Bridge Resource Management (BRM) and Expected Actions of Bridge Teams in Australian Pilotage Waters

Purpose
This Marine Notice reminds seafarers, shipowners/operators and pilots of the importance of well-planned Bridge Resource Management (BRM) techniques, efficient watchkeeping arrangements and passage planning requirements which enhance safety and reduce errors when navigating ships.

Bridge Resource Management (BRM) and the Passage Plan
The Australian community is sensitive to incidents that adversely affect the marine environment such as collisions or groundings in ports, harbours, or other waterways including the Great Barrier Reef, Torres Strait and other environmentally sensitive regions - particularly if such incidents result in pollution.

To support safe navigation and minimise the potential for such 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 due preparation of berth-to-berth operational matters, including the following considerations:
- Navigational and operational tasks responsibilities should be clearly defined and delegated.
- Dangers that may be encountered at any stage of each voyage should be identified as early as possible.
- Appropriate precautions and contingency arrangements necessary to manage identified risks should be implemented.
- Navigational, operational and general safety priorities should be set and constantly reviewed in the context of the prevailing circumstances and conditions.
- The vessel’s position, speed and heading with respect to other vessels and all navigation hazards, should be continuously monitored.
- The vessel’s actual position should be continuously monitored against the agreed passage plan.
- Deviation from the agreed passage plan or standard operating procedures should be noted and addressed immediately.
- Onboard electronic aids, systems and navigational equipment should only be used by appropriately trained personnel.
- Masters, bridge watch keeping officers and crew onboard vessels which 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, in order to retain resilience.
**Expectations in pilotage waters**

All vessels are required to prepare a berth to berth passage plan in accordance with:

- Part 2 (Voyage Planning) to Part A-VIII/2 of Chapter VIII of the STCW Code (Part A).
- IMO resolution A.893(21).
- SOLAS Chapter V (Regulation 34).

Early contact with a pilotage provider may assist with the preparation of the passage plan in Australian pilotage waters.

The agreed passage plan, its understanding and the establishment of a ‘shared mental model’ by the entire bridge team forms the basis of a safe voyage under pilotage conditions.

It is essential that the vessel closely follows the passage plan which was discussed and agreed with the pilot. It is equally important that every member of the bridge team understands the part they play in ensuring the safe and effective execution of the agreed passage plan.

The bridge team are expected to fully participate in the use of BRM techniques and support safe navigation by closely following the agreed passage plan while in Australian pilotage waters. BRM techniques should be consistent with the recommendations in Part 3 (Guidance on Watchkeeping at Sea) of section B-VIII/2 of Chapter VIII of the STCW Code (Part B).

**Training in the use of all navigation equipment**

The master and all bridge watch keepers must be fully trained and proficient in the use of all ship-specific navigation equipment aboard the vessel, including radars and any electronic navigation charting systems carried.

If onboard training is provided, this may only be adequate if all bridge navigation watch keepers have the opportunity to obtain complete competence in the use of the ships navigation equipment, as required by relevant sections of the STCW code, including paragraph 6 (On-board training) to section A-II/1 of Chapter II (Part A).

**Human performance**

Masters are reminded that they are not relieved of responsibility for the conduct and safe navigation of a vessel when the vessel is under pilotage, in accordance with Section 326(3) of the **Navigation Act 2012**.

Similarly, deck officers are reminded that under the master's general direction, the officers of the navigational watch are responsible for navigating the ship safely during their periods of duty, in accordance with paragraph 9 to Part 3 (Watchkeeping at Sea) of section A-VIII/2 of Chapter VIII of the STWC Code (Part A).

It is essential that the pilot, master and bridge team work together to ensure that errors are detected early and corrected before the ship is put into any danger.

The bridge team should remain alert at all times and actively follow the progress of the vessel while in pilotage waters. In the event that a deviation from the agreed plan (or a potential navigational error) is identified by a member of the bridge team, the team member should not hesitate to challenge the pilot in a timely manner and confirm if the pilot is aware of the deviation or error. Appropriate ‘challenge and response’ techniques are a very important aspect of effective BRM.

**Use of standard marine communication phrases**

All verbal communication used by every member of the bridge team should always be in accordance with the IMO ‘Standard Marine Communication Phrases’ (SMCP) as required by Table A-II/1 of the STCW code.

Closed-loop communications should always be used to eliminate any doubt or ambiguity.

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