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ANY OTHER BUSINESS

Call for establishment of a new traffic separation scheme south of Sri Lanka

Submitted by IWC, ICS, BIMCO, INTERTANKO, CLIA, INTERCARGO, IPTA, IFAW and WSC

SUMMARY

Executive summary:	This document outlines the environmental and safety problems surrounding the traffic separation scheme (TSS) south of Dondra Head, Sri Lanka. The document also lays out the history of outreach undertaken actions on this matter. The establishment of a new TSS would lead to significant environmental and safety benefits for the thousands of vessels transiting this major East-West trade lane, smaller fishing vessels, and a major reduction in the risk of ship strikes with endangered blue whales that feed in the waters surrounding the existing TSS. Recognizing the important safety issues and the specific action requested in paragraph 15, the co-sponsors plan to follow with an appropriate submission on this matter to MSC 108.
Strategic direction, if applicable:	4
Output:	4.1
Action to be taken:	Paragraph 15
Related documents:	IMO Ships' Routeing – Section IV/16; MEPC.1/Circ.674; MEPC 69/10/3 and MSC/Circ.1060

Introduction

1 The traffic separation scheme (TSS) located south of Dondra Head, Sri Lanka serves one of the largest marine trade lanes in the world. This trade corridor serves thousands of ships engaged in trade between Asia and Europe as well as important trade bound for destinations in the Indian Ocean and other locations connected to this major East-West marine traffic corridor. Monitoring data indicate that over 40,000 ships transit through these waters every year.

Nature of the problem

2 The existing TSS located south of Dondra Head (see *Ships' Routing, Section IV – Indian Ocean and adjacent waters,* IMO publication) was established in 1980 to provide a structured and safe traffic separation scheme for the significant volume of maritime traffic sailing in this major East-West corridor. However, the existing traffic lanes lie over a major upwelling area over the southern shelf of Sri Lanka. These specific waters and the enhanced biological productivity associated with the upwelling serve as a major feeding ground for a broad variety of marine species, including a substantial proportion of the northern Indian Ocean population of endangered blue whales that are known to be present in these waters year-round.[1] Blue whales off Sri Lanka were first recorded in the early 1980s and so this important blue whale habitat was not considered during the planning and establishment of the TSS.

3 The fact that the TSS overlies this major marine feeding zone has led to three problems that present significant environmental and safety issues. The three problems are briefly laid-out in the following discussion (paragraphs 4 to 8).

Collisions with whales (ship strikes)

4 The unfortunate overlay of the existing TSS with a major marine feeding ground for an important population of blue whales has long been recognized as one of the most significant areas in the world where the risk of ship strikes is very high. This is a function of one of the busiest traffic separation schemes in the world coinciding with a major marine feeding area. The area is identified as a high-risk area where mitigation actions are required in the Strategic Plan on Ship Strikes of the International Whaling Commission (IWC). The issue has also been the subject of several research studies conducted by scientists in Sri Lanka in collaboration with other international experts. Some of these studies assess the risk of ship strikes within the existing TSS and also for alternative routes further offshore. For example, Priyadarshana et al. (2016)[2] estimate a 95% reduction in risk if shipping is routed 15nm further south. The Scientific Committee of the IWC has recommended that the available data would support a proposal to IMO to establish a new TSS roughly 15nm south of the existing TSS.[3] The relative risk of ship strikes in the current TSS continues to rise as the volume of shipping traffic grows over time.

The risk of collision with small fishing vessels and other craft

5 The exceptional marine productivity of the waters under the existing TSS attracts a broad array of marine species including a diverse and abundant fishing stock. For this reason, hundreds of relatively small fishing vessels fish the waters underlying the TSS. This leads to a very unfortunate situation where tens of small fishing vessels are present throughout the day and night, operating in extremely close proximity to the traffic lanes. In addition, these fishing vessels by necessity transit across the traffic lanes as they position and re-position themselves to harvest in these waters. The nature of the risk is especially obvious at night when ship masters describe the unnerving sight of numerous small moving lights (from the small fishing vessels) moving in close proximity and across the shipping lanes. It is abundantly clear to any ship's captain that should any of these fishing vessels stray into the shipping lanes, or experience an engine failure when crossing the TSS, the ability of a large ship to change course or otherwise avoid a collision is extremely limited.

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1 de Vos, A., Pattiaratchi, C., Wijeratne, E.M.S., 2013. Surface circulation and upwelling patterns around Sri Lanka. Biogeosci. Discuss. 10, 14953–14998.

2 Priyadarshana, T., Randage, S.M., Alling, A., Calderan, S., Gordon, J., Leaper, R., Porter, L. 2016. Distribution patterns of blue whale (Balaenoptera musculus) and shipping off southern Sri Lanka. Regional Studies in Marine Science 3:181-188, http://dx.doi.org/10.1016/j.rsma.2015.08.002

3 International Whaling Commission (2017). Report of the Scientific Committee. Journal of Cetacean Research and Management (Supplement) 18: 1-109.

6 The risk of collision is not limited to smaller fishing vessels, but also includes notable risks to numerous whale watching boats that navigate in these waters, including operations that bring small whale watching vessels in close proximity to large trans-oceanic ships sailing through the current TSS. Both whale watching and fishing operations are concentrated in the waters surrounding the existing TSS. As seen in figure 1, transiting some 15nm south of the existing TSS greatly reduces the relevant risks.

The movement of ships transiting south of the existing TSS

7 The risks described above have resulted in a very large number of ships choosing to sail south of the existing TSS. Numerous masters and carriers have elected to sail south in light of the congestion, risk of accidents and well-known risk of ship strikes in the existing TSS. This is documented in AIS plots (see figure 1) that show 33% of ships transiting this area are now choosing to sail south to avoid the risks incumbent with use of the existing TSS south of Dondra Head. The number and percentage of ships sailing south is growing significantly (from around 20% in 2013) as a number of the world's largest carriers and individual masters are choosing to sail roughly 15 nm south of the existing TSS due to the aforementioned risks. Figure 1 depicts recent AIS data that reflects the significant volume of marine traffic now sailing south of the existing TSS and the East-West pattern of this traffic.

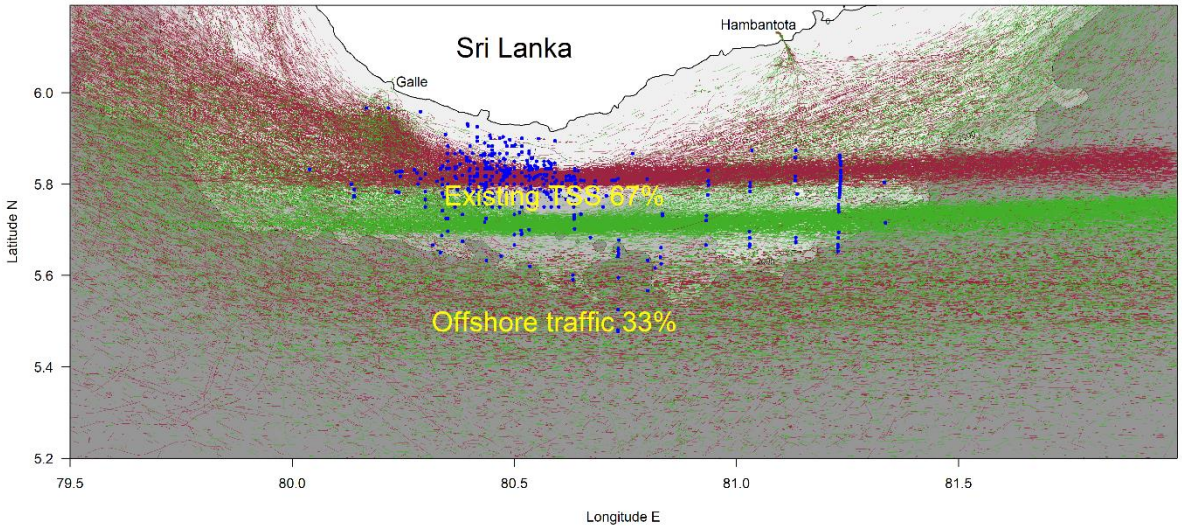

Figure 1: AIS data from October 2022 to January 2023. Red lines indicate westbound traffic and green lines indicate eastbound traffic. Blue dots indicate sightings of blue whales from surveys and whale watching.

8 The significant and growing maritime traffic sailing south of the TSS is doing so to avoid known risks, but this growing volume of traffic is also forced to sail without the explicit navigational safety benefits of a new IMO approved traffic separation scheme that needs to be created to avoid the specific problems and risks identified in the existing TSS. This results in two parallel risks that the co-sponsors believe are unnecessary and need to be resolved. The first set of risks are those present in the current TSS (see above discussion). The second consequential risk arises with the fact that a very large volume of ships now transit south of Sri Lanka without the navigational benefits of a new TSS whose coordinates fully avoid the substantial risks articulated in the preceding paragraphs.

A brief history of outreach with Sri Lanka

9 The problems and risks associated with the current TSS south of Dondra Head have been the subject of discussions with Sri Lanka over the last decade. Table 1 outlines an abbreviated timeline of several outreach efforts with the Government of Sri Lanka to address the situation and to establish a new TSS roughly 15 nm south of the current TSS.

Table 1: Timeline of IMO, IWC, industry and E-NGO outreach regarding the Sri Lanka TSS

Date	Outreach regarding the TSS south of Dondra Head
Sept 2011	IMO/IWC briefing concerning blue whales and ship strikes in the TSS
Jun/Oct 2013	IWC letter to the High Commission of Sri Lanka in London
Mar 2014	IWC letter to Dr. Ratnayake, Sri Lanka
Oct 2014	Meeting in Colombo between IWC and Sri Lankan officials
Jul 2015	WSC writes to Sri Lankan Director of Merchant Shipping
Nov 2015	WSC meets in Colombo with senior officials of the Sri Lankan Government to discuss the need for a new TSS
Feb 2016	Meeting between IWC and Sri Lanka Minister of Sustainable Development
Apr 2017	BIMCO, CLIA, ICS, INTERCARGO, INTERTANKO, IPTA and WSC write to the President and Prime Minister of Sri Lanka requesting that Sri Lanka relocate the existing TSS roughly 15 nm south of the existing TSS
Dec 2018	IMO and Sri Lanka organize national stakeholder consultation to discuss environmental and safety risks associated with the current TSS
Nov 2019	IWC meets with Deputy Commissioner Pathirana in London
Oct 2021	BIMCO, CLIA, ICS, INTERCARGO, INTERTANKO, IPTA and WSC again write the President, Prime Minister and Parliament of Sri Lanka requesting that Sri Lanka relocate the existing TSS roughly 15 nm south of the existing TSS
Oct 2021	IFAW, the Great Whale Conservancy and OceanCare reach out to Sri Lankan officials emphasizing the benefits to be gained by establishing a new TSS 15nm to the south.
Nov 2021	IWC letter to Sri Lankan High Commission in London
Feb/Mar 2022	IWC letter to senior Sri Lankan officials
Mar 2022	WSC writes to the President and other senior Sri Lankan officials emphasizing the value of creating a new TSS and inviting Sri Lanka to discuss the matter

10 As reflected in table 1, there have been several actions taken over the last decade to reach out to Sri Lanka to create a new TSS roughly 15nm south of the existing TSS, including offers to provide any technical assistance needed to move forward with the establishment of a new TSS. At present, no action has been taken on the matter. The co-sponsors would very much welcome the support and engagement of Sri Lanka and other IMO Member States on this matter, and to work together in a coordinated effort to establish a new TSS.

The benefits of creating a new TSS

11 The benefits to be realized by creating a new TSS roughly 15 nm south of the existing TSS are significant and can be broken into two categories – namely, safety/navigational benefits and environmental benefits. The benefits are briefly outlined below:

Safety related benefits:

.1 The risk of collision between small fishing craft operating in and around the productive waters of the existing TSS and large ocean-going ships transiting through the existing traffic lanes would be dramatically reduced.

.2 The risk of collision or swamping of small whale watching vessels operating in close proximity to the existing TSS would be effectively eliminated.

.3 The navigational risks inherent to a large portion of maritime traffic sailing south of the existing TSS, but without the navigational safety benefits of a new TSS would be effectively addressed.

Environmental benefits:

.1 The risk of ship strikes with blue whales that feed in the waters surrounding the existing TSS would be significantly reduced and largely eliminated because blue whale feeding activity (and feeding grounds important to other marine species) lie within the existing TSS.

.2 By increasing the distance of the TSS from Dondra Head by roughly 15 nautical miles, this provides a larger margin for response operations in the event of a maritime accident, lowering the risk of pollution in the productive and sensitive marine waters that lie north and along the Sri Lankan coast.

.3 Expected reduction of underwater radiated noise (URN) at a major marine feeding ground.

.4 Air quality benefits can be expected as less emissions from international shipping would reach Sri Lanka due to the increased distance from shore.

Creation of voluntary traffic lanes by the International Maritime Industry

12 Recognizing that the existing TSS south of Dondra Head presents significant safety and environmental risks the above industry co-sponsors of this document are presently identifying voluntary industry traffic lanes roughly 15 nm south of the existing TSS. The lanes are being designated to incorporate all known considerations to facilitate the safe movement of transiting ships and to effectively eliminate the risk of ship strikes between large commercial ships and endangered blue whales known to feed in the waters within and adjacent to the existing TSS. This proactive action will also significantly reduce the risk of collisions with the fleet of small fishing vessels and whale watching boats operating in and around the existing TSS.

13 The designation of voluntary industry traffic lanes is also considered a necessity to promote greater navigational safety in the waters south of the existing TSS. As reported in paragraphs 7 and 8 of this document and illustrated in figure 1, roughly 33% of the significant East-West maritime traffic in this major international trade lane is now sailing south due to the environmental and safety risks identified in this document.

14 In the judgement of the co-sponsors, the risk of collisions with whales, small fishing vessels and whale watching boats in the existing TSS is wholly unnecessary and development of the voluntary traffic lanes is a matter undertaken by the industry to avoid and mitigate the significant safety and environmental risks we see today in the existing TSS. While this voluntary action is being taken to address these risks, the co-sponsors are of the view that these risks would be most effectively addressed by establishing a new TSS outside Sri Lankan territorial waters roughly 15 nm south of the existing TSS that was first established in 1980.

Action requested of the Committee

15 The Committee is invited to consider the information provided in the document, in particular, the importance of the establishment of a new TSS south of Sri Lanka to address the current environmental and safety concerns and to invite the Secretary General to consider providing any necessary technical cooperation to facilitate the establishment of a new TSS to accommodate the significant East-West marine traffic sailing in these waters, to consider establishing the new TSS roughly 15nm south of the existing TSS through a coordinated process, and decide as deemed appropriate.