**NIPWG 6-09.2**

## Paper for Consideration by NIPWG

## [Revisions to Mariners’ Routeing Guides (S-49)]

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| ***Submitted by:*** | United States (NGA) |
| ***Executive Summary:*** | Discussion of proposed revisions to the Mariners’ Routing Guides (S-49) |
| ***Related Documents:*** | NIPWG 5-08.6 Global Underkeel Clearance Management (UKCM) Systems  NIPWG 6-09.1 Proposed Definitions for Underkeel Clearance Management (UKCM) Systems  NIPWG Letter 5/2018 Standardization of Mariners’ Routeing Guides (S-49)  IHO Resolution 2/2007 Principles and Procedures for Making Changes to IHO Technical Standards and Specifications |
| ***Related Projects:*** | Marine Traffic Management (S-127)  Underkeel Clearance Management (UKCM) Systems (S-129) |

## Introduction / Background

The S-100 Working Group Underkeel Clearance Management Project Team (UKCMPT) requested NIPWG to include underkeel clearance and underkeel clearance management system information in the Marine Traffic Management (S-127) Test Data Set. NIPWG responded to this request and added the Jussland Underkeel Clearance Management System to the S-127 Test Data Set.

During the development work on the Jussland Underkeel Clearance Management System and NIPWG 5-08.6 it was noted no official definitions for underkeel clearance management systems existed. NIPWG and the UKCMPT developed definitions for Underkeel Clearance Management System, Static Underkeel Clearance Management System, and Dynamic Underkeel Clearance Management System. After approval at NIPWG6 the new definitions will be submitted to the Hydrographic Dictionary Working Group for eventual inclusion in the Hydrographic Dictionary (S-32).

The NIPWG Chair requested a determination of the effects, if any, of the new UKCM System definitions on the Mariners’ Routeing Guides (S-49).

## Analysis / Discussion

S-49 (Edition 2.0.0) was prepared in 2009 by the Chart Standardization and Paper Chart Working Group (CSPCWG), now known as Nautical Cartography Working Group (NCWG), and issued in 2010. This occurred prior to the implementation of the Underkeel Clearance Management System in the Torres Strait (Australia—2011) and the St. Lawrence Seaway Draft Information System (Canada—2012).

NIPWG is currently responsible for S-49 and investigated the following two questions for S-49:

1. Will the new UKCM System definitions have any effect in S-49?
2. Are there other items that need to be updated (ESSENTIAL (E), USEFUL (U), NOT APPROPRIATE (N), or other sections) in S-49?

**Effect of new definitions.—**Section E2.3 currently reads “Underkeel clearance criteria and specific advice to deep draught vessels (if not included in E2.1 or E2.2).” This section needs to be revised to reflect the existence of Dynamic UKCM Systems but should not name any specific UKCM System. It is proposed to revise Item Box No. E2.3 to read:

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| **No.** | **Item** | **Special comments** |
| E2.3 | Underkeel clearance criteria, including Underkeel Clearance Management Systems, and specific advice to deep draught vessels. | Cross-referenced to U6.1. Could include diagram to show predicted squat for large vessels, examples of calculations of ’Tidal Windows’, etc. |

**Other area of potential changes.—**NIPWG Letter 5-2018 was distributed to the group asking for input regarding potential changes to S-49 in the following areas:

1. Is the current information in S-49 in proper E/U/N Subject Matter Categories?
2. Is any current information in S-49 in E/U/N Subject Matter Categories appropriate for deletion?
3. What new E/U/N Subject Matter Categories could be added to S-49?
4. Are any modifications/changes/updates necessary for Section 1, 2, or 3?
5. How should Availability of Mariners’ Routeing Guides be depicted in Section 4 of S-49?

## Conclusions

No or minimal costs are associated with revising S-49. Changes to the individual Mariners’ Routeing Guides are made by the individual HOs during the normal update rotation of their Mariners’ Routeing Guides, via Notice to Mariners corrections, or through digital updating of electronic versions.

## Recommendations

Further discussion on the following items:

1. E4.3, E4.4, U6.6, and N8.2 (reach a consensus).
2. U6.7 and U6.8 (new proposals).
3. E2.3 (exact wording)
4. Section 4 (availability of Mariners' Routeing Guides) and format of this information.

Adopt the consensus items.

## Justification and Impacts

Identifyies new items for inclusion in the ESSENTIAL (E), USEFUL (U), and NOT APPROPRIATE (N) sections of the Subject Matter table.

All work would be done via correspondence and during normally-scheduled NIPWG meetings.

NIPWG is the primary working group for this project with additional input from NCWG.

Medium priority.

Revisions must be approved by Member States via the HSSC as discussed in paragraph 5.1 of IHO Resolution 2/2007. Tentative timeline:

1. 28-31 January 2019—Discussion of proposed S-49 revisions at NIPWG6.
2. 31 March 2019—Distribution of NIPWG Letter with S-49 Version 2.1.0 (draft) requesting final group comments.
3. 30 June 2019—Closing date for receipt of group comments on S-49 Version 2.1.0 (draft).
4. Mid March 2020—Latest submission time for papers for HSSC12.
5. Mid-May 2020 (projected)—Review and endorsement by HSSC12.
6. November 2020 (projected)—IHO Circular Letter issued to conduct the voting process by Member States.
7. January 2021 (projected)—Closing date for Member State approval/disapproval.

**.Notes.—**HSSC11 is meeting in May 2019 but there is insufficient time from the end of NIPWG6 to the deadline for submissions to HSSC11 to produce an adequate paper for submission to the HSSC.

## Action Required of NIPWG

The NIPWG is invited to:

a. note this paper.

b. prepare to discuss and adopt the recommendations listed above.

**APPENDIX**

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| **NEW ITEMS** | | |
| **Number** | **Item** | **Remarks** |
| N8.2 | Automatic Identification System (AIS) | Consensus to include. However, Japan has promulgated required AIS Destination Indicating Symbols for AIS-based vessel reporting in their MRGs (Japan includes in E2.2)  **Note.—**Only intended to affect AtoN-based AIS information (similar to N1.2). |
| E4.3 | Area to be Avoided (ATBA) | Two options:   1. Include, but only those close to shipping lanes. 2. Do not include. Already covered by E1.1.   **Note.—**Only intended for IMO-adopted ATBA.  Would this be more appropriately designated E3.3? |
| E4.4 | Vessel Traffic Service | Two options:   1. Include. A Vessel Traffic Service operates differently than a Ship Reporting System. 2. Do not include. Already covered by E4.1 |
| U6.6 | Seismic Activity | Only if specific to the area.  Include earthquakes, volcanoes, and tsunamis. |
| U6.7 | Magnetic Anomalies | Add as text for geographic region. Local variation based on ocean floor magnetism.  **Note.—**New suggestion. Not in original NIPWG Letter 5/2018. |
| U6.8 | Maritime Boundaries | Special comments such as EEZ, territorial seas, COLREGS, harbor limits, 3-mile limit, etc.  **Note.—**New suggestion. Not in original NIPWG Letter 5/2018. |
| **OTHER ITEMS** | | |
| E2.3 | Underkeel clearance criteria | See **Analysis/Discussion** section of main paper |
| Is the current information in S-49 in proper E/U/N Subject Matter Categories? | | Consensus is Yes. |
| Is any current information in S-49 in E/U/N Subject Matter Categories appropriate for deletion? | | Consensus is No. |
| Are any modifications/changes/updates necessary for Section 1, 2, or 3? | | Consensus is No. |
| Section 4—Availability of Mariners’ Routeing Guides | Three options:   1. No changes to format. 2. Only provide web link to individual HO catalogs. 3. Delete entirely.   **Note.—**No consensus. Even split between No. 1, No. 3, and no opinion. Need further discussion at NIPWG 6.  The updated S-49 is promulgated as a Revision (n.n.0/2.1.0), which would need Member State approval. If option 1 or 2 is adopted, any subsequent changes made in Revision 2.1.0 to the list of Mariners’ Routeing Guides or the HO’s URLs should be considered as amending or updating “cross references” and promulgated as a Clarification (n.n.n/2.1.n) as described in Paragraph 5.1 of IHO Resolution 2/2007, which only requires HSSC approval. | |