

# Electronic Chart Display and Information System (ECDIS) Practice Exam (Sample)

## Study Guide



**Everything you need from our exam experts!**

**Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.**

**ALL RIGHTS RESERVED.**

**No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.**

**Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.**

**SAMPLE**

# Table of Contents

|                                    |           |
|------------------------------------|-----------|
| <b>Copyright</b> .....             | <b>1</b>  |
| <b>Table of Contents</b> .....     | <b>2</b>  |
| <b>Introduction</b> .....          | <b>3</b>  |
| <b>How to Use This Guide</b> ..... | <b>4</b>  |
| <b>Questions</b> .....             | <b>5</b>  |
| <b>Answers</b> .....               | <b>8</b>  |
| <b>Explanations</b> .....          | <b>10</b> |
| <b>Next Steps</b> .....            | <b>16</b> |

SAMPLE

# Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

**Remember:** successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

# How to Use This Guide

**This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:**

## **1. Start with a Diagnostic Review**

**Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.**

## **2. Study in Short, Focused Sessions**

**Break your study time into manageable blocks (e.g. 30 - 45 minutes). Review a handful of questions, reflect on the explanations.**

## **3. Learn from the Explanations**

**After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.**

## **4. Track Your Progress**

**Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.**

## **5. Simulate the Real Exam**

**Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.**

## **6. Repeat and Review**

**Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.**

**There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!**

## Questions

SAMPLE

- 1. What key function does the ECDIS perform regarding navigation hazards?**
  - A. It alerts the crew when hazards are identified**
  - B. It automatically adjusts the vessel's course away from hazards**
  - C. It marks hazards visually on the chart display**
  - D. It ignores hazards below a certain threshold**
  
- 2. Compared to radar, what essential consideration must be noted regarding AIS?**
  - A. AIS is more accurate than radar**
  - B. AIS must be manually set every time**
  - C. AIS is dependent on outside data sources**
  - D. AIS provides continuous updates without fail**
  
- 3. What does the symbol representing a vessel heading indicate on an AIS display?**
  - A. The speed of the vessel**
  - B. The current position of the vessel**
  - C. The intended course of the vessel**
  - D. The movement direction of the vessel**
  
- 4. How does the symbol for an AIS sleeping target compare to that of an activated target?**
  - A. They are equal in size**
  - B. Sleeping targets are larger**
  - C. Sleeping targets are smaller**
  - D. They have different colors**
  
- 5. Is an anchor watch alarm required on an ECDIS?**
  - A. No, it is optional**
  - B. Yes, as per IEC 61174**
  - C. Only on larger vessels**
  - D. Only in specific regions**

- 6. Which information is NOT typically displayed by an AIS system?**
- A. Vessel name**
  - B. Destination and ETA**
  - C. Weather conditions**
  - D. Vessel type**
- 7. Why is proper documentation essential during the use of ECDIS?**
- A. To verify the accuracy of data**
  - B. To ensure compliance with regulations**
  - C. To assist in training future personnel**
  - D. All are valid reasons**
- 8. Which information can be transmitted from AIS about a vessel's status?**
- A. Speed over ground**
  - B. Weather forecasts**
  - C. Cargo weight**
  - D. Environmental conditions**
- 9. How should the potential shift of floating ATONs be interpreted on ECDIS?**
- A. Buoy positions may be shifted**
  - B. All charts are up-to-date**
  - C. ATONs do not shift**
  - D. The ECDIS data is inaccurate**
- 10. ENCs should refer to which geodetic datum for accurate positioning?**
- A. WGS 84**
  - B. GDA 94**
  - C. NAD 83**
  - D. AGD 66**

## Answers

SAMPLE

1. C
2. C
3. D
4. C
5. B
6. C
7. D
8. A
9. A
10. A

SAMPLE

## **Explanations**

SAMPLE

**1. What key function does the ECDIS perform regarding navigation hazards?**

- A. It alerts the crew when hazards are identified**
- B. It automatically adjusts the vessel's course away from hazards**
- C. It marks hazards visually on the chart display**
- D. It ignores hazards below a certain threshold**

The key function of the ECDIS in relation to navigation hazards is to visually mark hazards on the chart display. This capability is crucial for enhancing situational awareness, allowing the crew to identify potential dangers in the navigational area quickly and effectively. The visual representation of hazards helps mariners make informed decisions to avoid these dangers while navigating, improving overall safety at sea. By incorporating detailed hazard information on electronic charts, ECDIS provides real-time updates and integrates data from various sources, including radar and AIS (Automatic Identification System). This visual marking is crucial, as it not only shows the location and nature of hazards but can also provide additional information such as depth of water in relation to the hazards, allowing for dynamic and adaptive navigation strategies. The other choices suggest functions that are not accurate or do not align with the primary purpose of ECDIS. For instance, while the system can provide alerts for hazards, it does not automatically take action such as adjusting the vessel's course, nor does it ignore hazards based on a threshold. Therefore, the ability to visually display hazards on the chart is a defining trait of ECDIS functionality in navigation safety.

**2. Compared to radar, what essential consideration must be noted regarding AIS?**

- A. AIS is more accurate than radar**
- B. AIS must be manually set every time**
- C. AIS is dependent on outside data sources**
- D. AIS provides continuous updates without fail**

AIS (Automatic Identification System) operates differently from radar, and one essential consideration is its dependence on outside data sources. AIS relies on transmissions from other vessels and shore stations to provide positional and navigational information. This means that the effectiveness and accuracy of AIS data are contingent upon factors such as the proper functioning of the transmitting vessels' systems, the availability of shore-based infrastructure, and the range of the transmission. For instance, if a vessel is not equipped with an AIS transponder or is operating outside of the transmission range, the system cannot provide reliable data. Additionally, environmental factors or equipment malfunctions can affect the reception of these data signals. Consequently, while AIS can provide valuable information for tracking and collision avoidance, it requires an external data exchange to function properly, setting it apart from radar, which operates independently by actively scanning the surroundings. The other options suggest misunderstandings about the nature of AIS. While it may not be inherently more accurate than radar, its reliability is contingent on external factors, not internal settings that need manual adjustment each time, and it may not guarantee continuous updates without interruptions.

**3. What does the symbol representing a vessel heading indicate on an AIS display?**

- A. The speed of the vessel**
- B. The current position of the vessel**
- C. The intended course of the vessel**
- D. The movement direction of the vessel**

The symbol that represents a vessel's heading on an AIS (Automatic Identification System) display provides information about the direction in which the vessel is currently moving. This symbol typically shows the instantaneous movement direction, which is crucial for navigation and collision avoidance. Understanding the heading helps mariners assess their own vessel's trajectory and is essential for situational awareness, particularly in busy or navigationally challenging environments. By focusing on the current movement direction, mariners can make informed decisions, adjust their navigation plans, and ensure safe passage while interacting with other vessels. This functionality is particularly vital for the effective use of ECDIS, as it allows for real-time assessment of navigational risks and helps in establishing appropriate responses to maintain safety at sea.

**4. How does the symbol for an AIS sleeping target compare to that of an activated target?**

- A. They are equal in size**
- B. Sleeping targets are larger**
- C. Sleeping targets are smaller**
- D. They have different colors**

The symbol for an AIS sleeping target is smaller than that of an activated target. This differentiation in size visually indicates the status of the ship's AIS transponder. An activated target has its AIS transponder broadcasting regularly, which is essential for real-time monitoring and collision avoidance. Conversely, a sleeping target's AIS is not actively broadcasting, suggesting that the vessel may be stationary, turned off, or not in use, hence needing a smaller symbol. This helps navigators quickly assess the status of vessels in the vicinity on their charts. The various symbols and their sizes enhance situational awareness without overcrowding the display. The other factors, such as color or size being equal, do not accurately reflect the purpose these symbols serve in maritime navigation.

**5. Is an anchor watch alarm required on an ECDIS?**

- A. No, it is optional
- B. Yes, as per IEC 61174**
- C. Only on larger vessels
- D. Only in specific regions

An anchor watch alarm is indeed required on an Electronic Chart Display and Information System (ECDIS) as specified in IEC 61174. This standard outlines the performance requirements for ECDIS, including essential safety features such as monitoring the vessel's position while at anchor. The anchor watch alarm is a critical safety measure that ensures the vessel does not drift from its designated anchorage due to factors like wind, current, or equipment failure. By mandating this alarm, IEC 61174 promotes the continued vigilance necessary for safe maritime operations, particularly when vessels are stationary and potentially vulnerable to external forces. Although there may be various operational protocols or discretionary practices applicable to different vessels, the underlying safety requirement established by this standard highlights the importance of situational awareness through automated monitoring systems.

**6. Which information is NOT typically displayed by an AIS system?**

- A. Vessel name
- B. Destination and ETA
- C. Weather conditions**
- D. Vessel type

The information that is NOT typically displayed by an AIS (Automatic Identification System) refers to weather conditions, which is correct in this context. AIS is primarily designed to enhance maritime safety by providing real-time information about vessel movements and characteristics. It transmits data that includes a vessel's name, its destination and estimated time of arrival (ETA), and its type, helping other vessels and shore stations track and communicate effectively. Weather conditions, however, are not part of the AIS system's functionality. While AIS provides essential navigational data, it does not encompass environmental information such as wind speeds, visibility, sea state, or atmospheric conditions. Such weather data is typically sourced from dedicated meteorological services or systems rather than AIS, which focuses on vessel-specific information necessary for safe navigation and collision avoidance.

## 7. Why is proper documentation essential during the use of ECDIS?

- A. To verify the accuracy of data
- B. To ensure compliance with regulations
- C. To assist in training future personnel
- D. All are valid reasons**

Proper documentation during the use of ECDIS is essential for multiple reasons, illustrating the multifaceted role that documentation plays in maritime navigation and safety. Firstly, maintaining thorough documentation helps in verifying the accuracy of data used within the ECDIS. Accurate data is crucial for safe navigation, and having documentation that tracks the sources and updates of this data helps ensure that navigators are relying on the most current and valid information available. Secondly, documentation serves to ensure compliance with various international and national regulations concerning navigation safety, environmental protection, and operational standards. Regulatory bodies often require proof that navigational aids are being used properly and that the data is up to date. Clear documentation helps fulfill these legal obligations. Finally, proper documentation becomes a valuable resource for training future personnel. As new crew members join the team, having comprehensive records aids in their training process and familiarization with the ECDIS systems. By reviewing documented procedures and past navigational decisions, they gain insights into effective practices and lessons learned, contributing to a safer operational environment overall. These interconnected reasons illustrate why maintaining appropriate documentation while using ECDIS is critical to maritime operations, thereby making the choice encompassing all of these valid points the correct answer.

## 8. Which information can be transmitted from AIS about a vessel's status?

- A. Speed over ground**
- B. Weather forecasts
- C. Cargo weight
- D. Environmental conditions

Speed over ground is a vital piece of information that can be transmitted from the Automatic Identification System (AIS) regarding a vessel's status. AIS is designed to enhance maritime safety by providing real-time data about vessels' positions and movements to other ships and shore stations. Speed over ground is essential for navigation and situational awareness, as it helps in assessing the vessel's progress over the seabed, which can be different from the speed through the water due to factors like currents or wind. The other options, such as weather forecasts, cargo weight, and environmental conditions, are not transmitted through AIS. While weather forecasts are crucial for maritime operations, they require separate services (like meteorological reports) and are not part of the AIS functionality. Cargo weight specifics need to be recorded and managed separately and are not included in AIS data. Likewise, while environmental conditions are important for navigation and safety, they are typically monitored and communicated through different systems rather than through AIS.

**9. How should the potential shift of floating ATONs be interpreted on ECDIS?**

- A. Buoy positions may be shifted**
- B. All charts are up-to-date**
- C. ATONs do not shift**
- D. The ECDIS data is inaccurate**

The potential shift of floating Aids to Navigation (ATONs) on ECDIS should be interpreted as a consideration that buoy positions may be shifted. This acknowledgment is critical for safe navigation, as floating ATONs, such as buoys, can change their positions due to factors like currents, tides, and weather conditions, or due to any movement of the floating devices themselves. In the context of ECDIS, it is essential for navigators to be aware that just because a chart may depict a specific position for an ATON, this position is subject to variation. Therefore, it's vital to continuously verify the position of floating ATONs for accurate navigation, as relying solely on static positions without considering possible shifts can lead to navigational hazards. This understanding highlights the need for navigators to maintain vigilance and monitor environmental conditions that may affect floating ATON positions. Consequently, safe navigation practices dictate that positions shown on the ECDIS should be regularly checked against real-time data or physical observations, especially in waters where shifting is common.

**10. ENC's should refer to which geodetic datum for accurate positioning?**

- A. WGS 84**
- B. GDA 94**
- C. NAD 83**
- D. AGD 66**

The correct answer is WGS 84, which stands for the World Geodetic System of 1984. This geodetic datum is widely used for navigation and mapping purposes, particularly in electronic navigational systems like ECDIS. WGS 84 provides a global reference frame that is essential for accurate positioning, ensuring that coordinates are consistent across different systems and regions. This universal applicability makes WGS 84 the standard datum in the context of electronic charts, as it allows for effective integration of various types of spatial data and satellite navigation systems such as GPS. The other datums mentioned, while important in their specific regions or contexts, do not have the same level of global acceptance or recognition. GDA 94 is primarily used in Australia, NAD 83 is standard in North America, and AGD 66 was used in Australia prior to GDA 94. Each of these datums serves specific local requirements and does not provide the same comprehensive global reference as WGS 84, making it essential for international mariners to rely on WGS 84 for accurate navigation and positioning.

## Next Steps

**Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.**

**As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.**

**If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at [hello@examzify.com](mailto:hello@examzify.com).**

**Or visit your dedicated course page for more study tools and resources:**

**<https://ecdis.examzify.com>**

**We wish you the very best on your exam journey. You've got this!**

SAMPLE