

The Shipping Industry, IMO and the Law of the Sea

1

Aldo Chircop

Canada Research Chair in Maritime Law and Policy

Marine & Environmental Law Institute (MELAW)

Schulich School of Law, Dalhousie university, Halifax, Canada

Presentation in at NISCS, Hainan, 27 January 2016

1. The shipping industry
2. Competent international organizations on shipping matters and the IMO
3. Examples of IMO functions in ocean governance
4. Conclusion

1. The shipping industry

- Shipping industry is synonymous with international maritime trade
- Global economy works thanks to the movement of goods between countries as cargoes on board ships, “just in time”
- Fundamentally an international and globalized industry
- Highly regulated, both in public and private law
- Perhaps the most regulated marine industry and ocean use

Ships

4

- Nationality:
 - Registration in one jurisdiction at a time (flag State)
 - Traditional registers (based on beneficial ownership)
 - Open registers (based on any ownership, also known as flags of convenience)
 - International registers (blend)
- Ship ownership structure:
 - Based on a legislated number of shares
 - Each share may have more than one corporate owner
 - Each corporate owner may be owned by one or more corporate owner
- Ship managers, operators and charterers



Largest flags (UNCTAD, 2015)

5

Rank	Flag	Ships	Global share	DWT	DWT share
1	Panama	8,351	9.33	352,192	20.13
2	Liberia	3,143	3.51	203,832	11.65
3	Marshall Islands	2,580	2.88	175,345	10.02
4	Hong Kong (China)	2,425	2.71	150,801	8.62
5	Singapore	3,689	4.12	115,022	6.58
6	Malta	1,895	2.12	82,002	4.69
7	Greece	1,484	1.66	78,728	4.50
8	Bahamas	1,421	1.59	75,779	4.33
9	China	3,941	4.41	75,676	4.33
10	Cyprus	1,629	1.82	33,664	1.92

Why is vessel tonnage important in the IMO and international maritime regulation?

6

ORs, “FOCs” according to the International Transport Workers Federation (Fair Practices Committee)

<http://www.itfglobal.org/flags-convenience/flags-convenien-183.cfm>

7

Antigua and Barbuda

Bahamas

Barbados

Belize

Bermuda (UK)

Bolivia

Burma

Cambodia

Cayman Islands

Comoros

Cyprus

Equatorial Guinea

Faroe Islands

French International Ship Register (FIS)

German International Ship Register (GIS)

Georgia

Gibraltar (UK)

Honduras

Jamaica

Lebanon

Liberia

Malta

Marshall Islands (USA)

Mauritius

Moldova

Mongolia

Netherlands Antilles

North Korea

Panama

Sao Tome and Príncipe

St Vincent

Sri Lanka

Tonga

Vanuatu



Why are open registers so popular?

8

- Received
 - Surveys and classification
 - Insurance (global, but traditional markets in London, Scandinavian countries, etc.) :
 - Hull and machinery + specialized cover clauses
 - Protection & indemnity
 - Necessaries: repairs, towage, supplies, bunkers, etc., received in various ports
 - Loading & unloading of cargo
 - Salvage
 - Etc.
- Provided
 - Maritime trade
 - Liner
 - Tramp
 - Carriage of passengers
 - Ferries
 - Cruise ships
 - Specialized ships and services
 - E.g., offshore platforms, OSVs, tugs, salvage vessels, etc.
 - Etc.

Projected impact of the North America Emission Control Area (MARPOL Annex VI) in the US & Canada combined

Source: EPA, 2009

<i>Mortality/illness</i>	<i>Annual w/o NAECA</i>	<i>Annual reduction with NAECA</i>
Premature Mortality	5,100 – 12,000	3,700 – 8,300
Chronic Bronchitis	4,600	3,500
Hospital Admissions	8,400	3,300
Emergency Room Visits	4,100	2,300
Acute Bronchitis	13,000	9,300
Acute Respiratory Symptoms	6,500,000	3,400,000



Standard contracts

11

- Usually standard agreements with clauses based on international conventions or model industry clauses, e.g.:
 - Convention-based:
 - Carriage of goods (carriers and shippers): Hague, Hague/Visby, Hamburg and Rotterdam Rules
 - Carriage of passengers (death, injury, luggage): Athens Convention
 - Salvage: Lloyd's Open Form (LOF) based on Salvage Convention
 - Industry-based (e.g., BIMCO):
 - Insurance: Institute Hull Clauses
 - Towage: TOWCON, TOWHIRE

Industry international non-governmental associations

12

- International Chamber of Shipping (ICS)
- International Shipping Federation (ISF)
- Independent Tanker Owners Pollution Federation (ITOPF)
- Baltic and International Maritime Council (BIMCO)
- International Union of Marine Insurance (IUMI)
- International Group of Protection and Indemnity Clubs
- International Cargo Handling Coordinating Association (ICHCA)
- International Salvage Union (ISU)
- International Association of Classification Societies (IACS)

Crews, training, protection

13

- Multinational crews
- Crewing agencies
- Trained by maritime academies with curricula based on international standards
- International Transport Workers Federation (ITF)
- Missions to Seafarers
- International Association of Maritime Universities

2. Competent intergovernmental organizations for shipping and the IMO

14

- IAEA: use of atomic energy
- IHO: nautical charts and documents
- ILO: maritime labour standards
- **IMO: navigation, shipping, security, trade facilitation, environment**
- IOC (UNESCO): ocean science
- UNCITRAL: trade law, carriage of goods law
- UNCTAD: maritime trade and shipping matters
- UNEP: coordination of environmental programs within the UN system
- WMO: world weather, climate, hydrology and water resources, environment



The IMO

15

- Specialized agency of the UN
- Established by the Convention on the International Maritime Organization, 1948
- 171 Member States; 3 Associate Members (Faroes, Hong Kong & Macau)
- IMO = synonymous with international shipping regulation
- Arguably one of the most successful intergovernmental organizations



Koji Sekimizu
(Japan), outgoing
SG

Kitack Lim
(Republic of
Korea), incoming
SG as of 1
January 2016

Source: IMO, 2015

Contemporary IMO mandate

16

1. Terms of reference under the Convention on the International Maritime Organization, 1948.
2. Tasks assigned by international maritime conventions.
3. Functions in UNCLOS wherever references to “competent international organization” apply to the Organization

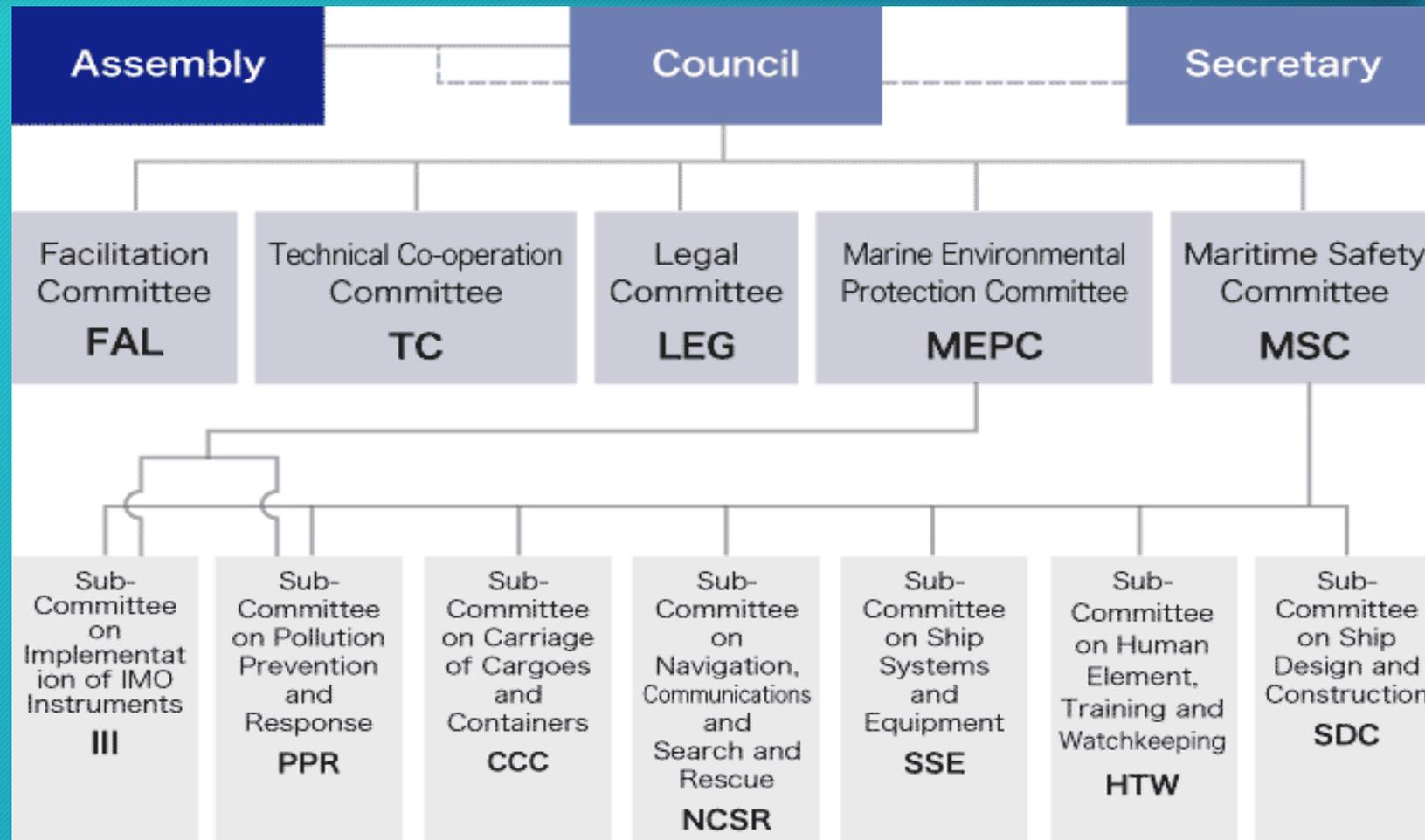
IMO Convention, Article 1

17

“To provide machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning the maritime safety, efficiency of navigation and prevention and control of marine pollution from ships; and to deal with administrative and legal matters related to the purposes set out in this Article.”

IMO Structure

18



Source: ClassNK
Online:
http://www.classnk.or.jp/hp/en/info_service/imo_and_iacs/topics_imo.html

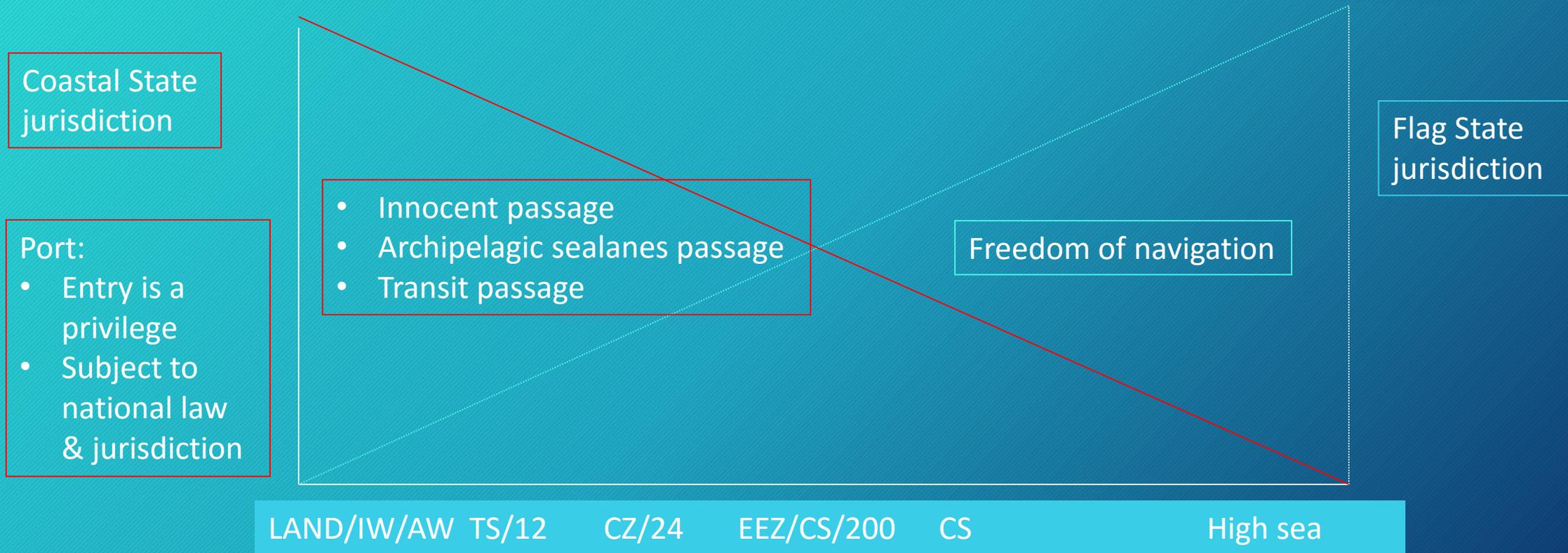
What distinguishes IMO competence

19

- UNCLOS-related reasons:
 - Designated as “the competent international organization” with regard to shipping matters in UNCLOS
 - Key role in giving content to the protection of international navigation rights in UNCLOS.
- IMO Convention-related reasons:
 - General comprehensive mandate exclusively dedicated to navigation and shipping, without being restricted to a particular issue.
 - Functions for the development of international maritime public law and regulation for safe, secure and environmentally responsible shipping, and related private law matters.

International navigation rights in UNCLOS

20



UNCLOS Article	Part	Express or implied prescriptive function
21(2), (4)	II: Territorial Sea & Contiguous Zone	<ul style="list-style-type: none"> • “generally accepted international rules or standards” on design, construction, manning or equipment of ships re laws relating to innocent passage • “generally accepted international regulations” concerning collision avoidance, applicable during innocent passage
22(3)		<ul style="list-style-type: none"> • “recommendations of the competent international organization” in designating sea lanes & prescription of traffic separation schemes, and their substitution
23		<ul style="list-style-type: none"> • Documents & special precautionary measures for nuclear-powered ships and ships carrying nuclear or inherently dangerous or noxious substances established by international agreements
39(2)		<ul style="list-style-type: none"> • “generally accepted international regulations, procedures and practices” for safety of life at sea and collision avoidance, applicable during transit passage • “generally accepted international regulations, procedures and practices” for vessel source pollution during transit passage
54		IV: Archipelagic States

IMO functions in the law of the sea

22

Prescriptive
function

Facilitation of
compliance

Facilitation of
management of
navigable
waters

Facilitation of
regional
cooperation

Others

Key functions defined

(a) Prescriptive function

23

- UNCLOS (numerous provisions regarding shipping):
 - internationally/generally/applicable agreed international instruments/rules/regulations/standards/recommended practices/procedures
 - Roles where navigation and shipping are concerned
- Codes, guidelines, procedures, recommendations within the framework of IMO Conventions (safety, environment, security, trade facilitation)
- Amendments to conventions: tacit acceptance of amendments process (“quasi-legislative”)

(b) Compliance facilitation

24

THE EXPECTATION

UNCLOS Article 94: Duties of the flag State:

Every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.

Duty to assume jurisdiction over each ship flying its flag and its master, officers and crew in respect of administrative, technical and social matters concerning the ship.

Duty to take measures for ships flying its flag to ensure safety at sea.

State is required to conform to generally accepted international regulations, procedures and practices and to take any steps which may be necessary to secure their observance.

THE REALITY

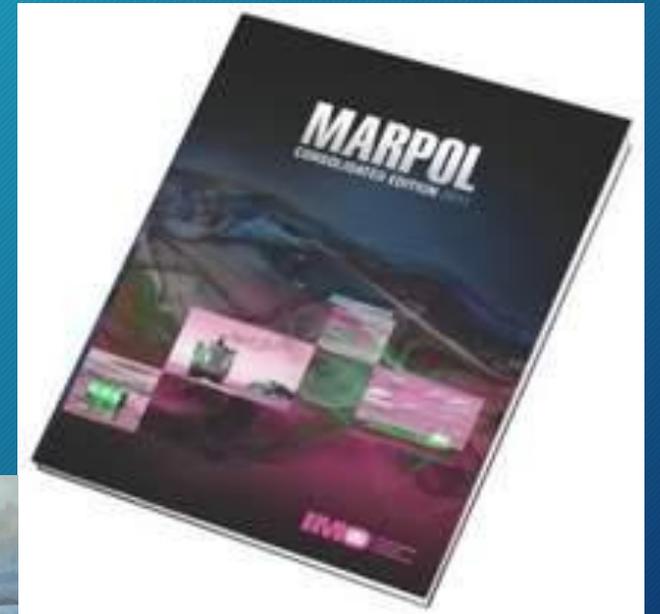
The UN General Assembly urges:

“... flag States without an effective maritime administration and appropriate legal frameworks to establish or enhance the necessary infrastructure, legislative and enforcement capabilities to ensure effective compliance with and implementation and enforcement of their responsibilities under international law, in particular the Convention, and, until such action is taken, **to consider declining the granting of the right to fly their flag to new vessels, suspending their registry or not opening a registry, and calls upon flag and port States to take all measures consistent with international law necessary to prevent the operation of substandard vessels.**”

Oceans and the Law of the Sea,” UN General Assembly Resolution UN Doc A/68/L.18, 27 November 2013, para 147

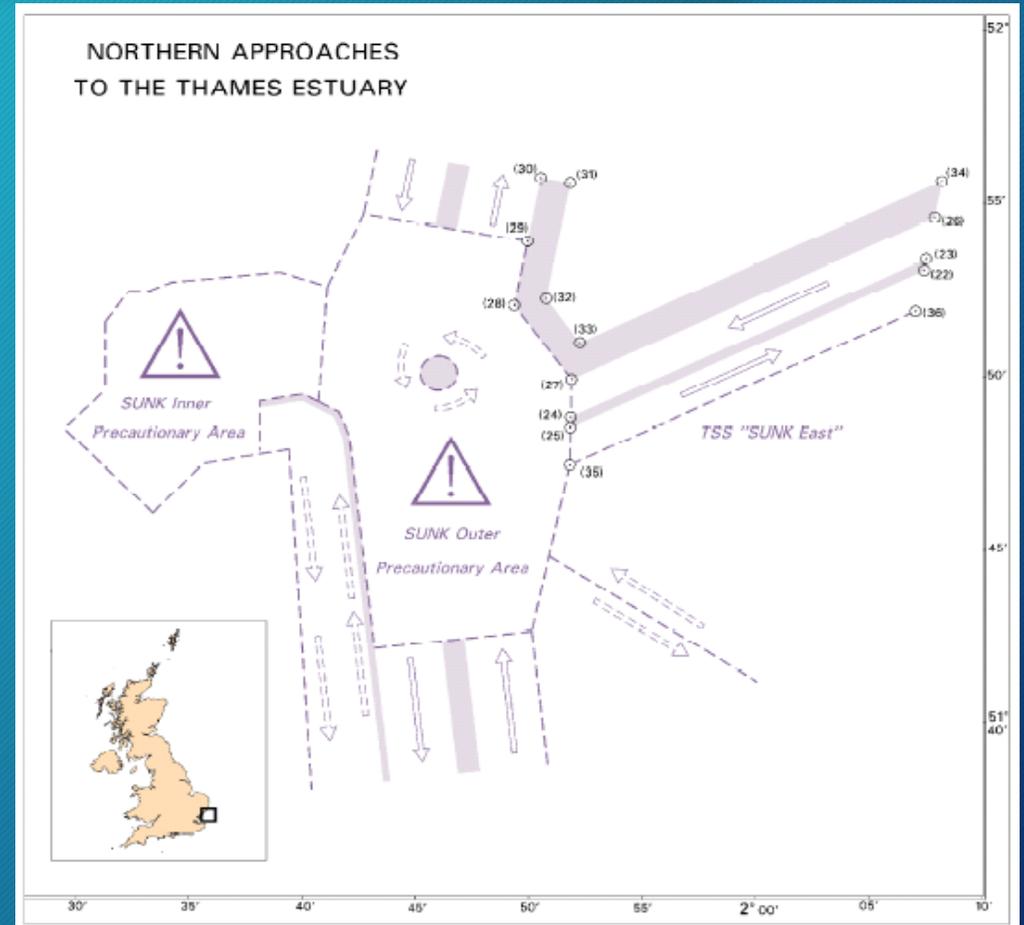
Compliance procedures and capacity-building

- Sub-Committee on Implementation of IMO Instruments (III)
- IMO Instruments Implementation Code, 2013 (III Code): mandatory audit scheme (flag, port and coastal States)
- Port state control system
- Integrated Technical Cooperation Programme
- IMO World Maritime University



(c) Facilitation of management of navigable waters

- Routing measures:
 - Territorial sea, straits, archipelagic waters, EEZ, high seas(?)
 - Traffic separation schemes, two-way routes, recommended tracks, areas to be avoided, inshore traffic zones, roundabouts, precautionary areas and deep water routes, ship reporting and weather routing
 - Archipelagic sea lanes
- Particularly sensitive sea areas (PSSAs)
- MARPOL special areas



(d) Facilitation of regional cooperation

- UNCLOS, Article 197:
- State Parties expected to cooperate on global and regional levels, either directly or through competent international organizations for the protection and preservation of the marine environment, taking into account characteristic regional features
 - Role of IMO in some UNEP regional sea programmes, e.g., Mediterranean
- Article 43: States bordering straits to cooperate:
 - Role of IMO in facilitating the Cooperative Mechanism for the Straits of Malacca and

5. Examples of IMO functions in ocean governance

28

- a) Facilitating cooperation among strait States (Cooperative Mechanism)
- b) Providing content to UNCLOS provisions (routing measures)
- c) Supporting environment protection (PSSAs)

(a) Cooperative Mechanism

29

UNCLOS Article 43

Navigational and safety aids and other improvements and the prevention, reduction and control of pollution

User States and States bordering a strait should by agreement cooperate:

- (a) in the establishment and maintenance in a strait of necessary navigational and safety aids or other improvements in aid of international navigation; and
- (b) for the prevention, reduction and control of pollution from ships.

Cooperative Mechanism between the Littoral States and User States on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore, Submitted by Indonesia, Malaysia and Singapore

- “to promote dialogue and facilitate close co-operation between the littoral States, user States and other stakeholders.”
- **IMO-facilitated, but strait States-driven!**

(IMO Doc. IMO/SGP 2.1/1, 16 August 2007)

Major components

30

1. The Co-operation Forum for open dialogues and discussions
2. Project Co-ordination Committee on the implementation of projects in cooperation with sponsoring users
3. Aids to Navigation Fund

UNCLOS Article 26

Charges which may be levied upon foreign ships

- 1. No charge may be levied upon foreign ships by reason only of their passage through the territorial sea.
- 2. Charges may be levied upon a foreign ship passing through the territorial sea as payment only for specific services rendered to the ship. These charges shall be levied without discrimination.

Aids to Navigation Fund

“The main purpose of the Aids to Navigation Fund is for the provision and maintenance of critical aids to navigation in the Straits of Malacca and Singapore that are identified and agreed” by the Tripartite Technical Experts Group on the Safety of Navigation in the Straits of Malacca and Singapore (TTEG).”

http://www.mpa.gov.sg/sites/pdf/annex_a_factsheet_on_co-operative_mechanism.pdf

- Contributions to the Aids to Navigation Fund are voluntary basis.
- Contributors: States, industry, private benefactors, non-governmental organizations and inter-governmental organizations.
- The administration of the Aids to Navigation Fund will be by the littoral States on a rotational basis.
- Committee:
 - Strait States
 - China, India, Japan, the Republic of Korea, Saudi Arabia, the United Arab Emirates
 - International Foundation of Aids to Navigation, IMO, Malacca Strait Council and Nippon Foundation

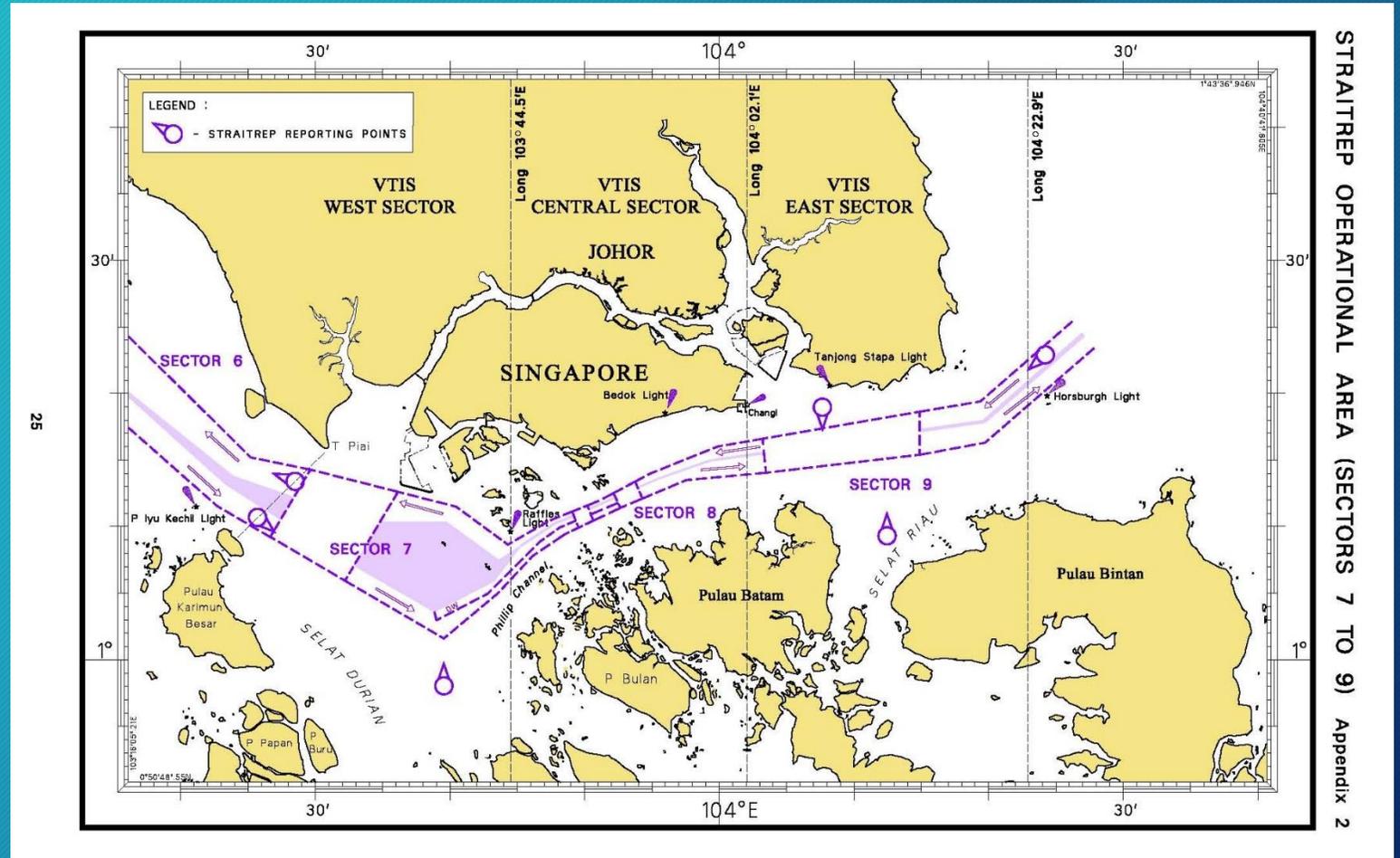
(b) Routeing measures

- Area based management tools available under:
 - IMO is the only international body with competence to adopt/establish routeing measures
 - International Convention for the Safety of Life at Sea, 1974, as amended, Chapter V, Regulation 8
 - General Provisions on Ship Routeing, 1985, as amended
 - Guidance Note on the Preparation of Proposals on Ships Routeing Systems and Ship Reporting Systems, 2003
- Valuable tools for:
 - Promoting safety of navigation
 - Designating routes through archipelagic waters, straits and territorial sea
 - Marine spatial planning, especially where there are multiple ocean uses and congestion
 - Marine environment conservation and protection where shipping posed threats to species or the marine environment

Routeing measures in the Straits of Malacca and Singapore

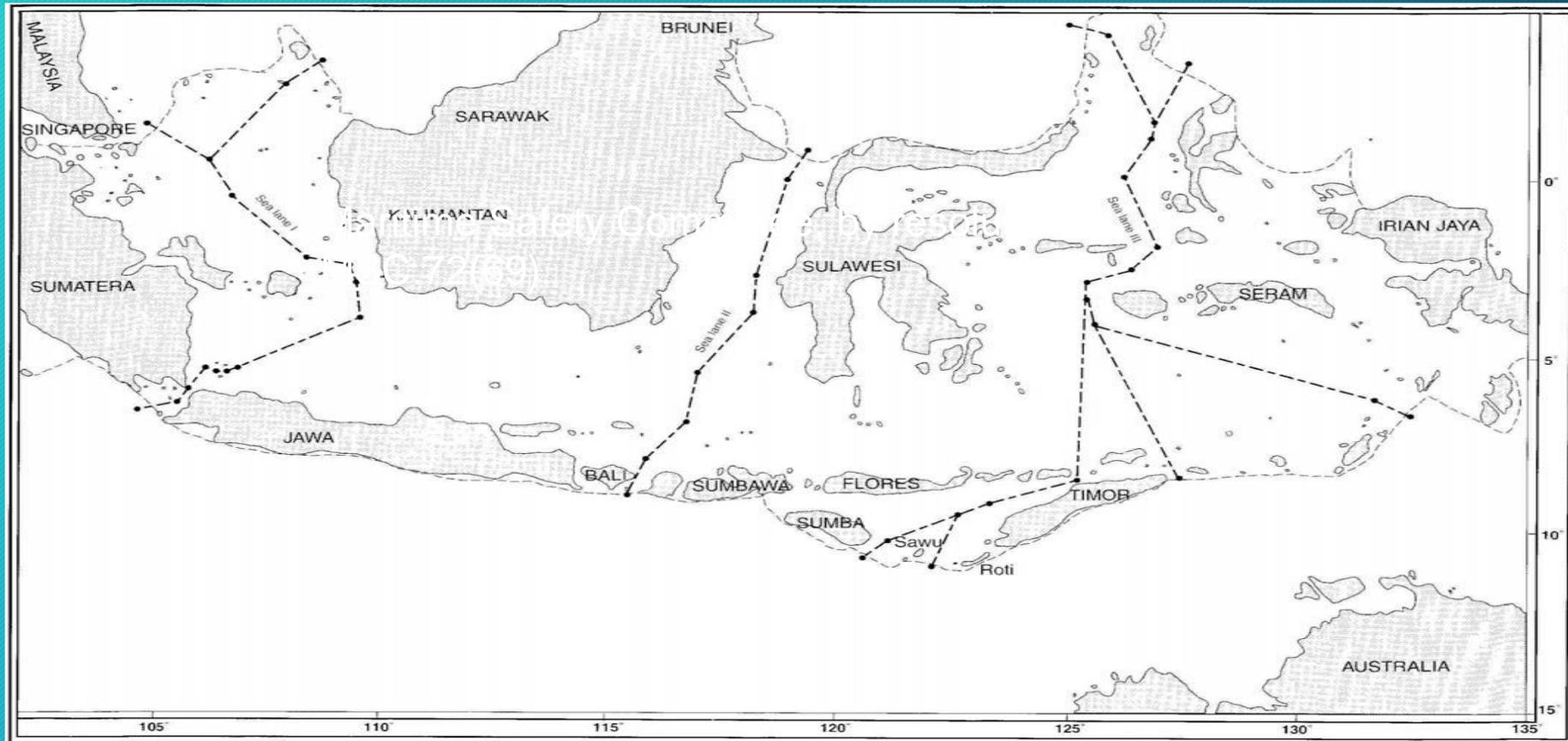
33

- Navigation through the Straits of Malacca and Singapore, IMO Assembly Resolution A.375(X), 14 November 1977
- Mandatory Ship Reporting System Systems, MSC.73(69), 19 May 1998



Indonesian Government Regulation No. 37, 2002, following Maritime Safety Committee Resolution MSC.72(69), 1998

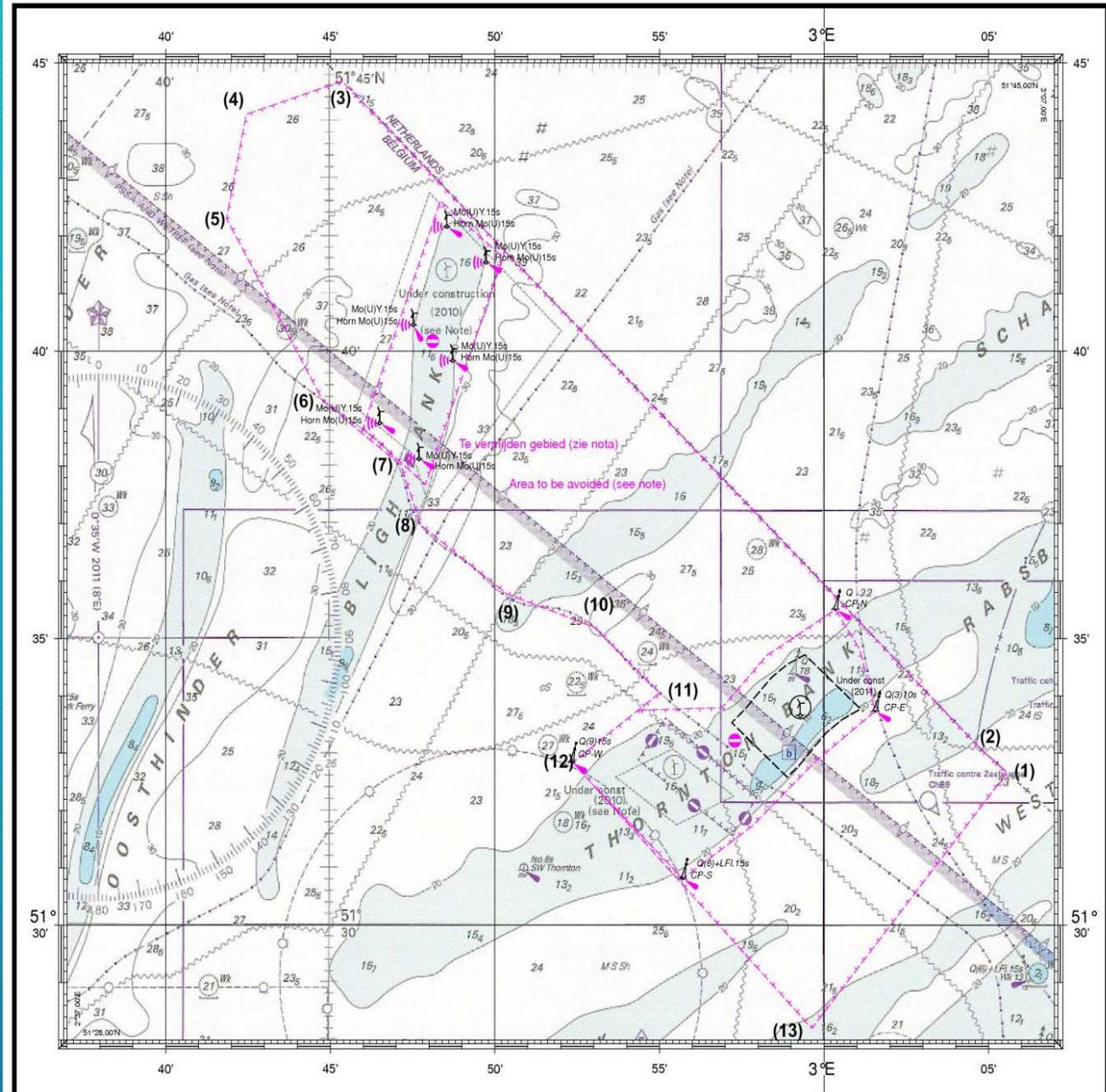
34



INDONESIAN ARCHIPELAGIC SEA LANES I, II AND III

Area To Be Avoided in the vicinity of the Thornton & Bligh Banks, EEZ (IMO, 2011)

54 turbines (Thornton), 10% of Belgian energy production by 2020; 55 turbines (Bligh)



Netherlands: 8 proposals for new & amended routing measures between Texel & North Hinder (IMO, 2012)

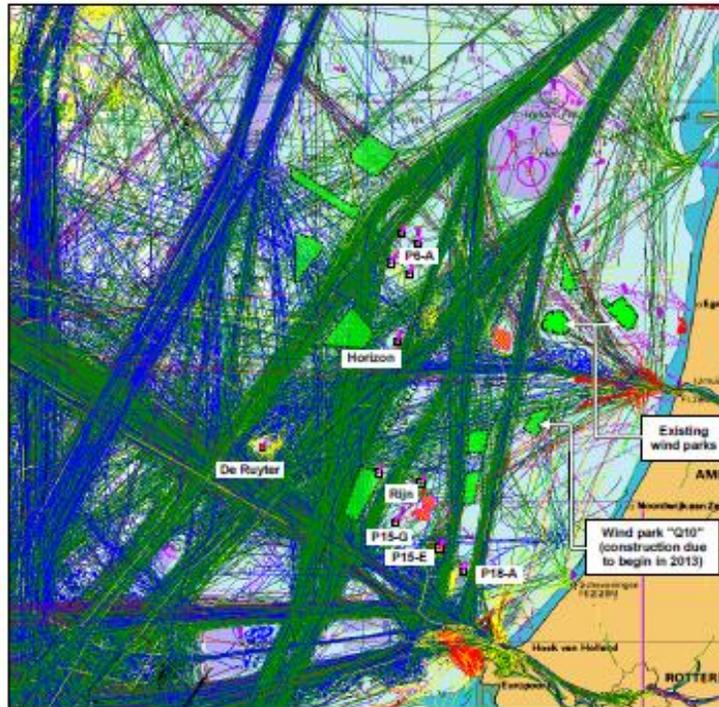
36

NAV 58/3/2
Annex 4, page 1

ANNEX 4

CURRENT TRAFFIC FLOWS

(AIS data on shipping through the area over a three month period in 2009)



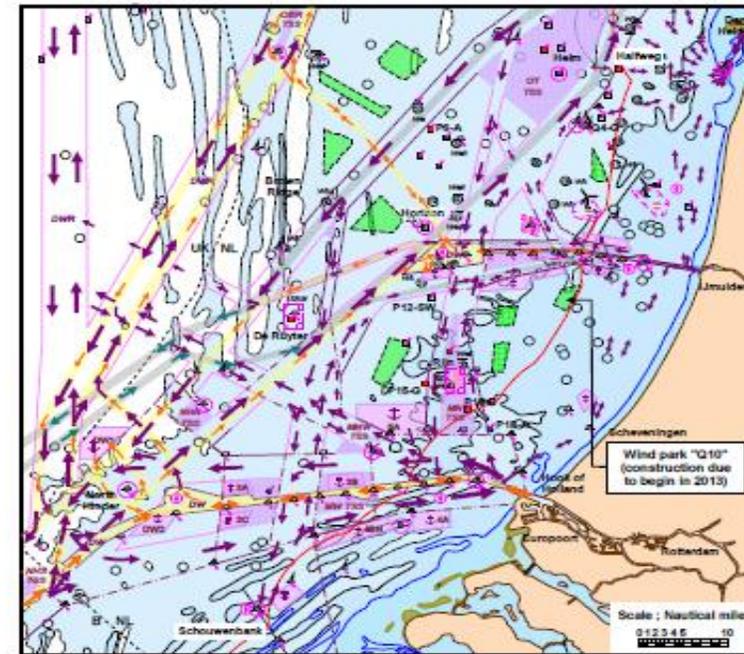
- = Possible wind park sites,
- = Ammunition dumps to be avoided
- = Manned offshore platforms,
- = Unmanned offshore platforms

NAV 58/3/2
Annex 6, page 1

ANNEX 6

PREDICTED TRAFFIC FLOWS

(The chart below shows the predicted traffic movements after adoption of the proposals)



- Water depths 'd'
- = $d \leq 10$ m, ■ = $10 < d \leq 20$ m, ■ = $20 < d \leq 30$ m, = $d > 30$ m
 - = Wind park sites, ■ = Existing wind parks, ■ = Ammunition dumps
 - = Traffic flows (arrow size indicates the flow rate), = Sunk East traffic
 - = Laden tanker routes, = Precautionary area, ↓ = Anchorage
 - = Traffic separation scheme, = Area to be avoided

(c) Particularly Sensitive Sea Areas (PSSAs)

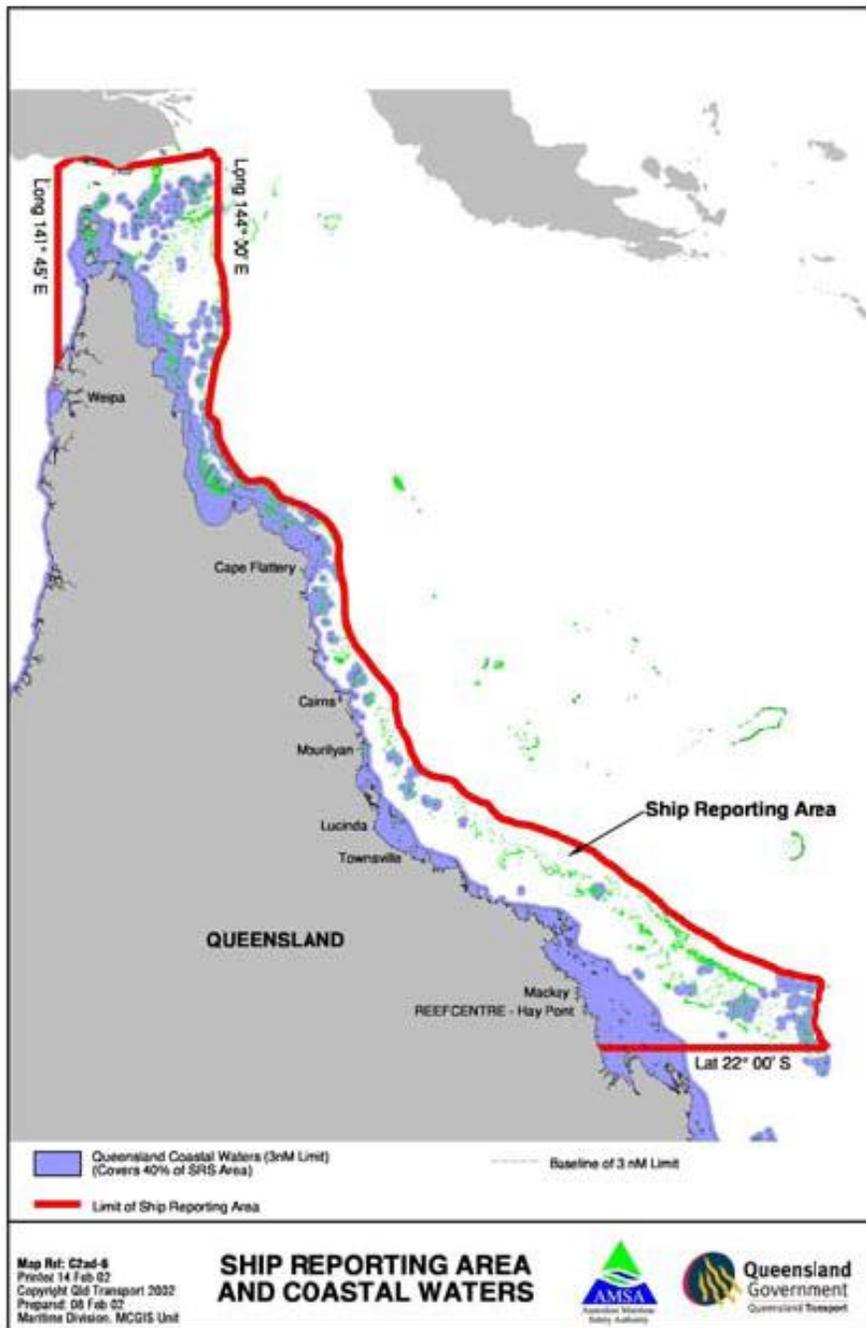
Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (Resolution A 24/Res. 982, 1 December 2005).

- Definition:

“A PSSA is an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities.”

A very useful tool to layer over an existing marine protected area (MPA) where threats to the MPA by international shipping

PSSA	Year adopted	Proponent State(s)	Appropriate protective measures adopted
Great Barrier Reef	1990	Australia	IMO-recommended Australian system of pilotage (includes compulsory pilotage) Mandatory reporting
Sabana-Camaguey Archipelago	1997	Cuba	Area to be avoided
Wadden Sea	2002	Denmark, Germany, Netherlands	Mandatory deep water route
Florida Keys sea area	2002	United States	Areas to be avoided (new and amendment of existing) Mandatory no anchoring areas
Malpelo Island	2002	Colombia	Area to be avoided
Paracas National Reserve	2003	Peru	Area to be avoided
Western European Area	2004	Belgium, France, Ireland, Portugal, Spain and United Kingdom	Mandatory ship-reporting system
Torres Strait (GBR PSSA extension)	2005	Australia and Papua New Guinea	IMO-recommended Australian system of pilotage Two-way shipping route
Canary Islands	2005	Spain	Traffic separation schemes (including inshore traffic zones and precautionary areas) Areas to be avoided Mandatory ship reporting
Galapagos Archipelago	2005	Ecuador	Area to be avoided Mandatory ship reporting system Recommended tracks
Baltic Sea (less Russian waters)	2005	Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden	Traffic separation schemes (including inshore traffic zones, precautionary areas) in three areas Deepwater route Areas to be avoided Mandatory ship reporting system MARPOL Special Area MARPOL SOx Emission Control Area
Papahānaumokuākea Marine National Monument (Hawaii)	2008	United States	Areas to be avoided Ship reporting system (mandatory for ships passing through PSSA to or from a US port; voluntary for all others)
The Strait of Bonifacio	2011	France, Italy	Recommendation on navigation
Saba Bank, Northeastern Caribbean	2012	The Netherlands	Area to be avoided Mandatory no anchoring area
Southwest part of Coral Sea (extension to GBR PSSA)	2015	Australia	Two-way routes Areas to be avoided



Great Barrier Reef PSSA

Source: AMSA

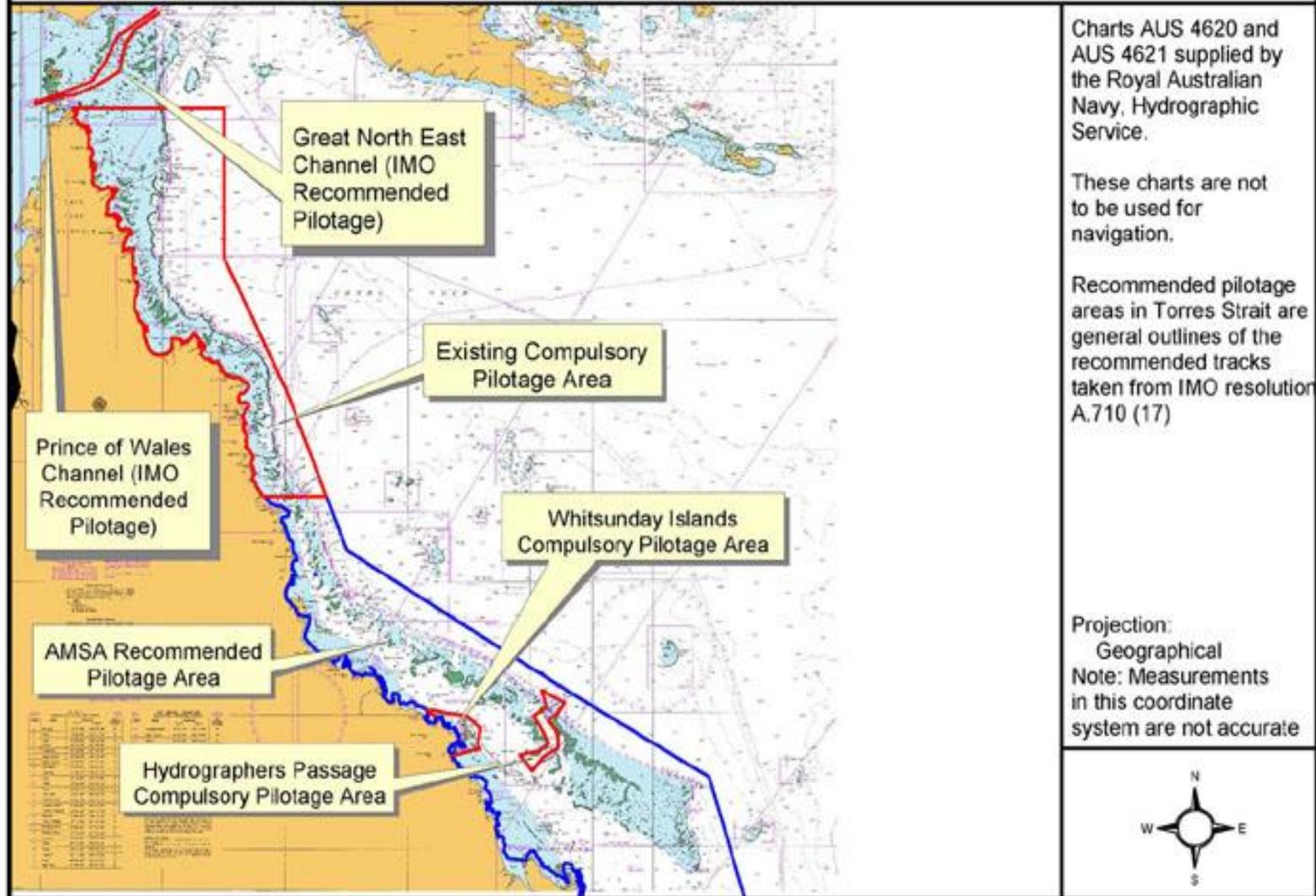
- IMO-recommended Australian system of pilotage (includes compulsory pilotage)
- Mandatory reporting

Coral Sea (2015)

- Two-way routes
- Areas to be avoided



Fig 3.1 - Pilotage Areas in the Great Barrier Reef & Torres Strait



Great Barrier Reef PSSA

Source: AMSA

Procedure for PSSA designation

41

- An application is submitted to the MEPC; a technical committee is appointed.
- The burden of the case to be proven lies with the proponent state(s).
- The case to be proven:
 - (1) the area's environmental conditions evidence sensitivity;
 - (2) the area is vulnerable to international shipping; and
 - (3) the measures to address the area's vulnerability are within the IMO's competence.

The “teeth” in the PSSA: Associated protective measures (APMs)

42

- Mere designation of a PSSA has no particular effect - rather, it is the prescription and application of APMs which truly change the status and conditions of international navigation in the area.
- Hence the importance and necessity for APMs to have a demonstrated legal basis.
- The legal basis may consist of an existing legal instrument, or may be created through the adoption of a new or amendment of an existing legal instrument.
- The APM may apply within and outside of the territorial sea.

- Convention on the Prevention of Pollution from Ships 1973/1978 (MARPOL 73/78):
 - Special area designation (Annexes I, II, V) and emission control area designation (Annex VI).
- Convention on safety of Life at Sea, 1974 (SOLAS):
 - Measures aimed at promoting safe international navigation, e.g.: traffic separation schemes, ships routing and reporting systems, and areas to be avoided (ATBs).
- UNCLOS Article 211(6):
 - Special mandatory measures.

UNCLOS Art. 211(6)(a)

44

“Where the international rules and standards referred to in paragraph 1 are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic, the coastal States, after appropriate consultations through the competent international organization with any other States concerned, may, for that area, direct a communication to that organization, submitting scientific and technical evidence in support and information on necessary reception facilities. Within 12 months after receiving such a communication, the organization shall determine whether the conditions in that area correspond to the requirements set out above. If the organization so determines, the coastal States may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for special areas. These laws and regulations shall not become applicable to foreign vessels until 15 months after the submission of the communication to the organization.”

Legal effect of PSSA/APM adoption

- The PSSA and its APMs become an “international rule/standard” for the area concerned.
- Coastal States are in a position to:
 - Exercise legislative jurisdiction, i.e., adopt national legislation to implement the PSSA and APMs.
 - Exercise enforcement jurisdiction, i.e., take enforcement steps against the ship in violation, but subject to UNCLOS enforcement restrictions.
 - Request the assistance of the flag state.
- Coastal States are required to inform IMO of steps they will take for enforcement purposes (consistently with UNCLOS).

Further legal effect

- All states are required to take steps to ensure that their ships comply with the PSSAs; the flag State has a duty to enforce violations of its ships.
- Once approved, PSSAs are formally identified on nautical charts in accordance with international symbols and methods of the International Hydrographic Organization.

Sensitivity criteria for the proposed area

- ***Ecological***: uniqueness or rarity, critical habitat, dependency, representativeness, diversity, productivity, spawning or breeding grounds, naturalness, integrity, vulnerability, bio-geographical importance.
- ***Social, cultural, economic***: economic benefit, recreation, human dependency.
- ***Scientific and educational***: research, baseline and monitoring studies, education.
- Only one of the above needs to be satisfied!

Criteria for vessel threats

48

- Vessel traffic characteristics: operation factors, vessel types, traffic characteristics, harmful substances.
- Natural factors: hydrographical, meteorological, oceanographical
- Other: evidence of damage from shipping, patterns of accidents, foreseeable incidents, other environmental stresses, existing measures and their impact.

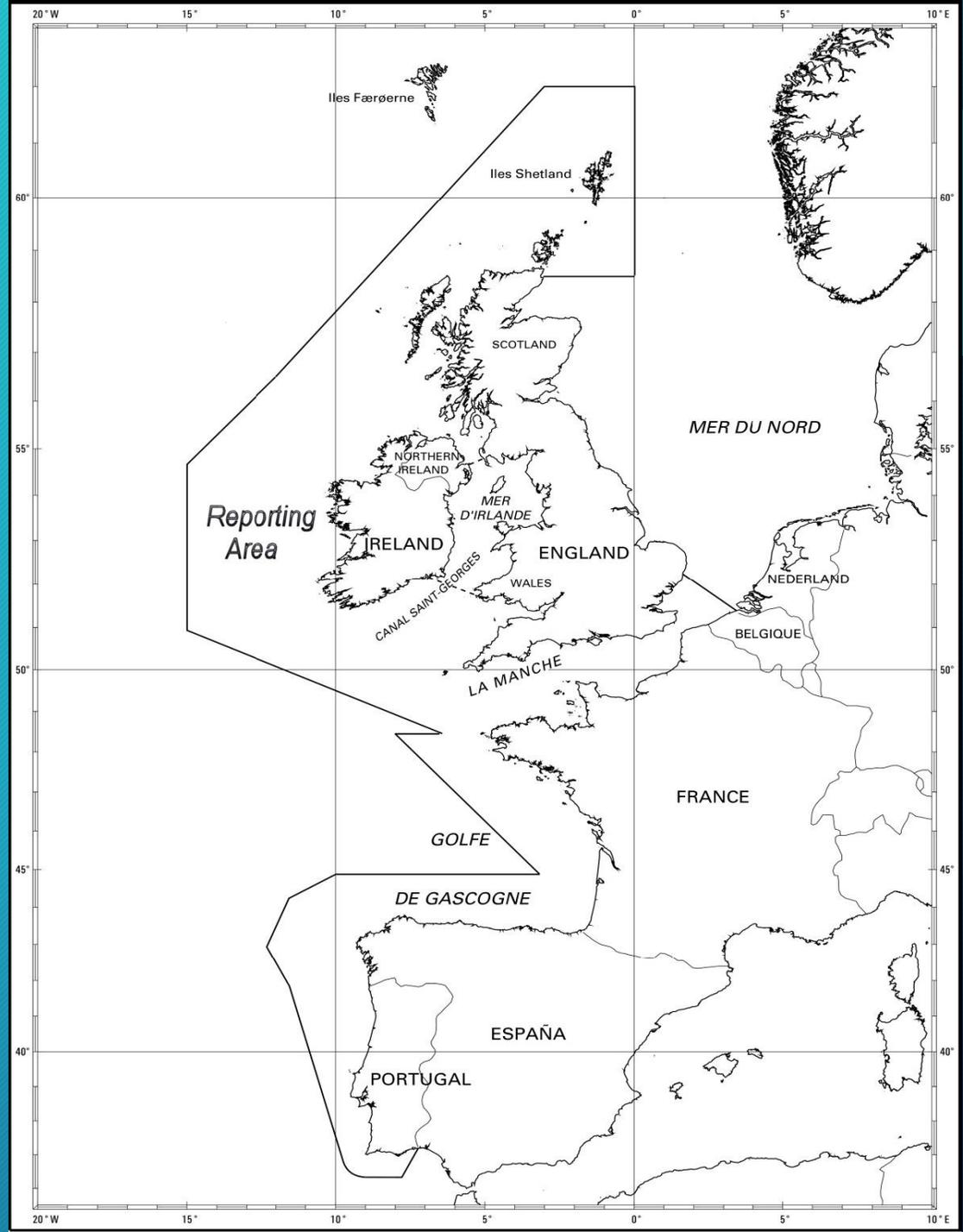
APM policy and examples

49

- IMO favours least restrictive options in the interests of commerce.
- Appropriateness is determined with reference to vulnerability and sensitivity, and the threat posed by shipping.
- Examples:
 - **Ships' routing measures** (areas to be avoided, traffic separation schemes, inshore traffic zones, deep water routes, precautionary areas, recommended routes, vessel traffic service systems, etc.).
 - **Ship reporting systems** (radar surveillance, interactive ship/shore reporting, etc.).
- Condition: domestic measures may not require new design, construction, manning or equipment standards; IMO-adopted standards must be applied.

Western European Waters PSSA

Source: IMO Doc.,
SN/Circ.242
13 December 2004



Western European Waters' APM

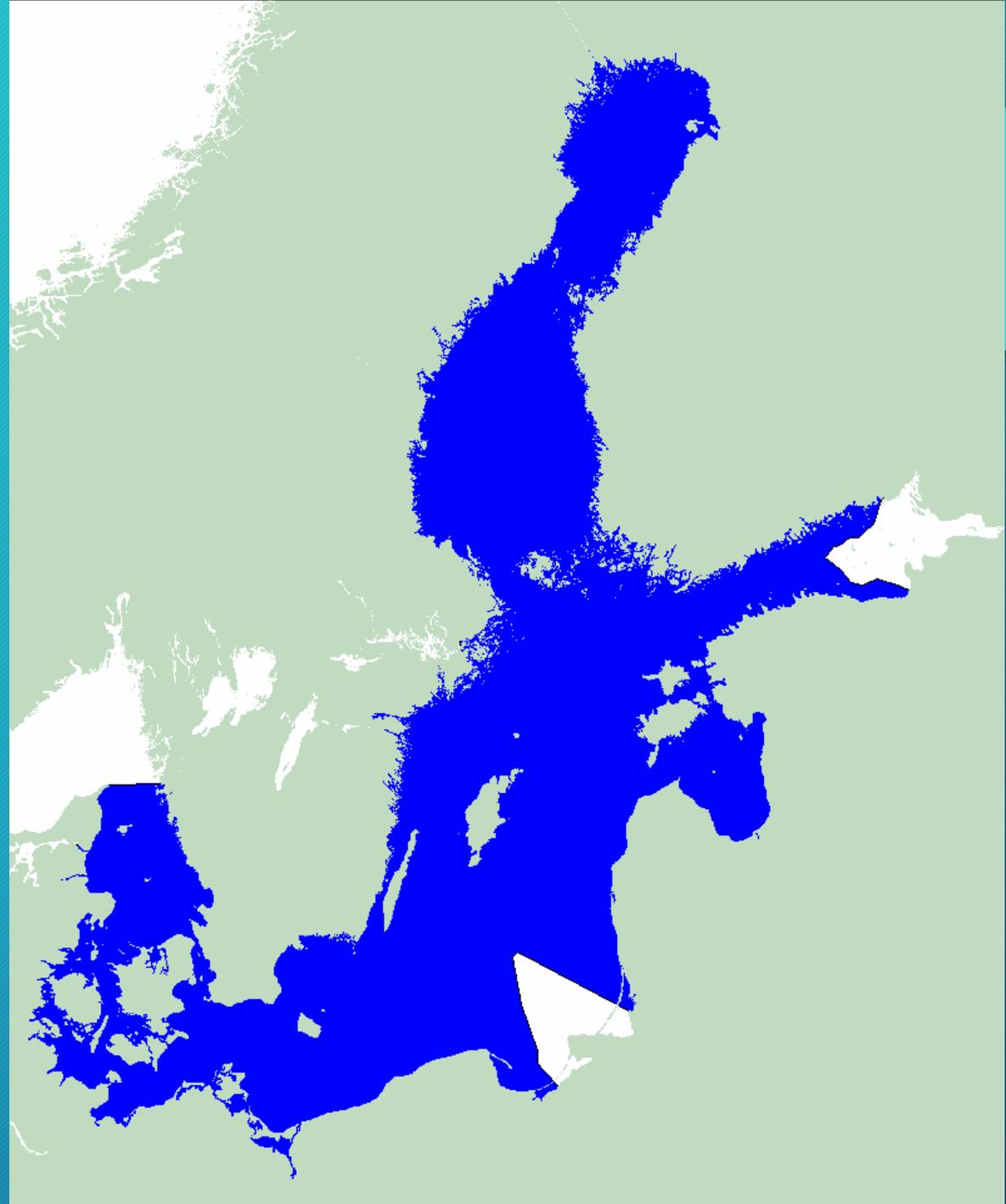
51

- The original controversial measure:
 1. Prohibiting the carriage of heavy grades of oil through the PSSA in vessels of more than 600 dwt, **except in double-hull tankers**, which will be obliged to comply with a **reporting obligation with a 48 hour notice period**; ...
 2. At a later date, **further associated measures** may be proposed in accordance with ... (IMO PSSA Guidelines).
- The approved measure:
 - **Mandatory ship reporting system** for laden (crude, heavy fuel oil, bitumen/tar) tankers of more than 600 tonnes; on entrance and departure from area.

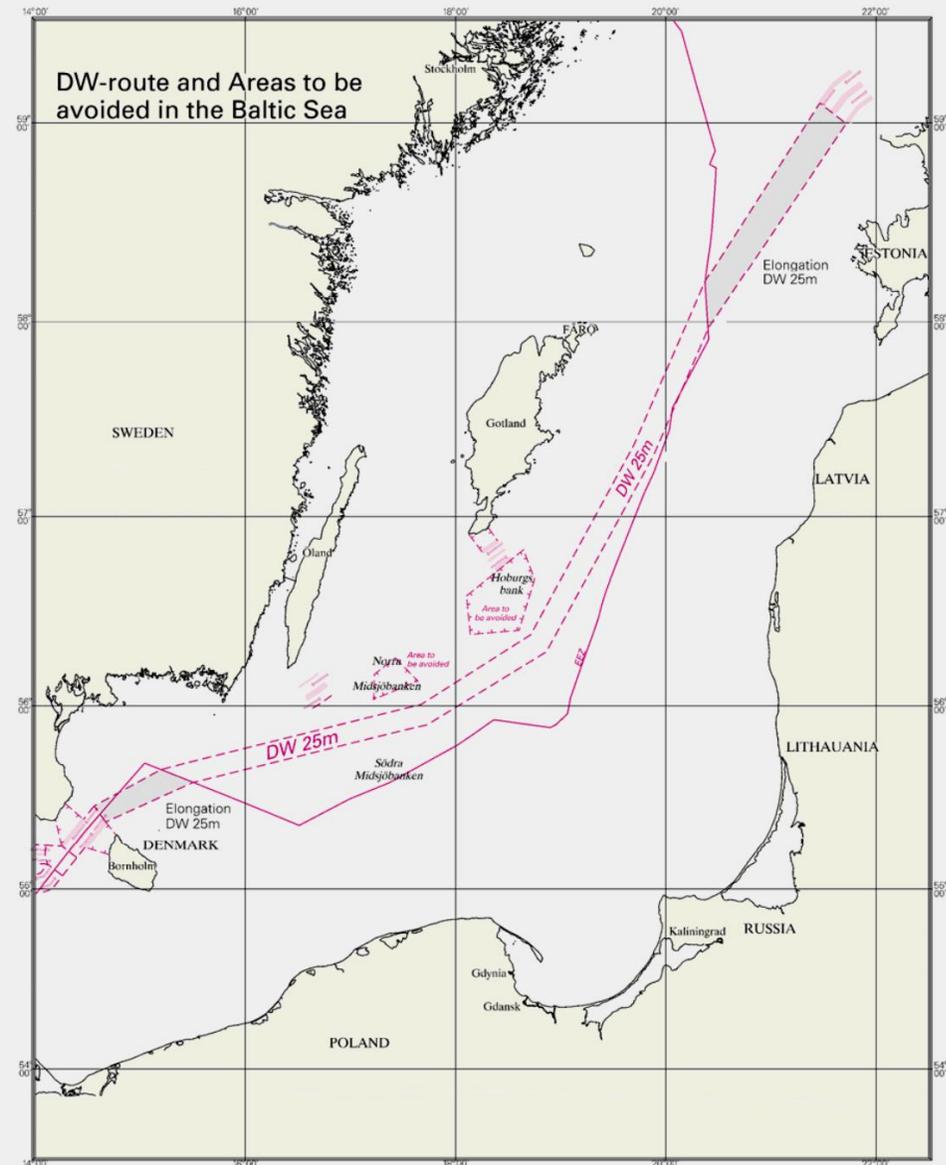
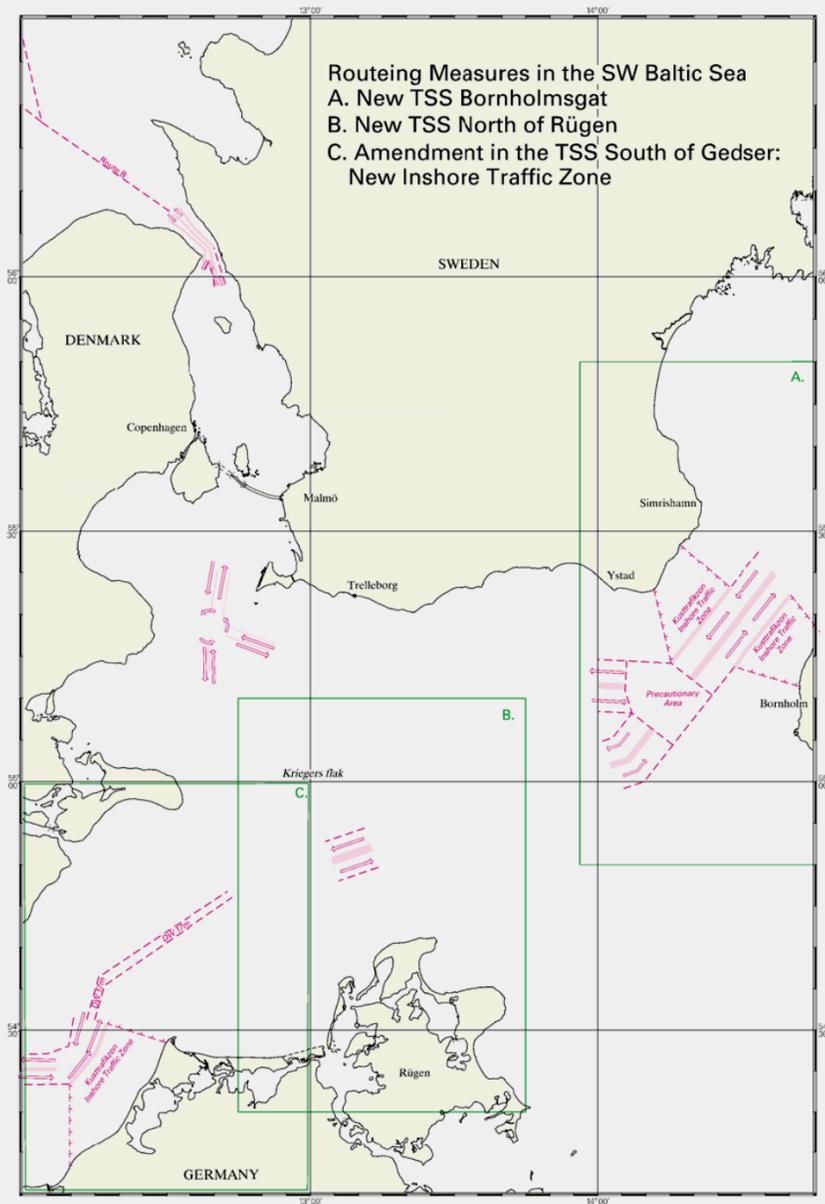
Baltic Sea PSSA:
*A politically
sensitive sea area?*

What do you think
was an issue in the
designation of this
PSSA?

Source: IMO Doc.
MEPC 53/WP.15, 20
July 2005



- Various measures already in place in some areas at the time of submission of proposal to IMO (e.g., compulsory reporting and traffic surveillance, routeing systems, compulsory pilotage, special area under MARPOL 73/78 Annexes I, II, V, and annex VI (Sox Emission Control Area)).
- Actual new measures approved: deep water route and areas to be avoided.



4. Conclusion



Thank you

谢谢

Maraming salamat

Cám ơn

ขอบคุณค่ะ

Terima kasih

ကျေးဇူးတင်ဥမ္မတယု။

Or-koon

ຂອບໃຈ