

Webinar on integrated marine geospatial information management

How to realize a Maritime Spatial Data Infrastructure (MSDI)

~ Japan's Case ~

Japanese Hydrographic and Oceanographic
Department (JHOD), JCG
27 Oct 2021



Logo for JP MSDI



Mascot for JP MSDI,
Seagull UMISHIRU

- Framework of Ocean Policy in Japan
- Japanese MDA concept - or MSDI -
- Distributed DB concept vs centralized
- Summary

Basic Act on Ocean Policy

Enactment : 20 April, 2007

Enforcement : 20 July, 2007



Headquarters for Ocean Policy of Govt.

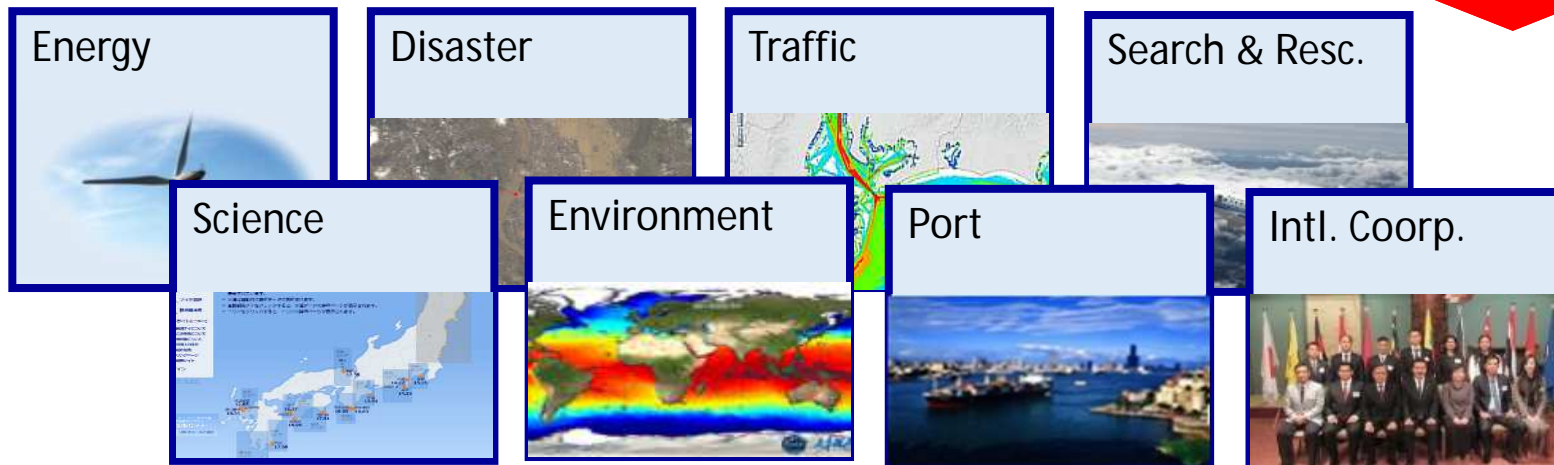
Director-General: Prime Minister

Vice-Director-General: Chief Cabinet Secretary
Minister for Ocean Policy

Members: All Ministers

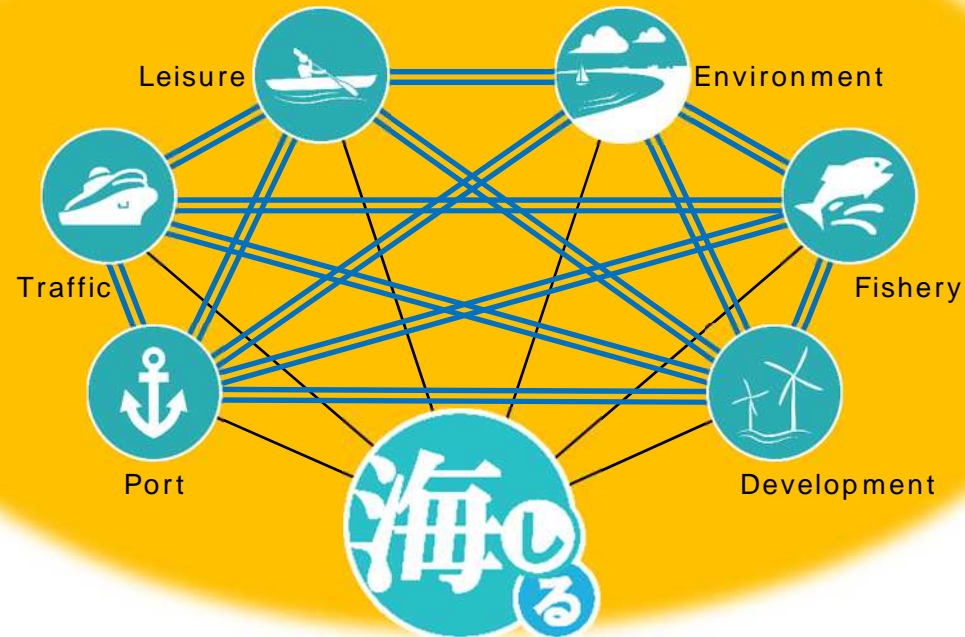
Basic Plan on Ocean Policy

- Five-year period
- Visions
- Execution measures



(Maritime) Spatial Data Infrastructure

Japanese MDA, M-SIL or MSDI



MDA is used in the context of security, normally. But we regard MDA concept as the basis for all maritime activities, not only for security, which can be called “MSDI.”

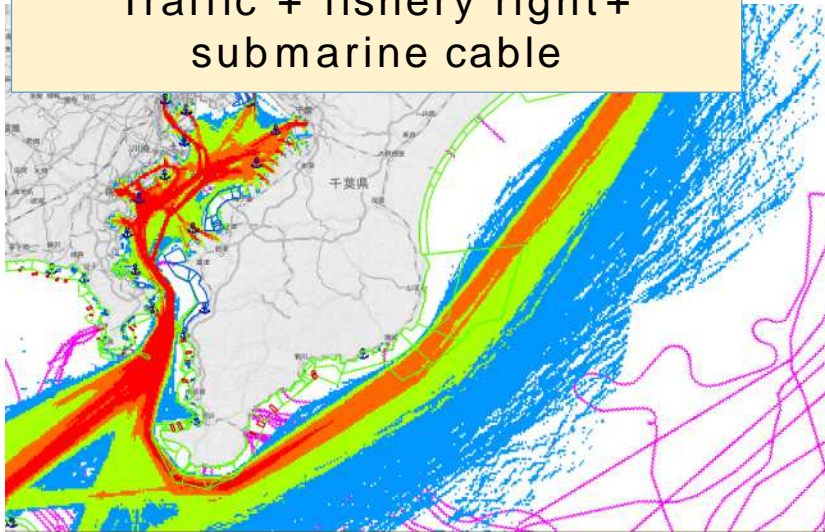
M-SIL comes after “MDA Situational Indication Linkages.”

MSIL Japan

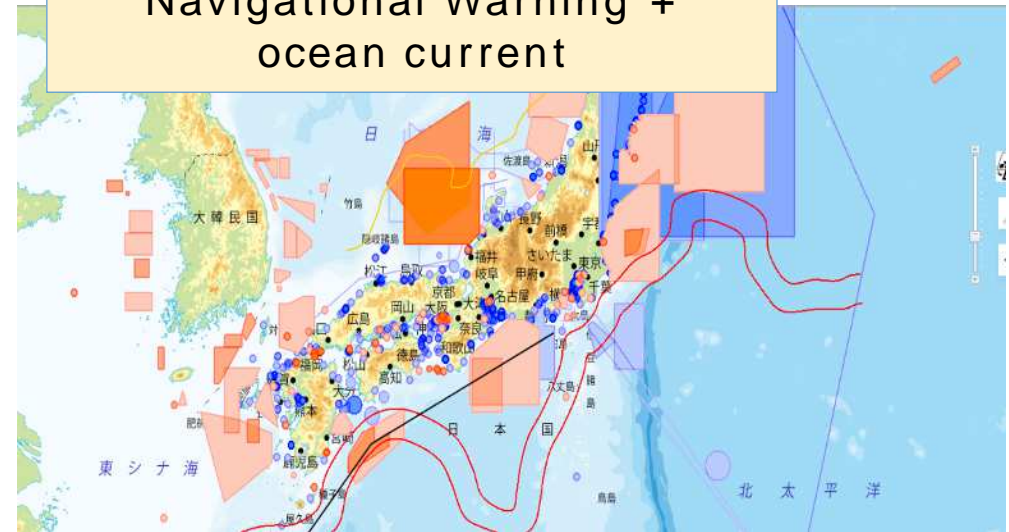
Search



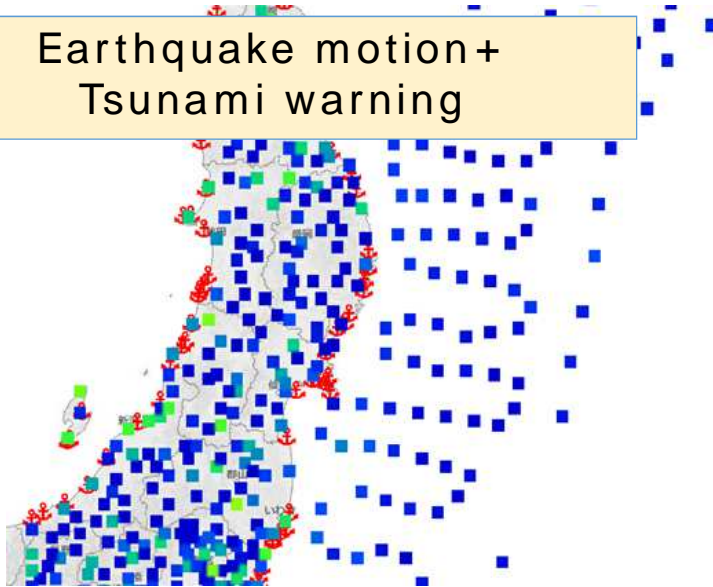
Traffic + fishery right+ submarine cable



Navigational Warning + ocean current



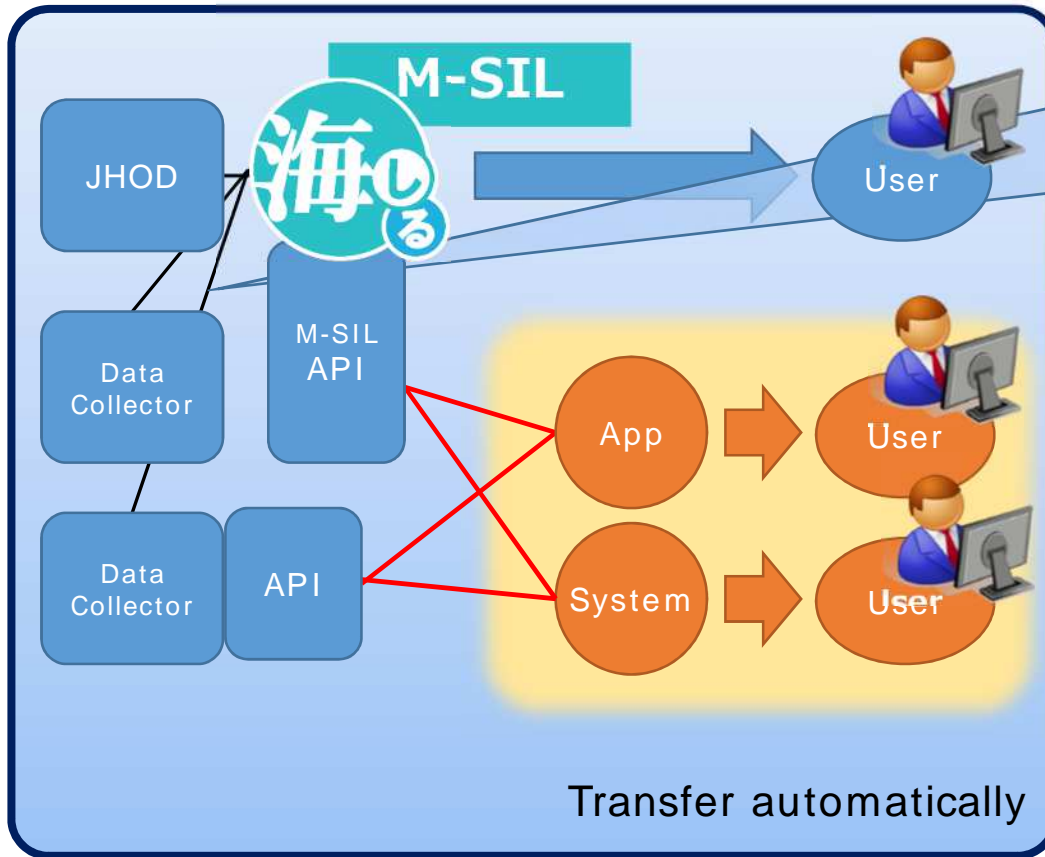
Earthquake motion+ Tsunami warning



Using M-SIL, you can access more than 200 kind of maritime geospatial data in real-time.
You can overlay any kind of data as you want.

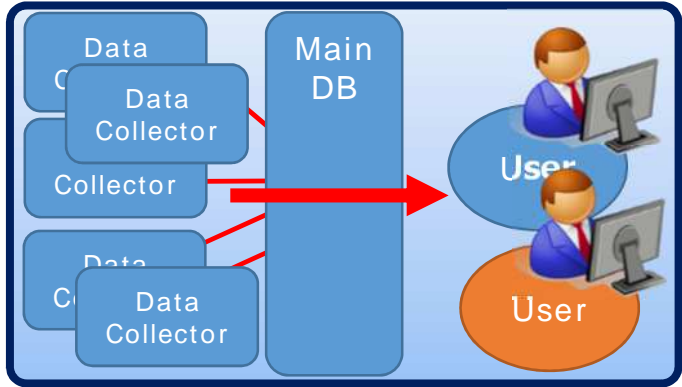
Distributed Database Concept vs centralized

Distributed Database Concept



Data collectors with servers are supposed to provide GIS readable format.

Centralized Database



Marché like Business



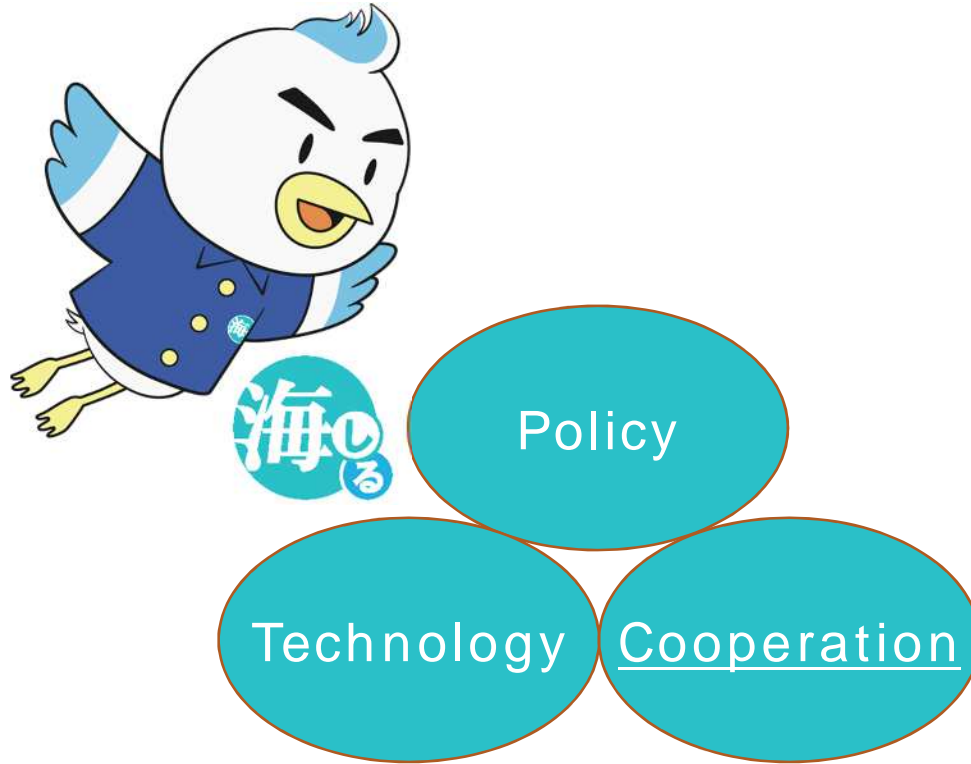
Big Business

- One layer in National Spatial Data Infrastructure,
- A big database to gather and assemble every kind of data “greedily”, nor
- The portal site which gets users to search and use data manually.



- Under the Ocean Policy framework,
- The database with “distributed” concept, and
- Providing data platform to allow any interfaces, data analyzers, or any apps connecting automatically.





Appreciate questions and comments