CONSIDERATION OF A REGIONAL MARINE SPATIAL DATA INFRASTRUCTURE (MSDI)

15th Southern African and Islands Hydrographic Commission
Seychelles, 28-30 August 2018

Desired outcomes

Through this session we will:

- Provide a brief overview of SDI/MSDI;

- Consider potential benefits;

- Consider Strengths, Weaknesses, Opportunities and
  Threats (SWOT analysis);

- Precis IHO activity in MSDI;

- Invoke a healthy discussion to understand if there is a
  requirement for regional MSDI;
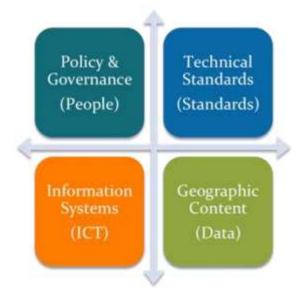
- Identify any required next steps.

What is SDI/MSDI

MSDI takes its high-level structure from Spatial Data Infrastructure (SDI). This is based around the "four pillars" or principles of SDI:

- Policy and Governance (people);

- Technical Standards;

- Information Systems;

- Geographic content (data).

What is SDI/MSDI continued

MSDI activity in IHO

IHO has an active MSDIWG under IRCC. Its key objective is to "*Identify the Hydrographic Community inputs to National Spatial Data Infrastructures (NSDI)"*. MSDIWG is chaired by Denmark with USA as Vice-Chair. This group has:

- supported and developed the IHO publication C-17 "Spatial Data Infrastructures – The Marine Dimension" located at this link https://www.iho.int/iho_pubs/CB/C-17_Ed2.0.0_EN.pdf
- Last convened its 9th meeting in Niteroi, Brazil in Jan/Feb 2018
- Has established TORs and work plan https://www.iho.int/srv1/index.php?option=com_content&view=article&id=483&Itemid=370&lang=en
- The next meeting is scheduled for 4-8 March 2019 in Busan, Republic of Korea.

Where has there been success already?

The arctic SDI is a good example of collaborative working.

See https://arctic-sdi.org/

SWOT Analysis

Key Strengths

- Influence funding decisions.
- Can support improve hydrographic governance.
- Regional group of subject Matter experts at SAIHC.
- Build regional reputational strength.
- Supports hydrographic data governance and data sciences.
- Interoperability

Key Weaknesses

- Lack of awareness of MSDI within regional stakeholders.
- Regional stakeholders may have differing priorities to implement/support MSDI.
- Unpredictable/unreliable digital infrastructure in some areas.
- Bureaucratic approvals process may make MSDI difficult to implement.

Key Opportunities

- Potential for least developed hydrographic stakeholders to achieve a "technology leap"
- Linking to "Blue Economy" strategies will gain interest from decision makers
- Could highlight new "users" in the marine space
- Link with existing geospatial initiatives in place
- Development of new partnerships such as Nairobi Convention
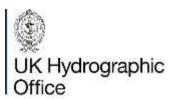- Provides evidence-based tool to secure wider funding

Key Threats

- Existing geospatial initiatives may detract from this MSDI proposal.
- Lack of knowledge of the subject matter.
- Lack of robust technology widely available.
- Resource needed to make a MSDI
- A poor-quality MSDI may hinder rather than advance requirements.
- CS without a survey programme in place.
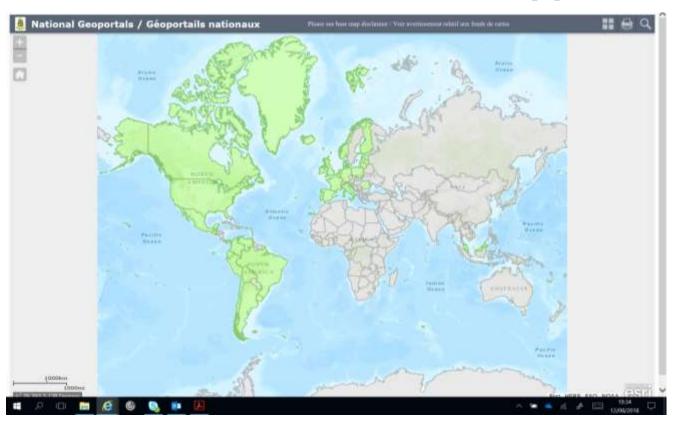- Its difficult to quantify the long-term benefits.

What could SAIHC MSDI achieve?

1. Improved communication between stakeholders.

2. Greater access to, and visibility of spatial data

3. Brings varied maritime stakeholders together.

4. Improved Management Information, leading to:

    a. Reduced duplication of effort.

    b. Increased efficiency.

5. Visual and statistical prioritisation of data collection requirements.

6. Reduced manual processing.

7. Help member states to deliver on their obligations.

8. Supports and possibly exceeds C-55 expectations.

SDI/NSDI and MSDI initiatives mapped to date

Source: IHO C-17 2017

Next steps?