Paper for Consideration to NCWG

Traffic Separation Scheme in The Indonesia Archipelagic Sea Lane, and Recommended Direction of Traffic Flow Portrayal

Submitted by: Indonesia (Pushidrosal)

Executive Summary: This paper aims to discuss and consider the possibilities of

drawing archipelagic sea lanes axis in the TSS and to propose the depiction of two-way recommended direction of traffic flow

in the ENC as drawn on the paper chart.

Related Documents: Article 53 Para. 6 and Para. 11 UNCLOS 1982

IMO MSC.72 (69) Resolution

IMO Ship's Routing 2017 Edition (Part H, Para 7.5, Notes 1)

IMO COLREG.2/Circ.74 IMO SN.1/Circ.337

UOC for ENC 10.2.5 Recommended direction of traffic flow S-101 DCEG 2.4.12 Attributes referencing external files

Related Projects: ENCWG and S-100WG

Introduction / Background

Indonesia has proposed traffic separation schemes and other routeing measures in the Sunda Strait and Lombok Strait and and approved by the 6th NCSR Sub-committee in January 2019. Subsequently, those new routeing measures have been adopted by the IMO 101st session MSC IMO 10th June 2019 and will be come into force in the 1st July 2020. The traffic separation schemes adoption listed in document COLREG.2 / Circ.74 dated 14th June 2019 concerning new traffic separation schemes while routeing measures other than traffic separation schemes are listed in SN.1 / Circ.337 on the same date. Based on its adoption, Indonesia has published Notices to Mariners and a new edition of paper charts and ENCs.

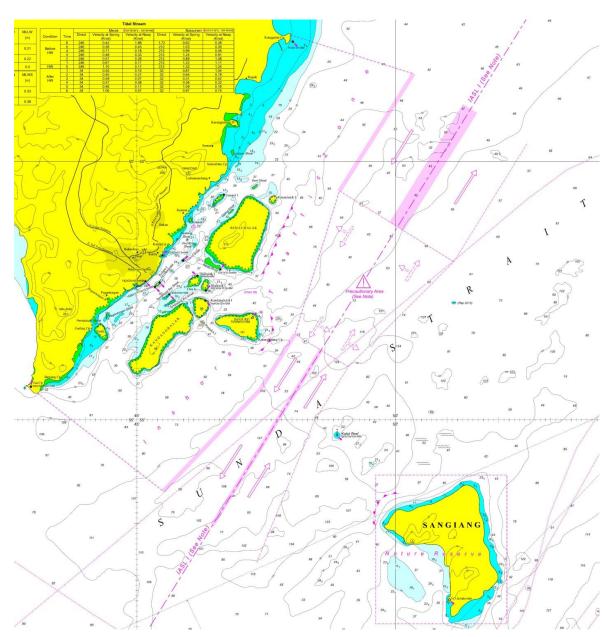
New TSS in the Sunda Strait and Lombok Strait is a unique condition due to it is located within the Indonesia Archipelagic Sea Lane (IASL). IASL has been adopted by IMO at MSC.72 (69) on 19th May 1998. Furthermore, UNCLOS 1982 described that an archipelagic States has rights to designate TSS within its ASL and requested all vessels to respect the adopted TSS therefore where a TSS exists in a narrow channel in such a sea lane (Sunda Strait and Lombok Strait), rules for the use of TSSs apply. The determination of the TSS has taken many aspects into account, including aspects of the customs of ships navigating the Sunda Strait and Lombok Strait. This paper will discuss how to draw TSS in IASL especially when there is a deviation of lines that can be possible to confuse mariners in reading charts who are navigating in the sea lane.

Analysis / Discussion

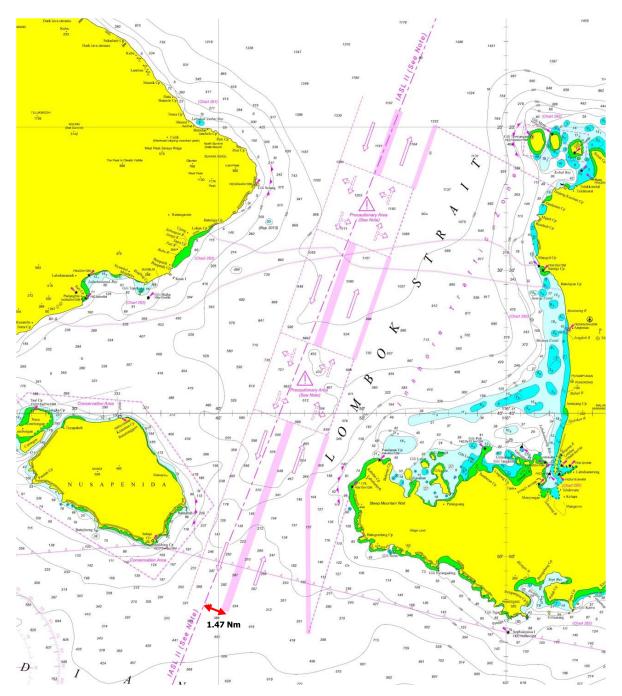
There may not be an issue for TSS in the Sunda Strait, as the TSS zones which are the axis of the TSS are drawn in one line with the IASL Axis. But it might be an issue in the Lombok Strait as the TSS zones are deviated from IASL axis by as much as 1.47 Nm. Even though, it is understandable that the axis line of the IASL may not necessarily form the center line of a routeing measure and that the axis line does not indicate the deepest water, any route or recommended track. Several possible drawing solutions, such as generalize or masking the IASL axis may be applied but it seems to eliminate information. Additionally, it is mentioned

in the IMO Ship's Routeing publication that the IASL axis line will be shown through other routeing measures without interruption. However, to reduce risk of mariner's confusion from IASL axis and TSS deviation, we propose NCWG to discuss and consider whether if there any depiction alternatives.

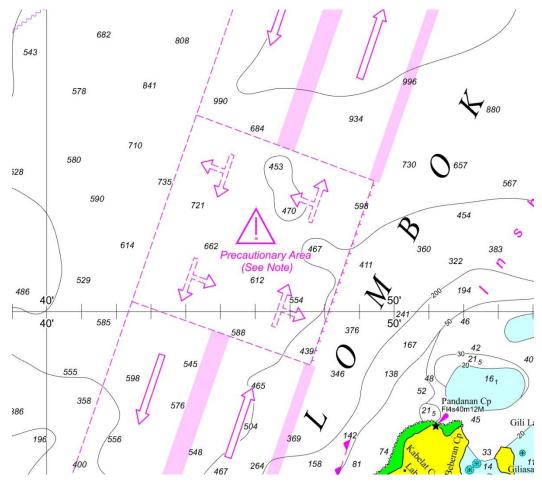
The second issue is the depiction of two-way recommended direction of traffic flow in the precautionary area in the Sunda Strait and the Lombok Strait. The depiction of two-way recommended direction of traffic flow on the paper chart will not be a problem. However, when encoding on the ENCs must be done by populating PICREP and TXTDSC on the attributes in M_NPUB as PICREP attributes are not available in PRCARE, RCTLPT or CTNARE. Furthermore, it could not be done in RCTLPT (recommended direction of traffic flow) as it only available for one direction only. This also could be considered as a proposal to ENCWG and S-101 DCEG to reduce of many additional(external) information usage due to the risk of ECDIS screen clutter.



Picture 1 IASL axis and TSS zone in Sunda Straits are drawn in one line (ID Chart No.170)



Picture 2 TSS zones are deviated from IASL axis by as much as $1.47 \, \text{Nm}$ in the Lombok Strait (ID Chart No. 291)



Picture 3 Two-way recommended direction of traffic flow in precautionary area in the Lombok Strait (ID Chart No. 291)

Conclusion

New TSS in the Sunda Strait and Lombok Strait is a unique condition due to it is located within the IASL. The deviation between the IASL axis and the TSS zones might be confusing to mariners navigating in the sea lanes. Therefore, we propose NCWG to discuss and consider whether if there are any depiction alternatives

Additionally, the encoding of two-way recommended direction of traffic flow on ENCs should be depicted as drawn on the paper chart.

Recommendations

NCWG to consider and discuss the possibilities of drawing the IASL axis in the TSS.

Propose to the ENCWG and S-100WG to accommodate the depiction of the two-way recommended direction of traffic flow in the ENC as drawn on the paper chart.

Action Required of NCWG

The NCWG is invited to:

Note this paper and discuss its recommendations;