



Marine notice 07/2021  
Supersedes 02/2019 and 11/2016

## Responsible navigational practices

### Purpose

This marine notice draws attention to responsible navigational practices which masters and officers in charge of a navigational watch on ships operating in Australian waters should follow.

### Background

Some of the safety issues associated with groundings and collisions are related to inadequate passage planning, lack of situational awareness, and poor communications. These can be due to inadequate training, poor navigational practices, and a lack of supporting safety systems.

In addition to risks to the safety of crew and ship, there is the likelihood of harm to the marine environment. In extreme cases, this can be irreversible and detrimental to local communities. Environmental harm can result in significant clean-up costs, as well as irretrievable reputational loss.

### Responsible navigational practices

It is the responsibility of masters and operators to ensure the principles applying to the keeping of a safe watch—as detailed in *Standards of Training, Certification and Watchkeeping (STCW) Code*—are followed and identified in the ship's safety management system (SMS). These include:

- *Use of a variety of navigational aids to verify the ship's position at appropriate intervals considering the ships speed and proximity to navigational hazards.*
- *Verification of global navigation satellite system (GNSS) positional information by terrestrial means, such as visual bearings and/or by radar.*
- *Understanding the capabilities of the Electronic Chart Display and Information System (ECDIS) and its features, including:*
  - *Cross Track Limits*
  - *Over scaling Electronic Navigation Charts (ENCs)*
  - *Look ahead function*
  - *Safety contours and depth alarms*
- *Wherever possible, use radar overlay and parallel index techniques to monitor a ship's adherence to its planned track.*
- *Consideration of the guidelines for voyage planning, as adopted by the International Maritime Organization (IMO) Resolution A.893(21).*
- *Use of soundings, clearing bearings and transits as cross-checks for position fixes and course alteration points.*
- *Consideration of the categories of zones of confidence (CATZOC), which tell us horizontal and depth accuracy of the hydrographic data.*
- *Ensure the ship has the latest maritime safety information (MSI) for the area by configuring its Enhanced Group Call (EGC) receiver correctly.*

- *Operators, as well as watchkeepers, need to be aware of human factors principles, including fatigue management and bridge resource management techniques.*
- *Cooperation with any available vessel traffic service.*

## Bridge Resource Management

Bridge Resource Management (BRM) techniques, which include efficient watchkeeping arrangements and passage planning, are integral to responsible navigation practices. A clear understanding of the agreed passage plan and the establishment of a 'shared mental model' by the entire bridge team forms the basis of a safe voyage.

The STCW Code provides standards for the level of proficiency needed for the proper performance of functions on board ship.

To support safe navigation and minimise the potential for incidents, mariners should be familiar with the provisions of:

- *Marine Order 28 (Operations standards and procedures) 2015; and*
- Part A-VIII/2 (Watchkeeping arrangements and principles to be observed) of Chapter VIII of the Standards of Training, Certification and Watchkeeping (STCW) Code (Part A).

Effective BRM begins at the initial passage planning stage and includes the following considerations:

- Navigational and operational tasks and responsibilities should be clearly defined and delegated.
- Dangers that may be encountered at any stage of the voyage should be identified as early as possible.
- Where an ECDIS is used, the voyage plan should be validated by the route-checking function using applicable safety parameters; additionally, a visual check of the intended tracks using an appropriate scale for viewing should be done.
- Navigational, operational, and general safety priorities should be set and consistently reviewed in the context of the prevailing circumstances and conditions.
- Any amendment to the voyage plan while on passage should be thoroughly checked and approved by the master before implementation.
- Any changes made to the voyage plan are consistent with IMO guidelines and are clearly marked and recorded in the ship's official documents.
- Masters and officers in charge of a navigational watch, who regularly undertake the same voyage / route, should be mindful of the risks associated with human performance limitations (such as the effects of fatigue and workload on vigilance and monitoring tasks) and familiarity, to retain resilience.
- Masters and officers in charge of a navigational watch are responsible for the safe navigation of their ships at all times, including when a pilot is on board. The master should ensure the bridge remains adequately manned and under the responsibility of a certificated officer in charge of a navigational watch.

## AMSA Bridge Resource Management Advisory Note

The AMSA Bridge Resource Management Advisory Note advises pilots on techniques to enhance safety and reduce the risk of single person errors when conducting coastal pilotage operations.

It provides advice on BRM and passage planning, BRM principles in the STCW code, human performance limitations and crew responsibilities, and single person error risk reduction.

AMSA recommends masters and officers familiarise themselves with the Bridge Resource Management Advisory Note on the AMSA website.

### **Mariner's Handbook for Australian Waters (AHP20)**

The Mariner's Handbook for Australian Waters (AHP20) contains information required by international and Australian commercial vessels operating in Australian waters.

The handbook provides information that enables vessels to operate safely and in accordance with relevant maritime rules and regulations for operations in Australian water. It also provides advice on emergency contacts and where additional information may be found to meet particular circumstances.

AMSA considers it necessary for all international and Australian commercial vessels operating in Australian waters to carry the Mariner's Handbook for Australian Waters.

### **Resources**

[AMSA Bridge Resource Management Advisory Note](#)

[Mariner's Handbook for Australian Waters \(AHP20\)](#)

[AMSA Safety Awareness Bulletin 14](#)

[AMSA Website - ECDIS](#)