Background

The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), a subsidiary body of the Economic and Social Council of the United Nations (ECOSOC) recognized the need to consider the marine environment, namely, inland waters and waterways, shorelines, coastal waters, seas and oceans, as a key component of any national geospatial information management arrangements essential for the effective administration, management and governance of land and marine spaces, and the national geospatial resources of Member States. Effective and integrated marine geospatial information management must be fit-for-purpose, appropriate and adequate, interoperable and sustainable, accessible and inclusive, and able to accelerate efforts to increase the availability and accessibility of marine geospatial information. Marine geospatial information management must be fully integrated with the geospatial information ecosystem within a broader digital information ecosystem nationally. Increasing the availability and accessibility of marine geospatial information benefits many sectors including sustainable access to inland waters and water bodies, coastal zones, seas and oceans as well as in sectors such as commercial shipping and safe navigation, marine spatial planning, management of marine resources, emergency management and response. To be effective is to be fit, adequate and successful in accomplishing the intended result.

This marine domain includes all water related elements, including oceans and seas, coastal zones and deltas, inland water bodies and waterways, basically a domain where water is the dominant geographic feature on the Earth’s surface. Approximately seventy percent of the Earth’s surface is water – lakes, rivers, deltas, seas, and oceans. Water is critical to socio-economic development, energy and food production, healthy habitat, and to human survival overall. Water is at the heart of adaptation to climate change and serves as the crucial link between society, the global economy, and the environment. The Food and Agriculture Organization (FAO) (2014) estimated that more than four billion people depend on maritime waters for fish as a primary source of protein, and the International Maritime Organization (IMO) (2015) estimated that ninety percent of the world’s trade is conducted upon the seas and oceans.

Marine geospatial information is needed by governments to support data-driven, evidence-based management and administration of seas, oceans, coastal zones, and inland waters. Knowing where people, marine life, events, and activities are, and their relationships to one another, is essential for informed policy-development and decision-making. The reliability, timeliness and quality of such data is of equal importance. Real-time marine geospatial information (e.g., met-ocean data) is needed to prepare for and respond to emergency situations, such as disasters, but real-time or near real-time data can also help governments develop strategic priorities and measure and monitor outcomes, including national development priorities and the 2030 Agenda for Sustainable Development.

Integrated practices would require collaboration across multiple disciplines and institutions, including users and stakeholders. The United Nations Integrated Geospatial Information Framework (IGIF) provides a coherent mechanism for effective and integrated marine geospatial information management, as well as the means to raise awareness and advocacy and facilitate communication and collaboration between the maritime, terrestrial and cadastral domains.

The Operational Framework for Integrated Marine Geospatial Information Management leverages the IGIF and seeks to provide practical guidance that countries can use to enhance the availability and accessibility of marine geospatial information (inclusive of hydrography, oceanography, marine geology, marine biology, human-related activities, maritime governance, and other water-related jurisdictions) to realize the greatest benefit from their integrated geospatial information management arrangements for the wellbeing of people, planet, peace and prosperity.
Provisional Annotated Agenda

Tuesday, 10 May 2022

08:30 a.m. – 09:00 a.m.
Arrival and registration of participants

09:00 a.m. – 10:30 a.m.
Official Opening Session

Moderator:

Official opening statement

Ceremonial presentation
(A choreographed opening ceremony presentation arranged by the Maritime and Port Authority of Singapore involving the Guest of Honor, invited dignitary and invited guest)

Opening address
(high-level address - outlines key issues to be considered or addressed collectively by the international seminar and expert meetings in Singapore)

Welcome remarks

10:30 a.m. – 11:15 a.m.
Group Photograph and Break

11:15 a.m. – 13:00 p.m.
Session #1 - “Effective and integrated marine geospatial information management”
Effective and integrated marine geospatial information management must be fit-for-purpose, appropriate and adequate, interoperable and sustainable, accessible and inclusive, and able to accelerate efforts to increase the availability and accessibility of marine geospatial information. This session discusses the integrative capabilities, potential and opportunities of marine geospatial information, products and services for the benefit of society, economy and environment. (Each presentation will be of 20 - 22 minutes duration allowing some time for moderated discussion)

Moderator:

Presentations

Moderated Discussion

13:00 p.m. – 14:30 p.m.
Break
14:30 p.m. – 16:00 p.m.  
Session #2 - "Availability and accessibility of marine geospatial information for sustainable societies, economies and environment"

Increasing the availability and accessibility of marine geospatial information benefits many sectors including sustainable access to inland waters and water bodies, coastal zones, seas and oceans as well as in sectors such as commercial shipping and safe navigation, marine spatial planning, management of marine resources, emergency management and response. This session discusses the availability and accessibility of marine geospatial information, which is crucial for sustainable socio-economic development, energy and food production, healthy habitat, and human wellbeing and survival overall. (Each presentation will be of 18 - 20 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations

Moderated Discussion

16: 00 p.m. – 16:30 p.m.  
Break

16:30 p.m. – 18:00 p.m.  
Session #3 - "Integration of terrestrial, maritime and cadastral domains"

Evidence-based policy development and decision making leading to effective governance of a country's 'total' space, inclusive of natural and built environment, require the integration of data and information from the terrestrial, maritime and cadastral domains. This session considers the importance of integrating data and information from these domains with any other meaningful data to address socio-economic and environmental challenges. Presenters will discuss not just the value and benefits of but also the issues and challenges of data integration for effective administration and governance of a country's 'total' space (Each presentation will be of 18 - 20 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations

Moderated Discussion

08:30 a.m. -09:00 a.m.  
Arrival of participants

09:00 a.m. – 10:45 a.m.  
Session #4 - "Effective governance, policy and legal frameworks and financing for integrated marine geospatial information management"

Enabling legislations and policies and effective governance and financing sustain and impacts the acquisition and application of marine geospatial information and its integration. The operating landscape is increasingly challenged as the production and consumption of marine geospatial information and services becomes increasingly innovative and creative arising from new and emerging technologies and devices. This session discusses effective governance, policy and legal frameworks and sustainable financing necessary for integrated marine geospatial information management recognizing the need to avoid duplication and avail geospatial information for a multiplicity of purposes, 'mapping once, using many times'. (Each presentation will be of 20 - 22 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations
Moderated Discussion

10:45 a.m. – 11:15 a.m.
Break

11:15 a.m. – 13:00 p.m.
Session #5 - “Data, innovation and standards for integrated marine geospatial information management”

Innovation stimulates, trigger and respond to rapid change and leapfrog outdated technologies and processes. Technology and processes are continually evolving, creating new opportunities and creativity. Compliance mechanisms and standards enable data and technology interoperability to deliver integrated marine geospatial information and location-based knowledge creation. This session discusses reliable, timely and quality data together with innovation and effective global open standards for integrated marine geospatial information management (Each presentation will be of 20 - 22 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations

Moderated Discussion

13:00 p.m. – 14:30 p.m.
Break

14:30 p.m. – 19:00 p.m.
Technical visit

A technical visit arranged by the Maritime and Port Authority of Singapore of invited participants only.

Thursday, 12 May 2022

08:30 a.m. – 09:00 a.m.
Arrival of participants

09:00 a.m. – 10:45 a.m.
Session #6 - “Partnerships, capacity development and advocacy for integrated marine geospatial information management”

Partnerships and capacities create and sustain the value of marine geospatial information through a culture based on inclusion, trust and strategic alliances that recognize common needs, aspirations and goals, towards achieving national development priorities and outcomes. Capacity and capability development is integral to sustain the value and deliver the benefits of integrated marine geospatial information, the value and benefits that must be continually advocated and communicated. This session discusses the essentials of partnerships, collaboration, avoiding duplication together with capacity development, continuous professional development and training, strategic message and advocacy for integrated marine geospatial information management (Each presentation will be of 20 - 22 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations

Moderated Discussion
10:45 a.m. – 11:15 a.m.
Break

11:15 a.m. – 13:00 p.m.
Session #7 - “An operational framework for integrated marine geospatial information management”

The Operational Framework to provide practical guidance that governments can use to enhance the availability and accessibility of marine geospatial information to realize the greatest benefit from their integrated geospatial information management arrangements for the sustainable society, economy and environment. This session discusses case for and the importance and value proposition of the operational framework towards strengthening and integrating national marine geospatial information management towards implementation of national development priorities and the 2030 Agenda for Sustainable Development (Each presentation will be of 20 - 22 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations
Moderated Discussion

13: 00 p.m. – 14:30 p.m.
Break

14:30 p.m. – 16:00 p.m.
Session #8 - “Coordinated and coherent integrated marine geospatial information management”

Coordination and coherence are the first priority in efforts to strengthen and modernize marine geospatial information management, its infrastructures and services. Effective and integrated marine geospatial information management is characterized by the application of a mixture of good practices, strategic partnerships, standards and compliance mechanisms enabled by sound and robust policy and legal framework, effective governance, and appropriate technology and process, all necessitating coordination and coherence. This session discusses why coordination and coherence including integrated management practices for evidence based policy development and decision making in the implementation of national development priorities (Each presentation will be of 18 - 20 minutes duration allowing some time for moderated discussion).

Moderator:

Presentations
Moderated Discussion

16: 00 p.m. – 16:30 p.m.
Break

16:30 p.m. – 17:45 p.m.
Closing session

This session gathers all the moderators to provide a succinct summary of the sessions they have moderated before the presentation of the outcome statement of the International Seminar, the Singapore Statement on Effective and Integrated Marine Geospatial Information Management.

Moderator:

Closing summaries
(A moderated panel discussion involving all session facilitators to summarize and present recommendations from their sessions, way forward including the value proposition for integrated marine geospatial information and to encourage effective and integrated marine geospatial information management for the benefit of all)
Outcome statement
(Singapore Statement on Effective and Integrated Marine Geospatial Information)

17:45 p.m. – 18:00 p.m.
Closing ceremony
This session brings the international seminar to a close with an official closing statement.

Moderator:

Closing remark

Official closing statement