

Title:

Revitalising Hydrographic Information for Empowering Marine Knowledge

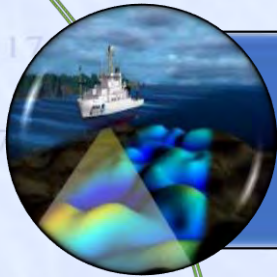
Speaker:

Rear Admiral Hanafiah bin Hassan
Director General of National Hydrographic Centre
Royal Malaysian Navy

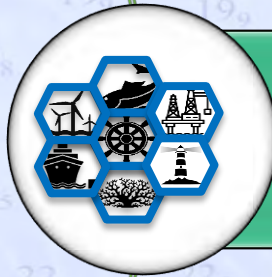
Date:

18 & 19 November 2019

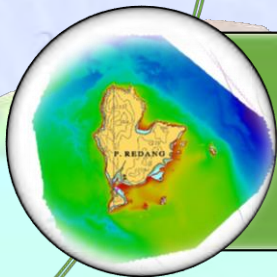
“Revitalising Hydrographic Information for Empowering Marine Knowledge”



Needs for Hydrographic Marine Data Information



Present Challenges

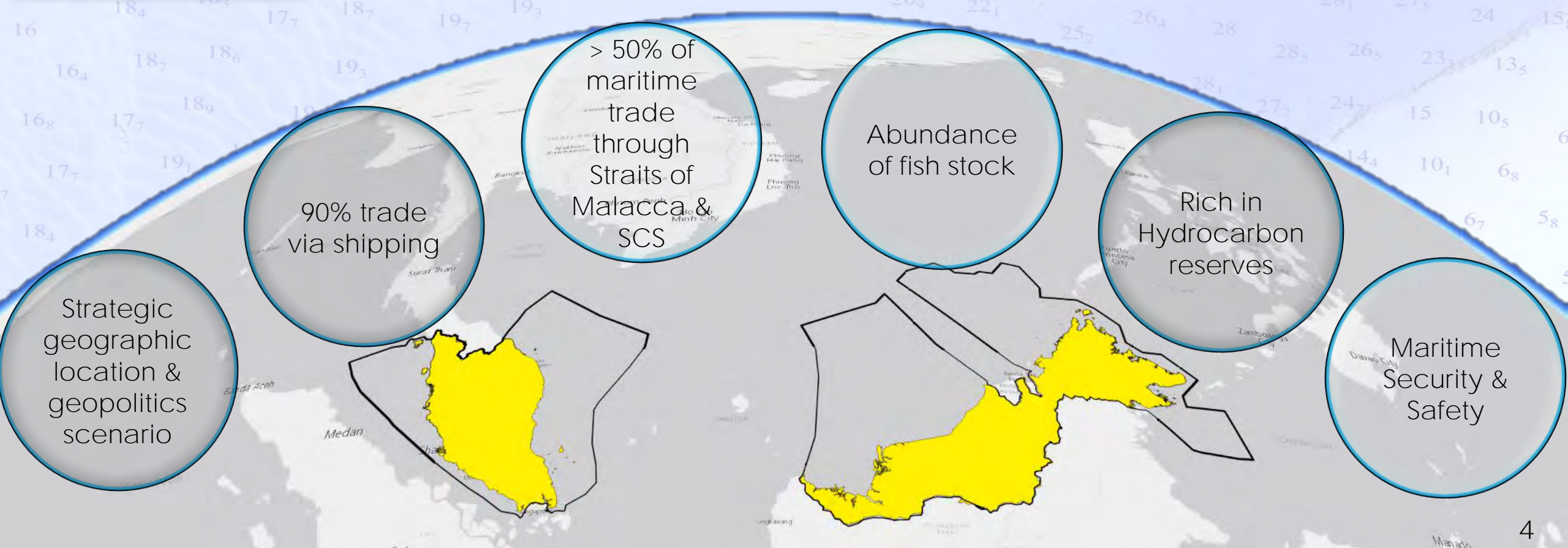


Revitalising Measures

A MARITIME NATION



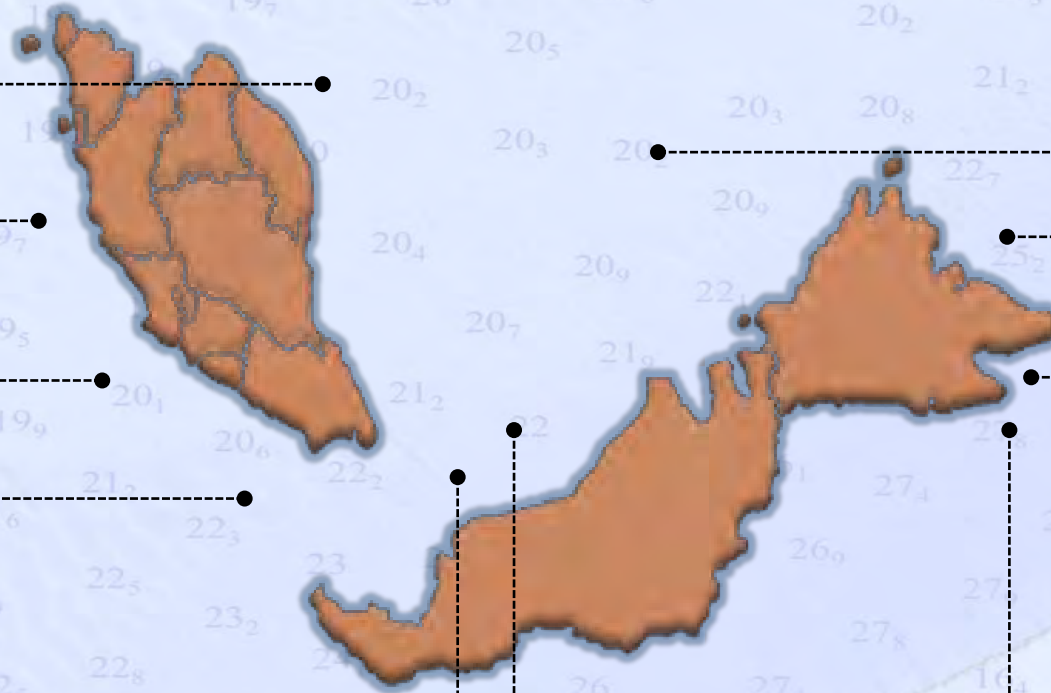
'The Making Of Malaysia As A Maritime Nation' is appropriate and relevant as it highlights Malaysia's aspiration to be a maritime nation in the true sense.....Because of our history and the close proximity of many Malaysians to the sea we are inclined to regard Malaysia as a maritime nation. We are situated on the trade routes between India and China, between Europe and the East and naturally served as a port of call between monsoons for supplies and crew for all ships plying this route.
Tun Dr. Mahathir, 1997 **(Malaysia's** First International Maritime Conference)





NEED FOR HYDROGRAPHIC DATA & INFORMATION

Malaysia Maritime Space:
569,845 KM²



Defence & Security



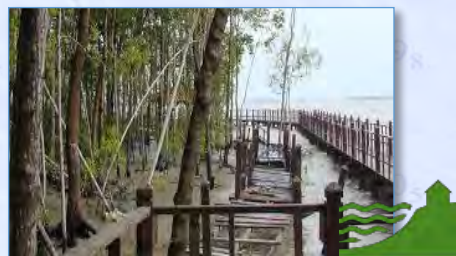
Safety of Navigation



Disaster Management



Marine Scientific Research



Coastal Zone Management



Maritime Boundary



Marine Data Spatial Infrastructure



Marine Exploration



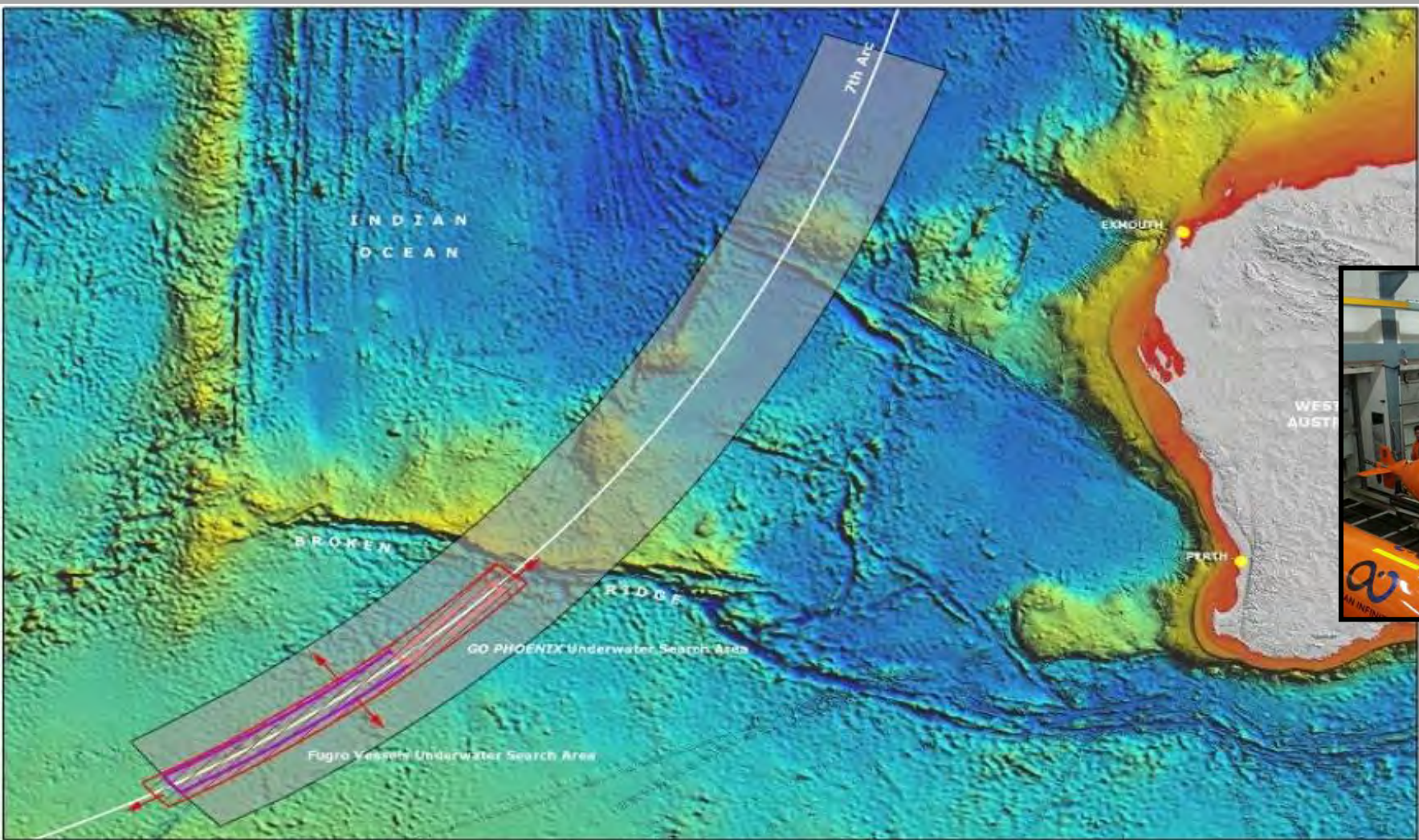
Fisheries



Marine Tourism

PRESENT CHALLENGES

NHC OBSERVER TEAM



MH370 Underwater Search Planning Areas

MH370 Underwater Search Areas Planning Map

Australian Government
Australian Transport Safety Bureau
Geoscience Australia

0 250 500 Kilometres

Indicative Search Area Extension to 120 000 km²

Potential Search Area Extension Directions

Underwater Search Area 1

Underwater Search Area 2

Wide search area

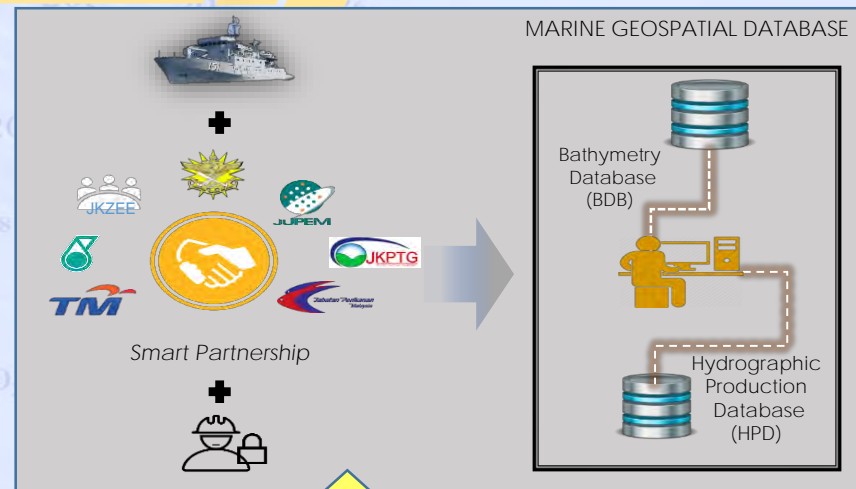
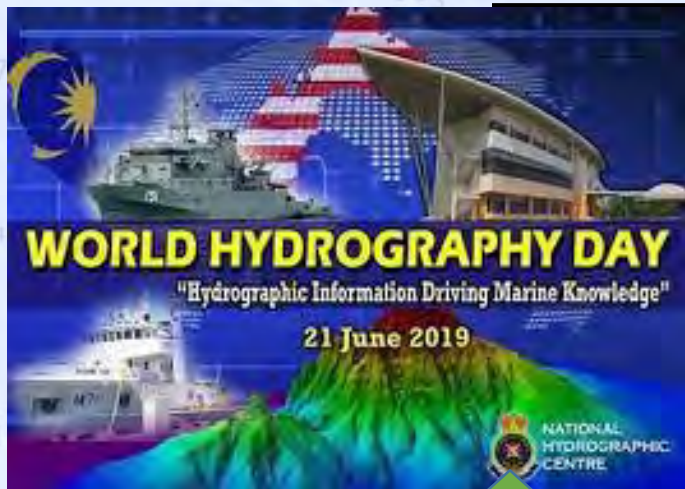
Bathymetry Elevation Ramp

0 m
-2000 m
-4000 m
-12000 m approx.

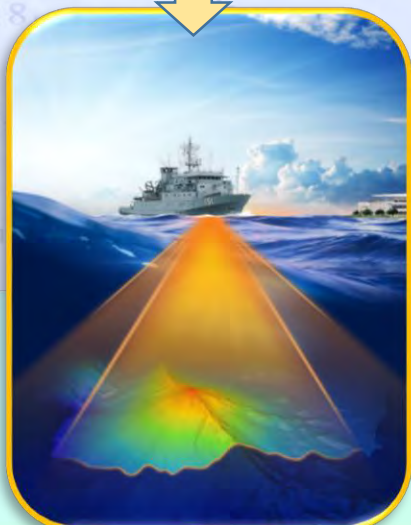
Date: 16/04/2015



PRESENT CHALLENGES



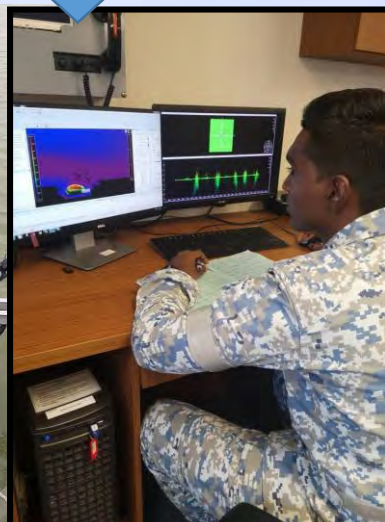
Multibeam Data Coverage



Regulating Policy & Awareness



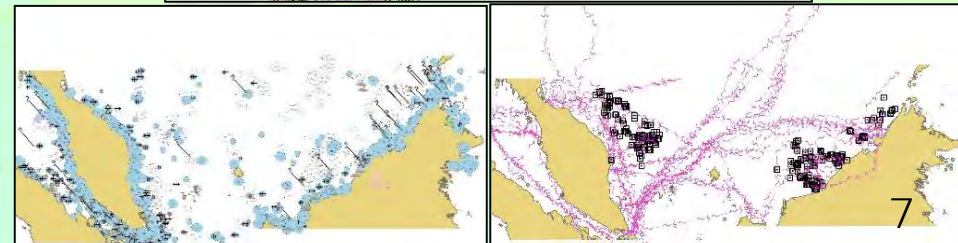
Qualification & Competency of Hydrographic Surveyor



Data Interoperability

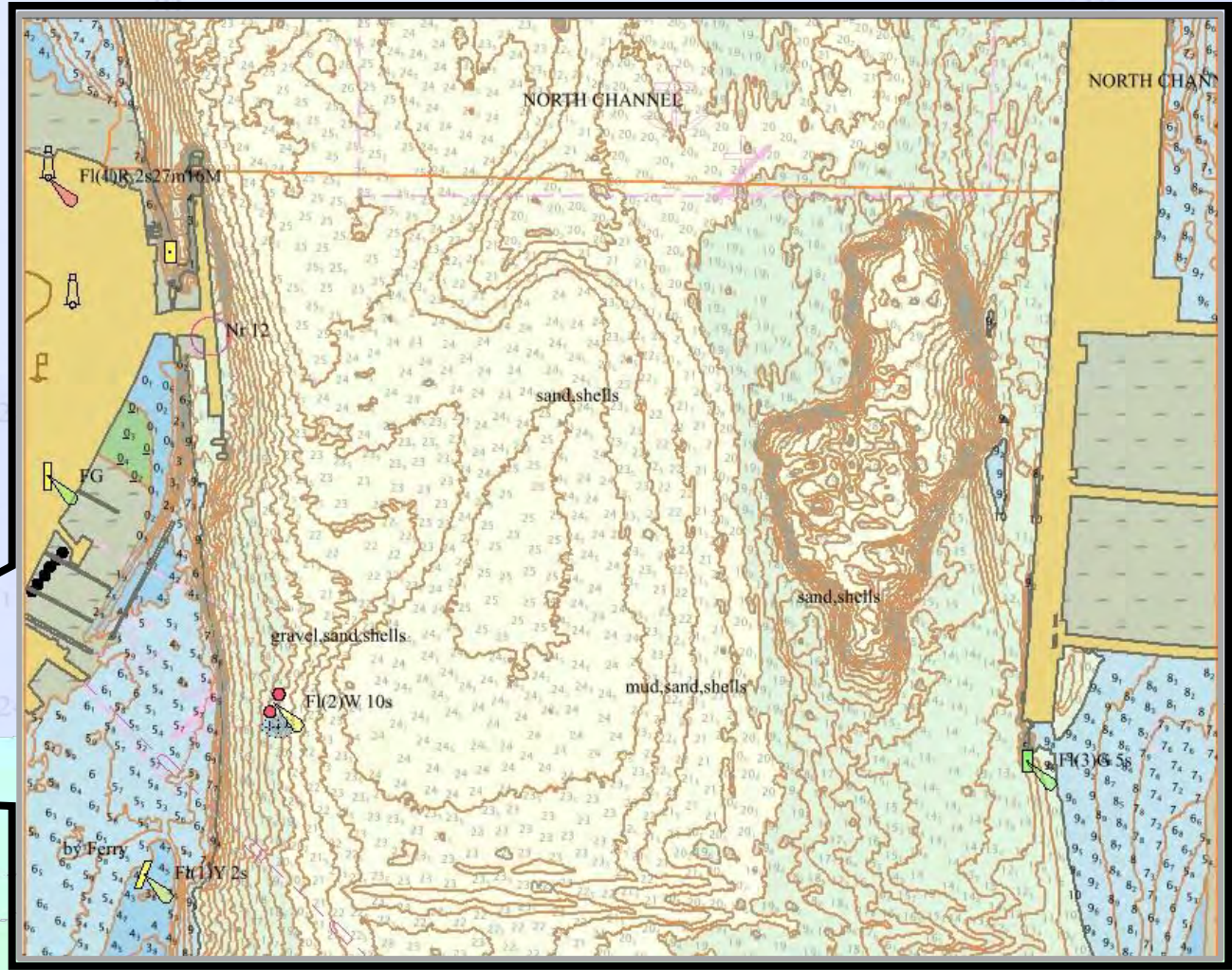
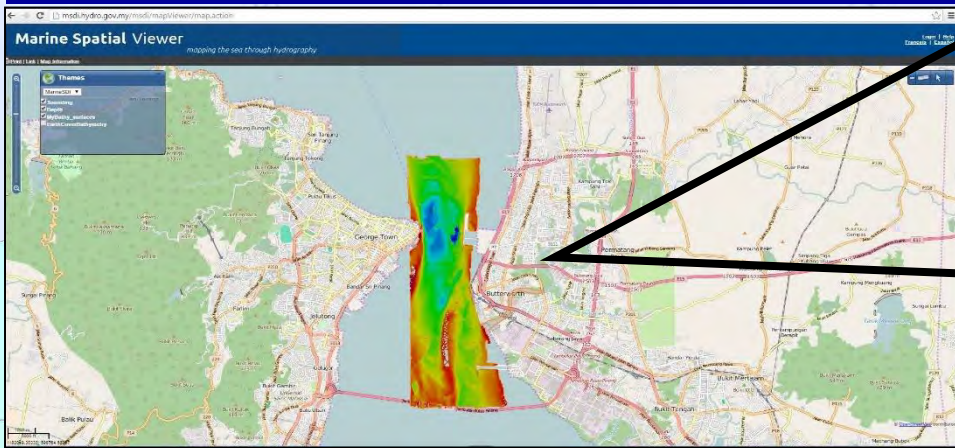
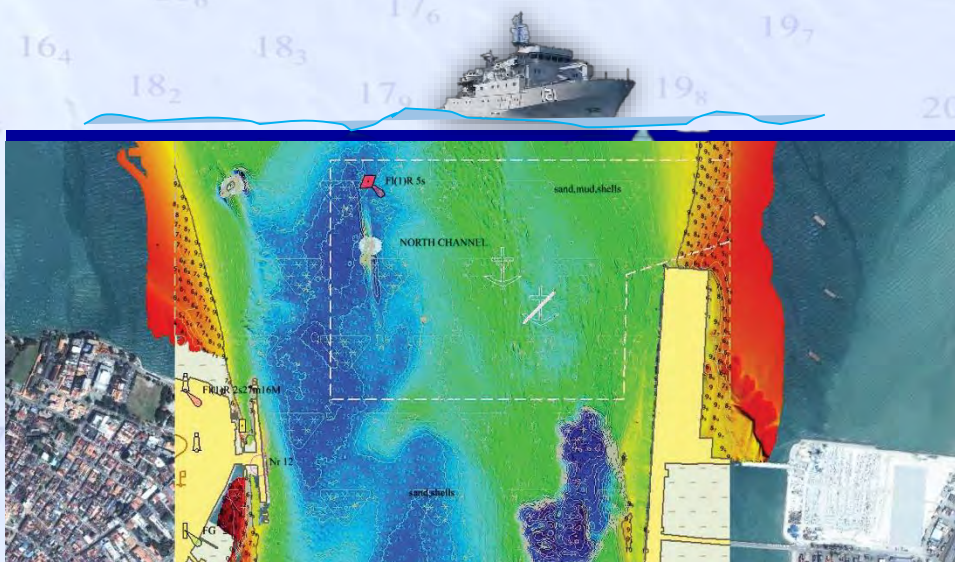


Big Data





Seabed 2050



BASELINES OF MARITIME ZONES ACT 2006
ACT 660

An Act to provide for the declaration of geographical co-ordinates of base points for the purpose of determining the baselines of Malaysia and for other matters connected therewith.

WHEREAS the United Nations Convention on the Law of the Sea done at Montego Bay on 10 December 1982:

AND WHEREAS Malaysia deposited her instrument of ratification on 14 October 1996 and therefore in accordance with Article 308 of the Convention, the said Convention entered into force as far as Malaysia is concerned on 14 November 1996:

NOW THEREFORE, IT IS ENACTED by the Parliament of Malaysia as follows:

1. Short title and commencement.

(1) This Act may be cited as the Baselines of Maritime Zones Act 2006.

(2) This Act comes into operation on a date to be appointed by the Minister by notification in the *Gazette*.

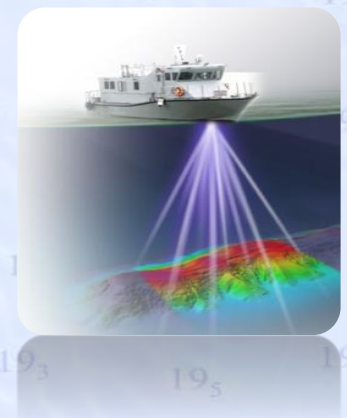
2. Interpretation.

In this Act, unless the context otherwise requires-

"chart " means a nautical chart specifically designed to meet the needs of marine navigation, showing depth of water, nature of the seabed, configuration and nature of the coast, dangers and aids to navigation, in a standardized format and such chart is also referred to as marine chart or hydrographic chart;

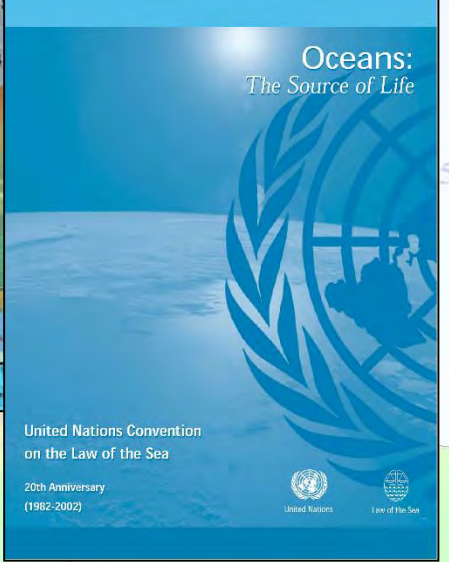
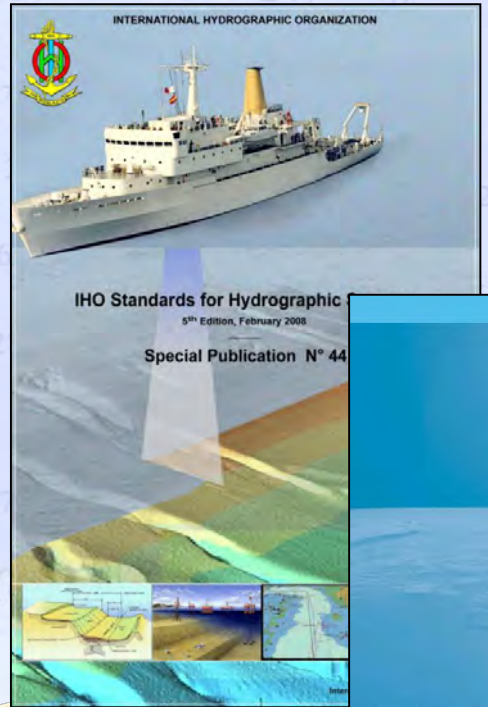
"low-water line " means the intersection of the plane of low-water with the shore; the line along a coast or beach to which the sea recedes at low water;

"baselines " means the baselines as determined under section 5;



Regulates the hydrography activities and its practices

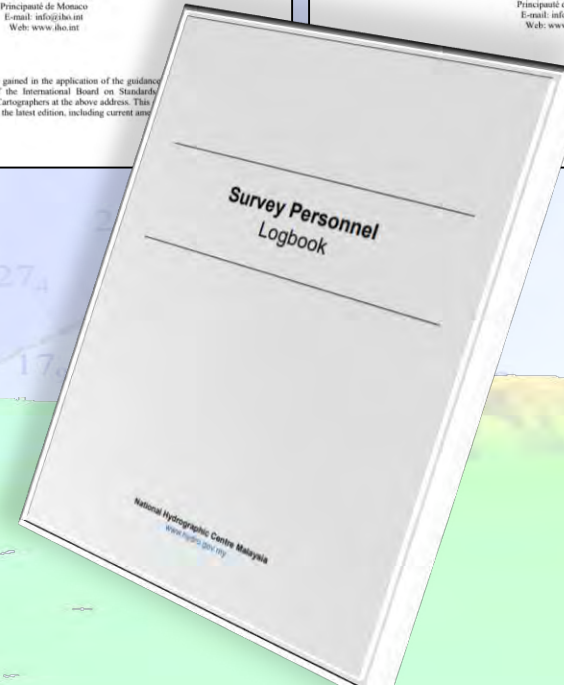
Compliance with the international standards

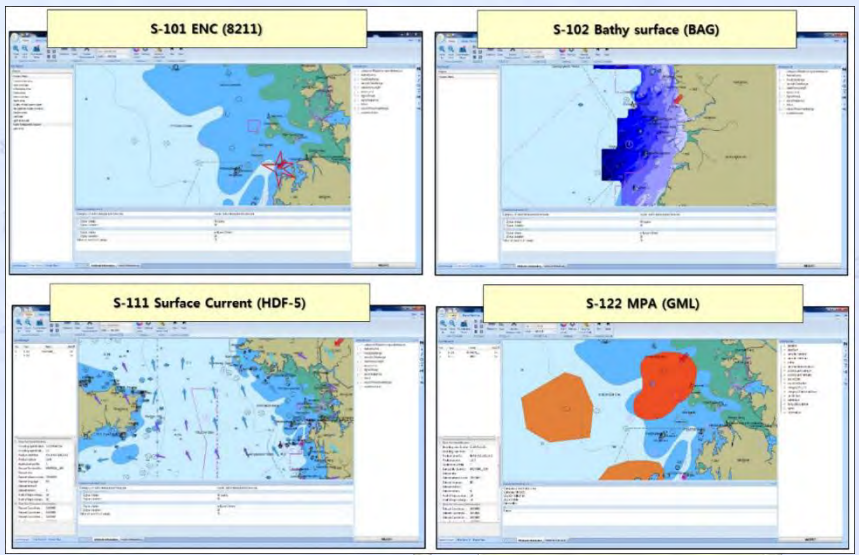
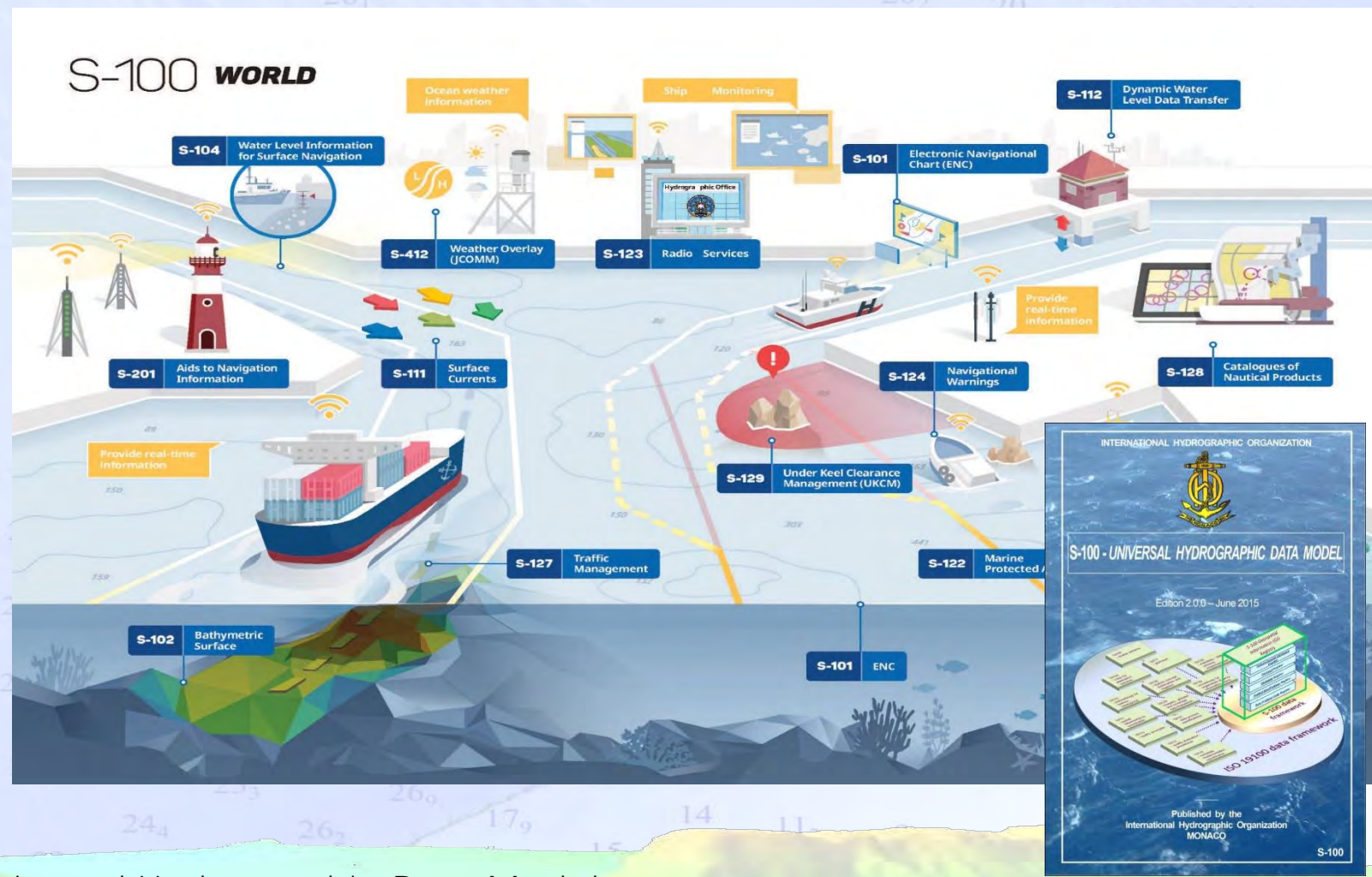
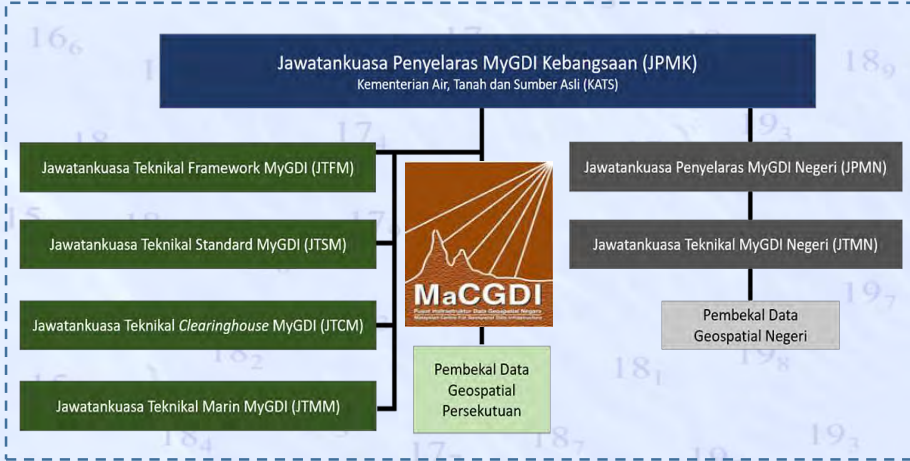


Competency of hydrographic surveyors



Hydrographic Surveyor Competency Assessment Committee





S-100: Universal Hydrographic Data Model

Key Features of S-100 : S-100 supports a wider variety of hydrographic related digital data sources, products, and customers. This includes new spatial models to support imagery and gridded data, 3-D and time-varying data (x, y, z, and time), and new applications that go beyond the scope of traditional hydrography (high-density bathymetry, seafloor classification, marine GIS, etc.).



*We are like islands in the sea,
separate on the surface but
connected in the deep
– William James*



<https://www.hydro.gov.my>



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National Hydrographic Centre



National Hydrographic Centre



[mynathydrocentre](https://www.instagram.com/mynathydrocentre)