



Norad

9th Cooperative Forum
Yogyakarta, 26 - 27 September 2016

PROGRESS UPDATE
INDONESIA

Content

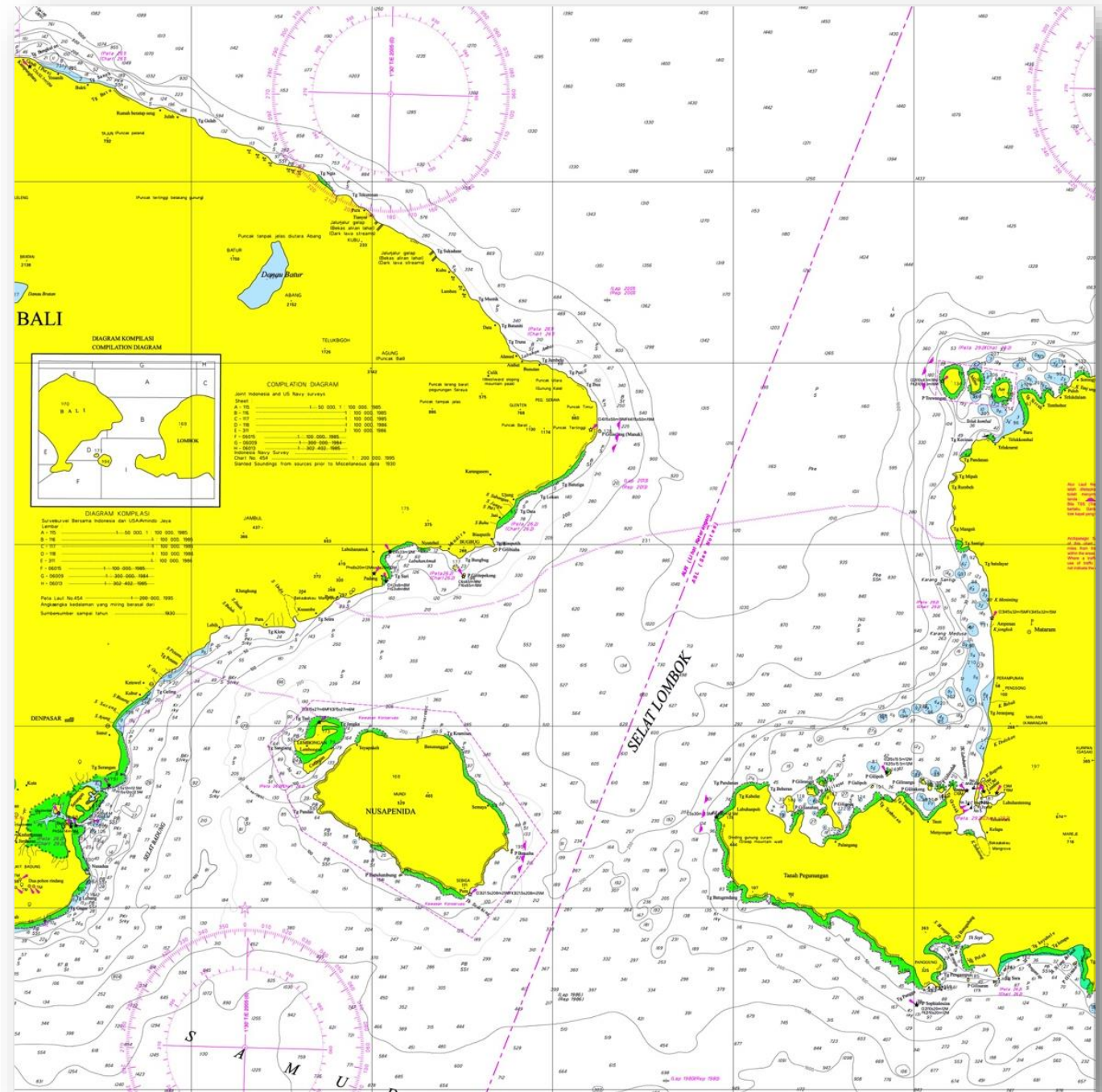


Description of Areas

1. Nusapenida Island is located in south east of Bali Island / western of Indonesia Archipelagic Sea Lane II (APL) at Lombok Strait while Gili Islands is located in north of Lombok Island / eastern side of ASL II ;
2. Nusapenida Island designated as Marine Conservation Area in southeast of Bali Island which has rich of bio diversity, where around of 149,05 Ha coral reef are exist and more than 296 kind of reef become part of the global coral triangle. This area has 576 fish species, which five species are categorize as new found species;
3. Gili Islands are Marine Tourism Park that consist of three islands: Gili Ayer Island, Gili Meno Island and Gili Trawangan Island. Gili Islands also has many type of coral reef which constitute as *fringing reef* with potential wide spread of coral reef covered for more than 101,27 ha in Gili Trawangan; 58,14 ha in Gili Meno, and 76,84 ha in Gili Ayer.



- Indonesia Archipelagic Sea Lanes II;
- Conservation Area on Gili Gili Island and Nusa Penida Island.

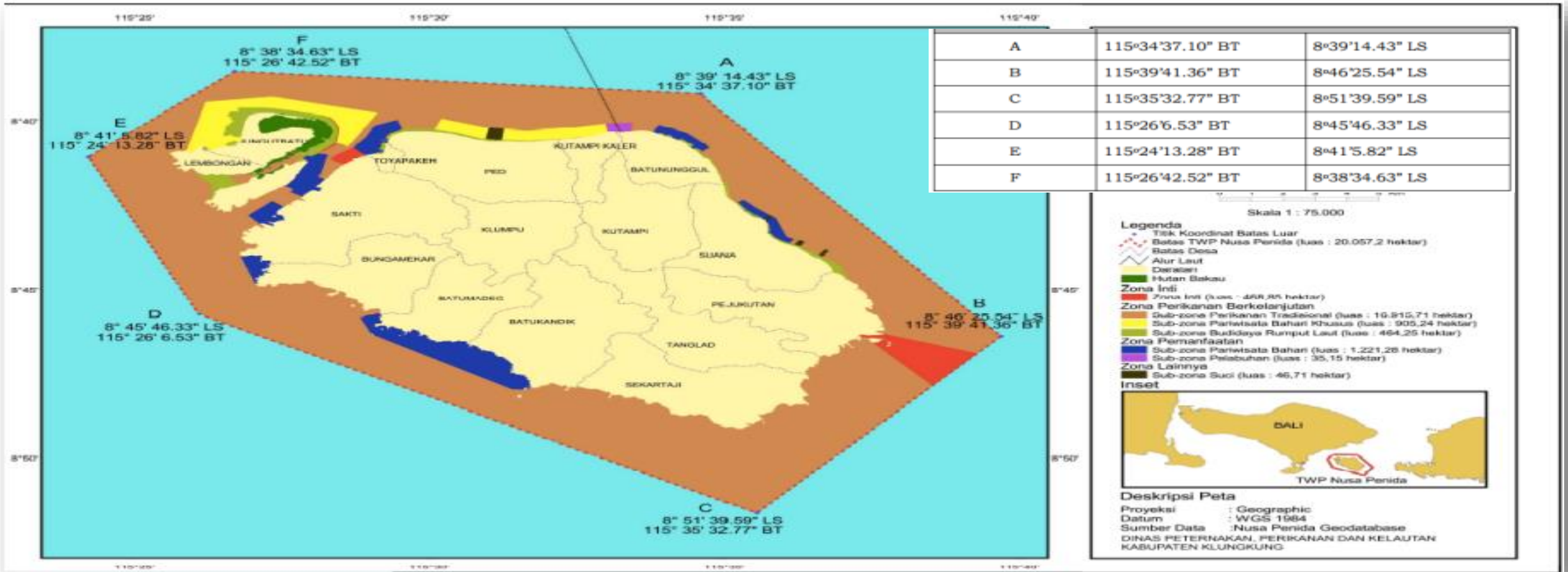


Key Environmental Attributes

Nusapenida Island

- *Designated as Conservation Area based on the Decision of the Indonesian Minister for Ocean Affairs and Fisheries No. 24/Kepmen-KP/2014.*
- Nusapenida Marine Tourism Park are saving a lot of potential coral reef, mangrove, seagrass, and almost of all important fisheries resources including sea mammals like whale and dolphin. Beside that, there are two kind of turtles: Green Turtle and Hawksbill Turtle. This area is also become cleaning station Mola-Mola Fish (Sun Fish).

Nusapenida Conservation Area

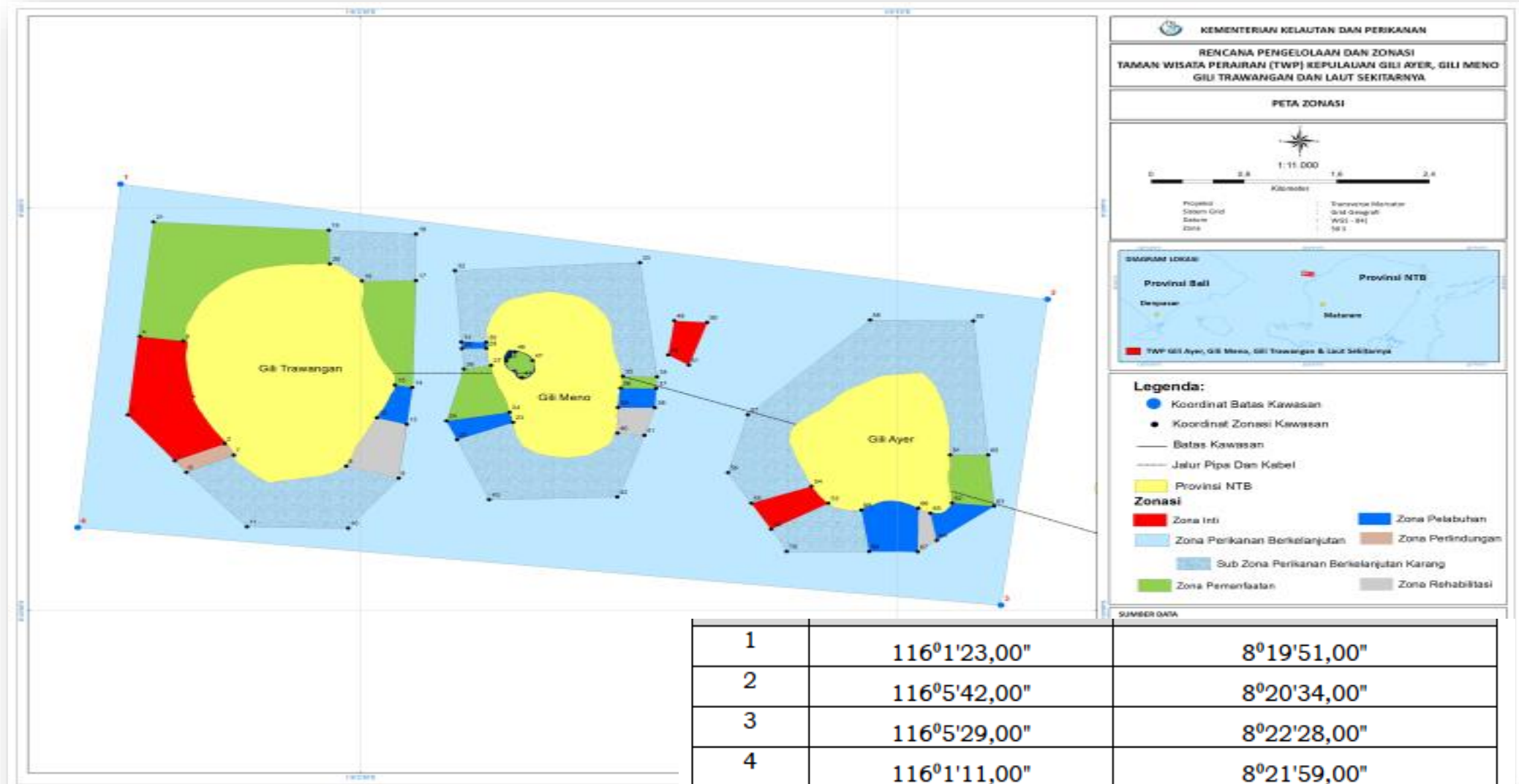


Key Environmental Attributes

Gili Islands

- *Designated as Conservation Area based on the Decision of the Indonesian Minister for Ocean Affairs and Fisheries No. 57/Kepmen-KP/2014.*
- Gili Ayer, Gili Meno, dan Gili Trawangan surrounded by coral reef ecosystem with consist of around 511 kinds of fish (accordance to Allen dan Werner Calculation Formula – 2002).

Gili Conservation



Threat from international shipping (1)

- The Strait of Lombok is the narrowest strait at the Archipelagic Sea Lane (ASL) II of Indonesia
- Oil spill incident from northbound fully loaded tanker could be very disastrous to the marine environment and socio-economic around the Lombok Strait.

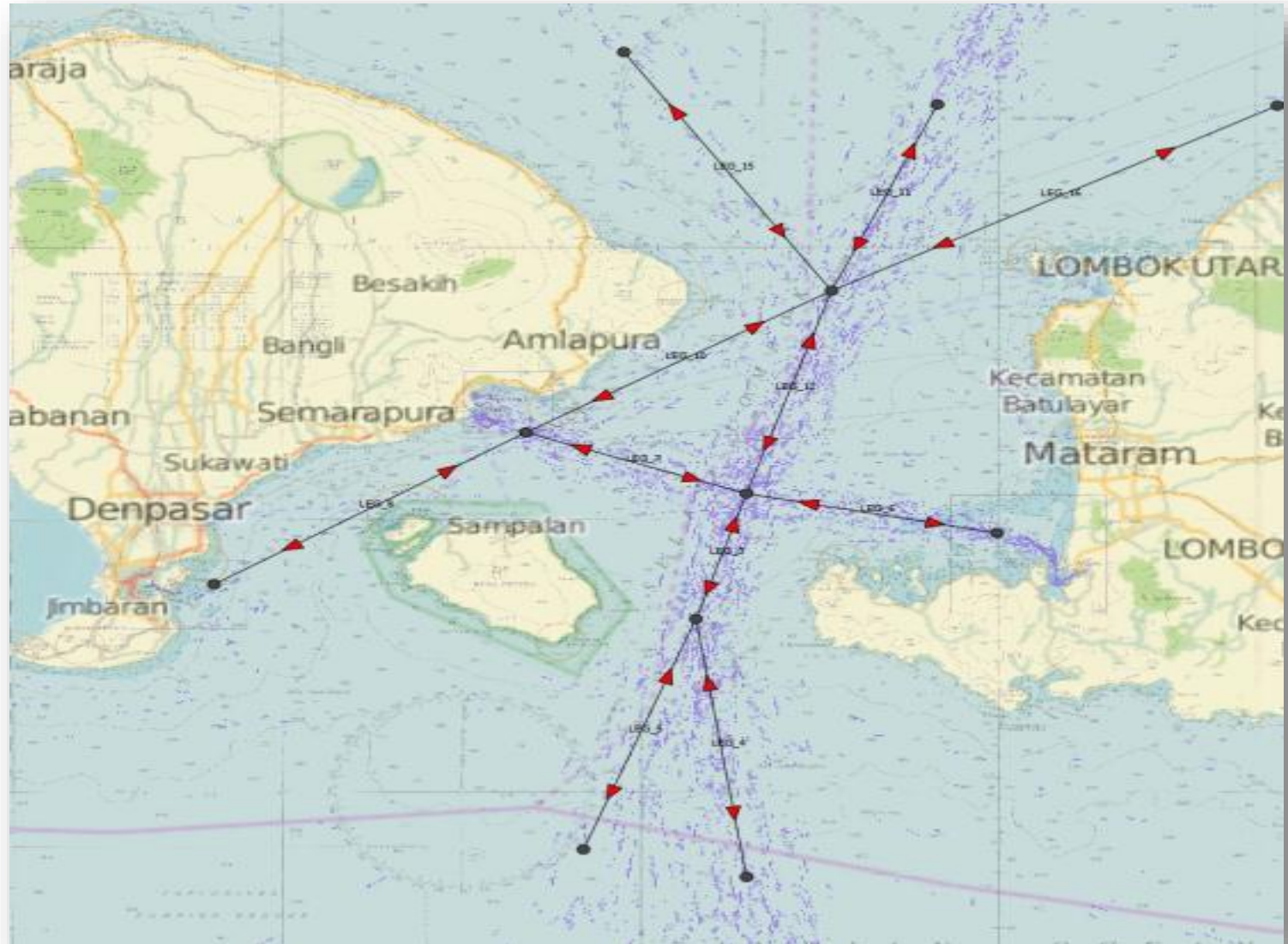
Type of Vessel	January 2016	February 2016	March 2016	April 2016	May 2016 (as per 3 rd of May 2016)	TOTAL
Passenger Ship	747	746	638	676	63	2870
Cargo	710	694	704	730	81	2919
Tanker	126	122	136	176	20	580
Others	23	27	29	22	2	103
TOTAL	1606	1589	1507	1604	166	6472

Statistics:

6,472/124 days :**52 vessels/day**

Threat from international shipping (2)

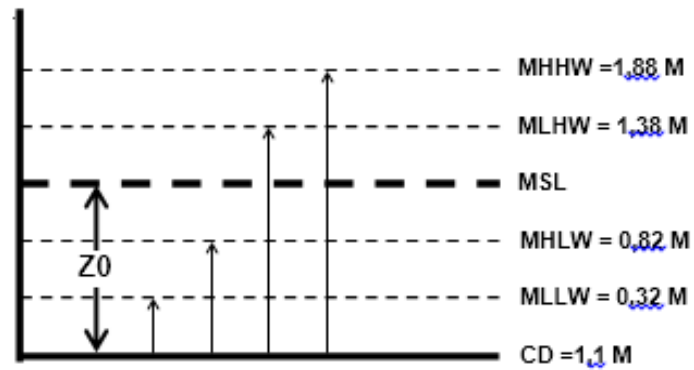
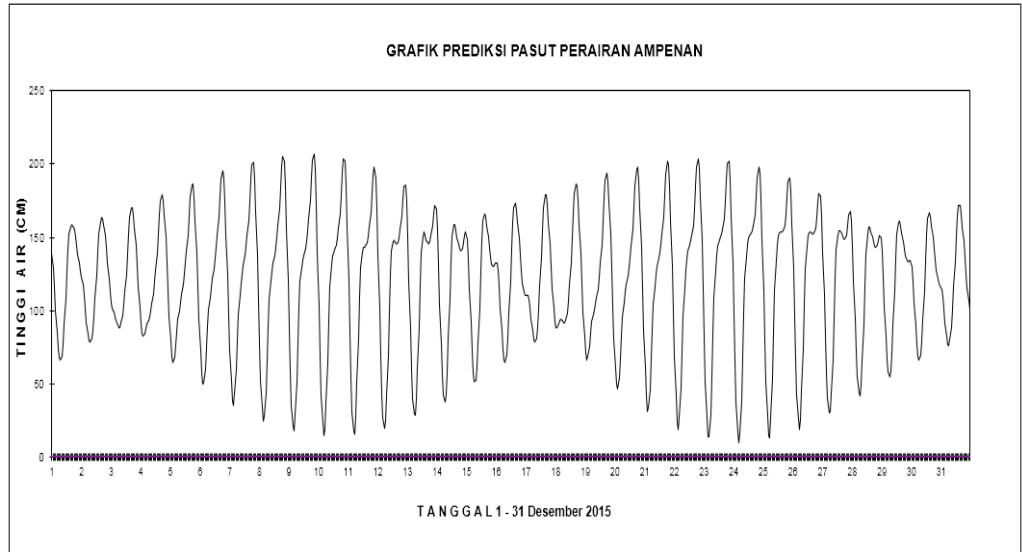
- Some marine accidents occurred in 2011 to 2016 and mostly caused by grounding and collision of passenger ship;
- This threat are potentially increase at crossing area between domestic passenger shipping lane and passing vessels in some areas of this Archipelagic Sea Lane II.



Marine Casualties Data

Years	Type of Ship	Type of Accident	Location
2011	Passanger	Grounded	Gilimanuk
	Passanger	Grounded	Padangbai
	Passanger	Sinking	Nusapenida
2012	Passanger	Grounded	Padangbai
	Passanger	Grounded	Gilimanuk
	Passanger	Grounded	Padangbai
	Passanger and Cargo	Collusion	Gilimanuk
2013	Cargo	Grounded	Lembar
	Cargo	Grounded	Gilimanuk
	Passanger	Grounded	Padangbai
	Cargo	Grounded	Gilimanuk
2014	Passanger	Sinking	Lombok
	Cargo	Grounded	Gilimanuk
2015	Other Cargo	Grounded	Benoa
2016	Passanger	Grounded	Lombok

Current And Tide Data



Tide

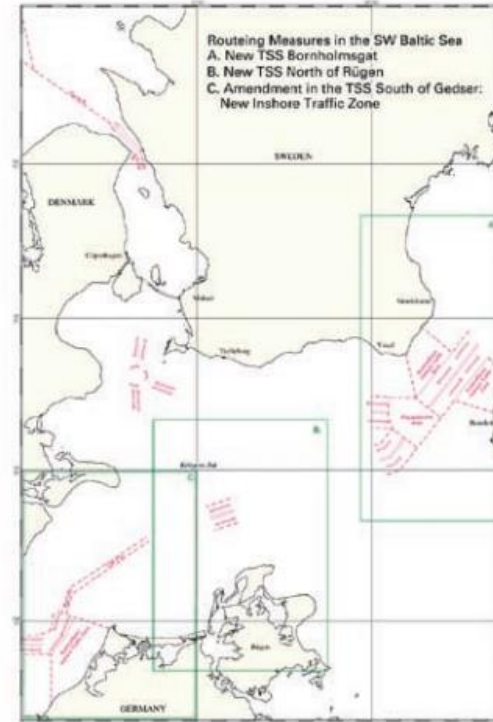
Source : Dishidros TNI AL

No	MONTH	VELOCITY (KNOT)	DIRECTION
1	JAN	0.9	NE
2	FEB	0.6	SE
3	MAR	0.5	S
4	APR	0.8	N
5	MAY	1.1	SW
6	JUN	0.8	SW
7	JUL	0.5	SE
8	AUG	0.3	SW
9	SEP	0.5	S
10	OCT	0.6	SW
11	NOV	1.4	E
12	DEC	0.8	NE

Current

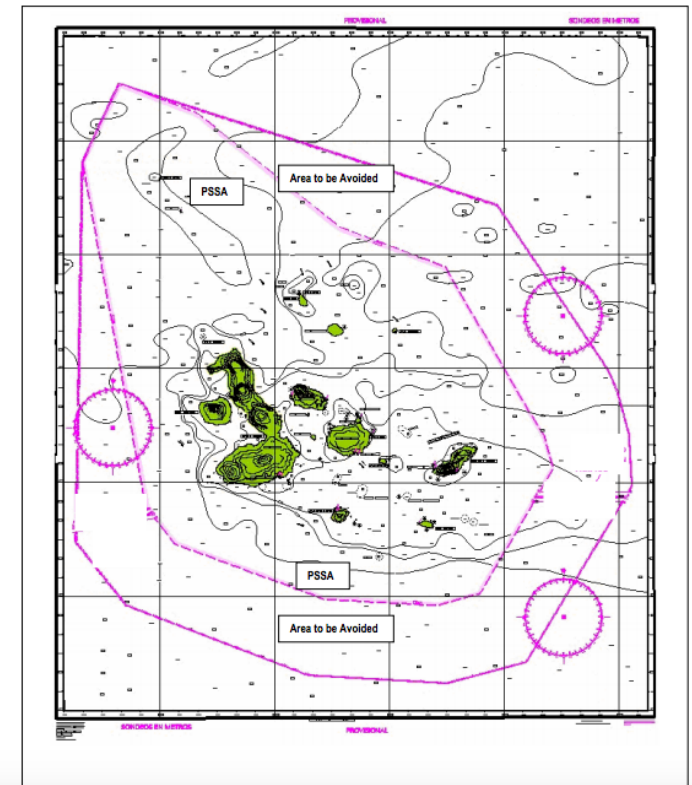
Associated Protective Measure/s

- The proposed APMs
 - To designate Traffic Separation Scheme;
 - To designate mandatory Ship Reporting System.

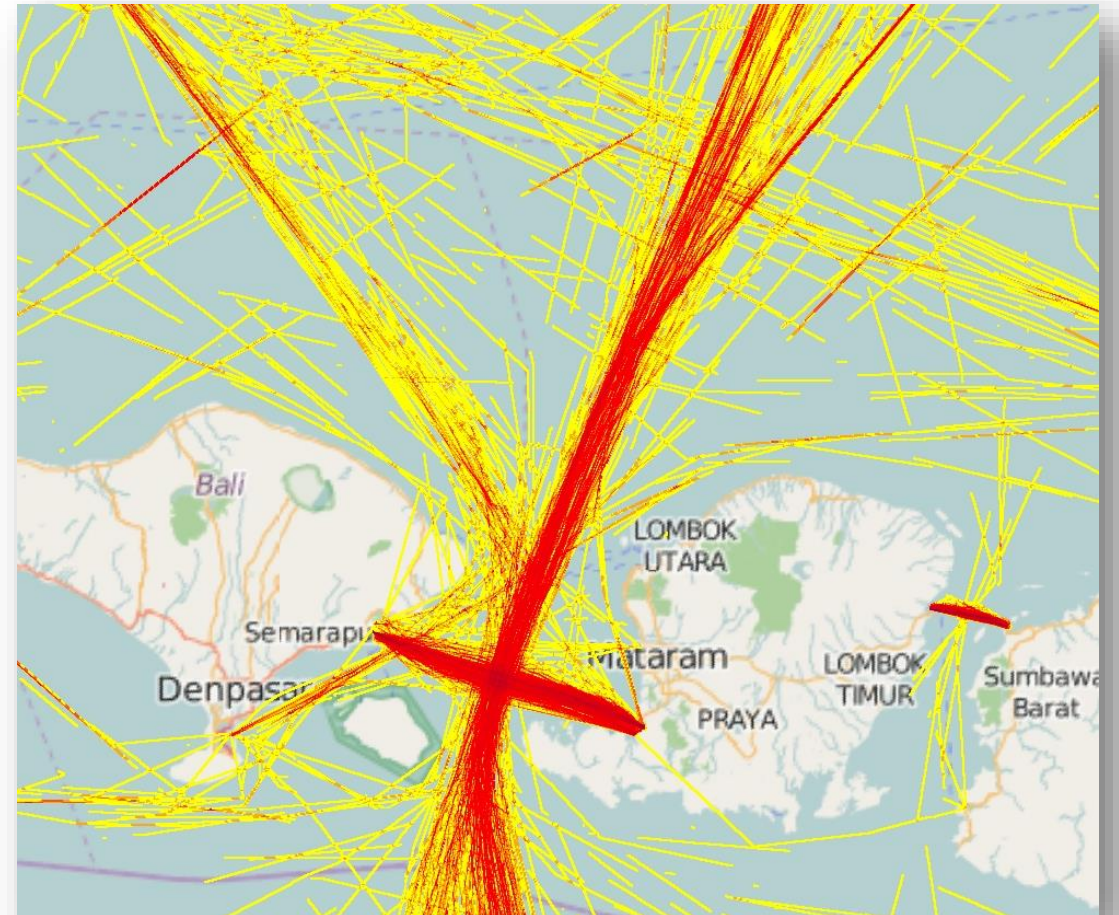
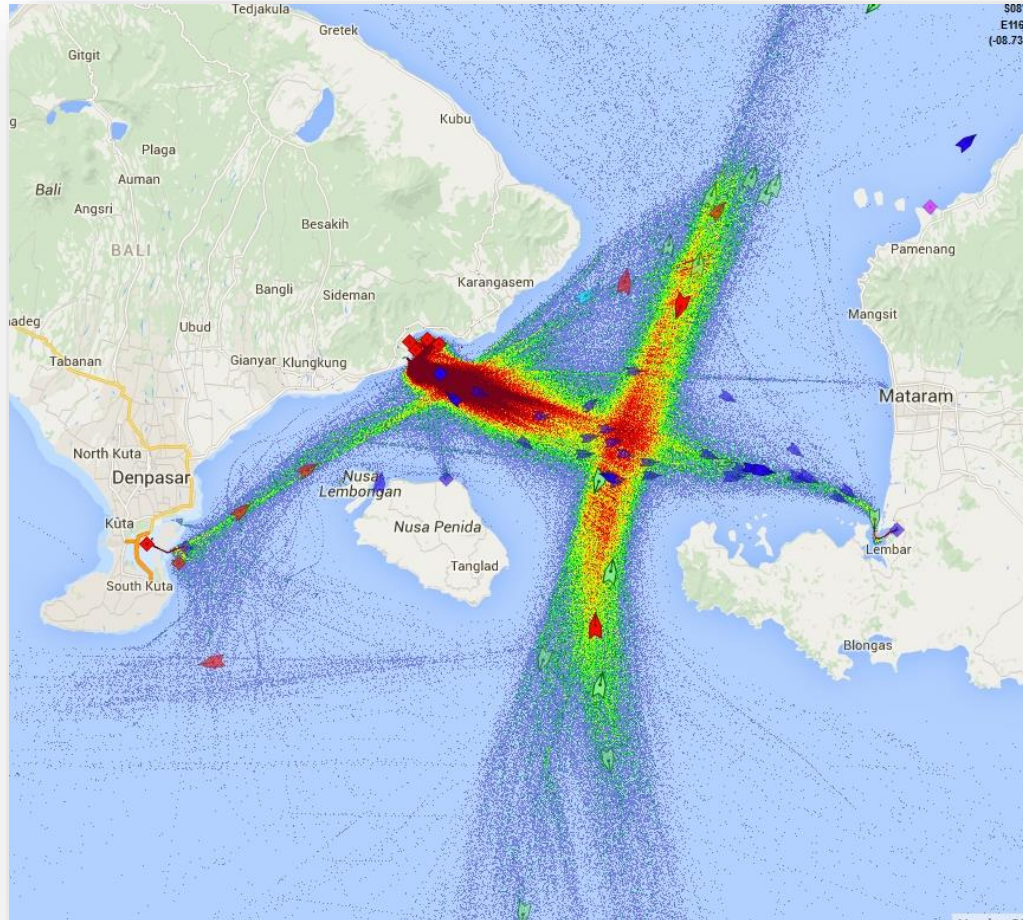


Baltic PSSA: the traffic separation scheme in the south-western Baltic, as decided by IMO

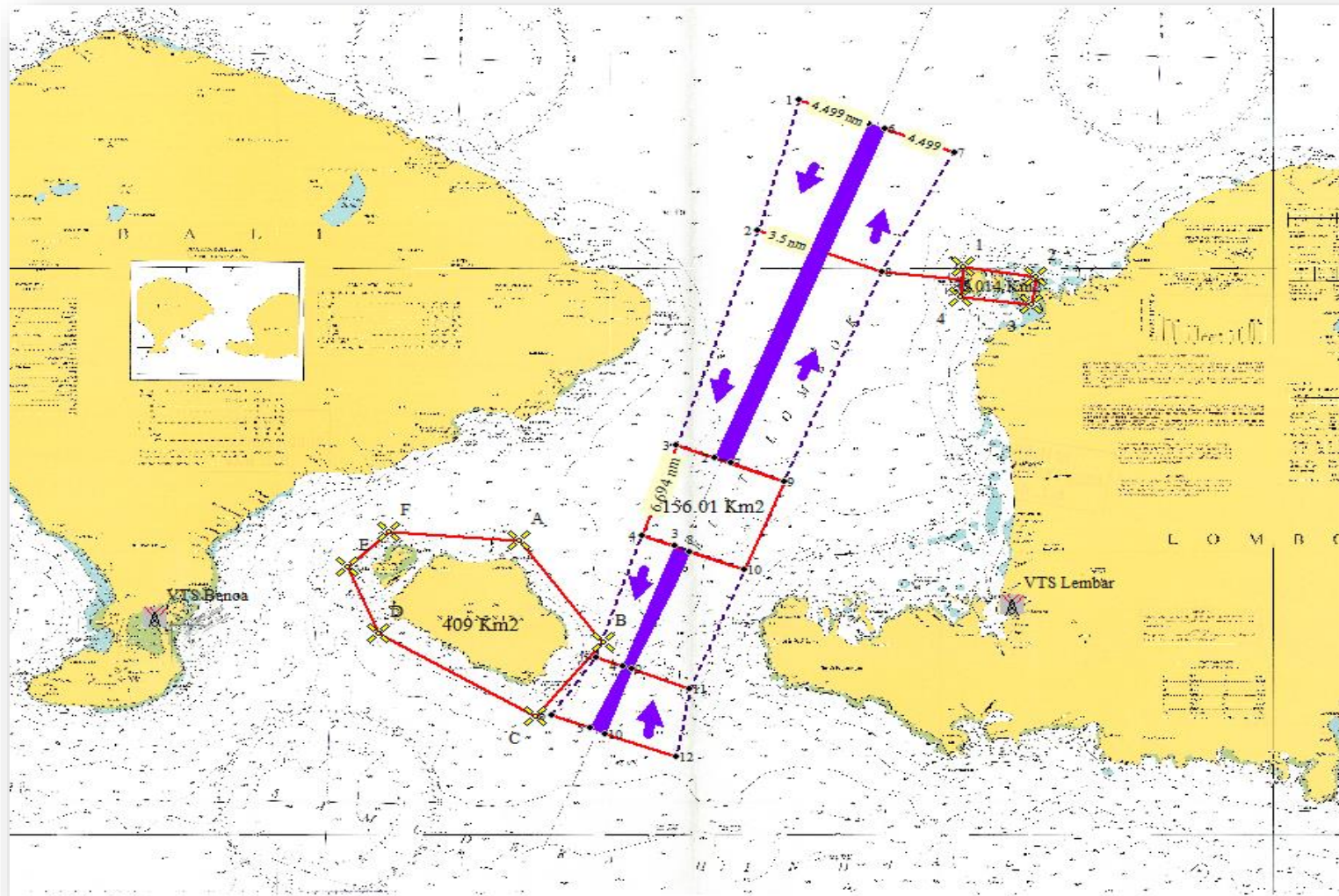
Chart of area covered by the mandatory ship reporting system



Traffic Density at the Lombok Strait



Draft of the Traffic Separation Scheme



PROPOSED TSS COORDINATES

NO	WESTERN PART	NO	EASTERN PART
1	8° 08' 02.2803" LS / 115° 51' 27.6646" BT	7	8° 11' 42.7079" LS / 116° 00' 50.7856" BT
2	8° 17' 14.7183" LS / 115° 48' 54.8302" BT	8	8° 20' 11.0761" LS / 115° 56' 25.4869" BT
3	8° 32' 25.4663" LS / 115° 44' 02.8350" BT	9	8° 34' 58.9937" LS / 115° 50' 35.4103" BT
4	8° 38' 49.9085" LS / 115° 41' 59.5202" BT	10	8° 41' 14.6153" LS / 115° 48' 10.0346" BT
5	8° 47' 26.4092" LS / 115° 39' 13.7903" BT	11	8° 49' 38.6874" LS / 115° 44' 52.2163" BT
6	8° 51' 32.7368" LS / 115° 36' 30.8514" BT	12	8° 54' 29.0881" LS / 115° 44' 02.1848" BT

TSS LOMBOK STRAIT

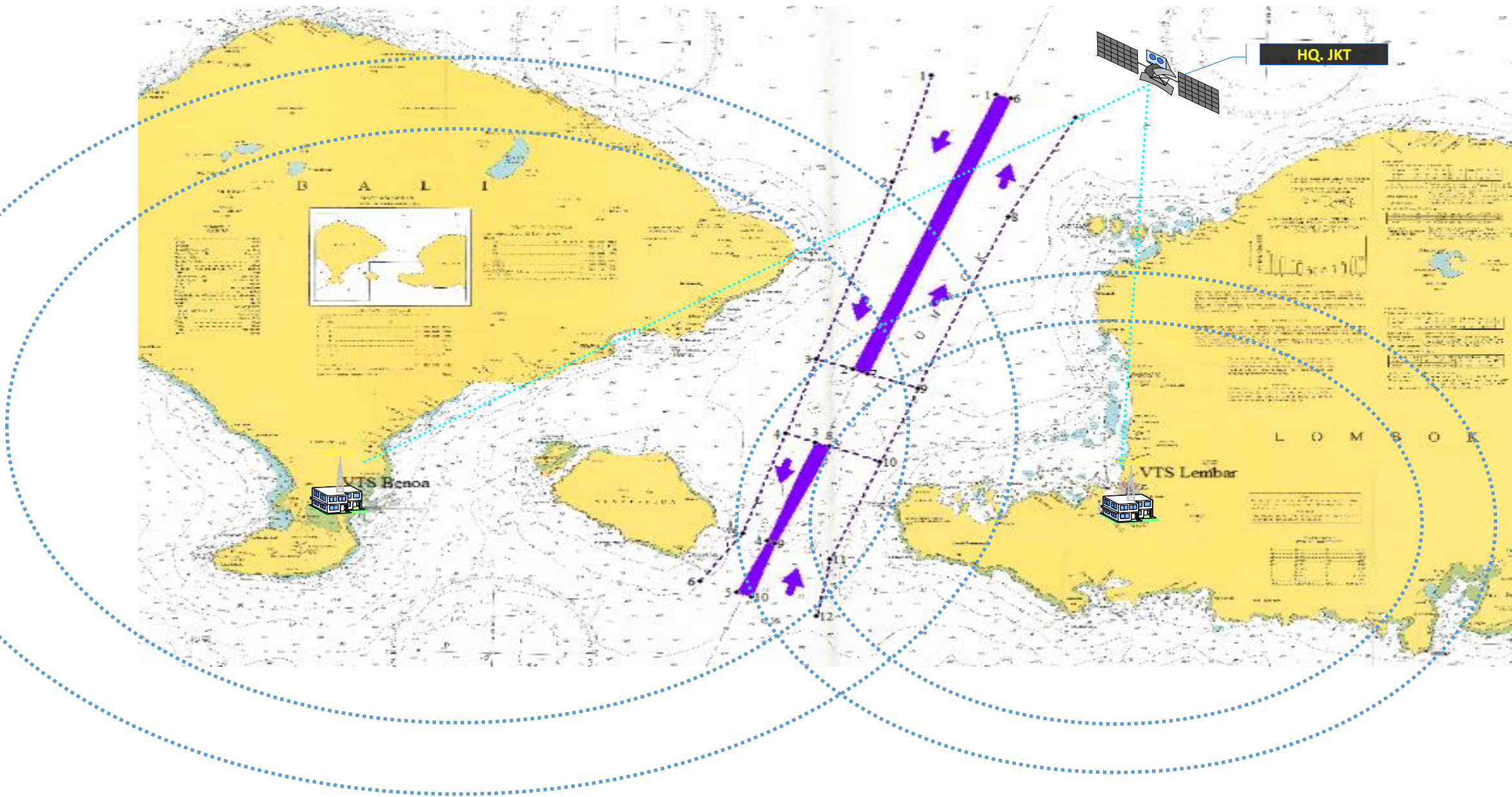
NO	WESTERN PART	NO	EASTERN PART
3	8° 32' 25.4663" LS / 115° 44' 02.8350" BT	9	8° 34' 58.9937" LS / 115° 50' 35.4103" BT
4	8° 38' 49.9085" LS / 115° 41' 59.5202" BT	10	8° 41' 14.6153" LS / 115° 48' 10.0346" BT

PRECAUTION AREA

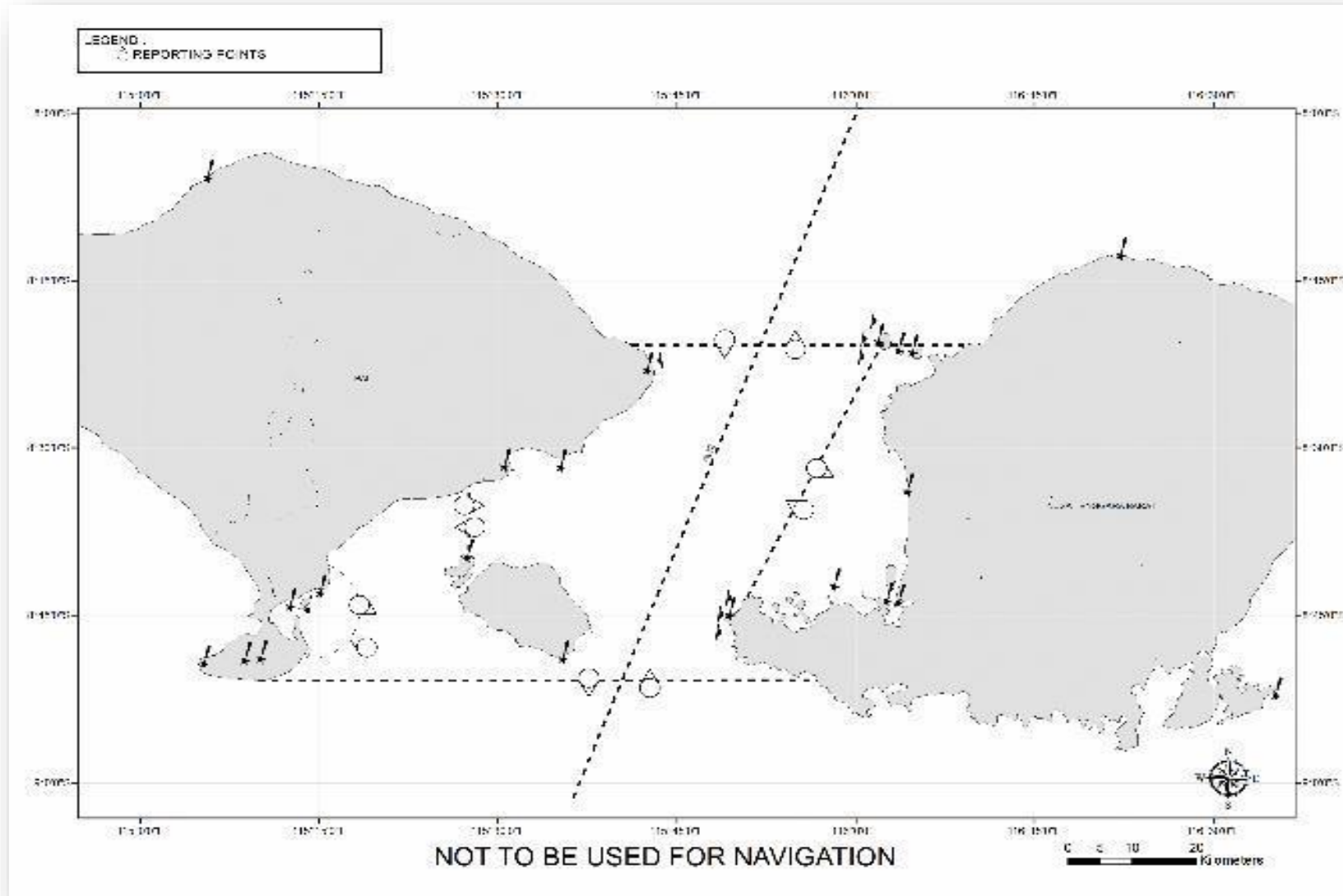
NO	WESTERN PART	NO	EASTERN PART
1	8° 09' 41.5345" LS / 115° 55' 40.9926" BT	6	8° 10' 03.6152" LS / 115° 56' 37.3728" BT
2	8° 33' 19.8483" LS / 115° 46' 21.7219" BT	7	8° 33' 41.9063" LS / 115° 47' 18.1021" BT
3	8° 39' 35.3805" LS / 115° 43' 55.9119" BT	8	8° 39' 57.4324" LS / 115° 44' 52.2921" BT
4	8° 48' 04.5654" LS / 115° 40' 51.3615" BT	9	8° 48' 15.5915" LS / 115° 41' 19.5620" BT
5	8° 52' 27.7560" LS / 115° 38' 51.5613" BT	10	8° 52' 49.8077" LS / 115° 39' 47.9739" BT

SEPARATION LINE

Draft of the Lombok Strait Ship Reporting System



VTS Reporting Point



Supporting Navigation Facilities on Lombok Strait

Coastal Radio Station

- Benoa Radio/PKD5 : $08^{\circ} 44' 40.00''$ LS/ $115^{\circ} 12' 32.00''$ BT
- Lembar Radio/PKD3 : $08^{\circ} 43' 41.00''$ LS/ $116^{\circ} 04' 23.00''$ BT
- Padang Bai Radio/PKD67 : $08^{\circ} 31' 58.00''$ LS/ $115^{\circ} 30' 28.00''$ BT

Vessel Traffic Service

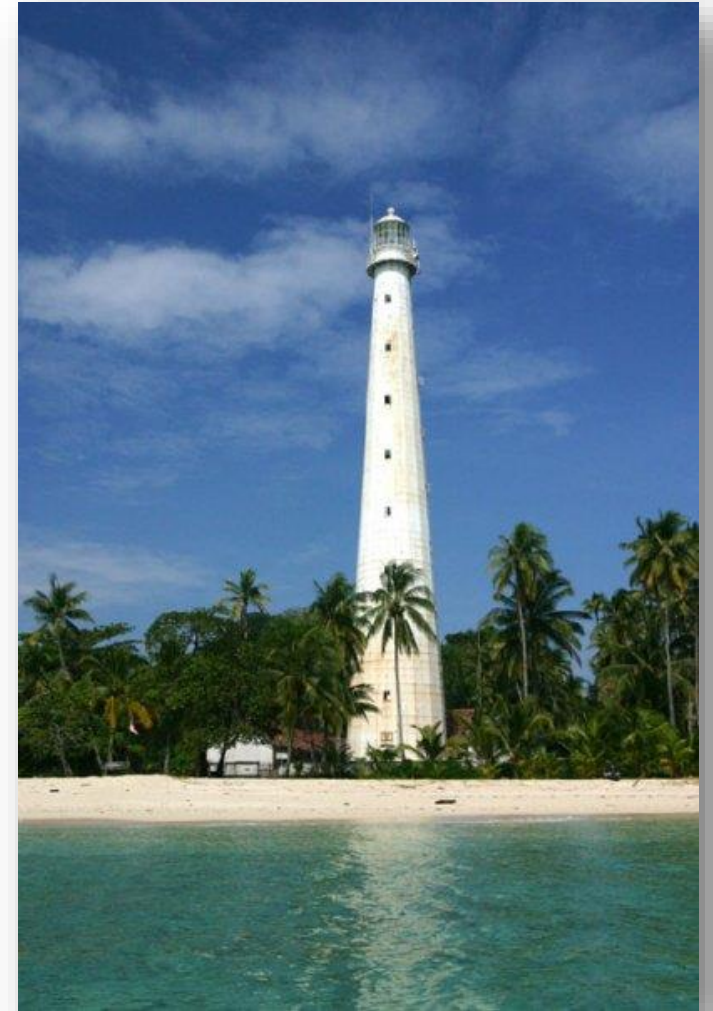
- Benoa VTS : $08^{\circ} 44' 36.00''$ LS/ $115^{\circ} 12' 35.77''$ BT
- Lembar VTS : $08^{\circ} 43' 441.54''$ LS/ $116^{\circ} 04' 18.56''$ BT



Aids to Navigation in Lombok Strait

AtoN data on Lombok Strait :

1. Ms. Lembongan (ILL.4170)
2. Ms. Sedihiing (ILL. 4175)
3. Ms. Bukit Badung (ILL. 4176)
4. Ms. Trewangan (ILL. 4178)
5. Ms. Ampenan (ILL. 4180)
6. Ms. Gili Selang (ILL. 4163)
7. Rs. Tg. Bungkulan (ILL. 4152)
8. Rs. Penuntun Depan Padang Bai (ILL. 4165)
9. Rs. Penuntun Belakang Padang Bai (ILL. 4166)
10. Rs. Tanjung Sari (ILL. 4167)
11. Rs. Padangbai (ILL. 4167.1)
12. Rs. Padangbai (ILL. 4167.2)
13. Rs. Gilitepekong (ILL. 4174)
14. Rs. Gili Aer (ILL. 4178.1)
15. Rs. Gili Meno (ILL. 4178.2)
16. Rs. Tg. Agar-Agar (ILL. 4179)
17. Rs. Bukit Puyahan (ILL. 4181)
18. Rs. Pelabuhan Lembar (ILL. 4182)
19. Rs. Gili Mas (No. 1 Pelb Lembar) (ILL.4183)
20. Rs. Tg. Bunutan (ILL. 4184)
21. Rs. Keramat (ILL. 4185)
22. Rs. No. 6 Lembar (ILL. 4185.1)
23. Rs. No. 5 Lembar (ILL. 41895.2)
24. Rs. Single Pipe Beacon (no.7) Lembar (ILL. 4185.3)
25. Rs. Single Pipe Beacon Lembar (No. 3) (ILL. 4183.5)
26. Rs. Gili Poh (ILL. 4188)
27. Rs. Tg. Pandanan (ILL. 4189)
28. Rs. Batu Gendang (ILL.4190)
29. Rs. Shopialousia (ILL. 4192)
30. Rs. Hijau Pelabuhan Nusa Penida (ILL. 4175.1)
31. Rs. Merah Pelabuhan Nusa Penida (ILL. 4175.2)
32. Pelsu No. 1 Alur Padangbai
33. Pelsu No. 1 Alur Padangbai
34. Pelsu No. 1 Alur Pelabuhan Lembar
35. Pelsu No. 2 Alur Pelabuhan Lembar
36. Pelsu No. 3 Alur Pelabuhan Lembar
37. Pelsu No. 41 Alur Pelabuhan Lembar (ILL. 4186)
38. Pelsu No. 5 Alur Pelabuhan Lembar



Consultation Taken Place

- National Workshop which held at Lombok in December 2015;
- National Task Force Meeting in May 2016;
- Regular National Meeting;
- Routinely by Permanent Representative of Indonesia at IMO London.



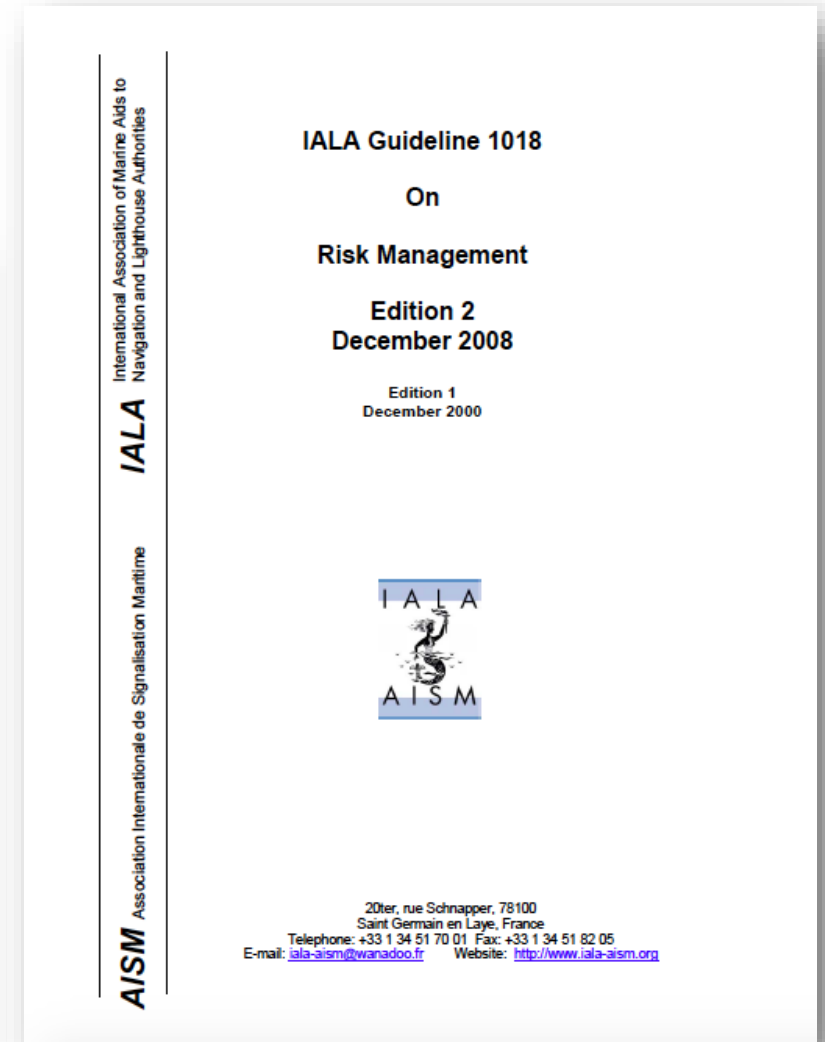
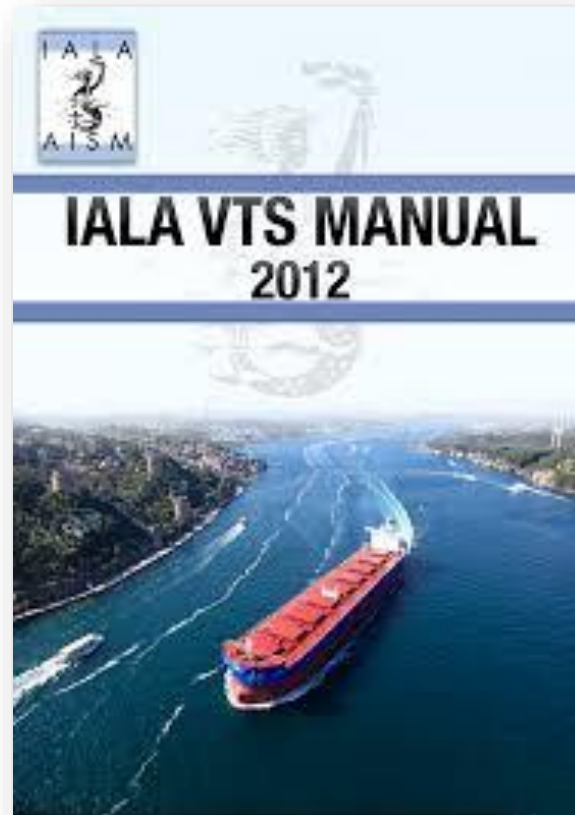
Consultation Taken Place (Cont'd)

- The 3rd Regional Meeting of IMO/Norad Programme of Promoting PSSA Concept in South-east Asia Region;
 - It was held in Lombok, 27 – 28 July 2016;
 - Attended by Indonesia, Malaysia, Vietnam and Philippines. Singapore attended the meeting as observers.
- During the meeting, Indonesia update the meeting on the progress of the designation of PSSA with the proposed APMs in Lombok Strait;
- Indonesia will prepare the information paper and proposal to be discuss in the next MEPC on 2017.



Additional Assistance Needed

- Technical Assistance from IALA on the IALA Risk Management;
- Capacity building on VTS.



Future Plans Beyond Norad Project

- Increasing Stakeholder Awareness on the PSSA in Lombok Strait;
- Review on the implementation of the APMs.



Next Step/Timeline

Action	Purpose	Timing
Inter-Ministerial (National) meeting	Consider potential PSSA Areas, Associated Protective Measures, adopt National Work Program and establish National Working Group	Completed
Provide details of any proposed consultant/s	Engage National Consultant/s	Completed
National Technical/Working Group to commence work	(1) Select priority area; (2) Monitor progress and co-ordinate work	February 2016, then regular updates.
Identify gaps	To seek assistance under IMO/Norad arrangements	March 2016
Draft outline of proposal	Provide to IMO	September 2016
Commence drafting		December 2016 i.e. the submission would need to be with IMO 2016
Completion of draft	To circulate for comment/clearance	January 2017
Implementing legislation drafted	Prepare draft of any legislation necessary to enforce Associated Protective Measures	January 2017
Application submitted to IMO		February 2017
Consideration by MEPC 71		May 2017

THANK YOU !!