



Advisory Note: 01/2018
Supersedes: 06/2015

UNDER KEEL CLEARANCE MANAGEMENT (UKCM) REGULATORY FRAMEWORK AND SYSTEM USAGE UPDATE

Purpose

This Pilot Advisory Notice updates coastal pilots and pilotage providers on:

- Details of Exemption 2018/5 to Marine Order 54 (Coastal pilotage) 2014;
- System usage;
- The positioning of the UKCM system as an Aid to Navigation;
- Key UKCM system functionality; and
- AMSA's approach to UKC regulation.

UPDATE

Marine Order 54 (Coastal pilotage) 2014 (MO54) requires AMSA-licensed coastal pilots to use the UKCM system to support the pilotage of vessels within a particular vessel draught range through Varzin Passage, Gannet Passage and the Prince of Wales Channel (POWC). In parallel, pilotage providers that assign pilots to conduct these transits are required to ensure the pilots use the UKCM system.

Assessment of transit data recorded since the UKCM system's introduction, along with data associated with targeted deep draught UKCM system trials, conducted since 2016, has identified that the previously established system usage limit may be safely adjusted under certain conditions. AMSA Operations Exemption 2018/5¹, issued on 28 September 2018, requires the UKCM system be used for transits through Varzin Passage, Gannet Passage and the POWC for vessels with draughts of 9 m and above.

For vessels with draughts between 8 m and 9 m, where any speed is greater than the maximum default planned speed for a particular location, coastal pilots are encouraged to continue to generate a UKCM system transit plan. This is in order to satisfy the coastal pilot that the transit can be safely executed taking into account the environmental factors for the planned time of transit.

¹ AMSA will consider implementing the effect of Exemption 2018/5 when AMSA next reviews MO54.

SYSTEM USAGE

Pilots are reminded that use of the UKCM system includes:

- ensuring a Transit Plan is activated for the correct vessel before entering the UKC corridor, and
- ensuring the minimum under keel clearance (UKC) requirements, as specified in MO54, are managed whilst transiting the areas mentioned above.

UKCM SYSTEM AS AN AID TO NAVIGATION

The UKCM system is considered to be an Aid to Navigation (AtoN) which supports safe navigation practices. As with all AtoN, use of the UKCM system should be seen as one of many means to ensure spatial awareness and assist with on-board decision making. Use of the UKCM system should not limit the use of other AtoN that may be available to the mariner.

The following points should be borne in mind by all UKCM system users:

- The Voyage Planning Service provides a broad indication of suitable tidal windows of opportunity for potential transits;
- The Voyage Planning Service supports long-term planning and does not incorporate any short-term or real-time met-ocean data;
- The Transit Planning Service should be used to generate transit plans for pilotage purposes. Transit plans can be generated up to five days before the planned transit, and can be made 'active' at any point within this five-day window;
- Active transit plans are continuously updated to incorporate real-time met-ocean data;
- Making the intended transit plan active means the Transit Monitoring facility will commence once the vessel has been detected in the UKCM system monitoring area.
- Even if a transit plan is not activated sooner, it must be activated before entering the UKCM system corridor (indicated by the pecked magenta polygon in Figure 1).
- The timing of a vessel's entry into the UKCM system corridor should be accurately reflected in the active transit plan. This may require a coastal pilot to update the transit plan on approach to the UKCM system corridor;
- The selection of a UKCM system Deep Route option ensures the UKCM system incorporates the deepest channel depths possible for transits of vessels with draughts that limit their route options; and
- To assist with data integrity across systems, coastal pilots are encouraged to verify that a vessel's AIS settings accurately reflect the vessel's actual deepest draught (as input into the UKCM system) before entering the UKCM system monitoring area.

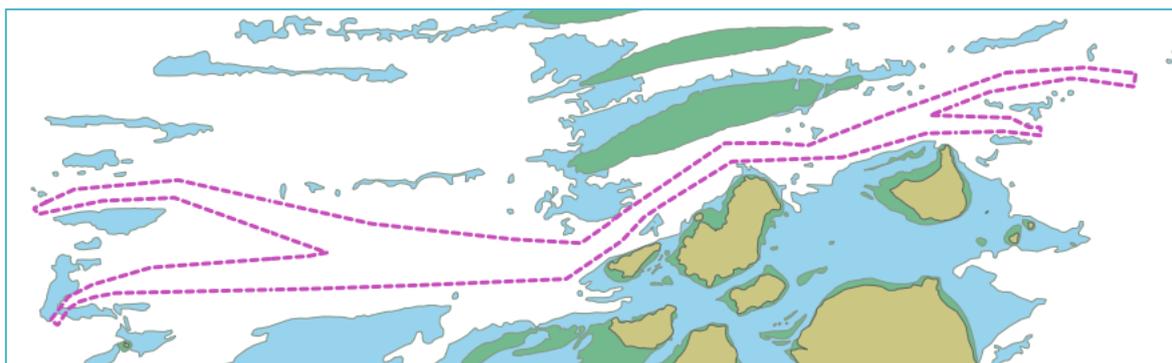


Figure 1 – UKCM system corridor

KEY UKCM SYSTEM FUNCTIONALITY

The chart overlay and UKC warning layer features of the UKCM system provide pilots with important information about the available water column within the UKCM monitoring area.

Chart overlay data is represented by red pixels in the individual transit monitoring display for vessels. These red pixels equate to areas where the UKCM system calculates the AMSA UKC limit cannot be satisfied, taking into account the current environmental conditions and the observed and planned vessel speed (Figure 2).

UKC warning layer data is represented by amber pixels in the individual transit monitoring display for vessels. These amber pixels equate to areas where the calculated UKC is between the AMSA UKC limit and 0.2 metres above the AMSA UKC limit. Again, the UKC warning layer display is based on the current environmental conditions and the observed and planned vessel speed.

Data for vessels with 'Active' transit plans are updated every 30 seconds, whilst in the UKC corridor, ensuring that near real-time information about current and predicted water column is provided throughout a vessel transit. Pixels in the chart overlay and UKC warning layer can be individually interrogated.

Coastal pilots are reminded that the named UKCM system waypoints are unique to the UKCM system and, whilst frequently located adjacent to the Queensland Coastal Passage Plan (QCPP) waypoints, should not be construed as being coincident with QCPP waypoints.

Whilst the QCPP provides recommended routes for transits of Torres Strait, coastal pilots should remain aware of the proximity of the UKCM system Deep Route boundary to the QCPP recommended track(s), particularly in the vicinity of Sunk Reefs in the Prince Of Wales Channel.

Coastal pilots of deep draught vessels using the UKCM system Deep Route option should, therefore, consider adjusting their planned track(s) to ensure the deep draught vessel remains wholly within the UKCM system Deep Route boundary at all times throughout the transit, if safe to do so.

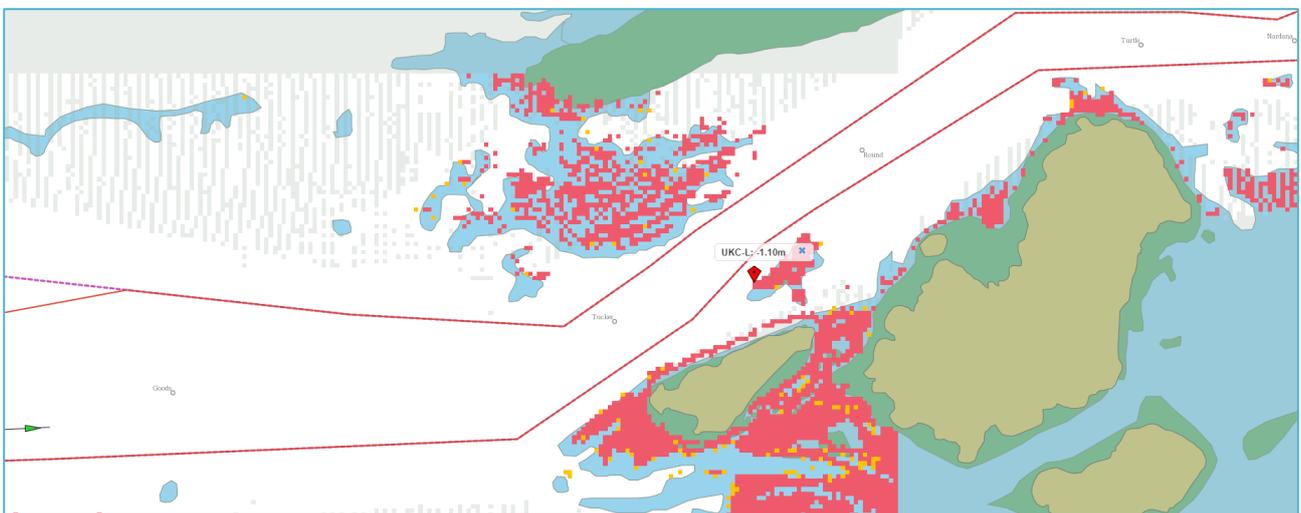


Figure 2 – UKCMS chart overlay feature

REGULATION

MO54 includes scope for potential regulatory action against coastal pilots and pilotage providers for breaches of AMSA's UKC requirements.

While UKCM system-calculated UKC values will be a relevant consideration in any potential proposed action, AMSA expects coastal pilots to exercise their professional judgment at all times. AMSA will consider all relevant aspects in forming a possible decision relating to an alleged breach.

This will ensure the combined elements of UKC (e.g. vessel speed, the location of the vessel within the channel), together with interactions with other vessels and any other relevant operational and navigational matters) are considered as a whole. This approach to regulation will consider the pilot's overall management of the safety of the vessel and the environment, using all available means, and in accordance with the provisions within MO54.

AMSA's Compliance and Enforcement Policy includes engagement and education as options for encouraging compliance. For example, where it is appropriate to do so, AMSA may consider using various means of post-transit analysis to inform and assist coastal pilots' understanding of a particular observed UKCM issue.

FURTHER INFORMATION:

Further information related to the UKCM system can be obtained from:

- www.amsa.gov.au/ukcm
- AMSA UKCM System website:
<https://ukcm.amsa.gov.au>

Please forward any queries about the information contained in this PAN to:

- Advisor – Coastal Pilotage (UKC)
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