreliance on automated checks and insufficient understanding of safety settings, such as safety contours, were common, potentially compromising navigational safety.



### Alarm and display management

- Half of the crew members had trouble distinguishing alarms from alerts, leading to confusion and reduced situational awareness.
- Misunderstandings around key symbols and ECDIS functions, such as the 'hover-over' feature, were widespread.



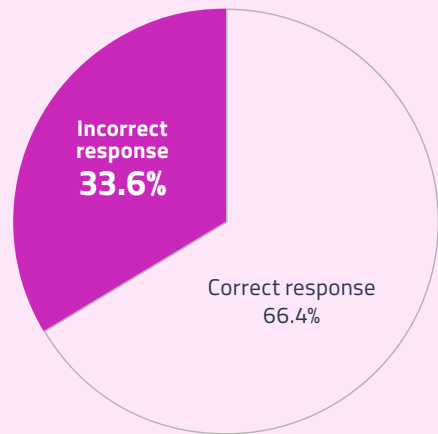
### Execution and monitoring

- There were significant gaps in recognising datum-related issues and verifying positions, highlighting the need for improved training on ECDIS alarms and interpreting symbols.

# The ETA platform – what did the data reveal?

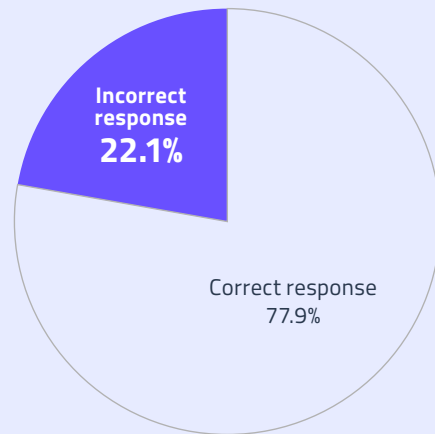
The ETA platform is split into sections, based around the four pillars of passage planning. Each section is further divided into four subsections. The results for each section are shown below. The data reveals a significant and worrying knowledge gap in all sections.

## Section 1: Appraisal and General Knowledge



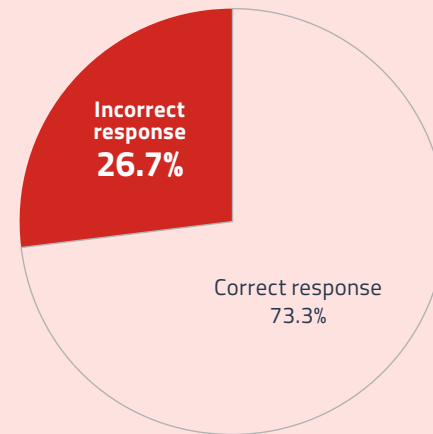
[View subsections >](#)

## Section 2: Planning



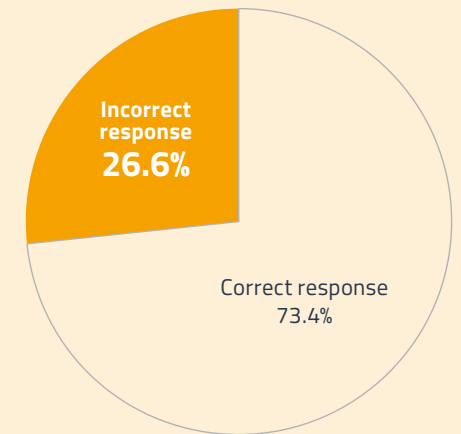
[View subsections >](#)

## Section 3: Execution



[View subsections >](#)

## Section 4: Monitoring



[View subsections >](#)

## Section 1

# Appraisal and general knowledge



# Appraisal and general knowledge

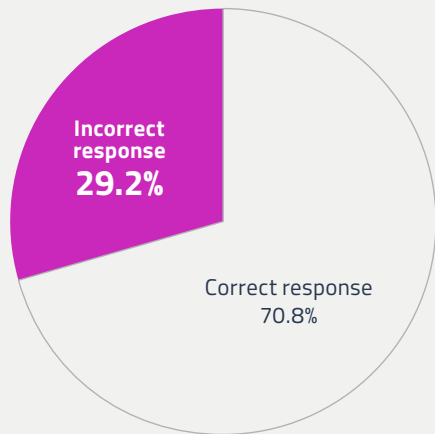
## Subsection breakdown

On average, about a third of bridge teams had ECDIS knowledge gaps across these subsections.

Subsection 1a:

### Appraisal information

Assessing where and how bridge teams can gather information for passage planning, including the required checks and confirming data.

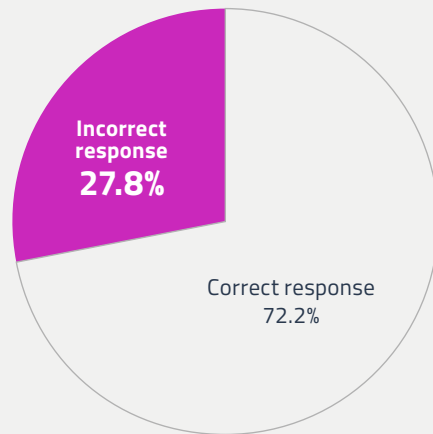


[Read more >](#)

Subsection 1b:

### ECDIS general knowledge

Checking bridge teams' understanding of important ECDIS features.

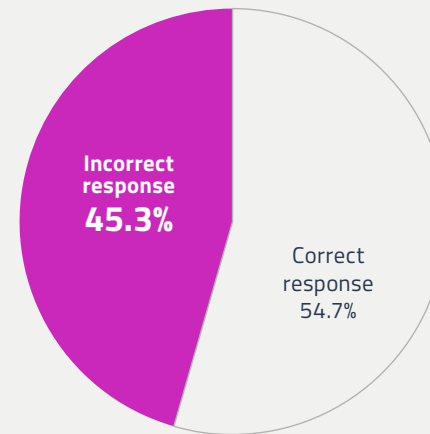


[Read more >](#)

Subsection 1c:

### ENC installation and updating

Assessing bridge teams' understanding of how to install ENC's, conduct ENC updates, and how to recognise changes following an ENC update.

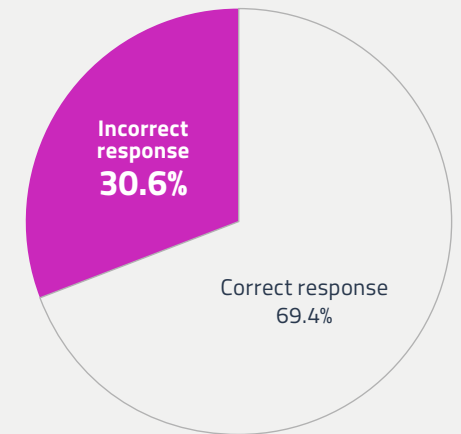


[Read more >](#)

Subsection 1d:

### Training/Standards/ENC production

Checking bridge teams' understanding of ENC data standards and their own training requirements.

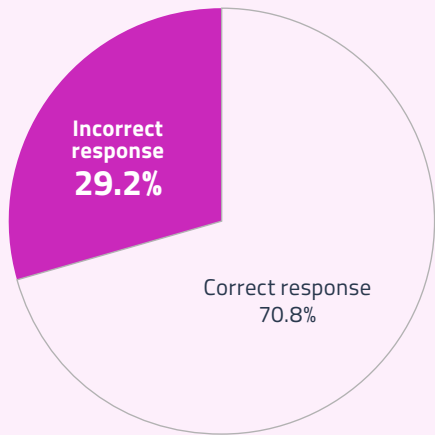


[Read more >](#)

Subsection 1a:

# Appraisal information

Assessing where and how bridge teams can gather information for passage planning, including the required checks and confirming data.



## Datum information

There was a knowledge gap in bridge teams' understanding of datums and how ECDIS alerts users to ENC's not referenced to WGS84. Another knowledge gap was in applying sounding and vertical datums, and their potential effects on the passage.

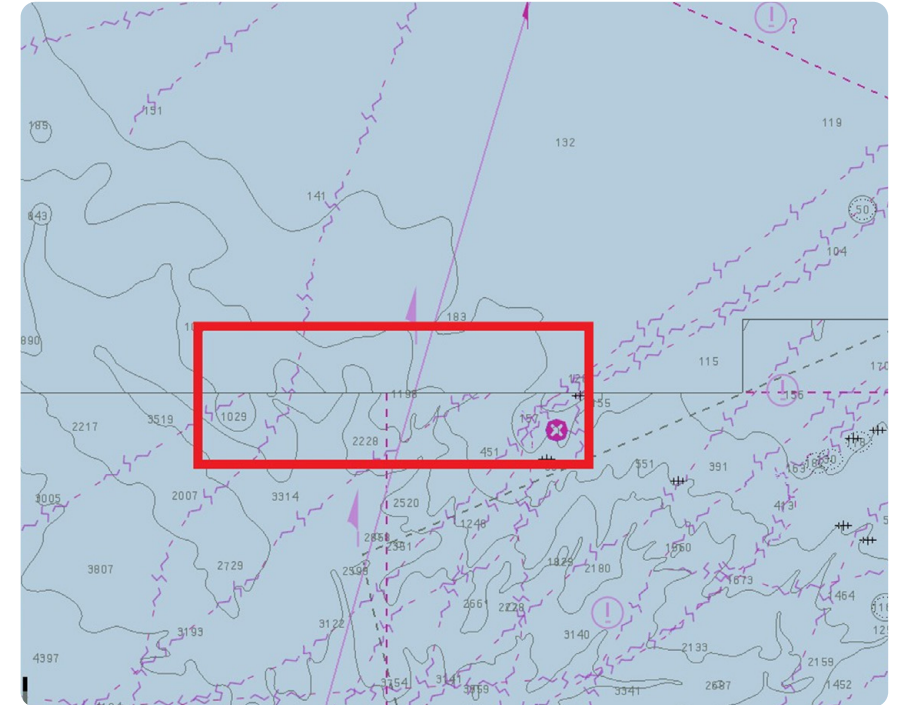
Responses to the datum-related questions showed over half of participants needed further training in this area. Using an ENC on an ECDIS that is not referenced to WGS84 can introduce several risks. ENC's based on local datums may not align accurately with GPS positions, leading to significant positional discrepancies.

These inaccuracies can cause navigation errors, particularly when near shorelines or hazards, and bridge teams might find charted features don't match their actual positions. Adjoining ENC cells may also have been shifted by different amounts, causing inconsistencies in displayed data, such as contour lines.

Its essential bridge teams are aware of these risks and how they affect ECDIS use.



Its essential bridge teams are aware of these risks and **how they affect ECDIS use.**

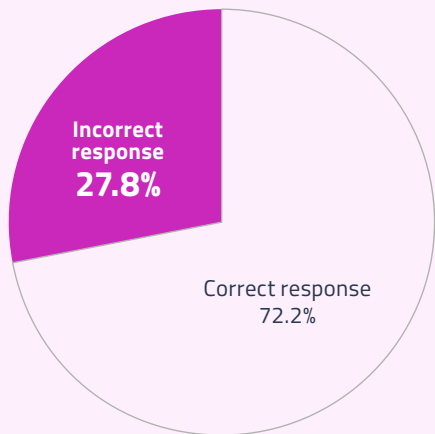


Highlighted box above: Different datums on ENC cells causing issues with depth contours not joining.

Subsection 1b:

# ECDIS general knowledge

Checking bridge teams' understanding of important ECDIS features.



## Sounding datums

The assessment revealed a significant knowledge gap regarding changes in the sounding datum between adjoining ENC cells. Nearly two-thirds of respondents were unaware of how the ECDIS user can recognise this issue. The sounding datum is the vertical reference point for all depth soundings, and failing to recognise potential issues can lead to inaccuracies with safe clearance calculations.

## Data quality

There was good overall understanding of the Admiralty Information Overlay (AIO) and its uses, such as showing temporary corrections. There was also good knowledge about the M\_QUAL function – a valuable source of information showing potential inaccuracies in the ENC data.

## Survey data quality

About a third were less knowledgeable about M\_SREL and its function. M\_SREL provides information on the reliability of the survey data used to create the ENC. This helps bridge teams assess the charted information's accuracy and make informed decisions about navigation, enabling them to identify areas where the data may be less accurate or outdated. This is particularly important in regions with complex navigational challenges, such as shallow waters or areas with significant underwater hazards.

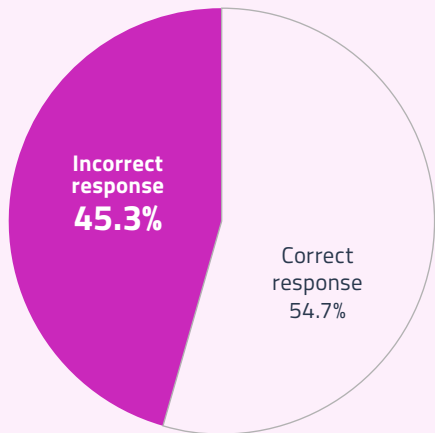
**M\_SREL is particularly important in regions with complex navigational challenges, such as shallow waters or areas with significant underwater hazards.**



Subsection 1c:

# ENC installation and updating

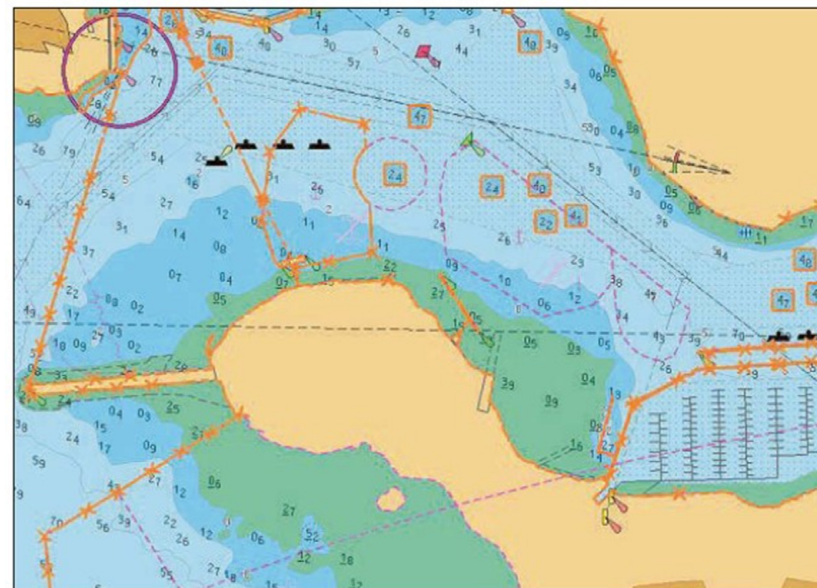
**Assessing bridge teams' understanding of how to install ENC, conduct ENC updates, and how to recognise changes following an ENC update.**



This subsection focused on bridge teams' ability to recognise and apply updates to ENCs. It highlighted significant concerns in some teams' ability to recognise ENC updates, with the following knowledge gaps.

## Knowledge gaps in recognising ENC updates

- Recognising updates: Nearly two-thirds of bridge teams showed a lack of knowledge in recognising an ENC update.
- Understanding update content: A significant portion of bridge team members were unaware of what specific updates involved.



ENC automatic updates highlighted with orange markings.

## Methods of updating ENCs

- Awareness of update methods: Around half of respondents were unable to recognise the different methods available for updating ENCs, including automatic and manual update processes.
- Risks of manual updates: There was a notable lack of understanding about the potential risks of manually updating ENCs. This could lead to navigational errors and increased safety risks.

## Awareness of update requirements

- Process requirements: There was a general lack of awareness about the requirements for updating ENCs, including why frequent updates are necessary to ensure accurate and reliable navigation.

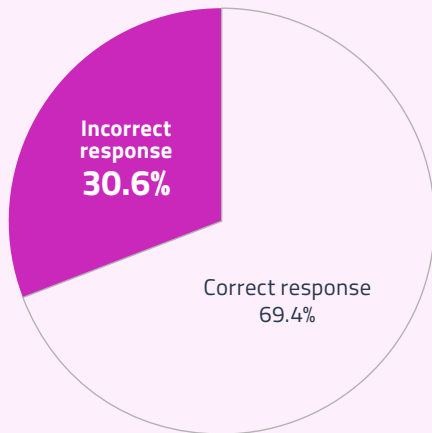
The UK Hydrographic Office (UKHO) offers **free guides on installing and updating ENCs** for all main ECDIS manufacturers, including docs and/or instructional videos.

“**Nearly two-thirds of bridge teams showed a lack of knowledge in recognising an ENC update**”

Subsection 1d:

# Training/Standards/ENC production

Checking bridge teams' understanding of ENC data standards and their own training requirements.



Our assessment showed there was a potential area of weakness regarding how ENC can differ between cartographers/hydrographic offices.

These findings highlight specific improvement areas in ENC production and the ECDIS presentation library. Find out more in our ENC accuracy briefing and the UKHO publications [linked at the end of this report](#).

## Recognising ENC differences

Over half of the assessed bridge team members showed weakness recognising differences in ENCs produced by different cartographers and hydrographic offices. Noting these differences when moving between coastal regions is important when conducting passage planning and any difference can be highlighted in the passage narrative.

## Understanding the ECDIS presentation library

Almost half of bridge teams had a general lack of understanding regarding the current ECDIS presentation library, including its latest contents and purpose.

## Recognising IHO data standards

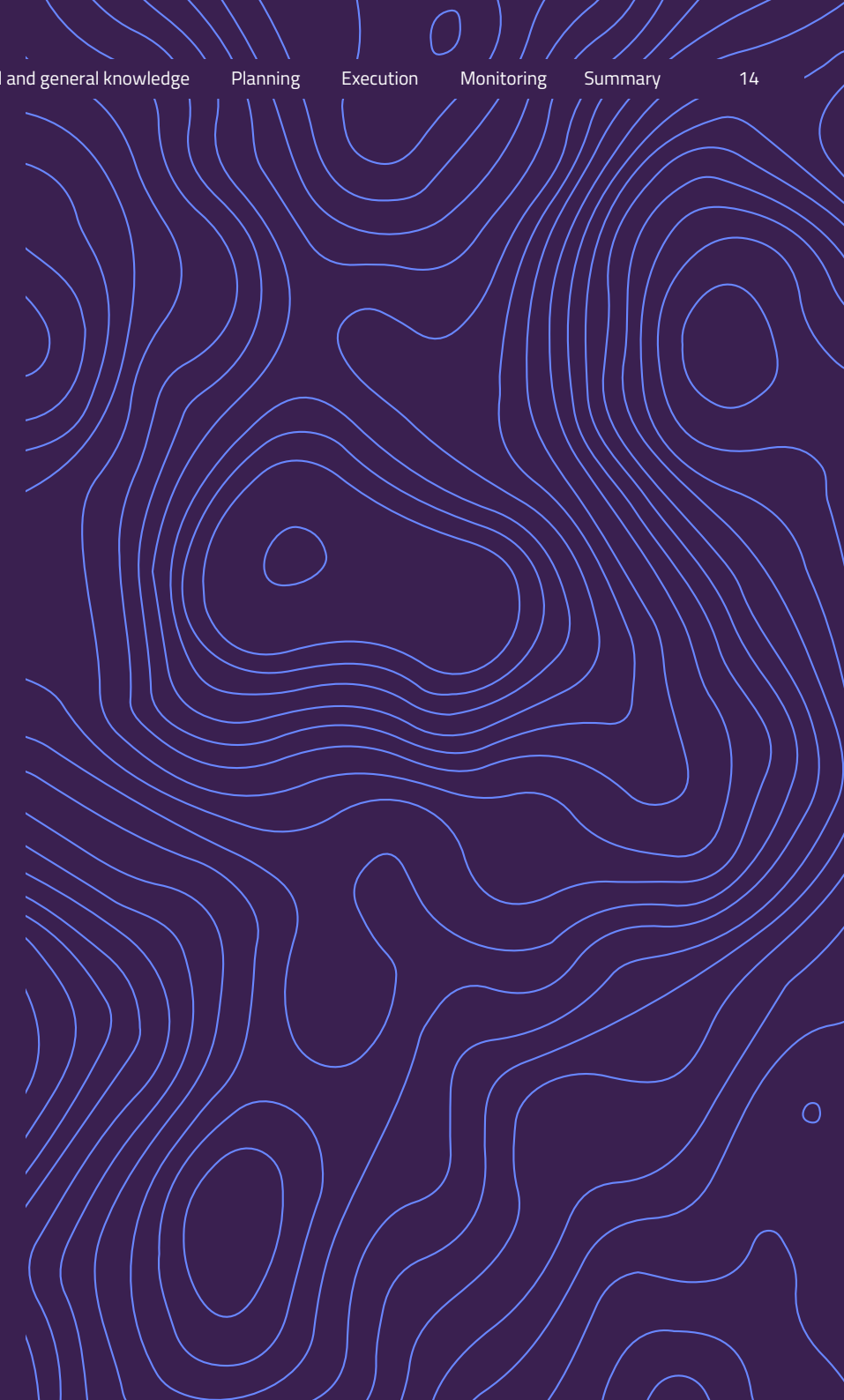
There was a strong performance in recognising the International Hydrographic Organization (IHO) data standards applicable to ECDIS.

“ Almost half of bridge teams had a general lack of understanding regarding the current ECDIS presentation library ”



## Section 2

# Planning



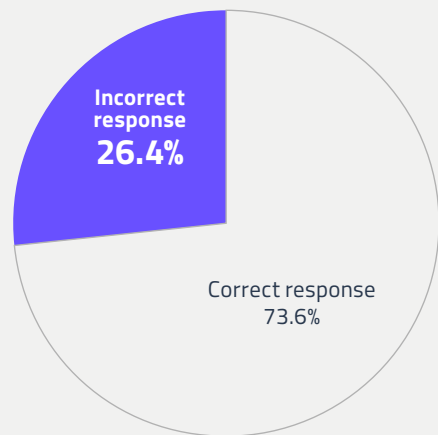
# Planning

## Subsection breakdown

Subsection 2a:

### Display and ENC scale

Assessing bridge teams' knowledge on data layers and the ENC scale used in the planning process.

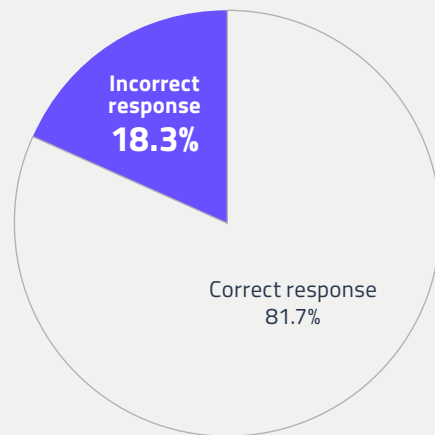


[Read more >](#)

Subsection 2b:

### ENC accuracy

Checking bridge teams' understanding of Category Zone of Confidence (CATZOC) and anything that affects the accuracy of the intended ENC.

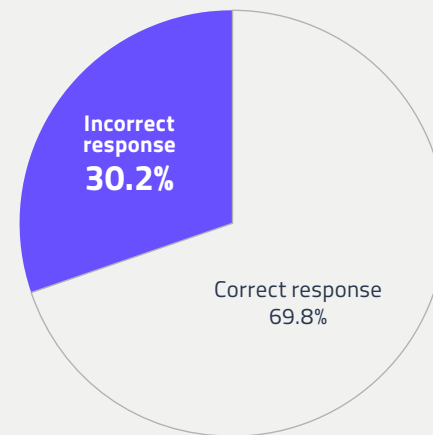


[Read more >](#)

Subsection 2c:

### Passage plan confirmation

Checking and verifying the completed planned passage is correct and safe.

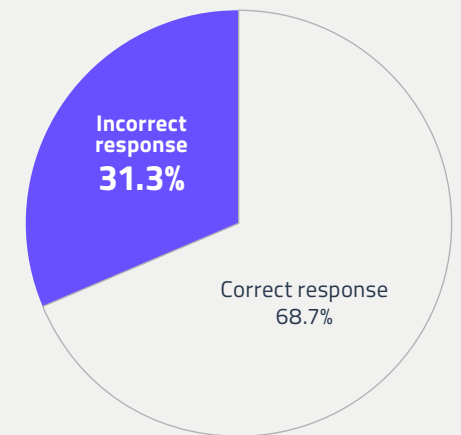


[Read more >](#)

Subsection 2d:

### Setting up safety settings

Assessing bridge teams' understanding of what the safety settings are and how to set them up for use.

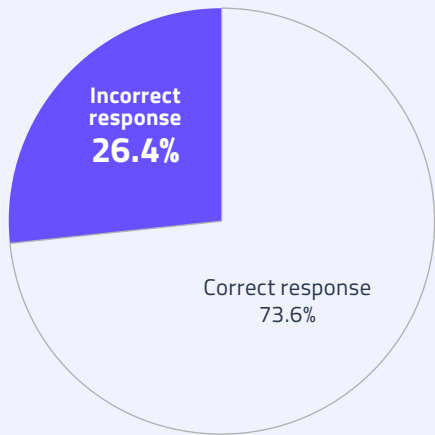


[Read more >](#)

Subsection 2a:

# Display and ENC scale

Assessing bridge teams' knowledge on data layers and the ENC scale used in the planning process.



## Priority of ENC scale

Nearly half of bridge team members failed to prioritise ENC scale when starting passage planning. Using the wrong ENC scale can lead to important navigational features being missed during the planning phase. Another problem can be screen clutter, hampering the planning officer's decision-making.

## Display layers

There was a notable knowledge gap regarding the features appearing on different display layers, particularly the layer where CATZOC appears. Numerous incidents have been attributed to a lack of information on the ECDIS screen, often caused by the bridge team using the wrong layer, meaning critical information is missing.

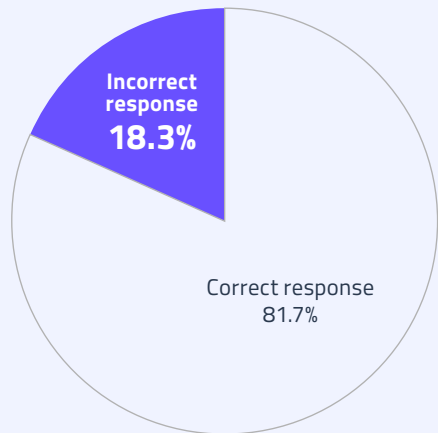
Using the wrong ENC scale can lead to **important navigational features being missed** during the planning phase



Subsection 2b:

# ENC accuracy

Checking bridge teams' understanding of Category Zone of Confidence (CATZOC) and anything that affects the accuracy of the intended ENC.



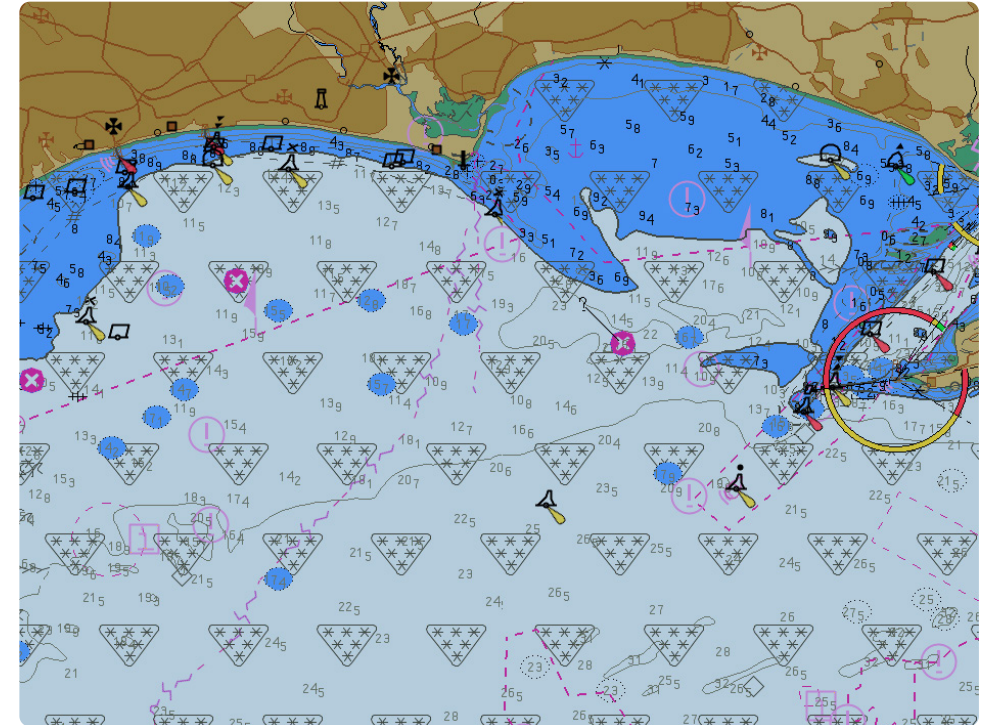
## ENC accuracy

The majority of areas assessed by ETA showed good knowledge of ENC accuracy and how to identify potential issues, apart from the relationship between CATZOC and pick report.

## Category Zone of Confidence (CATZOC) and pick report relationship

Bridge teams showed a knowledge gap around the relationship between CATZOC and the pick report. There was also some misunderstanding about the limitations of CATZOC symbols. Knowing how to assess the ENC data accuracy is essential when conducting passage planning. This includes where to find the data and potential issues with the data sources. Relying solely on one source, such as the CATZOC symbol, can lead to errors, so bridge teams should be aware of these issues.

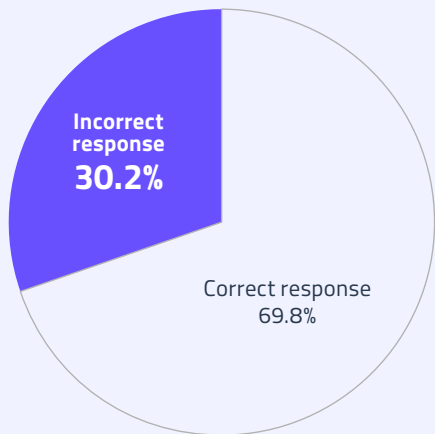
Bridge teams showed a knowledge gap around **the relationship between CATZOC and the pick report**



Subsection 2c:

# Passage plan confirmation

Checking and verifying the completed planned passage is correct and safe.



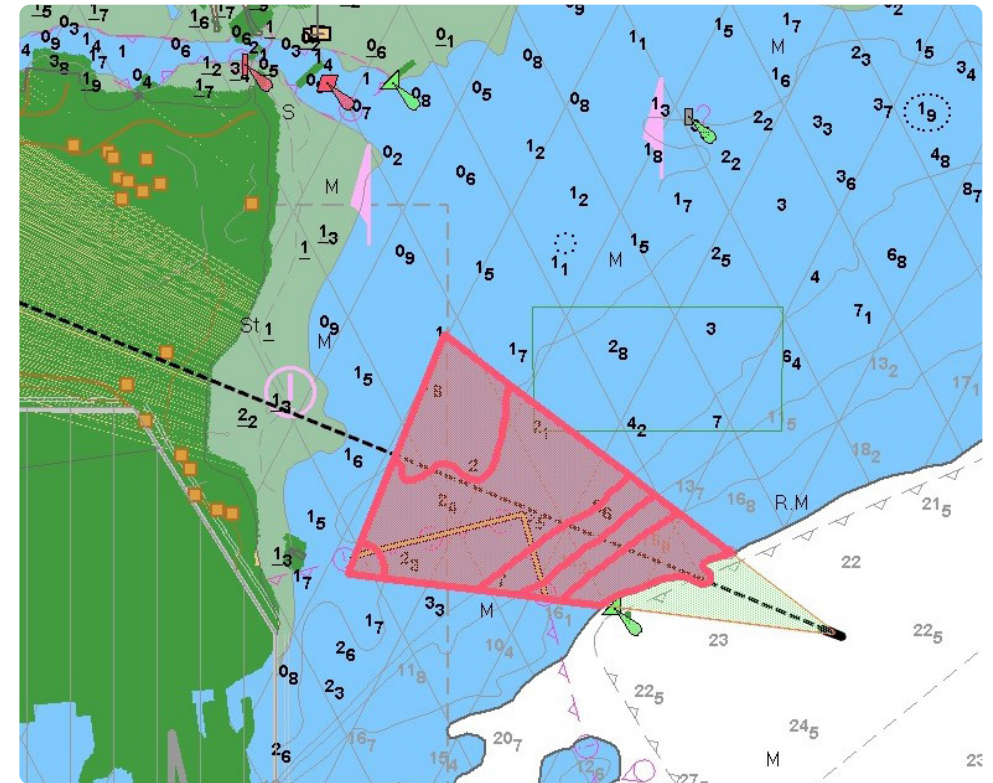
## Overreliance on automated checks

Respondents generally understood how and when to use automated checks to the planned passage to help ensure the passage is safe for use before departure. However, over half of respondents relied solely on automated checks, neglecting the requirements for a visual check of the planned passage. Both checks are necessary to ensure the planned passage is safe.

## User-inputted alarms

There is still a gap in bridge teams' understanding around what the ECDIS user can set to trigger an alarm and what will always automatically do so. Alarm management and understanding is at the heart of many ECDIS-related incidents, and featured in the DMAIB and MAIB ECDIS report as a recurring ECDIS-related use issue. Bridge team members must understand ECDIS alarms and how to manage them to get the most out of these vital safety features on voyage. A link to the DMAIB and MAIB report on ECDIS use is in the [Useful Resources section](#) at the end of this report.

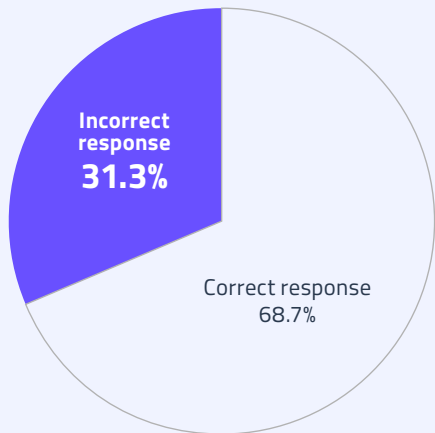
“ Bridge team members must understand ECDIS alarms and how to manage them to get the most out of these **vital safety features** on voyage ”



Subsection 2d:

# Setting up safety settings

Assessing bridge teams' understanding of what the safety settings are and how to set them up for use.

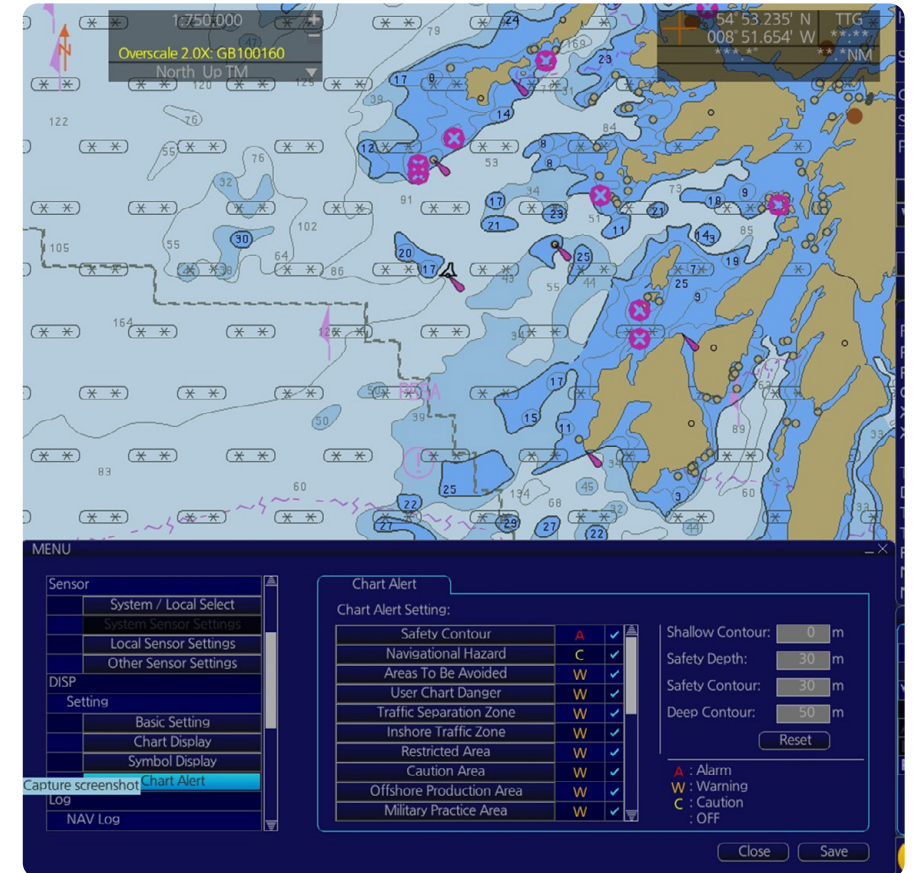


## What affects the safety contour

Over two-thirds of bridge teams assessed showed potential knowledge gaps regarding how limitations in the availability of charted depth contours affect the safety contour. Charted depth contours are often seen as 5m, 10m, and 20m. If the safety contour is set between these available contours, it will default to the next available charted contour. This issue can impact the amount of safe, navigable water, so bridge teams need a good understanding of these limitations.

## Unawareness of deep contour

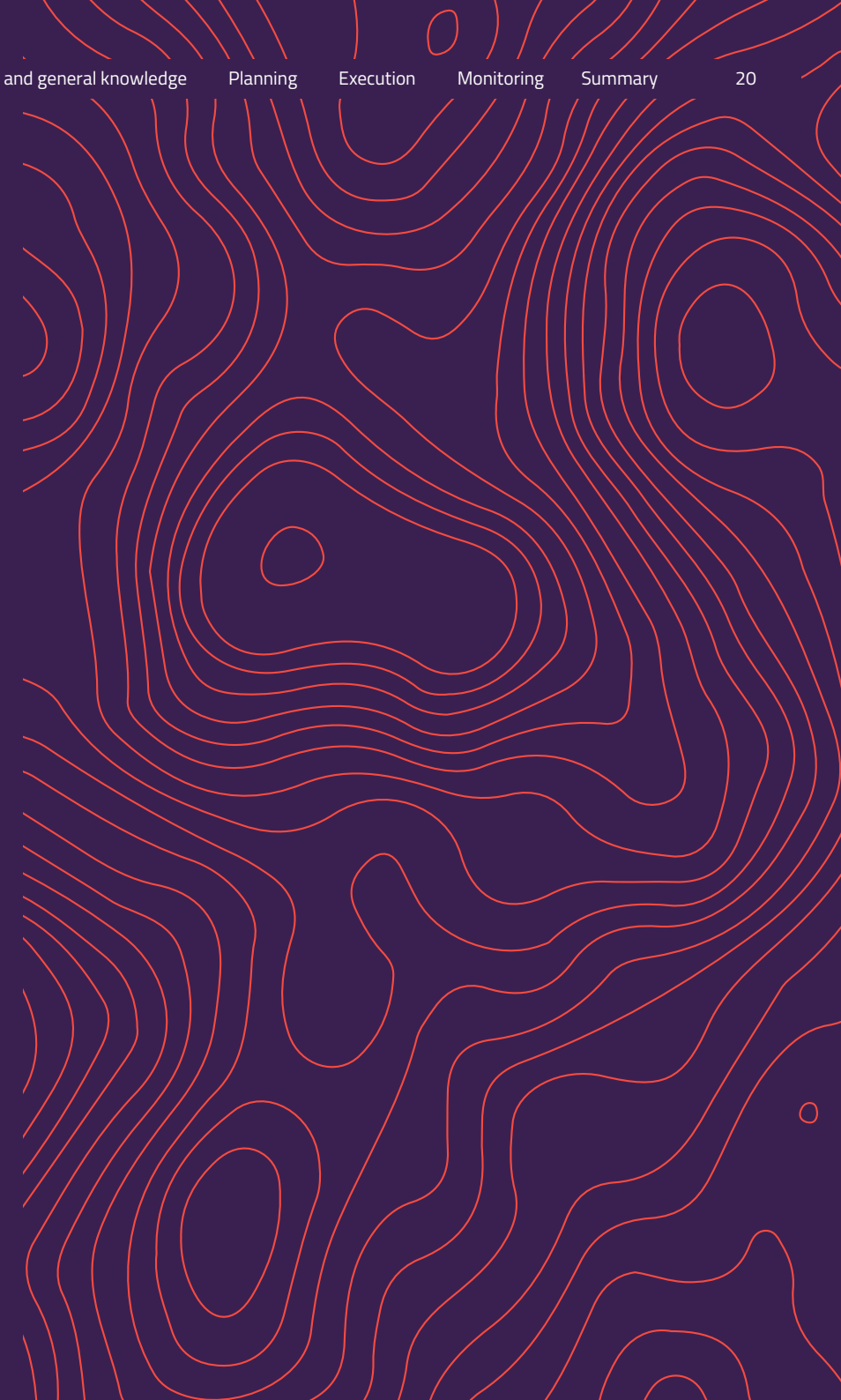
Nearly half of those assessed were unaware of what a 'deep contour' is and how it affects the ENC display. The deep contour shows the user what the passage plan regards as deep water, and the limit of the sea area where shallow-water effects can impact the vessel. This critical safety setting enhances vessel safety when understood and used correctly.



ENC showing the deep contour.

## Section 3

# Execution



## Execution

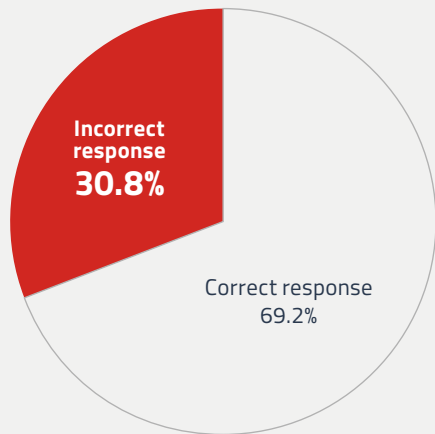
# Subsection breakdown

Overall, this section showed a good knowledge of what to check before departure.

Subsection 3a:

### ECDIS displays and alarms

Assessing bridge teams' knowledge of ECDIS colour palettes, the presentation of information on ECDIS, and ECDIS alarms and highlights.

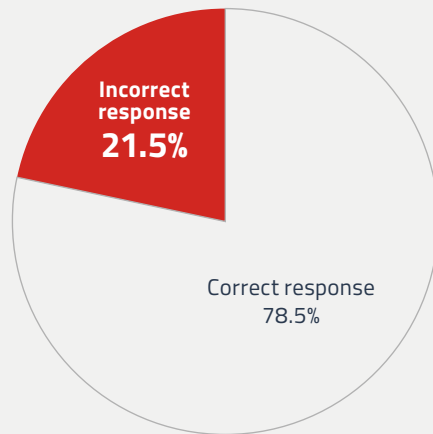


[Read more >](#)

Subsection 3b:

### ECDIS inputs and datums

Checking bridge teams' understanding of Category Zone of Confidence (CATZOC) and anything that affects the accuracy of the intended ENC.

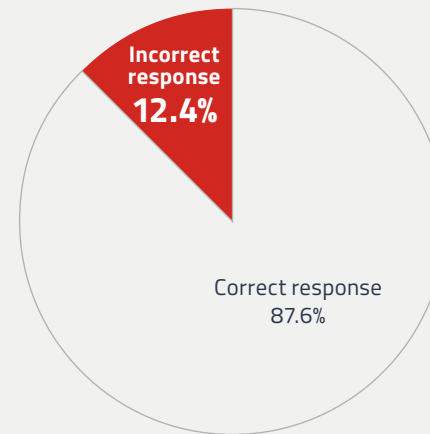


[Read more >](#)

Subsection 3c:

### Passage plan administration

Requirements for ECDIS and wider navigational issues before departure.

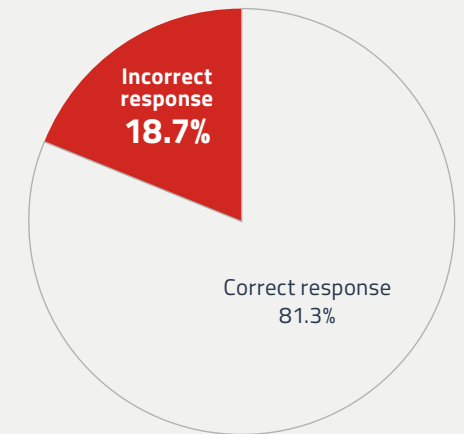


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Subsection 3d:

### Verifying and using safety settings

Final checks to safety settings and recognising potential issues.

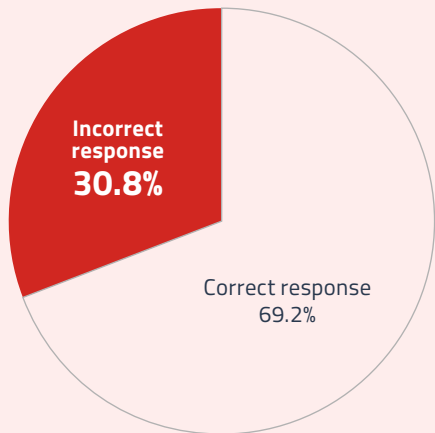


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Subsection 3a:

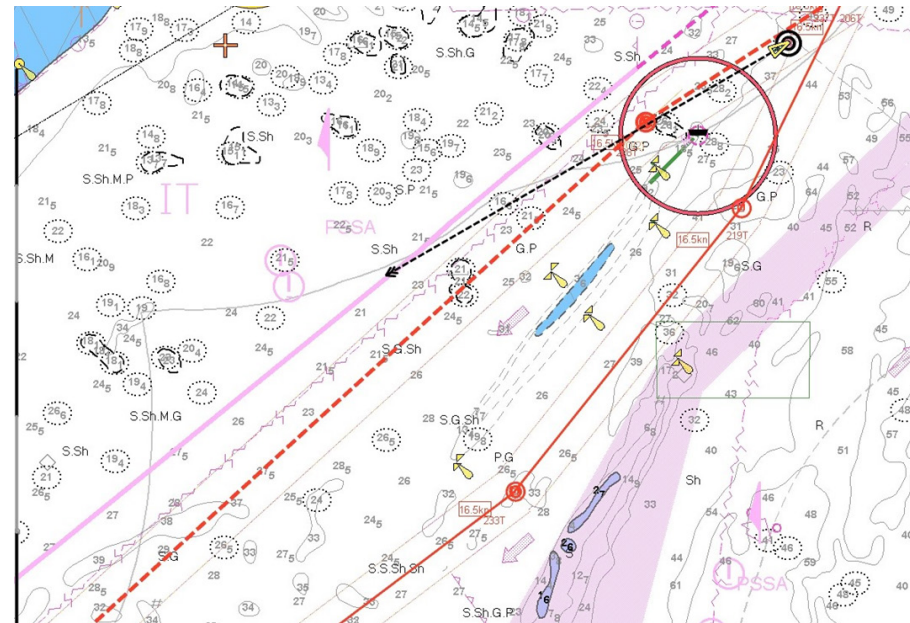
# ECDIS displays and alarms

Assessing bridge teams' knowledge of ECDIS colour palettes, the presentation of information on ECDIS, and ECDIS alarms and highlights.



## Alternative routes

About half of ETA respondents were unaware that alternative routes can be loaded on the ECDIS screen simultaneously with the current passage. This allows any changes in route to be safely monitored even when deviating from the original plan.



Above: ENC showing an alternative route

## Display clarity

About half of respondents indicated a need for improved knowledge on ensuring the ECDIS display remains clear and well-defined at different times of the day, taking natural light and the age of the ECDIS screen into account. As display screens' colour-generating capability deteriorates over time, regular checks should be carried out before departure. ECDIS features can help ensure all information presented on the screen is clearly visible.

## Alarm confusion

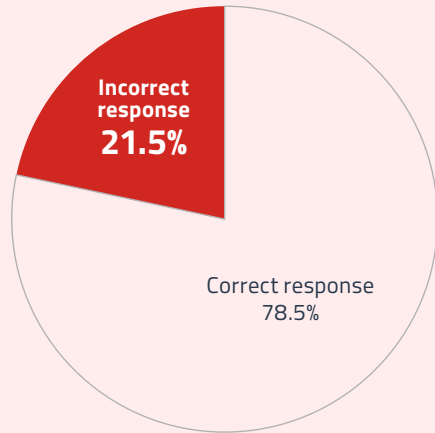
Over one third of bridge teams showed a knowledge gap in ECDIS display and alarms. Historical changes in ECDIS alarm requirements have caused some confusion over an actual alarm vs a highlight/alert on the screen. If misunderstood, alarms can cause frustration and reduce situational awareness, but when set correctly, alarms can greatly enhance navigational safety.

Over one third of bridge teams showed a knowledge gap in ECDIS display and alarms

Subsection 3b:

# ECDIS inputs and datums

Checking bridge teams' understanding of Category Zone of Confidence (CATZOC) and anything that affects the accuracy of the intended ENC.



## Using time zones

Over half of bridge teams were generally unaware of using time zones on the ECDIS and how they affect passage and information provided. This can cause issues with time-based alerts and incorrect arrival times at critical points on the passage.

## Datums

There was a recurring knowledge gap regarding datums and their impact on navigational matters such as air draft, with almost half of bridge team members showing some misunderstanding. The potential consequences can include miscalculating air draft, misinterpreting depth, and errors in assessing tides.

## Navigational equipment

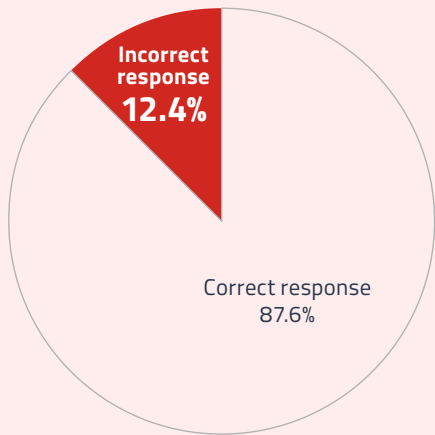
There was a good understanding of which other navigational equipment feeds into the ECDIS and how their inaccuracies can affect the ECDIS output for the user.



Subsection 3c:

# Passage plan administration

Requirements for ECDIS and wider navigational issues before departure.



## NAV warnings and passage plan narrative

Although knowledge was good overall, a small number of respondents failed to prioritise NAV warnings on the chart before leaving port, as well as the need to create a detailed narrative passage plan to accompany the ECDIS route. Bridge teams should always check current NAV warnings to ensure they're available on the ENC. The narrative can be used to highlight safety-specific information for each leg of the passage.

## Safety settings

Almost 100% of respondents knew to check the safety settings before departure and during watch takeover.

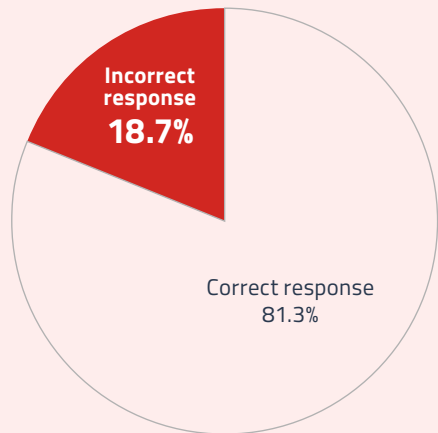
“ Bridge teams should **always** check current NAV warnings to ensure they're available on the ENC ”



Subsection 3d:

# Verifying and using safety settings

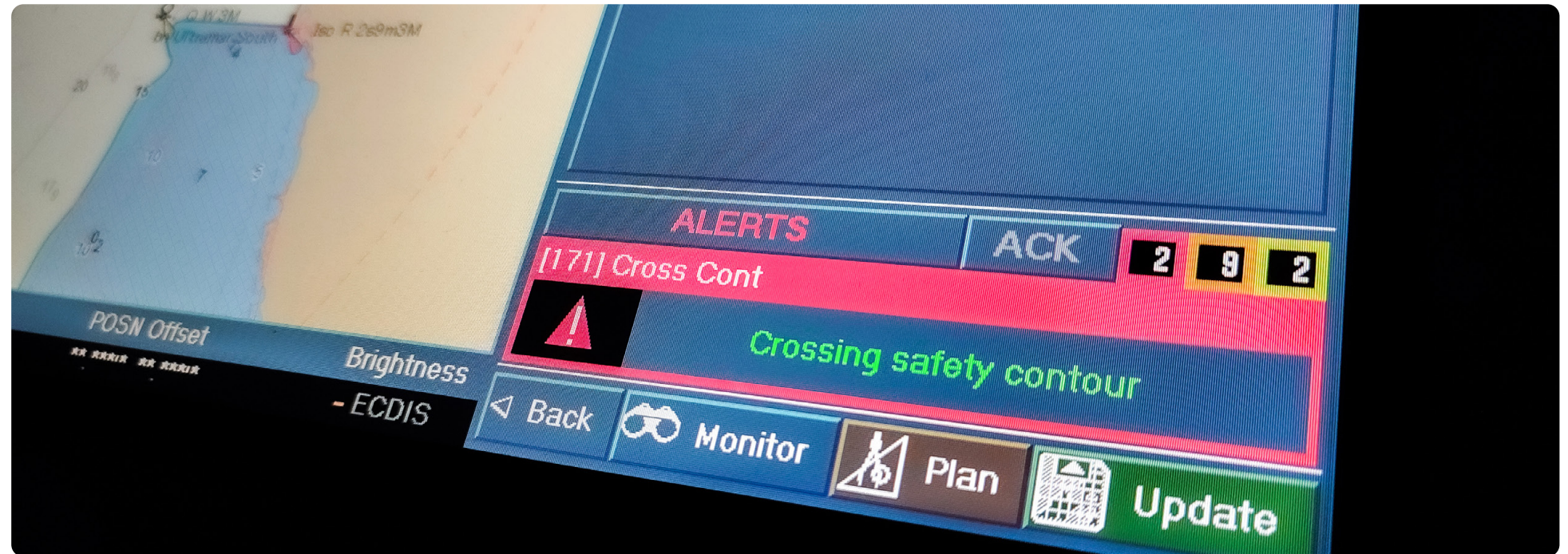
Final checks to safety settings and recognising potential issues.



## Identifying safety contours

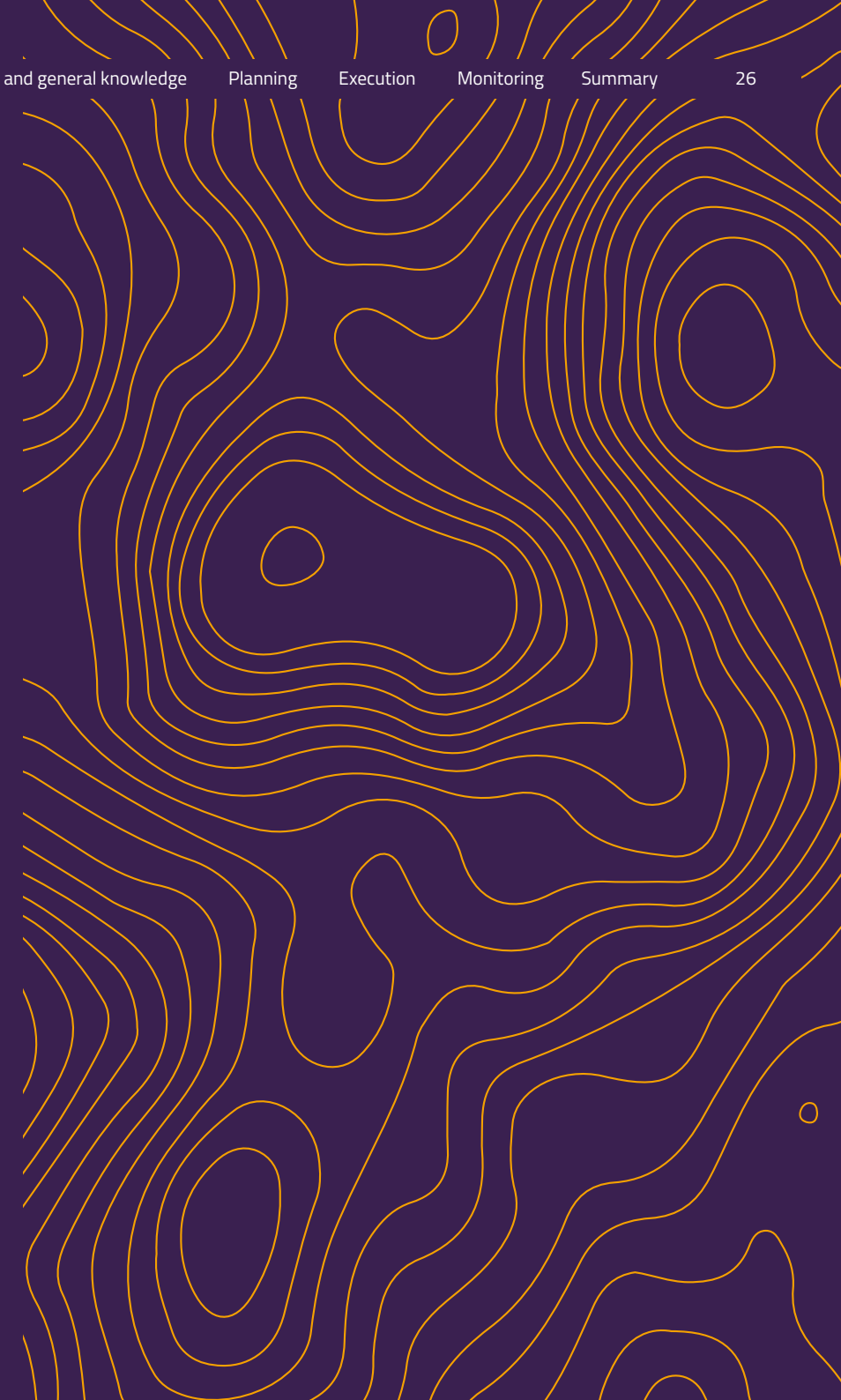
Almost a third of those assessed were unable to correctly identify the ECDIS default safety contour setting, despite correctly stating they would check the safety settings before departure. The default setting is 30m, so it's critical bridge teams check they have input an appropriate safety contour relevant to the planned passage. Failing to do this can lead to more alarms than required, affecting situational awareness, or even result in no alarms in safety-critical instances.

“It's critical bridge teams check they have input an **appropriate safety contour** relevant to the planned passage”



## Section 4

# Monitoring



# Monitoring

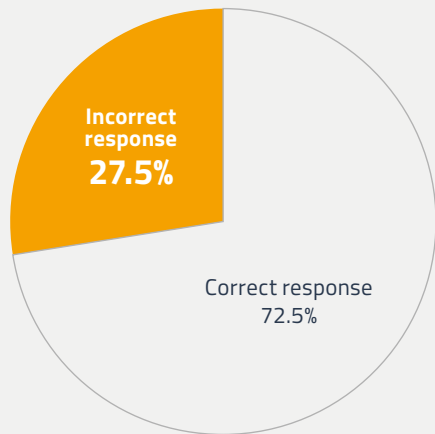
## Subsection breakdown

Overall, the bridge teams showed good knowledge.

Subsection 4a:

### Alerts/Indicators/ Alarms

Alarm management and alerting.

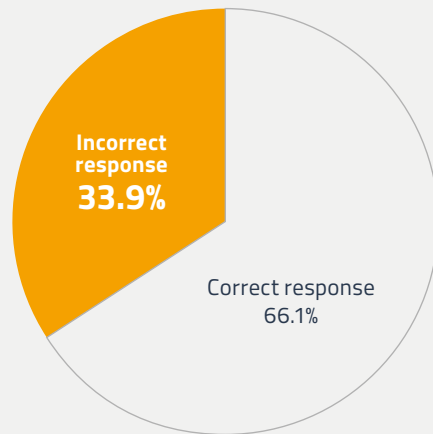


[Read more >](#)

Subsection 4b:

### Using safety settings

Monitoring the effectiveness and use of the safety settings during passage, including questions on datums.

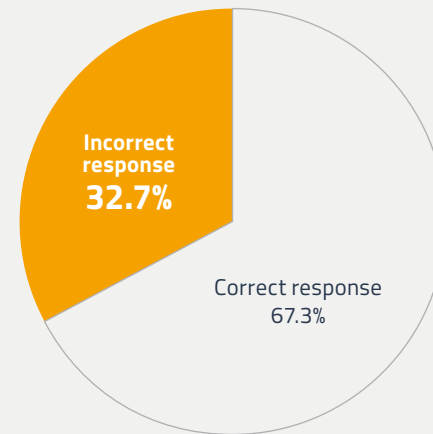


[Read more >](#)

Subsection 4c:

### Recognising symbols/ On-screen display

Identifying simplified symbols and notable ENC markings.

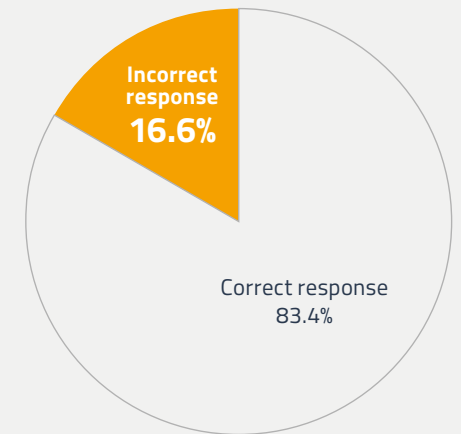


[Read more >](#)

Subsection 4d:

### Vessel position and OOW use

Vessel position fixing and OOW behaviour when using ECDIS.

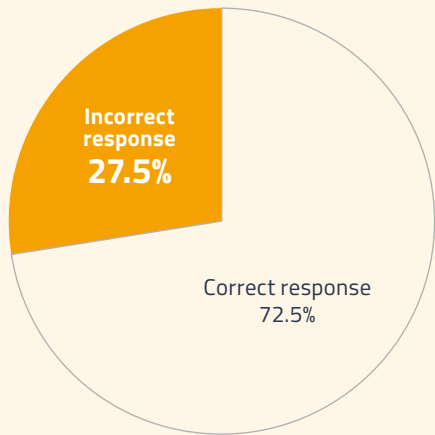


[Read more >](#)

Subsection 4a:

# Alerts/Indicators/Alarms

Alarm management and alerting.



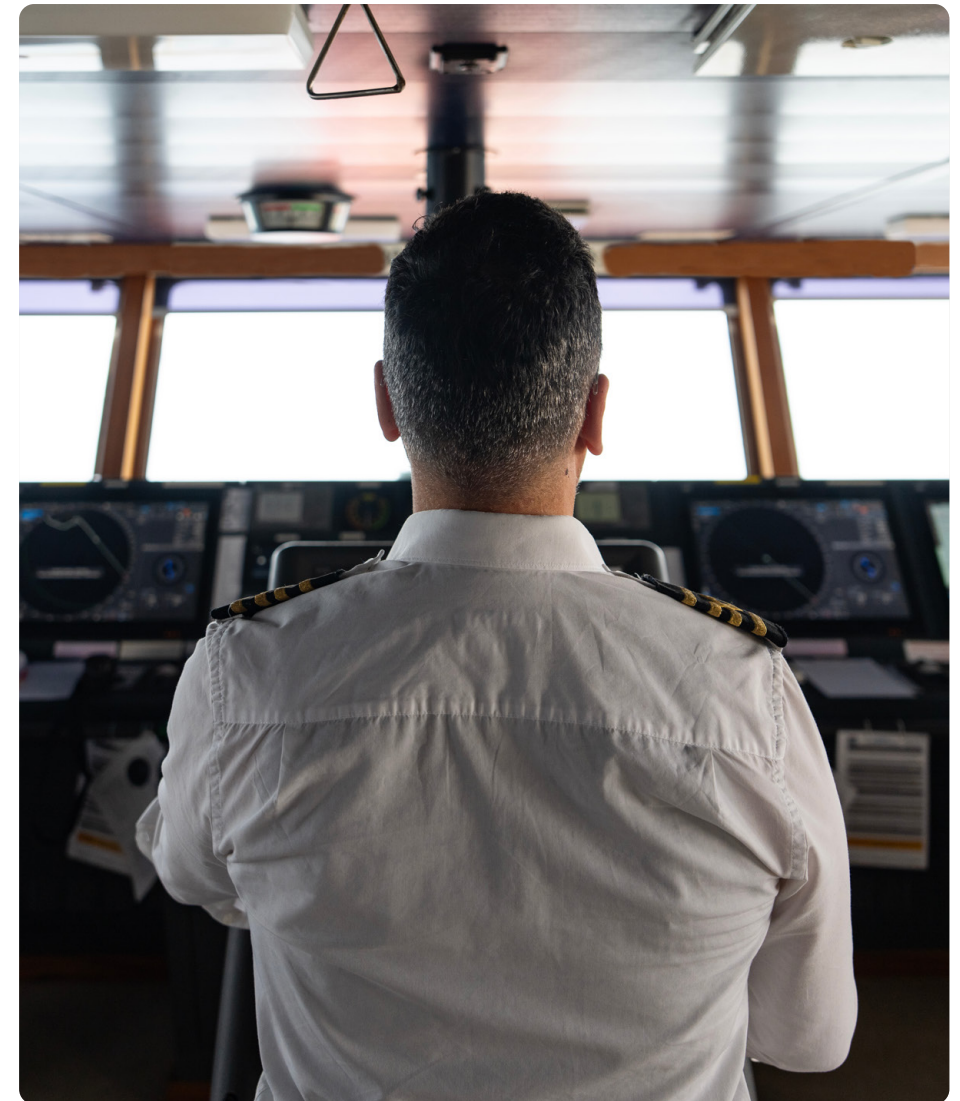
## Recognising alarms

Just over half of bridge team members failed to recognise what will trigger an alarm on the ECDIS, suggesting a knowledge gap about an actual alarm vs an alert/highlight. Additionally, half also demonstrated a lack of understanding about user-set alarm requirements. ECDIS alarms have long been misunderstood, so focusing on safe use and management is critical for safe navigation.

## Safety contour

Around half of users were unaware that ECDIS settings can allow a vessel to navigate within the set safety contour when necessary, such as approaching a pilot station. Understanding and using this function can help vessels navigate safely in confined waters. However, there was recognition that the safety contour would trigger an alarm, alerting users to potential risks ahead if the look-ahead vector crossed it.

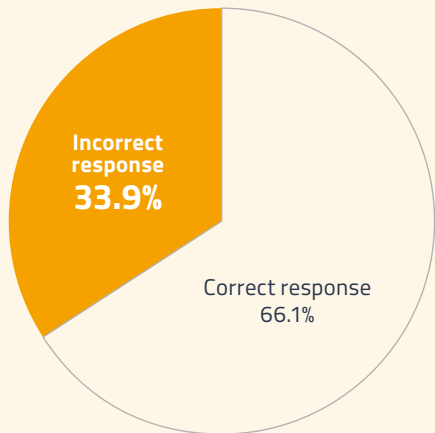
“ Just over **half of bridge team members** failed to recognise what will trigger an alarm on the ECDIS ”



Subsection 4b:

# Using safety settings

Monitoring the effectiveness and use of the safety settings during passage, including questions on datums.



## Alarm expectation

Despite a general understanding that crossing the safety contour with the look-ahead vector would trigger an alarm, almost half of bridge team members failed to recognise an impending alarm for this situation when shown an actual ECDIS screen of a vessel approaching the safety contour. This indicates a gap between theoretical knowledge and practical application.

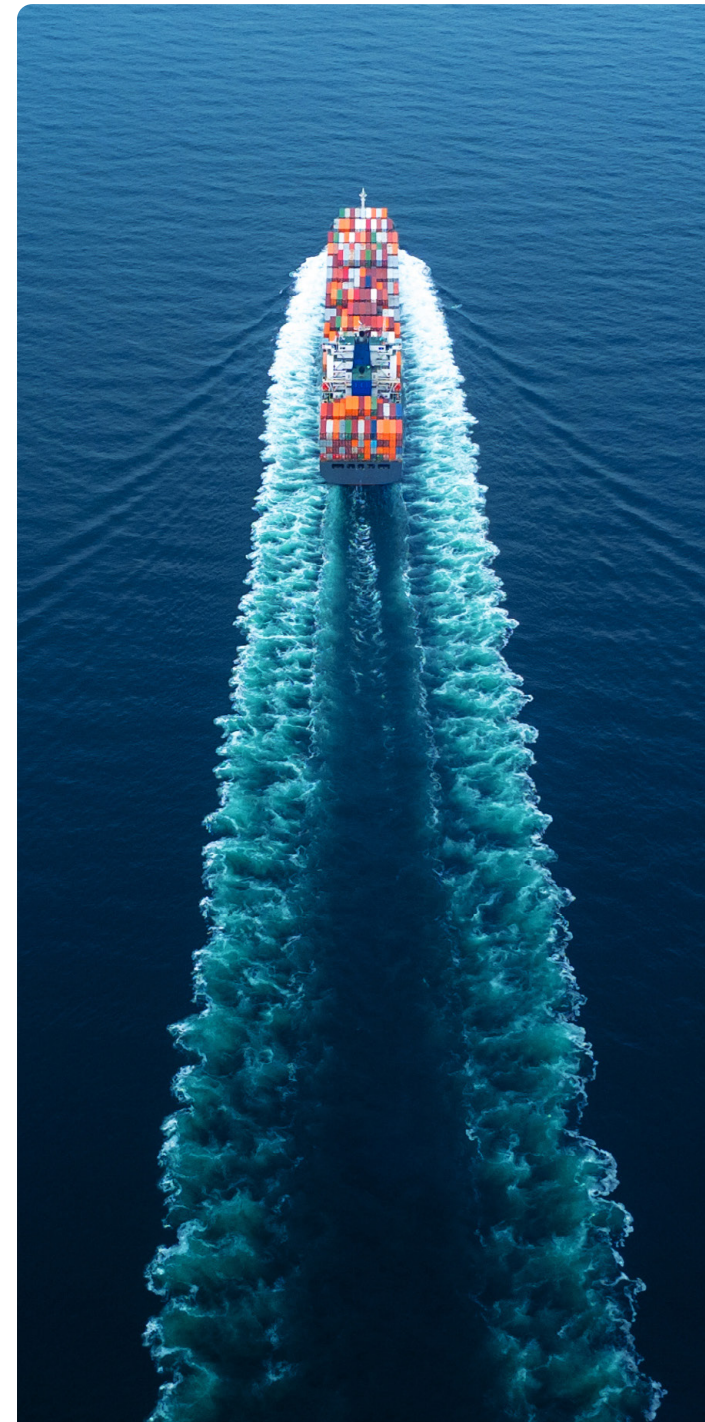
## Managing alarms

Some bridge team members showed a knowledge gap around alarm management, choosing inappropriate methods to reduce ECDIS alarms. Again, ECDIS alarms are an excellent aid to safe navigation when used properly.

## Misunderstanding depth contour

There is still some misunderstanding about the restrictions of available charted depth contours and their relationship with the set safety contour. This issue was an ongoing theme throughout the entire assessment.

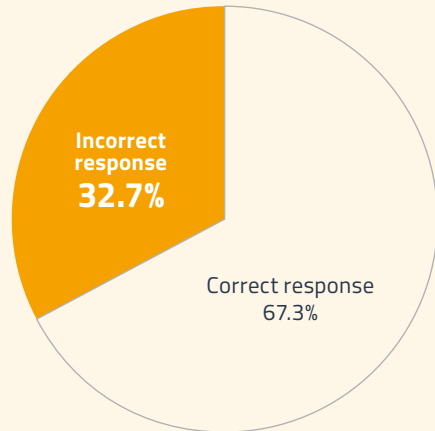
“ ECDIS alarms are an excellent aid to safe navigation when used properly ”



Subsection 4c:

# Recognising symbols/On-screen display

Identifying simplified symbols and notable ENC markings.



## Datum issues

Nearly two-thirds of respondents failed to recognise potential datum-related issues on an ENC, reinforcing knowledge gaps regarding datums and how they affect the ENC. As seen previously, this can cause misrepresentation of charted objects, depths and several other inaccuracies highlighted earlier in this report.

## Recognising symbols

While many simplified symbols were recognised and understood, over half failed to recognise the magenta X symbol can cover numerous navigational hazards. Additionally, almost half were unable to correctly identify drying heights on the ENC screen. Recognising symbols is important to enable safe passage planning, execution and monitoring.

## Hover-over function

There was also a lack of understanding of the hover-over function when fitted to ECDIS, while some bridge teams said it wasn't an option for them. However, the hover-over function provides quick and efficient navigation information.

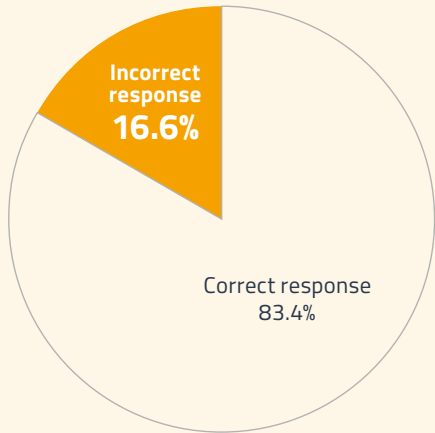
“Recognising symbols is important to enable safe passage planning, execution and monitoring.”



Subsection 4d:

# Vessel position and OOW (Officer of the Watch) use

Vessel position fixing and OOW behaviour when using ECDIS.



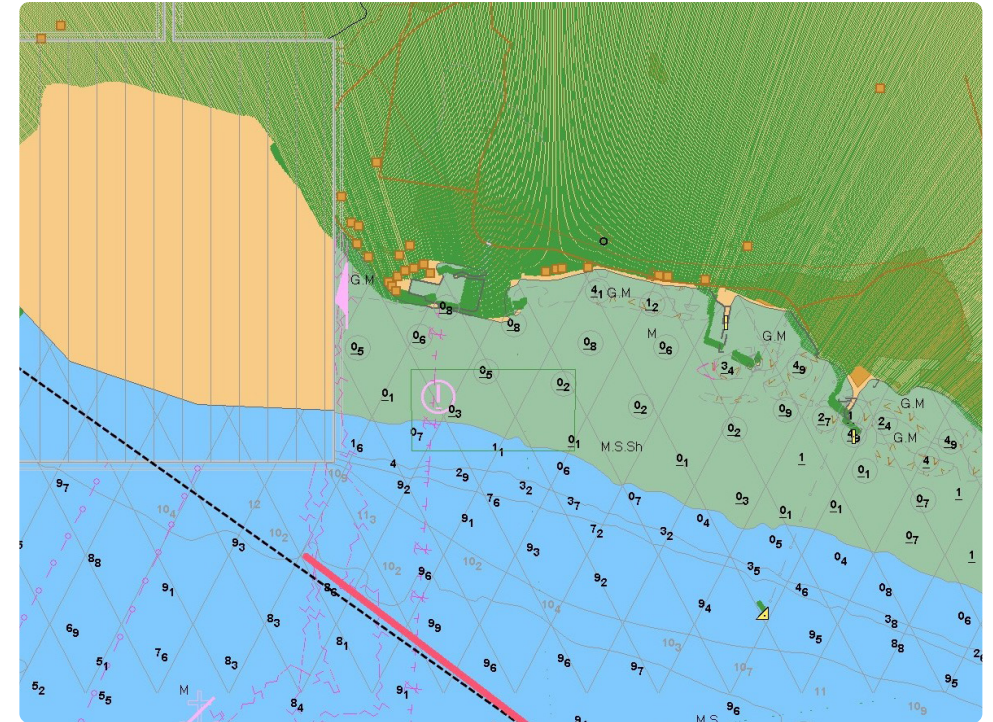
## GPS over-reliance

Some respondents relied too much on GPS, with some stating it offers 100% accuracy. Additionally, a quarter were unaware of the need to check precision dilution in deep sea. This allows bridge teams to check for any errors in the GPS position when other sources for cross-referencing the position are limited.

## Verifying position

A quarter of bridge team members failed to recognise the need to mark the position on the ENC when verifying the position using ranges and bearings from a prominent point. This is good navigational practice.

**A quarter were unaware of the need to check precision dilution in deep sea**



# Summary



# Summary

Reflecting on the first year of the ECDIS Training Assessment (ETA), it's clear that while the platform has made strides in identifying and addressing knowledge gaps within bridge teams, significant gaps still remain.

The data gathered has highlighted widespread areas for improvement in critical ECDIS competencies, from understanding datum-related issues to correctly applying safety settings. These findings underscore the need for targeted training and continuous education to ensure bridge teams are fully equipped to navigate safely and effectively.

Bridging these knowledge gaps through structured training and awareness programmes will be key to enhancing navigational safety and optimising ECDIS system use. This is not only a matter of regulatory compliance but also empowering all personnel with the right skills to make informed, real-time decisions. The data suggests that as we move forward, focused efforts on strengthening understanding in these highlighted areas will be vital for achieving safer, more efficient operations.

“ The data gathered has highlighted **widespread areas for improvement** in critical ECDIS competencies ”

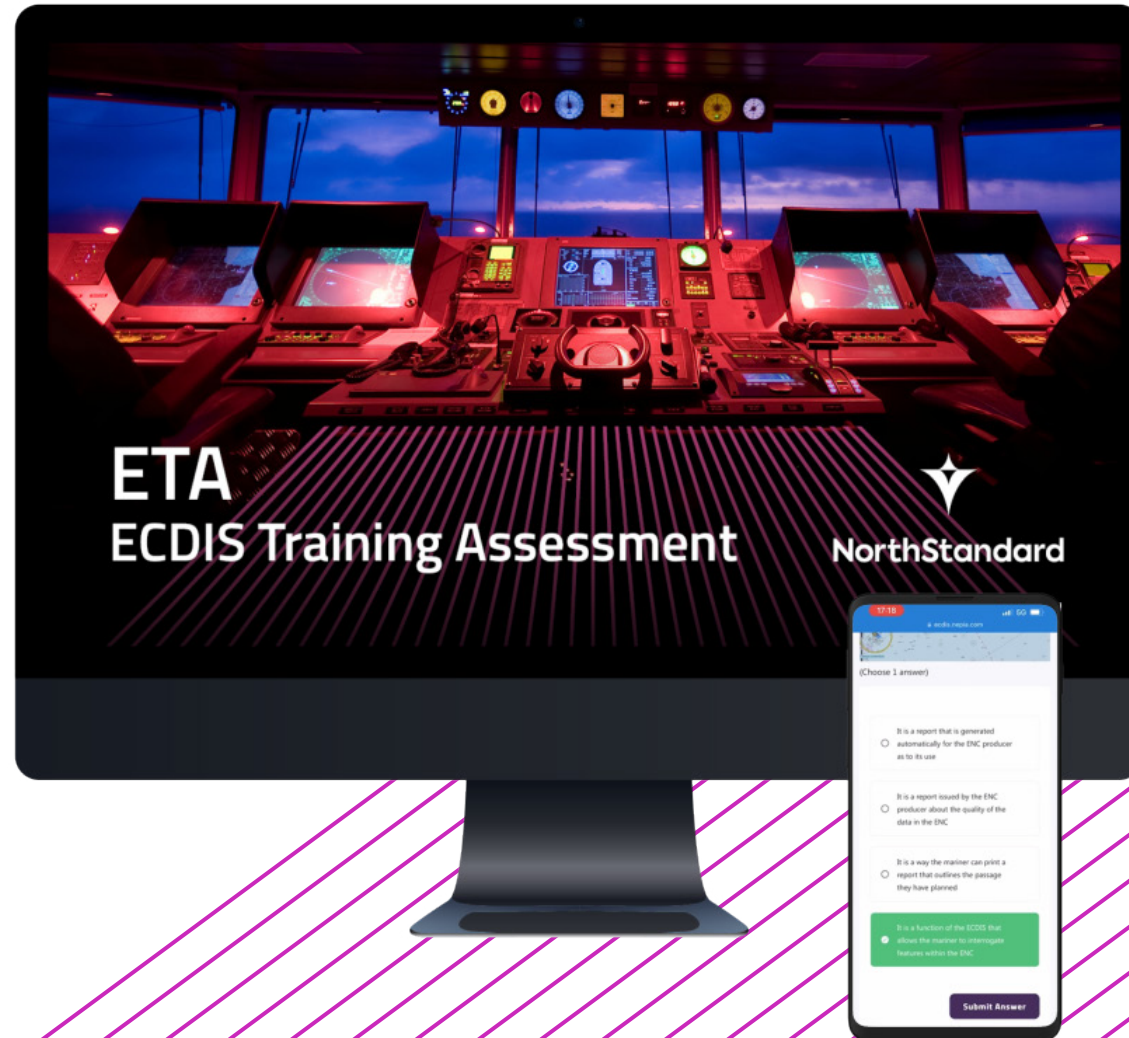


# What can you do?

The ECDIS Training Assessment (ETA) is free for NorthStandard members, allowing you to find out if your bridge teams need support to fill ECDIS knowledge gaps. Individual and company results are not seen by the club.

We also have several NorthStandard publications related to ECDIS use to assist you and your bridge teams, including an onboard training pack and Loss Prevention ECDIS briefings.

For more information on ETA, how to use the platform and our ECDIS publications, please visit [our website](#).



# Where to start?

You should consider checking where knowledge gaps exist in your bridge teams by using ETA.

However, results so far suggest prioritising the following knowledge areas – categorised as URGENT (red) or ASAP (amber) based on the subject matter and the ETA data gathered:



## Urgent

- **ENC installation and updating** – How to install and update an ENC properly, and how to recognise what changes have been made to an ENC.
- **Understand datums** – How datums affect the ENC and safe navigation.
- **ENC scale and display layers** – How scale can affect passage planning and safe navigation, and which features appear on different display layers.
- **ECDIS alarms** – Which features automatically alarm, what features will be highlighted, and how to manage alarms, particularly in confined waters.
- **Safety settings** – Using the deep contour function, and particularly how available charted depth contours can affect the safety contour.
- **Symbols** - Recognising the generic underwater obstructions symbol.



## ASAP

- **ENC production** – How different ENC cartographers' methods can affect ENC's appearance.
- **ECDIS presentation library** – What it is and how to check it remains compliant.
- **Pick report** – What the pick report contains and how to use it.
- **Passage plan confirmation** – The importance of visually checking your plan as well as using automated check functions.
- **Screen clarity** – How to ensure that all required information can be clearly seen onscreen in different lighting and when using older monitors.
- **Verifying position** – How to verify the GPS' correct position in different stages of the voyage.

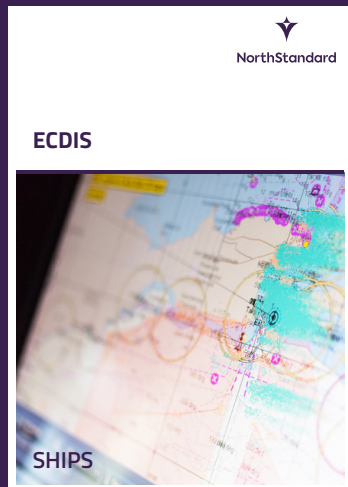
# Useful resources



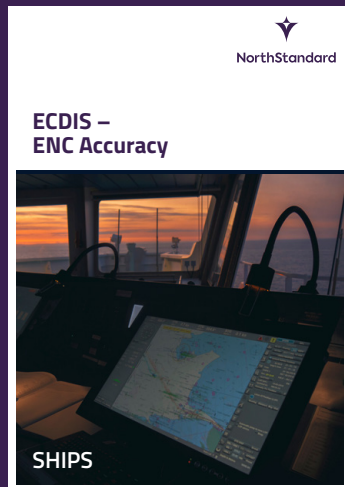
## NorthStandard

We have a range of briefings and an ECDIS training pack available:

### ECDIS General Knowledge Briefing



### ENC Accuracy Briefing



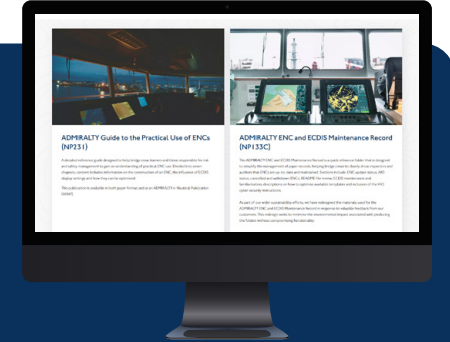
### ECDIS Safety Settings



### ECDIS Onboard training pack



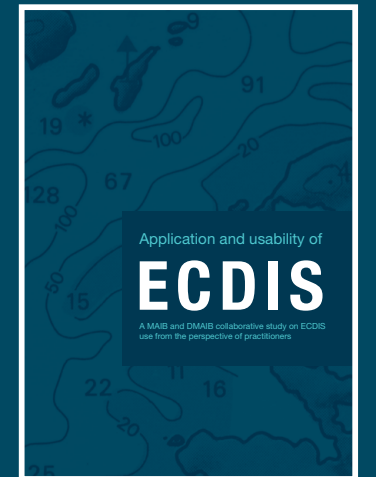
## UK Hydrographic Office



The UKHO also have several publications available to support ECDIS use, and management regarding SMS procedures. For more information, please visit [ADMIRALTY ECDIS and ENC Reference Publications](#)

## MAIB

MARINE ACCIDENT INVESTIGATION BRANCH



The MAIB and DMAIB study and report on ECDIS use and application can be found [here](#)



It is great to see the level of interest in, and use of, ETA by our members. It's clear from the data that there are some significant gaps in bridge team knowledge which no doubt reflects the wider industry given the size of the sample.

ETA can help bridge teams to address those gaps both within the app and through company training initiatives.

**I strongly encourage all NorthStandard members to consider using ETA as part of their bridge team training.** Remember, individual company results are only available to the member and cannot be seen by NorthStandard.



**Colin Gillespie**  
GLOBAL HEAD OF LOSS PREVENTION, NORTHSTANDARD



# NorthStandard

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