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## WHAT IS THE USE CASE?

The use case should "show the benefits of open (readily available and accessible) marine geospatial information, including minimum standards needed for data. The use case will serve as a **reference** for Member States on the benefits of providing easy access to marine geospatial data, and on the recommended data types to make available."

Work Plan, Working Group on Marine Geospatial Information



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## GOALS OF THE USE CASE

- 1 To serve as a **reference** on the strengths, challenges, standards, and benefits of providing open, readily available marine geospatial data
- 2 To provide successful examples of providing open, readily available marine geospatial data, which illustrate the benefits of open data



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## GOALS OF THE EXERCISE

Exercise

Information

Use Case



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## GOALS OF THE EXERCISE

1

To understand the commonalities - strengths and challenges  
- among countries when it comes to managing and providing  
open marine geospatial data

2

To understand the benefits realized from providing open,  
readily available data and to gather successful examples of  
open marine geospatial data



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# THE EXERCISE

The exercise is a scenario and a series of 5 questions.

## Use Case on Open Marine Geospatial Information

### Overview

The Working Group would like to produce a use case showing the benefits of open (readily available and accessible) marine geospatial information, including minimum standards needed for data. The use case will serve as a reference for Member States which identifies trends, strengths, challenges, issues, possible solutions, and the benefits of providing easy access to marine geospatial data and on the recommended data types to make available. The exercise below will gather information from participants on the practices, challenges, and issues encountered when providing open marine geospatial information. The findings from this exercise will help the Working Group understand what challenges and issues to address and provide real-world examples of the benefits of and need for open marine geospatial information.

### Use Case Exercise

#### Exercise Instructions

Below is a hypothetical scenario followed by five questions which are aimed at understanding the practices and challenges a jurisdiction faces when they provide open marine geospatial information. As you answer the questions, assume you are the lead hydrographer or person responsible for hydrographic surveying of Country A. Assume the legal and policy framework of Country A is identical to that of your jurisdiction. If in your jurisdiction you are not responsible for the decisions below, answer to the best of your knowledge within your jurisdiction's laws and policies. The scenario below is meant to provide a framework for thinking about the questions posed; however, the questions can be answered without the scenario.

#### Scenario

Country A is demolishing a large chemical storage facility on its coast. Country A needs to design protective measures if, during the demolition, toxic chemicals are leaked into Country A's coastal waters. The hydrographic office of Country A has been asked to provide geospatial data on those coastal and nearby inland waters, so that Country A can predict if the chemicals will reach and contaminate the inland water supply. There is also a possibility that chemicals released from the storage facility will reach inland waters of neighboring Country B. Currently, Country A has no agreement on sharing geospatial information with Country B.

#### Questions

1. How does your country organize and manage marine geospatial information (e.g., spatial data infrastructure)?
2. How are data added to or integrated with existing geospatial data, including land-based data?
3. How can or do you share and integrate your data with other national agencies?
4. Do you have any international, cross-agency, or non-governmental partnerships that facilitate the collection, sharing, and maintenance of data?
5. What legal and logistical barriers do you know of or foresee in using a multilateral approach to managing and sharing data (i.e., marine spatial data infrastructure)?



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How does your country organize and manage marine geospatial information?

How are data added to or integrated with existing geospatial data, including land-based data?

How can or do you share and integrate your data with other national agencies?

Do you have any international, cross-agency, or non-governmental partnerships that facilitate the collection, sharing, and maintenance of data?

What legal and logistical barriers do you know of or foresee in using a multilateral approach to managing and sharing data (e.g., MSDI)?



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## TIMELINE

**March 2019**

First Expert Meeting  
of WG-MGI



- Formal discussion on the use case and use case exercise
- Created a small group to review and provide feedback to the use case exercise



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## TIMELINE

**March 2019**

First Expert Meeting  
of WG-MGI



**April 2019**  
Exercise to Small  
Group



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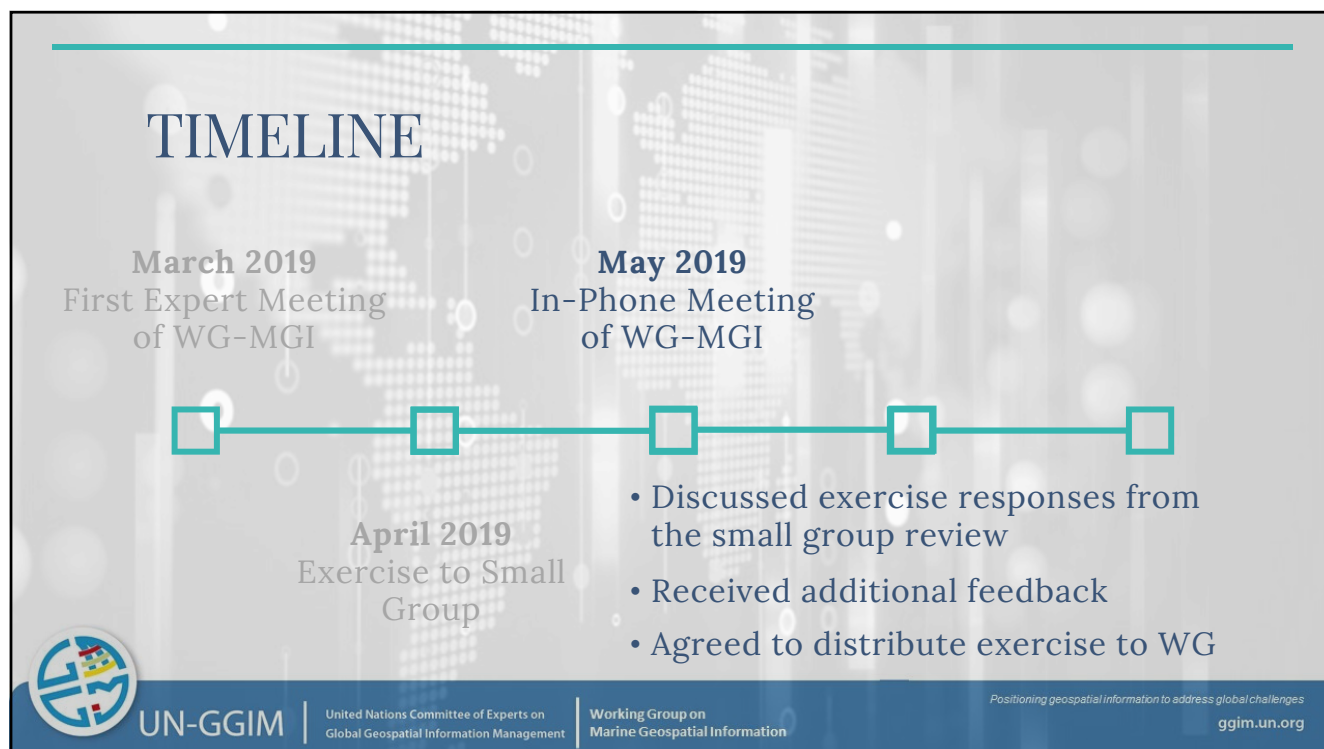
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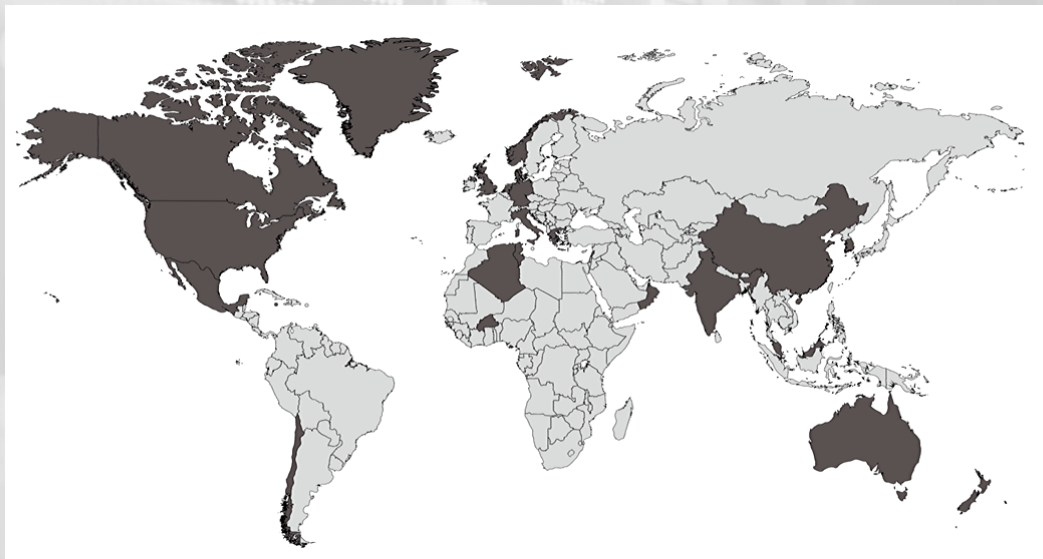




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## 20+ MEMBERS

## 13 RESPONSES



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## COMMENTS ON THE EXERCISE

- Not the agency (or not the sole agency) responsible for data
- Scenario is not applicable; did not use scenario when responding
- Support for sharing the exercise with a larger group



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## INSIGHTS

Data collection and management are funded for a purpose and often that money and task are given to a singular agency.



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## INSIGHTS

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Hydrographic Office



Navigation



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## INSIGHTS

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Oceans Office



Hydrographic Office



Fisheries Office



Protected Areas

Navigation

Inland Waters



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## INSIGHTS

Many agencies manage a variety of marine spatial data, each with its own mission.



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## INSIGHTS

Data are not collected and managed consistently across different levels of government and across agencies.



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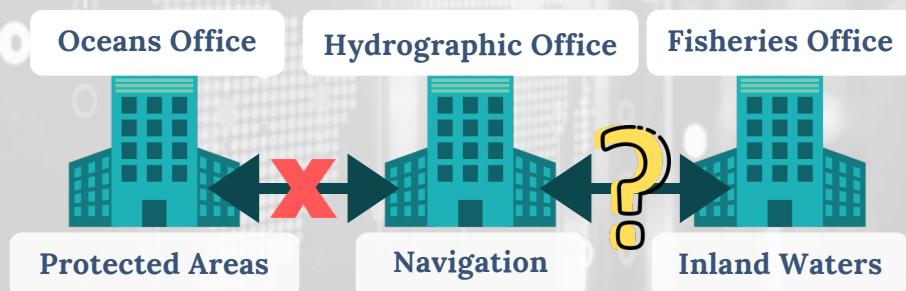
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## INSIGHTS

There were two solutions to facilitate the sharing of data:  
data-sharing partnerships and/or legislation.



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## INSIGHTS

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## INSIGHTS

There were two solutions to facilitate the sharing of data:  
data-sharing partnerships and/or **legislation**.

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## CONCERNS

- How will people use open data? Is it safe for that usage?



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## CONCERNS

- How will people use open data? Is it safe for that usage?
- Copyright / licensing issues



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## CONCERNS

- How will people use open data? Is it safe for that usage?
- Copyright / licensing issues
- Security issues



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## CONCERNS

- How will people use open data? Is it safe for that usage?
- Copyright / licensing issues
- Security issues
- Are data current?



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## DISCUSSION

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# OUTLINE

- Document Justification
- Benefits
- Challenges and Solutions
- Case Studies
- Recommendations

## The Benefits of Open Marine Geospatial Information

Outline and Recommendations

### Document Justification and Purpose

Marine geospatial information that encompasses inland water bodies and waterways, coastal zones, seas and oceans is an integral component of global geospatial information management. Marine geospatial information can support Governments in developing policies, priorities and programs, making decisions, and measuring and monitoring progress and outcomes.

Contributing to the availability and accessibility of comprehensive location-based information will benefit and improve the work of many marine sectors of society, including but not limited to academic/scientific research, natural resource exploration, fisheries management, emergency management, and marine spatial planning.

This whitepaper and the case studies it includes demonstrate "the benefits of open (readily available and accessible) marine geospatial information, including minimum standards needed for data, and the challenges facing the marine domain. The use case will serve as a reference for Member States on the benefits of providing easy access to marine geospatial data, and on the recommended data types to make available."

### Benefits

- Timely and effective emergency management
  - Improved risk assessment for navigation
  - Improved disaster management (and reduced costs)
  - There are many high-profile events in the last ten years that have needed some form or type of marine geospatial information, including oil spills, airline crashes, earthquakes and tsunamis.
- Economic growth
  - Marine spatial planning
  - Sustainable natural resource exploration
  - Sustainable fisheries management
  - Data use for other purposes...
  - Cost-effective and efficient data collection
  - Marine tenure rights in the ocean and other water bodies (probably a form of marine spatial planning)
- Improved marine science



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VISION					
The efficient use of geospatial information by all countries to effectively measure, monitor and achieve sustainable social, economic and environmental development – leaving no one behind					
MISSION					
To promote and support innovation and provide the leadership, coordination and standards necessary to deliver integrated geospatial information that can be leveraged to find sustainable solutions for social, economic and environmental development.					
STRATEGIC DRIVERS					
National Development Agenda • National Strategic Priorities • National Transformation Programme • Community Expectations • Multilateral trade agreements • Transforming our World 2030 Agenda for Sustainable Development • New Urban Agenda • Sendai Framework for Disaster Risk Reduction 2015–2030 • Addis Ababa Action Agenda • Small Island Developing States Accelerated Modalities of Action (SAMOA Pathway) • United Nations Framework Convention on Climate Change (Paris Agreement) • United Nations Ocean Conference: Call for Action					
UNDERPINNING PRINCIPLES					
Strategic Enablement	Transparent and Accountable	Reliable, Accessible and Easily Used	Collaboration and Cooperation	Integrative Solution	Sustainable and Valued Leadership and Commitment
GOALS					
Effective Geospatial Information Management	Increased Capacity, Capability and Knowledge Transfer	Integrated Geospatial Information Systems and Services	Enhanced National Engagement and Partnership (Leveraged)	Economic Return on Investment	Enriched Societal Value and Benefits
STRATEGIC PATHWAYS					
Governance and Institutions	Legal and Policy	Financial	Data	Innovation	Standards
Partnerships	Capacity and Education	Communication and Engagement	Technical and Operational	Standards	Partnerships
Capacity and Education	Communication and Engagement	Technical and Operational	Standards	Partnerships	Standards

## SUSTAINABLE DEVELOPMENT GOALS



	Goals	Requirements
Transparency, Institutions and Accountability	Transparency and accountability increased	Accountable and transparent governance
Legal and Policy	Gender and vulnerable groups sensitive	Inclusive and recognize all forms of tenure
Finance	Affordable investments and economic returns secured	Affordable with sustainable business models
Data	Reliable data and service quality obtained	Data maintained, secure and not duplicated
Innovation	Responsible innovation oriented	Upgradeable systems and approaches
Standards	Interoperability and integration supported	Considerate internationally agreed standards
Partnerships	Cooperation, partnerships, and participation leveraged	Strengthen partnerships and supports collaboration
Capacity and Education	Capacity, capability and knowledge transfer enhanced	Facilitates capacity development and knowledge transfer
Advocacy and Awareness	National engagement and communication enhanced	Advocates for land administration and management

IGIF

Sustainable Development Goals

FELA



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## RECOMMENDATIONS

Develop data-sharing partnerships and/or agreements to facilitate the timely sharing of data between Member States, government agencies, research and academia, and private data-providers.



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## RECOMMENDATIONS

Implementation of standards to make data-sharing easier  
(e.g., ISO, IHO, and OGC standards).



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## RECOMMENDATIONS

Manage marine geospatial information with multi-use purposes in mind and increase stakeholder awareness of what information is available and where.



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## RECOMMENDATIONS

Actively transfer knowledge of tools and techniques that facilitate the sharing of marine geospatial information.



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# RECOMMENDATIONS

Are there more???



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# THANK YOU!

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