



DIRECTORATE GENERAL OF SEA TRANSPORTATION
MINISTRY OF TRANSPORTATION
REPUBLIC OF INDONESIA

DRAFT OF PSSA PROPOSAL FOR LOMBOK STRAIT

**CIL Regional Workshop on PSSAs in Southeast Asia
Trends and Prospects
11–12 October 2017, Singapore**

RAYMOND SIANTURI

Head of District of Navigation of Tanjung Pinang

1 Legal Basis

2 Description of the Areas

3 Key Environmental Attributes

4 Threat from international Shipping

5 Associated Protection Measures

6 A Way Forward

1

LEGAL BASIS – NATIONAL LEGISLATIONS



- 1. INDONESIA SHIPPING LAW**
Law Number 17 Year 2008
- 2. INDONESIA REGULATION ON MARINE NAVIGATION**
Government Regulation Number 5 Year 2011
- 3. INDONESIA REGULATION ON MARINE ENVIRONMENT PROTECTION**
Government Regulation Number 21 Year 2010
- 4. INDONESIA REGULATION ON SHIPS ROUTEING SYSTEM**
Minister of Transportation Regulation Number 129 Year 2016
- 5. INDONESIA REGULATION ON MARINE TELECOMMUNICATION**
Minister of Transportation Regulation Number 26 Year 2011
- 6. INDONESIA REGULATION ON MARINE AIDS TO NAVIGATION**
Minister of Transportation Regulation Number 25 Year 2011
- 7. MARINE CONSERVATION ON NUSAPENIDA WATERS**
Decision of the Indonesian Minister for Ocean Affairs and Fisheries No.24/Kepmen-KP/2014
- 8. CONSERVATION OF TOURISM PARK ON GILI ISLANDS**
Decision of the Indonesian Minister for Ocean Affairs and Fisheries No.57/Kepmen-KP/2014

1

PART IV of UNCLOS 1982 – ARCHIPELAGIC STATES

Article 53 “Right of Archipelagic Sea Lane Passage”

2

PART XII of UNCLOS 1982 - PPME

- Article 192 - General Obligation.
- Article 194 - Measures to Prevent, Reduce and Control Pollution of The Marine Environment.
- Article 211 - Pollution from Vessels.

3

SOLAS - CHAPTER V

4

COLREGs – RULE 8, 9, 10

5

MARPOL Annex I – VI

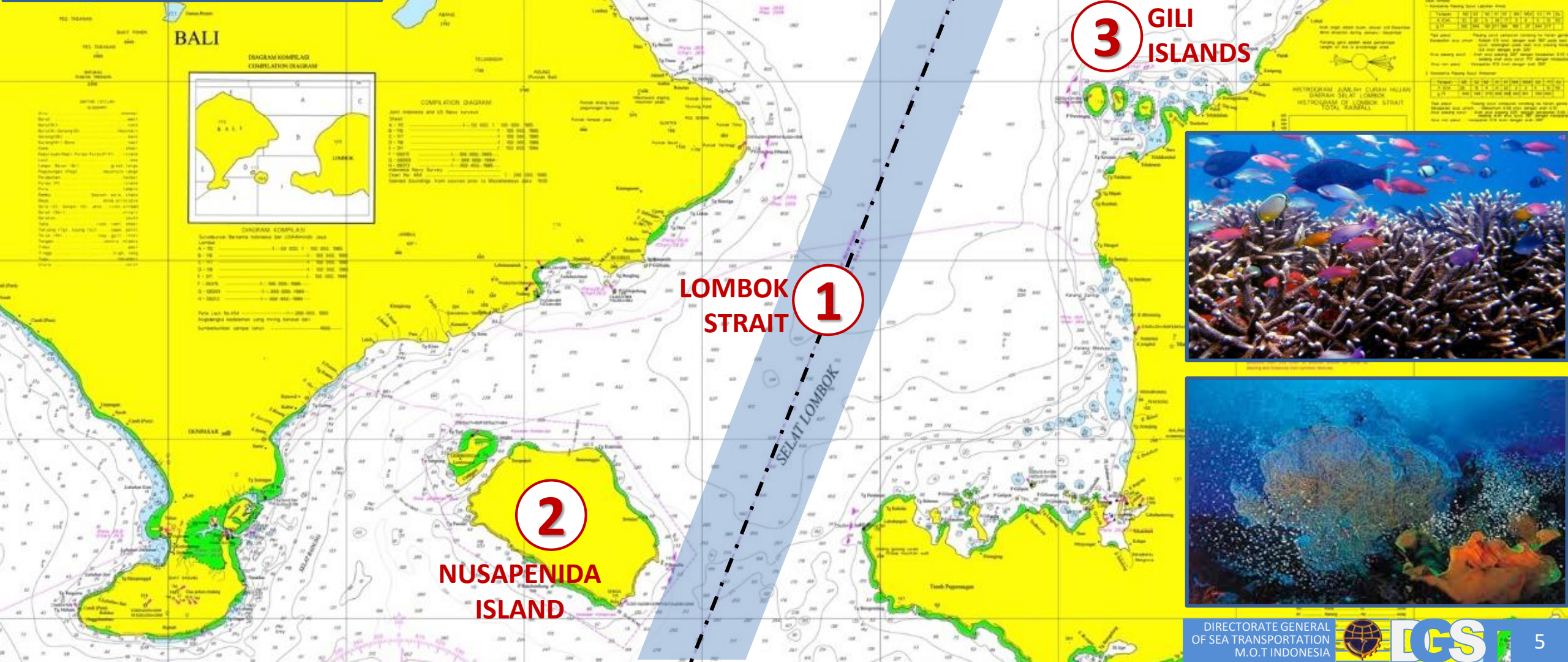
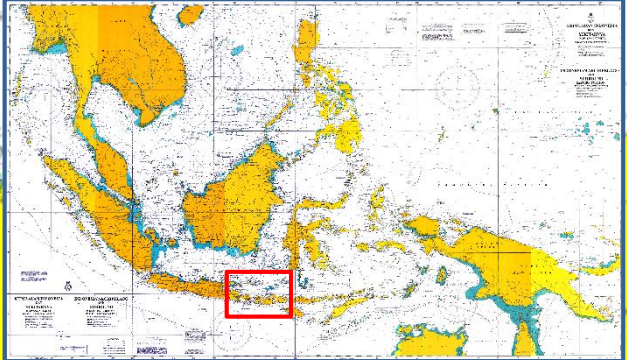
6

IMO RESOLUTION A. 982 (24)*Revised Guidelines for the Identification and Designation of PSSA*

7

MEPC.1/CIRC.510*Guidance Document for Submission of PSSA proposals to IMO*

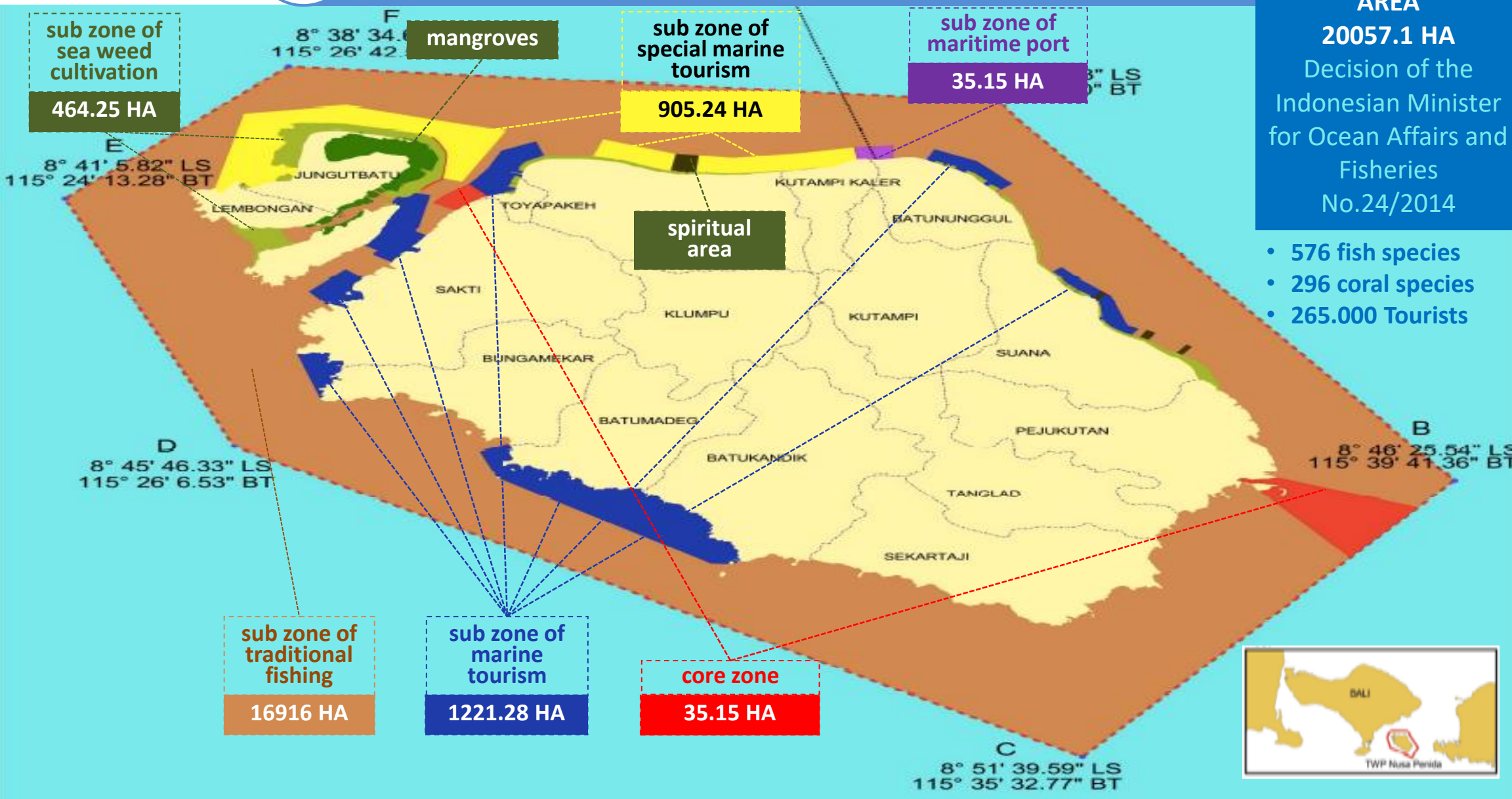
2 DESCRIPTION OF AREAS



3 KEY ENVIRONMENT ATTRIBUTES

DESIGNATED CONSERVATION AREA
20057.1 HA
 Decision of the Indonesian Minister for Ocean Affairs and Fisheries No.24/2014

- 576 fish species
- 296 coral species
- 265.000 Tourists



3 KEY ENVIRONMENT ATTRIBUTES | NUSAPENIDA



Green Turtle



Green Turtle



Mola-Mola



Hawksbill Turtle



Hawksbill Turtle



Mola-Mola

- The Ocean Sunfish or Mola Mola is the heaviest bony fish in the world with an average adult weight of 1,000kg or 2,200lbs.
- The fish is native to tropical and temperate waters around the world.

3 KEY ENVIRONMENT ATTRIBUTES | NUSAPENIDA



AN EXAMPLE OF **HYBRIDIZATION** (B) AT NUSAPENIDA
BETWEEN **CENTROPYGE EIBLI** (A) AND **C. VROLIKI** (C)

3 KEY ENVIRONMENT ATTRIBUTES | NUSAPENIDA



PARAPERCIS BIMACULA
11CM TOTAL LENGTH



MANONICHTHYS
3.5CM TOTAL LENGTH

3 KEY ENVIRONMENT ATTRIBUTES | NUSAPENIDA



CORAL REEFS

DESIGNATED CONSERVATION AREA
2273.56 HA

Decision of the Indonesian Minister for Ocean Affairs & Fisheries No.57/2014

511 FISH SPECIES

Allen & Werner Calculation Formula 2002

surrounded by rich type of coral reef ecosystem

296 CORAL SPECIES

101.27 HA

GILI TRAWANGAN

58.14 HA

GILI MENO

76.84 HA

GILI AYER

MARINE TOURISM PARK

445.000 TOURISTS

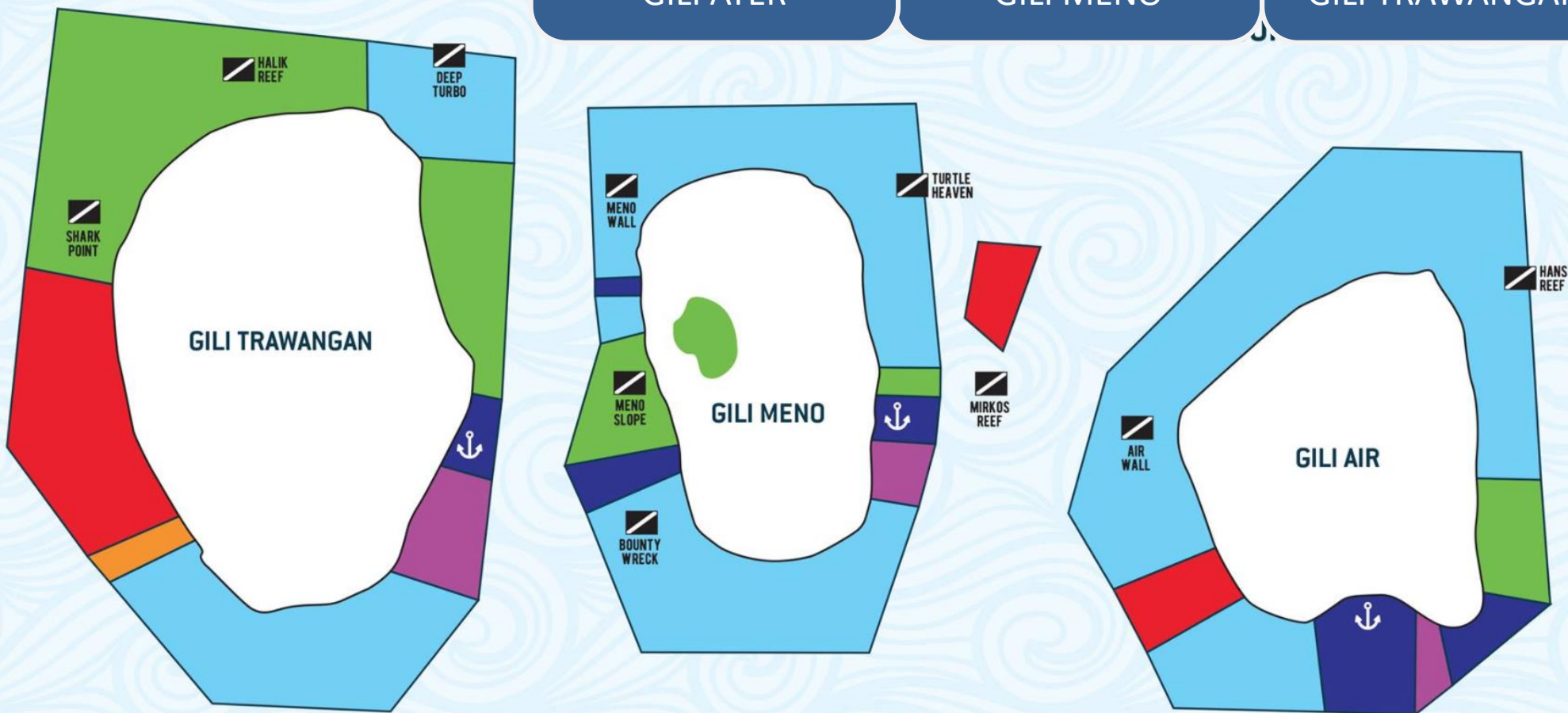
3

KEY ENVIRONMENT ATTRIBUTES | GILI ISLANDS

GILI AYER

GILI MENO

GILI TRAWANGAN



LEGEND

PROTECTION

NO BOAT MOORING IN THIS AREA, NO DIVING OR SNORKELLING WITHOUT THE PROPER PERMIT, NO FISHING.

NO FISHING

TOURISM AND RESEARCH DIVING PERMITTED BUT NO FISHING

SUSTAINABLE FISHING

FISHING WITH NETS AND LINES PERMITTED OF ANY TELEOSTEI SPECIES

REHABILITATION

TOURIST AND RESEARCH ZONE FOR CORAL PROTECTION, NO FISHING

CORAL SPECIES PROTECTION

NO TOURIST OR FISHING ACTIVITIES ALLOWED TO PROTECT BLUE CORAL

HARBOUR

SPECIALISED FOR BOAT TRAFFIC AND DOCKING, NO TOURIST ACTIVITIES PERMITTED DURING THE DAY DUE TO SAFETY CONCERNS

MAP SOURCE:



Ministry of Environment and Forestry



4 THREATS FROM INTERNATIONAL SHIPPING

JAN – 3RD MAY 2016 OBSERVATION

Narrowest Strait
ASL-II

6742
VESSELS

580 TANKERS
(Oil & Chemical)

2919 CARGOES

Potential
OIL SPIIL
from
Northbound
Tanker

INCREASING TRAFFIC
in SOMS & Sunda Strait
ECONOMIC DEVELOPMENT
in East Asia

INCREASING VLCC TRAFFIC
in Lombok Strait

TYPE OF VESSEL	JAN 2016	FEB 2016	MAR 2016	APR 2016	3 RD 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



CROSSING AREA
GROUNDING & COLLISION

DENSITY

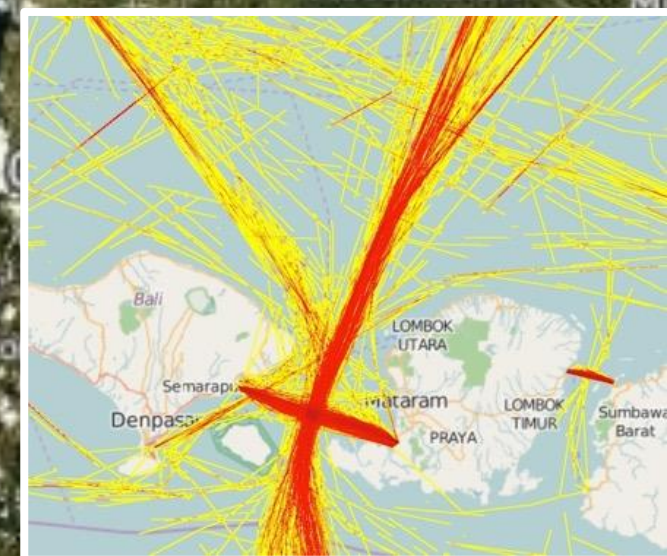
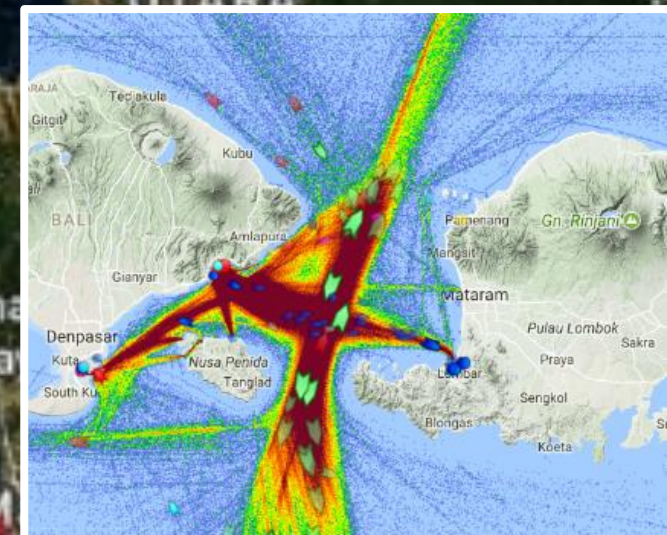
1600

VESSEL/MONTH

4

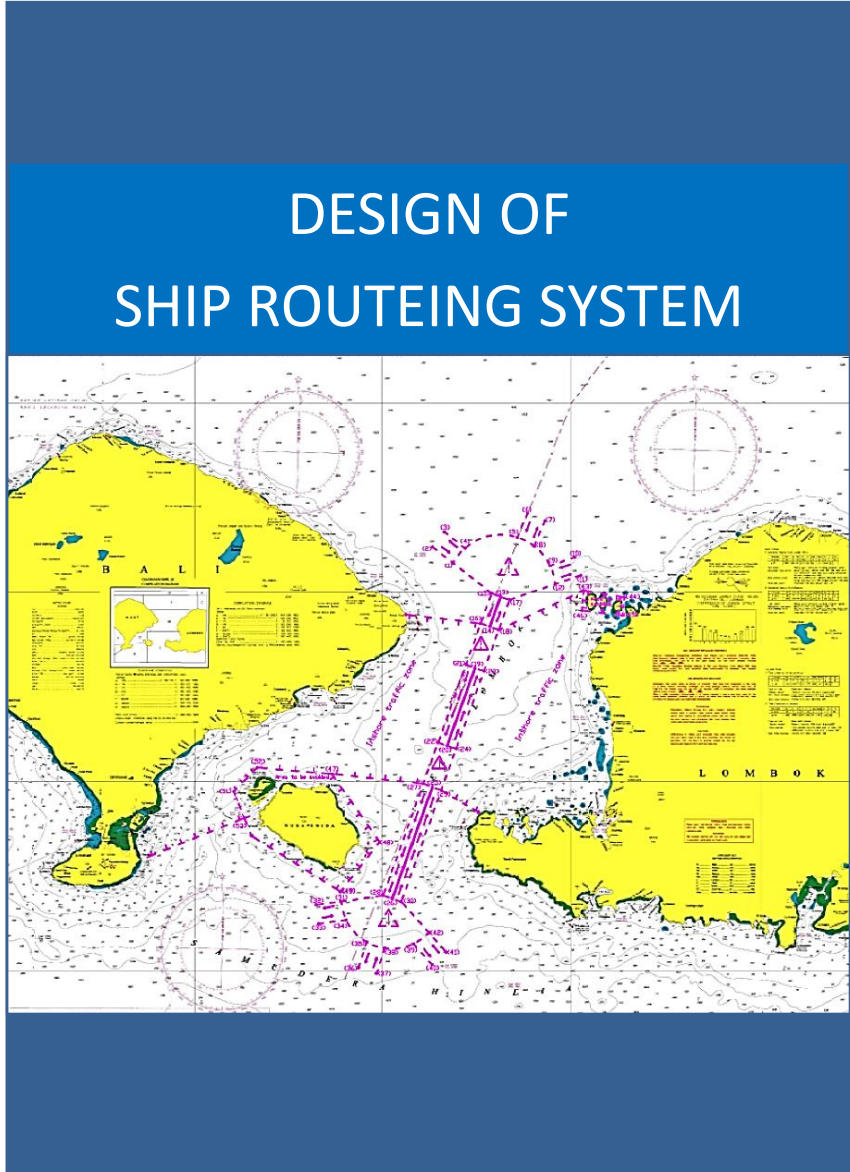
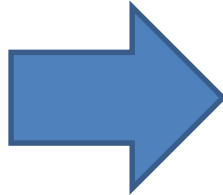
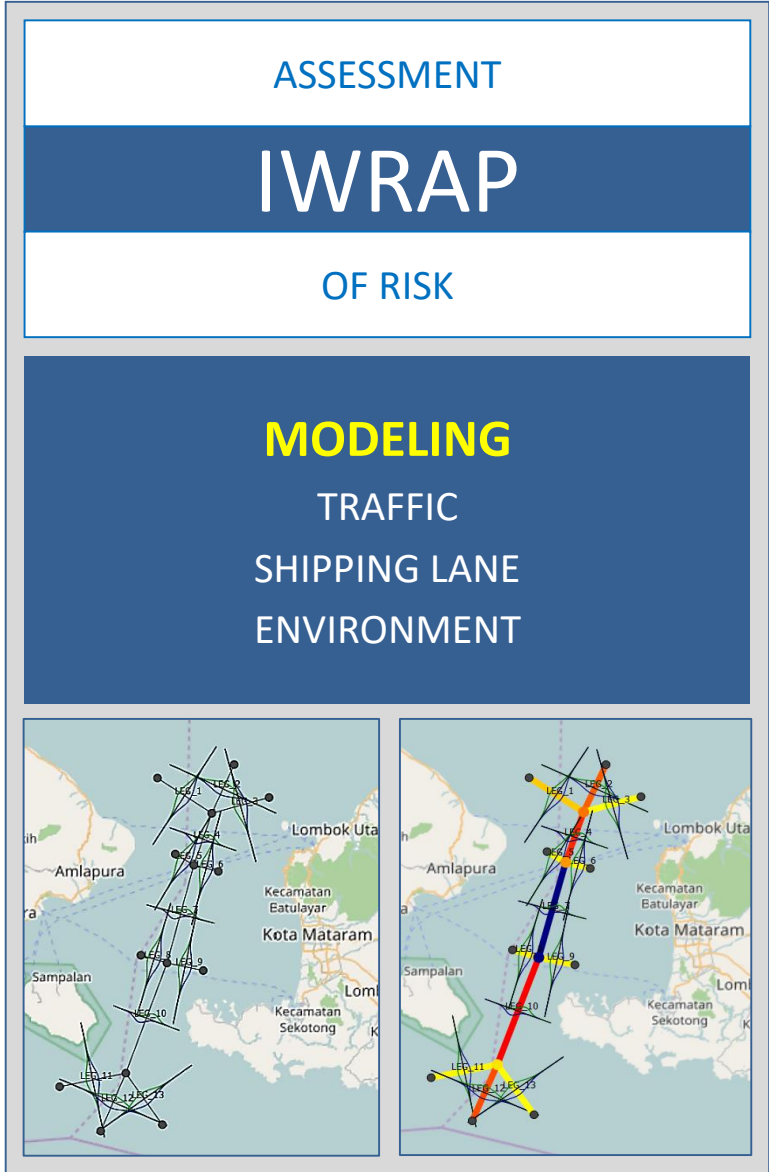
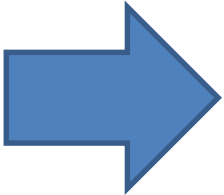
THREATS FROM INTERNATIONAL SHIPPING

VESSEL TRAFFIC CHARACTERISTICS



4 TECHNICAL ASSESSMENT & MODELING TOOLS

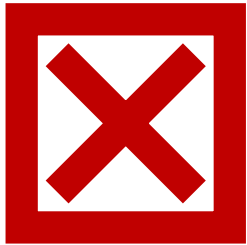
- Vessel Size
- Vessel Speed
- Local Piloted Ship Control
- Channel Cross Section & Alignment
- Current, Wind, & Wave Height
- Navigation Traffic Pattern
- Vessel Traffic Density
- Visibility



5

ASSOCIATED PROTECTIVE MEASURES

WIDTH OF LOMBOK STRAIT : 11 – 37 NM



LONGER NAVIGATION DISTANCE

LONGER VOYAGE TIME

ADDITIONAL COST



MORE ORGANIZED TRAFFIC

BETTER SAFETY OF NAVIGATION

BENEFIT TO MARINE ENVIRONMENT

DRAFT ASSOCIATED PROTECTION MEASURES

2

ATBA

35

NM TSS

4

PRECAUTION AREAS

2

VTS - SRS

38

ATON

ATBA

6 A WAY FORWARD

national initiatives
3 REGIONAL W.SHOPs

Consultation with
User States,
Shipping Industry,
Stakeholders

IMO-NORAD
assistancies

APMs

SUBMISSION
to
5th of IMO
NCSR

FEB 2018

PSSA

SUBMISSION
to
72nd IMO MEPC

APR 2018



THANK YOU



DIRECTORATE GENERAL OF SEA TRANSPORTATION
MINISTRY OF TRANSPORTATION
REPUBLIC OF INDONESIA