

14th Meeting of the IHO MSDIWG

Review of Result and Feedback from C-6, IRCC14 and HSSC14

4.2



RESULT AND FEEDBACK FROM IRCC14

International Hydrographic Organization

IRCC14: Actions/Decisions for MSDIWG

Action 5: MSDIWG to provide recommendations to IRCC 15 on how IHO MS can use the FAIR principles and establish a HO MSDI FAIR principles check list.	Agenda item 10 Guidance on applying FAIR principles
Action 6: MSDIWG to provide recommendations to IRCC 15 on how MSDI and HOs can be part of Digital Twins in the future.	Agenda item 12 Discussion on the Future MSDI
Action 7: MSDIWG to revise the IHO publication C-17.	Agenda item 15 C-17 Version 3.0 Drafting
Decision 28: Take note of the S-100 initiatives from a MSDI perspective.	Agenda item 8 S-100 from MSDI Perspective
Action 8: MSDIWG to investigate in liaison with the IHO Secretariat, having in consideration the possibilities, challenges and resources required, the establishment of a basis MSDI portal solution building on the already existing INToGIS solution and other available data.	Agenda item 4.2 Review the result and feedback from C-6, IRCC14, HSSC14
Action 9: MSDIWG to investigate in liaison with the IHO Secretariat the different possibilities, challenges and resources need for step 2 of the MSDI Portal (an IHO marine data hub network) in order to have the information needed to take a decision about implementing step 2 and to present the recommendations at IRCC 15.	
Decision 29: The MSDI draft questionnaire to be forwarded to the IHO Secretariat inviting, if deemed appropriate, to send it out to the IHO MS.	



RESULT AND FEEDBACK FROM HSSC14

International Hydrographic Organization

HSSC14: Actions/Decisions for MSDIWG

Updates on S-100 roadmap and S-1xx Product Specifications

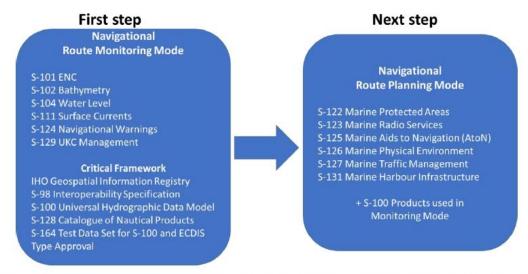


Figure 2; The S-100 Implementation Priorities should also reflect the Critical Framework needed for usage of S-100 products in future S-100 ECDIS.

To be further discussed under MSDIWG14 agenda item 8 S-100 from MSDI Perspective



RESULT AND FEEDBACK FROM C6

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IHO Council 6: Actions/Decisions for MSDIWG

Decision and Action C6/71: The **Council** invited the **IRCC** to identify a theme on which ISO 9001 Principles should be applied and to propose it to **Council** for endorsement (deadline: IRCC15/C-7). The **Council** noted task given by the IRCC to the MSDIWG to identify a theme in their portfolio of activities, where ISO 9001 basic principles he could be applied and be beneficial (deadline: IRCC-15).

To be discussed following agenda item 11 Spatial Data Quality and Integrity

Decision C6/51: The **Council** noted the progress made by IRCC in the development of the methodologies and metrics for SPIs allocated to IRCC and endorsed the proposals (definitions, metrics, action plan...) as reported in IHO CL 23/2022.

Agenda item 4.2 Review the result and feedback from C-6, IRCC14, HSSC14 (In the next slides)

Action C6/53: The **Council** agreed on the recommendation from the Secretary-General to refocus the function and the layout of a future MSDI portal. (deadline: C-7)



IHO STRATEGIC PLAN 2021 - 2026

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Goal 1: Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation

Goal 2: Increasing the use of hydrographic data for the benefit of society

Targets	Relation with IHO Object
2.1 Build a portal to support and promote regional and international cooperation in marine spatial data infrastructures (MSDI).	b, g
2.2 Promote new tools and methods to accelerate and increase coverage, consistency, quality of surveys in poorly surveyed areas.	b, d
2.3 Apply UN shared guiding principles for geospatial information management in order to ensure interoperability and extended use of hydrographic data in combination with other marine-related data.	d, g

Goal 3: Participating actively in international initiatives related to the knowledge and the sustainable use of the Ocean

Each Target has a **Strategic Performance Indicator (SPI)** to measure efficiency and effectiveness of the application of work programme items.



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- Two IRCC Workshops on SPIs were held in October 2021 and April 2022.
- Recommendation for SPIs:
 - a) Keep it simple
 - b) Derive figures that are measuring the success
 - c) These figures don't have to be perfect
 - d) They can evolve over time, but for the period of the Strategic Plan they have to be comparable for each year.
 - e) Use of existing digital tools available at the IHO Secretariat as far as possible.
 - f) No need (and no time in view of A3 in 2023) to wait for the development of fully new tools based on information not available yet.
 - g) Core aim is to find worldwide indicators that doesn't leave any MS behind.
 - h) Recognition of additional national and regional approaches to the IHO Strategic Plan and possibility of additional, tailored, probably more sophisticated measures in certain regions.
 - i) Main focus on quality rather than quantity in defining the metrics to apply to the SPI assigned to IRCC.
 - j) MSDI portal will not be ready before 2024.



TARGET 2.1 – INTERIM MEASURE

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Targets	SPI (measure for success)	Comments ²	
Goal 2: Increasing the use of hydrographic data for the benefit of society			
2.1 Build a portal to support and promote regional and international cooperation in marine spatial data infrastructures (MSDI).	2.1.1 Number of hits downloading data/information from the portal.	2.1.1 Monitoring will be based on the increase of the value of the indicator and assessment of its significance	

Decision C6/51: The **Council** noted the progress made by IRCC in the development of the methodologies and metrics for SPIs allocated to IRCC and endorsed the proposals (definitions, metrics, action plan...) as reported in IHO CL 23/2022.

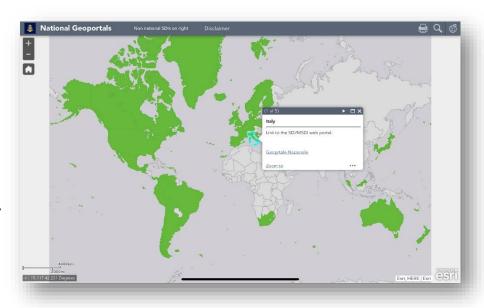
SPI 2.1.1 Number of hits downloading data/information from the portal

- IHO Secretariat to extract the number of accesses to the Map of National Geoportals per year using the GIS tools.
- The figure is a number, there is no concrete target other than an increase over time.

Member States are invited to provide more links to their respective MSDI portals

IHO Secretariat will also report the number of visitors arriving via IHO website annually.

• In 2022, 461 visitors!



IHO Online Catalogues > Map of National Geoportals



TARGET 2.1 – LONGER TERM SOLUTION

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- The Secretary-General reported on the new Strategic Performance Indicators (SPI), adopted by A-2 in the Revised Strategic Plan, in respect of Work Programme 1 (Corporate Affairs).
- One major issue had arisen under Goal 2, increasing the use of hydrographic data for the benefit of society. Target 2.1 under that goal was to build a portal to support and promote regional and international cooperation in marine spatial data infrastructures (MSDI).
- The portal was still at the design stage, and the challenges of collecting and updating information about national MSDI infrastructures, as originally envisaged, had led the Secretariat to suggest a change in strategy. The recommendation is to move away from an aggregated collection of links to national infrastructure and focus on global thematic layers of information that are genuine to the IHO scope, such as those already provided under various digital services in place such as INToGIS and the SCUFN Gazetteer.
- New types of information, such as a repository of Marine Protected Areas relevant for safe navigation, for example, could be included in the portal. The Council endorsed the change of strategy, which he would then submit to A-3 for approval.
- Participants agreed with the proposal to focus the MSDI portal on products controlled by IHO. It was important to know how hydrographic data were used, and by whom. Information on new areas of interest, such as "green" spatial planning, would help to increase IHO's visibility.
- Action C6/53: The Council agreed on the recommendation from the Secretary-General to refocus the function and the layout of a future MSDI portal. (deadline: C-7)

Docs: C6-6.1A



IHO STRATEGIC PLAN

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For MSDIWG's Discussion:

- •IRCC14/Action 8: MSDIWG to investigate in liaison with the IHO Secretariat, having in consideration the possibilities, challenges and resources required, the establishment of a basis MSDI portal solution building on the already existing INToGIS solution and other available data.
- "Global thematic layers of information that are genuine to the IHO scope"
 - ✓ Feasible for MSs to contribute
 - ✓ To support and promote regional and international cooperation in marine spatial data infrastructures (MSDI), increasing the use of hydrographic data for the benefit of society
 - e.g. A repository of Marine Protected Areas relevant for safe navigation; hydrodynamic data stations/coverage for safe and efficient navigation
- •IRCC14/Action 9: MSDIWG to investigate in liaison with the IHO Secretariat the different possibilities, challenges and resources need for step 2 of the MSDI Portal (an IHO marine data hub network) in order to have the information needed to take a decision about implementing step 2 and to present the recommendations at IRCC 15.
- •IRCC14/Decision 29: The MSDI draft questionnaire to be forwarded to the IHO Secretariat inviting, if deemed appropriate, to send it out to the IHO MS.
- •To be put on hold and re-considered following C6-endorsed change in strategy of Target 2.1 to be submitted to A3.



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TARGET 2.3

2.3 Apply UN shared guiding principles for geospatial information management in order to ensure interoperability and extended use of hydrographic data in combination with other marinerelated data.

2.3.1 Number of HOs reporting success applying the principles in their national contexts (2026: 70%).

Indicators	% <u>of</u> Yes/Full (From 34 Member States)
Representation	72%
Governance	81%
Compliance	94%

Questions	Fr	om 34 Member Sta	4 Member States	
Questions	Yes/Full	Other/Partly	No/None	
Representation				
Participation: Does your organization participate in your national delegation to UNGGIM?	44%	21%	35%	
Hydrographic data advocacy: Does your government actively promote the application of hydrographic data beyond safety of navigation in support of sustainable development, economic growth, disaster risk reduction and climate change?	76%	21%	3%	
Collaboration and coordination: <u>Does</u> your government encourage national, regional and global collaborations fundamental to the facilitation of improvements in the development, management, use and exchange of hydrographic information, in order to create new knowledge and supply hydrographic products and services meeting user needs of the maritime domain?	79%	21%	0%	
Continuous development and recognition of work: Is your government committed to policies and practices that ensure the continuous development, professional competence and ethical practices of those who work for and with hydrographic data?	82%	18%	0%	
Agility and addictiveness: <u>Is</u> your government addressing and take advantage of instructional, technological and other advancements in support of the development and delivery of hydrographic products and services?	74%	26%	0%	
Open data: Where feasible does your government adopt policies that maximize access to and use of open, free and unrestrictive geospatial information for innovation, efficient and effective decision making and a spatially enabled society.	79%	18%	3%	





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1	Governance			
	Use of and adherence to geospatial standards: Is your			
	government committed to utilize standards and			
	interoperable geo-processing technologies for	85%	15%	0%
	hydrographic information according to the geodata			
	standards framework maintained by IHO, ISO and OGC?			
	Ownership and accountability: Ls your government			
	committed to the publication of metadata, including			
	information on ownership and intellectual property rights,			
	access and usage conditions and technical specifications	79%	21%	0%
	of national hydrographic data and is your organization	1370	21/0	0 /0
	responsible for compliance to the IHO, ISO and OGC			
	specifications of hydrographic data sets made available for			
	consumption and use?			
	Transparency: Are the sources and the processes that			
	are used to create and provide official hydrographic data	53%	47%	0%
	sets transparent to the public?			
	Respect and confidentiality: Is your organization			
	exhibiting high levels of responsibility and consideration to			
	stakeholders in the execution of daily operations and is	97%	3%	0%
	particular care exercised to protect the confidentiality of	31 /6	3 /0	0 /0
	hydrographic information that may adversely impact an			
	individual, community and/or Member State?			
	Standards of service: Is your Organization employing			
	geospatial information management best practices and			
	solutions for hydrographic data, and pursue excellence in	85%	15%	0%
	the delivery of hydrographic data and services including	0376	1370	0 /6
	appropriate access, fairness and equity to all			
	stakeholders?			
	Institutional framework: Does your government			
	encourage and create inclusive and participatory legal,			
	policy and administrative frameworks to manage	88%	12%	0%
	hydrographic data ownership, hydrographic data quality,	0070	12/0	0 /0
	and intellectual property and confidentiality issues?			
	Expertise: Is your government valuing national expertise			
	in hydrographic information knowledge and experience in.			
	order to, where appropriate, comment on and validate the			
	quality of hydrographic datasets covering the national	85%	15%	0%
	territorial waters seeking their overall consistency, in order	00 /0	1376	076
	to advise on matters of application, interpretation and use			
	of hydrographic information?			
	International cooperation and harmonization: ls your			
	organization engaged in bilateral and multilateral			
	cooperation in hydrographic information management to			
	foster effective and efficient geospatial data management	76%	21%	3%
	systems and is harmonization of national hydrographic	7070	Z 170	370
	data and services at regional and global levels encouraged			
	in order to meet the needs of supranational users?			

Compliance			
Sovereignty of Member States : Does your government consider and treat hydrographic data as a base infrastructure, to be created and maintained as other base infrastructures?	91%	6%	3%
Adherence to law: Is the intellectual property of hydrographic data creators and providers acknowledged and protected in your country?	97%	3%	0%