

**Baltic Sea – North Sea  
Marine Spatial Data Infrastructure  
WG  
(BS-NSMSDIWG)**



**BALTIC SEA  
HYDROGRAPHIC  
COMMISSION**



**NORTH SEA  
HYDROGRAPHIC  
COMMISSION**

- Welcome, introduction of participants and practical information

- Approval of the Agenda.

Appendix A

**Draft Workshop Schedule day one  
BS MSDIWG4**

**Day One: November 16, 2015**

| <b>Theme</b>                     | <b>Time</b>        | <b>Subject</b>  | <b>Responsible</b> |
|----------------------------------|--------------------|---|--------------------|
| <b>Welcome</b>                   | 1100 - 1110        | Welcome, introduction of participants and practical information   | Host/Chair         |
| <b>Status</b>                    | 1110 - 1125        | Introductions to the MSDI Workshop 4 – what is the aim of the workshop and the meeting, and what do we want to achieve? (Draft to be forwarded before the workshop)     | Chair              |
|                                  | 1125 - 1200        | The MSDI work of IHO (IHO MSDIWG) status<br>(Review of the work plan circulated and responses to it)  | Chair              |
| <b>Lunch</b>                     | <b>1230 - 1330</b> |   |                    |
| <b>Presentations</b>             | 1330 - 1415        | National presentation from members on status on SDI, MSDI and INSPIRE<br>(Key successes and challenges on a country by country basis)                                   | All                |
| <b>Break</b>                     | <b>1445 - 1500</b> |   |                    |
| <b>Presentations</b>             | 1500 - 1530        | National presentation from members on status on SDI, MSDI and INSPIRE   | All                |
|                                  | 1530 - 1600        | National status on the directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management | All                |
| <b>Presentation Task 6.</b>      | 1600 - 1645        | Task 6. Work item:<br>Pilot projects/demonstration - WEB GIS demonstrator with BS HO datasets   | Denmark            |
| <b>Status and how to proceed</b> | 1645 - 1655        | Summing up the challenges for the future  | Chair              |
|                                  | 1655 - 1700        | Evaluation and preparations for the second day  | Chair              |



**Draft Workshop Schedule Day Two  
BS MSDIWG4**

**Day Two: November 17, 2015**

| <b>Theme</b>         | <b>Time</b>        | <b>Subject</b>  | <b>Responsible</b> |
|----------------------|--------------------|---|--------------------|
| <b>Welcome</b>       | 0900 - 0910        | Welcome and the conclusions from Day One  | Host/chair         |
| <b>Status</b>        | 0920 - 1020        | The work of VASAP/HELCOM data expert group  | Chair              |
|                      |                    | Terms of reference for the BS-NSMSDI WG (see below)   | Chair/All          |
| <b>Break</b>         | <b>1020 - 1035</b> |   |                    |
| <b>Presentations</b> | 1035 - 1230        | BS-NSMSDI WG Work plan- What are the outputs waited for each task?<br>Topics for discussion:<br>Task 1: A review of C-17 (part 2.1 related to the role of HO in MSDI) as well as a chapter dealing with on the status of MSDI in the Baltic and North Sea countries e.g. a report "MSDI in the Baltic and North Sea countries"<br>Task 2: A chapter in the report "MSDI in the Baltic and North Sea countries" listing the projects relevant for BS-NSMSDI with the web links and explanation why each project is relevant to BSMSDI<br>Task 3: Tbd (chapter in the report "MSDI in the Baltic and North Sea countries"?)<br>Task 4: The output may be a report dedicated to the standards (S57, S100, OGC, ...) of interest for MSDI with a focus on INSPIRE --> Ellen provided a very interesting presentation about standards in BSMSDI3 which could be used as a base material for this report and there are also material in the UN-CGIM report "A Guide to the Role of Standards in Geospatial Information Management"<br>Task 5: the output may be a review of C-17 (to be submitted to MSDIWG)<br>Task 6: the output may be a demonstrator with BSHC web page | All                |
|                      |                    | Setting goals for this meeting's results.<br>Topics for discussion, the various outputs could be:<br>- proposal for revision of C-17 (through tasks 1 and 5)<br>- a report "MSDI in the Baltic countries: status and relevant projects" (trough tasks 1 and 2 and maybe 3),<br>- a report "Which standards for MSDI? Focus on INSPIRE" (task 4)<br>- demonstrator and web page (task 6)   | All                |
| <b>Lunch</b>         | <b>1230 - 1330</b> |   |                    |
| <b>Work plan</b>     | 1330 - 1400        | Work plan - working on the tasks defined in the work plan   | All                |

|  |                    |  |                 |
|--|--------------------|--|-----------------|
| Separate session on BSHC-<br>HELCOM cooperation. | 1400 - 1500        | Presentation about HELCOM.   | HELCOM          |
|  |                    | Presentation about the Baltic Sea and North Sea MSDI work group.   | Chair           |
|  |                    | Data approach from a HELCOM perspective.<br>(INSPIRE compliant and use the EUROSTAT GISCO/EEA grid for grid based data.)<br>Data approach from a IHO approach.<br>(Presentation about IHO S-100) | HELCOM<br>Chair |
| <b>Break</b>                                     | <b>1500 - 1515</b> |  |                 |
| Separate session on BSHC-<br>HELCOM cooperation. | 1515 -1600         | Discussion about how the hydrographic offices can contribute with our data to HELCOM, and how HELCOM and BS-NSMSDIWG can cooperate in the future   | All             |
|  |                    | Way ahead  |                 |
|  |                    | Anny other business  | All             |
|  |                    | Closing of the separate session on BSHC-HELCOM cooperation.  |                 |
| Work plan  | 1600 - 1700        | Work plan - working on the tasks defined in the work plan  | All             |
| Closing  | 1700               | Closing of day two   | Chair           |



**Day Three: November 18, 2015**

| Theme                          | Time               | Subject   | Responsible |
|--------------------------------|--------------------|---|-------------|
| Welcome                        | 0900 - 0910        | Welcome and the conclusions from Day Two                  | Host/chair  |
| Work plan                      | 0920 - 1020        | Work plan - working on the tasks defined in the work plan | All         |
|                                |                    |   |             |
| <b>Break</b>                   | <b>1020 - 1035</b> |   |             |
| Work plan                      | 1035 - 1230        | Work plan - working on the tasks defined in the work plan | All         |
|                                |                    |   |             |
| <b>Lunch</b>                   | <b>1230 - 1315</b> |   |             |
| Evaluating                     | 1315 - 1500        | Evaluation  | All         |
|                                |                    | How to proceed  | All         |
|                                |                    | Update of work plan and action list                       | All         |
| Next meeting                   |                    | Next meeting  | Chair       |
|                                |                    | Any other business  | Chair       |
| <b>Closing of the workshop</b> | <b>1500</b>        |   |             |



## From BSMSDIWG to BS-NSMSDIWG:

### NSHC meeting.

#### 106. Extended Marine Spatial Data Infrastructure WG

Noting the global perspective covered by the IHO MSDIWG;

Noting the increased activity within EU in fields related to MSDI (Marine Spatial Planning, Inspire, Marine Knowledge 2020, EMODnet...);

Noting the progress with respect to MSDI achieved in the Baltic Sea through the BSHC;

The Commission recognize a need for a coordinated approach for the North Sea area. As several MS are represented in either IHO MSDIWG or BSHC MSDIWG or both, the Commission concluded that to set up a separate MSDI WG under the NSHC was not expedient. To build on and benefit from the progress of the work done within BSHC would be favorable. The Commission decided that:

- The Chair of NSHC to send a letter to the Chair of BSHC requesting to include participation from NSHC MS in the existing BSHC MSDI WG





Royal Netherlands Navy

**TO:**

The chairman of the BSHC  
Mr. Janis Krastins  
Maritime Administration of Latvia  
Hydrographic Service  
Tribadibas iela 5  
RIGA LV - 1048  
Latvia

**Copy:**

NSHC Member States, IHB G. Bessero

Date 10 September 2015  
Subject BSHC/MSDIWG

*Dear Janis,*

During the 31st conference of the NSHC in Amsterdam, June 2014, the members of the NSHC expressed their wish to intensify their coordination on Marine Spatial Data Infrastructures (MSDI). Some of the dual NSHC/BSHC members suggested that the most efficient way to organize this would be to find out if the existing BSHC MSDI Working Group could be extended to a dual NSHC/BSHC Working Group. I refer to NSHC Conclusion 106 (annexed). This idea led to a workshop of the BSHC MSDI Working Group (Rostock, Germany, 20-22 January 2015) that was attended by several non-BSHC NSHC members as well. The general impression was that the extension of this group with the non-BSHC NSHC members was productive for all.

Now that the next workshop of the BSHC MSDI Working Group is approaching (Helsinki, Finland, 16-18 November 2015), I would like to request the BSHC to consider to reorganize this group to a formal dual NSHC/BSHC Working Group. Perhaps it would still be possible to discuss this request during your next conference (16-18 September 2015, Saint Petersburg)?

As many current MSDI developments are currently taking place in an identical way for the NSHC and the BSHC, creating a common group will lead to more progress on these developments than an approach per RHC. I am thinking about INSPIRE implementation and harmonization, the EMODNet project and the creation of regional bathymetric databases to support that initiative, and the monitoring of the impact of new European Directives like Marine Spatial Planning on MSDI. Synergy with the IHO MSDI Working Group is likely, as many key players in that IHO Working Group are from the NSHC and/or BSHC region.

Netherlands Ministry of Defence

The Netherlands  
Hydrographic Office

Van Alkemadelaan 786  
2507 BC The Hague  
P.O. 90701  
2500 LS The Hague  
The Netherlands

Contact  
Dr.Ir. L.L. Dorst

T +31 70 316 28 26  
F +31 70 316 28 43  
LL.Dorst@mindex.nl

Our reference  
CZSK/2015003590

Enclosed: NSHC Conclusion 106, 107 and  
115  
*Please quote date, our reference and  
subject when replying.*

I am satisfied that, in practice, the integration of NSHC into this group is already taking shape, with a combined Dutch/French Task to monitor the implementation of INSPIRE in NSHC and BSHC countries. This is an excellent way to structure the work on NSHC Conclusions 107 and 115 (both annexed), from which all NSHC and BSHC MS will benefit.

I wish you a productive conference in Saint Petersburg, and look forward to your response.

Your sincerely,

Captain RNLN M.C.J. (Marc) van der Donck  
Director Netherlands Hydrographic Office  
Hydrographer of the Royal Netherlands Navy  
Chairman, North Sea Hydrographic Commission



- Introductions to the MSDI Workshop 4 – what is the aim of the workshop and the meeting, and what do we want to achieve? (Draft to be forwarded before the workshop)

## The Baltic Sea – North Sea MSDI Working Group should:

- **Identify and analyse** the current status of individual MS MSDI implementation
- **Consider MSDI policies** within the related international project
- **Analyse how maritime authorities can contribute** their spatial information and the necessary updates, so information can easily be collated with other information to a current overall picture for the region.
- Focus on **how BSHC in the future can benefit from a regional approach**
- Monitoring MSDI and marine- related initiatives, as well as more general geospatial developments with relevance for the Baltic Sea.





Draft work plan for BSMSDIWG 2015-2020

| Theme   | Subject  | Responsible                           |
|---|--|---------------------------------------|
| <b>Task 1.</b><br>Work item:<br>Hydrographic data and legal aspects | - Definition of HO role in MSDI<br>- Study on status on implementation and responsibility with relevance to MSDI in the Baltic countries   | Denmark                               |
| <b>Task 2.</b><br>Work item:<br>Liaison with external projects      | - Scanning of projects relevant for BSMSDI   | Germany                               |
| <b>Task 3.</b><br>Work item:<br>S 100                               | - Conduct S 100 pilot project<br>- Evaluate on how to promote S 100 in the Baltic  | Germany                               |
| <b>Task 4.</b><br>Work item<br>INSPIRE                              | - Make a matrix of hydrographic datasets versus INSPIRE.<br>- Give input to a survey to get overview of available webservices, including INSPIRE webservices, to facilitate a demonstrator by DEN<br>- Present information about INSPIRE at the next wg meeting. | Netherland/<br>France                 |
| <b>Task 5.</b><br>Work item:<br>Common understanding                | - Establish a framework for common understanding of MSDI   | Denmark/<br>Finland                   |
| <b>Task 6.</b><br>Work item:<br>Pilot projects/demonstration        | -Study on the possibility to establish a BSMSDI WEB page<br><br>- Demonstration project S100<br><br>- WEB GIS demonstrator with BS HO datasets   | Denmark<br><br>Germany<br><br>Denmark |

## **Input from France to the BS-NSMSDI WG meeting**

### **The work plan - Considerations about the outputs we want to achieve for each task?**

**Task 1:** the output may be a review of C-17 (part 2.1 related to the role of HO in MSDI) as well as a chapter dealing with the status of MSDI in the Baltic countries in a report "MSDI in the Baltic countries"

**Task 2:** the output may be a chapter in the report "MSDI in the Baltic countries" listing the projects relevant for BSMSDI with the web links and explanation why each project is relevant to BSMSDI

**Task 3:** A chapter in the report "MSDI in the Baltic countries"

**Task 4:** the output may be a report dedicated to the standards (S57, S100, OGC, ...) of interest for MSDI with a focus on INSPIRE

**Task 5:** the output may be a review of C-17 (to be submitted to MSDI WG)

**Task 6:** the output may be a demonstrator with BSMSDI web page

#### **Thus the various outputs could be:**

- proposal for revision of C-17 (through tasks 1 and 5)
- a report "MSDI in the Baltic countries: status and relevant projects" (through tasks 1 and 2 and maybe 3),
- a report "Which standards for MSDI? Focus on INSPIRE" (task 4)
- demonstrator and web page (task 6)



Draft work plan for BSMSDIWG 2015-2020

| Theme   | Subject  | Responsible                           |
|---|--|---------------------------------------|
| <b>Task 1.</b><br>Work item:<br>Hydrographic data and legal aspects | - Definition of HO role in MSDI<br>- Study on status on implementation and responsibility with relevance to MSDI in the Baltic countries   | Denmark                               |
| <b>Task 2.</b><br>Work item:<br>Liaison with external projects      | - Scanning of projects relevant for BSMSDI   | Germany                               |
| <b>Task 3.</b><br>Work item:<br>S 100                               | - Conduct S 100 pilot project<br>- Evaluate on how to promote S 100 in the Baltic  | Germany                               |
| <b>Task 4.</b><br>Work item<br>INSPIRE                              | - Make a matrix of hydrographic datasets versus INSPIRE.<br>- Give input to a survey to get overview of available webservices, including INSPIRE webservices, to facilitate a demonstrator by DEN<br>- Present information about INSPIRE at the next wg meeting. | Netherland/<br>France                 |
| <b>Task 5.</b><br>Work item:<br>Common understanding                | - Establish a framework for common understanding of MSDI   | Denmark/<br>Finland                   |
| <b>Task 6.</b><br>Work item:<br>Pilot projects/demonstration        | -Study on the possibility to establish a BSMSDI WEB page<br><br>- Demonstration project S100<br><br>- WEB GIS demonstrator with BS HO datasets   | Denmark<br><br>Germany<br><br>Denmark |







**The MSDI work of IHO  
(IHO MSDI WG) status  
(Review of the work  
plan circulated and  
responses to it)**





**5th Arctic Regional Hydrographic Commission Meeting  
28-30 October 2015,  
Saint Petersburg,  
Russian Federation**

**Report of the Marine Spatial Data  
Infrastructures Working Group  
(MSDIWG)**

**Jens Peter Hartmann IHO MSDIWG Chair**



# IHO - MARINE SPATIAL DATA INFRASTRUCTURE WORKING GROUP (MSDIWG)

## Key objectives:

- Advise Member States on their roles in National Spatial Data Infrastructures (NSDI)
- Identify actions and procedures that the IHO might take to contribute to the development of SDI and / or MSDI in support of Member States



International Hydrographic Organization  
Organisation Hydrographique Internationale

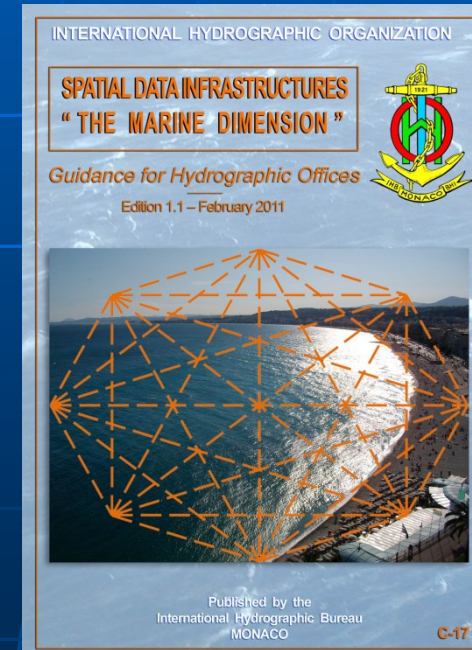
Home Letters & Documents Standards & Publications Committees & WGs Capacity Building ENCs & ECDIS Meetings External Stakeholder Liaison IHO Media

Committees & WG

- » HSSC
- » TSMAD
- » HSSC Meetings
- » DPSIWG
- » DPIWG
- » CSRCWG
- » DOIWG
- » MSDIWG
- » TWLIWG
- » HDIWG
- » ABLOS
- » IRC
- » FC
- » SRWG

Home > HSSC > MSDIWG

| English   | Français   |
|---|--|
| <b>MARINE SPATIAL DATA INFRASTRUCTURE WORKING GROUP (MSDIWG)</b>  | <b>GROUPE DE TRAVAIL SUR L'INFRASTRUCTURE DES DONNÉES SPATIALES MARITIMES (MSDIWG)</b>   |
| <b>Chair:</b> Mr. Jens Peter HARTMAN (Denmark)<br><b>Vice-Chair:</b> Vacant<br><b>Secretariat:</b> Vacant   | <b>Président:</b> M. Jens Peter HARTMAN (Danemark)<br><b>Vice-Président:</b> A pourvoir<br><b>Secrétariat:</b> A pourvoir  |
| <b>Objectives:</b><br>Identify the Hydrographic Community inputs to National Spatial Data Infrastructures (NSDI). More details can be found in the full Terms of Reference for MSDIWG.<br><b>This group is open to representatives of IHO Member States' Hydrographic Offices and, as expert contributors, to entities and organisations that can provide a relevant and constructive contribution to the work of the WG.</b><br><br>See <b>Terms of Reference</b> for further information. | <b>Objectifs:</b><br>Identifier les contributions de la communauté hydrographique aux infrastructures des données spatiales nationales (NSDI). On peut trouver de plus amples détails dans le mandat du MSDIWG.<br>La participation à ce groupe est ouverte aux représentants des Services hydrographiques des Etats membres de l'OHI et, en qualité de collaborateurs experts, aux entités et organisations qui peuvent fournir une contribution pertinente et constructive aux travaux du GT.<br>Voir le <b>mandat</b> pour plus de détails. |
| <b>Meetings:</b><br>The WG works primarily by correspondence and aims to meet at least once every two years, normally in connection with another convenient IHO forum. See current <b>Work Plan</b> .   | <b>Réunions:</b><br>Le GT travaille essentiellement par correspondance et a pour objectif de se réunir au moins une fois tous les deux ans, normalement en liaison avec d'autres réunions appropriées de l'OHI. Voir le <b>programme de travail</b> en cours.  |
| <b>Members:</b><br>The WG comprises representatives of IHO Member States, Expert Contributors and Accredited NGO Observers. Expert Contributors principally from industry participate in the WG at the invitation of the Chairman. A full list of the WG Members is maintained.   | <b>Membres:</b><br>Le GT est composé de représentants des Etats membres de l'OHI, d'experts collaborateurs et d'observateurs d'organisations internationales non gouvernementales accréditées. Les experts collaborateurs, principalement du secteur industriel, participent aux travaux à l'invitation du Président. Une liste complète des membres du GT est tenue à jour.   |



| MS / RHC          | NHC | NSHC | MBSHC | BSHC | USCHC | EAHC | EAHC | SEPRHC | SWPHC | MACHC | SAIHC | NIOHC | RSAHC | SWAHC | ARHC |
|-------------------|-----|------|-------|------|-------|------|------|--------|-------|-------|-------|-------|-------|-------|------|
| Argentina         |     |      |       |      |       |      |      |        |       |       |       |       |       | X     |      |
| Australia         |     |      |       |      |       |      |      |        | X     |       |       |       |       |       |      |
| Brazil            |     |      |       |      |       |      |      |        |       | X     |       |       |       | X     |      |
| Canada            |     |      |       |      | X     |      |      |        |       |       |       |       |       |       | X    |
| Cuba              |     |      |       |      |       |      |      |        |       | X     |       |       |       |       |      |
| Denmark           | X   | X    |       | X    |       |      |      |        |       |       |       |       |       |       | X    |
| Estonia           |     |      |       | X    |       |      |      |        |       |       |       |       |       |       |      |
| Finland           | X   |      |       | X    |       |      |      |        |       |       |       |       |       |       |      |
| France            |     | X    | X     |      |       |      | X    |        | X     | X     | X     |       |       |       |      |
| Germany           |     | X    |       | X    |       |      |      |        |       |       |       |       |       |       |      |
| Japan             |     |      |       |      |       | X    |      |        |       |       |       |       |       |       |      |
| Nigeria           |     |      |       |      |       |      | X    |        |       |       |       |       |       |       |      |
| Netherlands       |     | X    |       |      |       |      |      |        |       | X     |       |       |       |       |      |
| Norway            | X   | X    |       |      |       |      |      |        |       |       | X     |       |       |       | X    |
| Portugal          |     |      |       |      |       |      | X    |        |       |       |       |       |       |       |      |
| Republic of Korea |     |      |       |      |       | X    |      |        |       |       |       |       |       |       |      |
| Romania           |     |      | X     |      |       |      |      |        |       |       |       |       |       |       |      |
| Slovenia          |     |      | X     |      |       |      |      |        |       |       |       |       |       |       |      |
| Spain             |     |      | X     |      |       |      | X    |        |       |       |       |       |       |       |      |
| Singapore         |     |      |       |      |       | X    |      |        |       |       |       |       |       |       |      |
| Ukraine           |     |      | X     |      |       |      |      |        |       |       |       |       |       |       |      |
| UK                |     | X    |       |      |       |      |      |        | X     | X     | X     | X     |       |       |      |
| USA               |     |      |       |      | X     |      |      |        | X     | X     |       |       |       |       | X    |



# IHO Publication C-17 - Guidance for Hydrographic Offices

## Annex 1

### Syllabus for Educational and Training Programmes for Marine Spatial Data Infrastructures

#### **The aim of the syllabus**

The syllabus is about making sure decision makers and employers have the skills, knowledge and understanding to approach the different elements of MSDI.

It is not intended to set out exactly what the instructor should do.

The MSDI syllabus is a tool for communicating what should be the minimum content of a MSDI course. It acts as a “road map” for the MSDI courses and puts the students on the same path as the instructor. By setting the tone and describing the course structure, the syllabus is critical in implementing effective learning.



# Syllabus outline

The syllabus is divided in four, one MSDI orientation and 3 more detailed MSDI courses:

1. Provides a general introduction to MSDI.
2. Is a Syllabus for Fundamentals of a Marine Spatial Data Infrastructure (MSDI)
3. Is a Syllabus for Database Design, Data Management and MSDI for Practitioners (i.e. Hydrographic Surveyors, Cartographers, Oceanographers, IT specialists)
4. Is a Syllabus for Marine Spatial Data Infrastructure (MSDI) for Senior Managers (i.e. Directors, Hydrographers, Human Resource Managers)



# All MSDI training courses should have basic information such as:

- Course Description
- Course Date(s) and Times
- Instructor Contact Information (if applicable)
- Course Objectives / Goals
- Learning Objectives to meet the Course Objectives/Goals
- Course Completion Requirements
- Requirement(s) for Text and or Other Materials
- Any Technology Requirements (if applicable)
- Technical support (if applicable)

## Annex 1.1: Syllabus for MSDI orientation

|                                  |  |
|----------------------------------|--|
| Target Audience:                 | Decision makers (e.g. National Hydrographers, Oceanographers, Investors, Planners, Asset Managers, Scientists)                       |
| Description:                     | MSDI Awareness Briefing  |
| Expected duration:               | 2 to 4 hour Briefing Session   |
| Objectives:                      | To provide a basic awareness and appreciation of the importance of MSDI in hydrographic and oceanographic management decision making |
| Required Material:               | None   |
| Technical Requirements/ Support: | None/Laptop computer, Audio-Visual projector,  |

| Subject | Description                                   | Content   | Outcome   |
|---------|---|---|---|
| 1.1     | <b>Introduction</b>                           | <ul style="list-style-type: none"> <li>• Welcome and introductions</li> <li>• Programme</li> <li>• Aims and objectives of the day</li> </ul>  |   |
| 1.2     | <b>Spatial Data Infrastructure</b>            | <ul style="list-style-type: none"> <li>• What it is SDI</li> <li>• Policy and Governance (People)</li> <li>• Technical Standards (Standards)</li> <li>• Information Systems / Services (ICT)</li> <li>• Geographic Content (Data)</li> </ul>                  | Have a basic understanding of spatial data infrastructures (SDI) and the important marine components (MSDI)   |
| 1.3     | <b>Wider uses and applications of HO data</b> | <ul style="list-style-type: none"> <li>• The future role of Hydrographic Offices</li> <li>• Supporting "The Blue Economy"</li> <li>• The role of HOs within a SDI (hydrography is much more than charting!)</li> <li>• The business case for MSDI?</li> </ul> | Understand the strengths, weaknesses, opportunities and threats facing HO's and how HO's can contribute to the wider economy                                      |
| 1.4     | <b>MSDI - Obstacles to progress?</b>          | <ul style="list-style-type: none"> <li>• People as individuals and as part of teams</li> <li>• Organisational culture</li> <li>• Organisational structures</li> <li>• Making change happen</li> <li>• Sustainable change</li> </ul>                           | Understand why "change" is mission critical to achieving best practise and delivering MSDI and why without the support of people, success is far from guaranteed! |



## **S-102 and INSPIRE**

The Marine Spatial Data Infrastructure Working Group (MSDIWG) would like the HSSC S-100 Working Group to consider looking at the relationship between S-102 and the INSPIRE Elevation theme as it pertains to bathymetry data.

The reason for this request is to attempt to avoid a possible format conflict and to help ensure that hydrographic offices are not in a position where they need to maintain two separate bathymetry layers.

One for primary charting activities and another to serve the regional or national spatial data infrastructure initiatives for purposes that go beyond charting e.g. marine spatial planning or oil spill response.

The MSDIWG understands that the S-100 work group will be undertaking a revision of S-102 in its work plan (item D.8.) so perhaps this would present an opportunity for this investigation.





## INSPIRE

Although INSPIRE is a primarily European Union activity it is perhaps the best example of a Spatial Data Infrastructure and therefore is recognized well beyond the borders of Europe.

Many European hydrographic offices have requirements under INSPIRE so it would be beneficial to adopt a policy of collect once and use many times as it relates to one of the most important data assets held by hydrographic offices i.e. bathymetry.

Under INSPIRE there are maintenance groups that drive the direction and scope of the various themes including Elevation. The MSDIWG suggests that it may be worthwhile for the IHO group responsible for data standards such as S-102 also to attend the maintenance group responsible for this related theme. This way hydrography has a louder voice within INSPIRE and the work done under INSPIRE can be considered in the development of S-100 which should allow these two bathymetry related standards to be developed more harmoniously.



**Marine SDI Documents:**

[Frequently Asked Questions on SDI](#)  
[Capacity Building material on SDI](#)  
[SDI Stakeholders](#)

[Hydrographic Data Policy for SDI](#) (Best practices for Hydrographic Offices)

[White Paper - The Hydrographic and Oceanographic Dimension to Marine Spatial Data Infrastructure Development Developing the capability](#) (A contribution from the MSDIWG Experts Contributors)

**Miscellaneous:**

[New Zealand Bathymetry Investigation Report](#) (2015) >>>> NEW <<<<

[MSP Governance Framework Report](#) (2014)

Links to [SDI websites](#)

[UN-GGIM: A Guide to the Role of Standards in Geospatial Information Management](#) (2014)

[UN-GGIM: A Guide to the Role of Standards in Geospatial Information Management - Companion document](#)

[UN-GGIM: Future trends in geospatial information management: the five to ten year vision](#) (July 2013)

[IHO-ONHG Seminar on Marine Spatial Data Infrastructures, La Havana, Cuba, 9 February 2009](#)

[EuroSDR-IHO Workshop on Land and Marine Information Integration, Dublin, Ireland, 21-23 March 2007](#) ([Report](#))

[IHO Marine SDI Workshop, Havana, Cuba, 12 February 2007](#)

[IHO SDI Seminar, Rostock, Germany, 8-9 November 2005](#)

[BLAST](#) [Bringing Land and Sea Together] Project

## Marine Spatial Data Infrastructures Working Group (MSDIWG)

## SDI Geoportals

*Last update: novembre 17, 2014*

## National SDIs:

[Argentina](#)

[Belgium](#)

[Canada 2](#)

[Croatia](#)

[Finland](#)

[Germany 2](#)

[Ireland](#)

[Lithuania](#)

[Northern Ireland](#)

[Portugal](#)

[Spain 1](#)

[USA 2](#)

[Brazil](#)

[Canada 3](#)

[Denmark](#)

[France](#)

[Great Britain](#)

[Italy](#)

[Mexico](#)

[Norway](#)

[Romania](#)

[Spain 2](#)

[USA 3](#)

[Canada 1](#)

[Canada 4](#)

[Estonia](#)

[Germany 1](#)

[Iceland](#)

[Latvia](#)

[Netherlands](#)

[Poland](#)

[Slovenia](#)

[USA 1](#)

[USA 4](#)

## Other SDIs:

[EU Inspire](#)

[Open Geospatial Consortium 1](#)

[GEOSUR Portal](#)

[Open Geospatial Consortium 2](#)

[GOOS Glider Tracker](#)





### Layer List

Operationelle lag

- ✓ IHO\_SDI

- NaN
- Geoprtals



# MARINE SPATIAL DATA INFRASTRUCTURE (MSDI) QUESTIONNAIRE

**CIRCULAR LETTER 56/2015**  
**6 August 2015**

INTERNATIONAL HYDROGRAPHIC  
ORGANIZATION



ORGANISATION HYDROGRAPHIQUE  
INTERNATIONALE

IHB File N° S3/8151/MSDIWG

**CIRCULAR LETTER 56/2015**  
**6 August 2015**

## MARINE SPATIAL DATA INFRASTRUCTURE (MSDI) QUESTIONNAIRE

Reference: Report of the MSDIWG to the IRCC7 (*doc. IRCC7-8E rev1*)

Dear Hydrographer,

1. The Inter-Regional Coordination Committee (IRCC), at its 7<sup>th</sup> meeting in June in Mexico City, approved the Terms of Reference for the Marine Spatial Data Infrastructure (MSDI) Working Group (MSDIWG) and consolidated the transfer of this body from the Hydrographic Standards and Services Committee (HSSC) to the IRCC. The Committee also approved the MSDIWG Work Plan for 2015-2020 (see Reference, Annex C). Work item A.1 of the MSDIWG Work Plan is to "*Set up a survey to establish current position in respect of benefits and challenges faced by Member States' role in National Spatial Data Infrastructure (NSDI) and / or MSDI*". In order to implement this task, the MSDIWG has decided to circulate a questionnaire initiated by Canada (Annex A).
2. Canada took the initiative early in 2015 and completed a short study to review the way a sample of comparable nations have developed an MSDI to support the distribution of navigational information to commercial shipping, recreational boaters, and the general public. The result of this survey will be reported to the eighth meeting of the IRCC by the MSDIWG next year, where several presentations will address best practices for MSDI.
3. In order to broaden the results of study, the MSDIWG has requested that the IHB issue a Circular Letter inviting full participation in the questionnaire. The Directing Committee invites Member States to complete and submit the questionnaire provided in Annex A to the Canadian Hydrographic Service ([kian.fadaie@dfo-mpo.gc.ca](mailto:kian.fadaie@dfo-mpo.gc.ca)) with copy to the MSDIWG Secretary, Mr. John Pepper ([john.pepper@oceanwise.eu](mailto:john.pepper@oceanwise.eu)) at their earliest convenience and **no later than 15 October 2015**.
4. Noting that Canada has already collected this information from several countries those countries that have already responded, are not required to complete the questionnaire again.

On behalf of the Directing Committee  
Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Mustafa IPTES', is written over a light blue circular stamp.

Mustafa IPTES  
Director

Annex A : Questionnaire on Marine Spatial Data Infrastructure (MSDI) Implementation.



## MARINE SPATIAL DATA INFRASTRUCTURE from an international and a regional approach:

- International focusing on more strategic and conceptual topics
- Regional focusing on more practical and operational topics

From a more practical approach there is a need to focus on and strengthen the maritime approach to MSDI and to insure that maritime information is included. Some of the challenges from a regional approach for IHO MS in relation to MSDI are seen as:

- Ensuring that MS participate in the MSDI work
- Ensuring that regional MS HO have the possibility to contribute to the development of the regional MSDI
- Ensuring the use of data/information provided by regional HO is fit for purpose for wider dissemination

The creation of a regional MSDI WG will give the MS direct possibility to actively participate in the development of a well-functioning MSDI within the hydrographic domain and its surroundings with the possibility to benefit from a national and a regional approach and in that way take the lead in addressing regional MSDI matters for the countries in the region.



**Draft Workshop Schedule day one  
BS MSDIWG4**

**Day One: November 16, 2015**

| Theme                            | Time               | Subject   | Responsible |
|----------------------------------|--------------------|---|-------------|
| <b>Welcome</b>                   | 1100 - 1110        | Welcome, introduction of participants and practical information   | Host/Chair  |
| <b>Status</b>                    | 1110 - 1125        | Introductions to the MSDI Workshop 4 – what is the aim of the workshop and the meeting, and what do we want to achieve? (Draft to be forwarded before the workshop)     | Chair       |
|                                  | 1125 - 1200        | The MSDI work of IHO (IHO MSDIWG) status<br>(Review of the work plan circulated and responses to it)  | Chair       |
| <b>Lunch</b>                     | <b>1230 - 1330</b> |   |             |
| <b>Presentations</b>             | 1330 - 1415        | National presentation from members on status on SDI, MSDI and INSPIRE<br>(Key successes and challenges on a country by country basis)                                   | All         |
| <b>Break</b>                     | <b>1445 - 1500</b> |   |             |
| <b>Presentations</b>             | 1500 - 1530        | National presentation from members on status on SDI, MSDI and INSPIRE   | All         |
|                                  | 1530 - 1600        | National status on the directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management | All         |
| <b>Presentation Task 6.</b>      | 1600 - 1645        | Task 6. Work item:<br>Pilot projects/demonstration - WEB GIS demonstrator with BS HO datasets   | Denmark     |
| <b>Status and how to proceed</b> | 1645 - 1655        | Summing up the challenges for the future  | Chair       |
|                                  | 1655 - 1700        | Evaluation and preparations for the second day  | Chair       |

