# IHO Marine SDI Working Group Meeting 1st Meeting, IHB, Monaco, 4-5 February 2008

#### **Draft Minutes**

Attendees: John Pepper (UK - Chair) (JP)

Mr. Gordon Homes (Australia) (GH) Mr. Thomas Ravn (Denmark) (TR) Mr. Peeter Våling (Estonia) (PV)

Mr. Rainer MUSTANIEMI (FINLAND) (RM)

Ms. Caroline Texier (France (CT) Ms Ellen Vos (Netherlands) (EV) Mr. Tore Haye (Norway) (TH) Mr. Igor Karnicnik (Slovenia) (IK)

Mr. Igor Karnicnik (SLOVENIA) (I Ms. Maureen Kenny (USA) (MK) Capt Robert Ward (IHB) (RW) Mr Tony Pharaoh (IHB) (TP) Mr Michel Huet (IHB) (MH)

Dr Mike OSBORNE (SeaZone - Rapporteur) (MO)

1a	JP welcomed all participants to the inaugural meeting of the MSDI	
	WG and declared the first session open.	
1b	Apologies had been received from Patrik WIBERG and Caroline Texier,	
	who would arrive late.	
1c	The agenda was reviewed and accepted unanimously without	
	amendment (see Annex A), although JP noted that it would need to	
	remain flexible due to the nature of the task ahead.	
	It was noted that an IHO web page for the MSDI WG had been set up	
	and this would contain all of documents, presentations and websites	
	referred to during the meeting.	
1d	Participants introduced themselves and their roles within their	
	respective organisations.	
2	JP introduced the terms of reference of the WG and these were	
	accepted unanimously. (RW noted later that the ToRs had been set by	
	CHRIS and therefore could not be amended without referring back to	
	CHRIS).	
3	JP used presentations from the Rostock and Havana SDI workshops to	
	convey a common understanding of an SDI, which can mean different	
	things to different people. JP invited comments from participants.	
	A key issue raised was that for an SDI to be successful, co-operation	
	was required across many different sectors. This set the tone for	
	subsequent discussion and was well received.	
	TR noted that services, which JP had omitted from the presentation,	
	were a key component of SDI because they enable users to access the	
	information they require.	
	TH suggested that SDI supports integrated management i.e. that the	
	whole should be considered when looking at the part.	
	EV commented that agreements to use and share data were key to SDI	

	success, yet is often the most difficult problem to overcome and is	
	subject to national policies.	
	MK noted that using SDI as an enabler to better decision making was a	
	core benefit of SDI.	
	The points above were agreed as being important aspects of an SDI. A	
	good level of knowledge and demonstration of the key issues was	
	shown by all participants.	
	Break	
4	RW explained the existing structure of the IHO and the reorganised	
	structure that will come into force on 1 Jan 2009. Refer to RW	
	presentation for details but give special note that the MSDI WG is a	
	technical WG reporting to CHRIS. Conference (the representative	
	body of IHO member states) agrees the work programme and	
	considers recommendations made by CHRIS. Generally, for technical	
	matters, 50% of all Member States must vote positively for a	
	recommendation to be carried. For postal voting, the quorum is all	
	Memebr States entitled to vote (currently 78). By not recording a vote,	
	a Member State effectively votes against a recommendation. Any	
	report should include reference that its contents are the collective	
	opinion of an expert group appointed by the Member States.	
5	MH summarised the outputs from the IHO SDI workshops in Rostock	
	(Sep 2006) and Havana (Feb 2007). [Ref to MH's presentation and	
	WG paper 4A]. Participants were asked to consider the outputs.	
	GH noted that the workshop output included "an assessment of the	
	associated benefits to society" but that the WG ToR did not include	
	this. It was agreed that identifying the benefits of the subject of a WG	
	work item was a fundamental output for any WG and therefore the	
	MSDIWG ToRs did not require amendment.	
6	Participants were asked to give a summary of the status of SDI in their	
	respective countries. JP later asked that participants follow the lead of	
	Sweden and submit a paper to the WG to this effect. The summaries	Action:
	are presented below:	All
	Slovenia; SDI was described as being very new but is recognised as	
	important because of INSPIRE for example. Land and marine	
	mapping responsibility is combined in a single agency. The three	
	points raised were: important that all parties communicate especially	
	as the different levels and states of data to obtain an understanding;	
	hydrography should be included; and proper set up and resources were	
	needed.	
	Norway: SDI was described as working for sometime with the land	
	mapping agency taking the lead. Norway was a major participant in	
	ISO TC211. A Government white paper in 2003 as laid the foundation	
	for the setting up of 'Norway Digital' [	
	www.statkart.no/Norge_digitalt/Engelsk/About_Norway_Digital/].	
	Norway, (although a non EU Member) was working towards the aims	
	of INSPIRE in any case. A key issue raised was that Norway Digital	
	involved mainly national agencies and local authorities and there was	
	little participation from outside.	
	<u>UK</u> ; A 'GI Panel' comprising different agencies and interested bodies	
	across Government has been set up and a draft strategy submitted to	

Government. The strategy was recently revised to align it with INSPIRE. In the marine sector the 'Marine Data and Information Partnership' had been set up. Phase 1 (end Mar 2008) has defined requirements and a prototype portal implemented. Phase 2 to be delivered over 2-5 years will extend this.

<u>USA</u>; An executive order in 1994 had paved the way for the creation of a NSDI. Initially the marine sector was omitted but a subcommittee to address this was set up. FGDC is involved in the NSDI as is 3 data centres for oceanographic, climate and geospatial data. The US NSDI strategy was tabled and a framework for the coastal zone noted

Netherlands; The Geoinformation Board was established in 2006 after many years a data being managed separately. A status review and terms of reference were being developed. There were many obstacles to overcome, such as budget allocation and division of responsibility but lately the need for geospatial data to support security concerns had provided an impetus.

<u>France</u>; Various initiatives exist e.g. a GI Portal, metadata catalogue etc which allows people to search and view data. Next step is to provide a download facility. There was an issue with costs and SHOM had not yet contributed data. The project 'Litto 3D' was addressing harmonisation issues between land and sea, including acquiring new data. SHOM and IFREMER are helping create a common database for bathymetry, while Infra-HGEOS was providing an infrastructure for other types of data internally at SHOM.

<u>Finland</u>; In common with Sweden, a Board had been established to consider metadata, data services and research and education. INSPIRE is being adopted into national legislation. There exists a database for bathymetry, and there is cooperation with the Finnish land mapping agency. Although a common shoreline had not been implemented, there was work towards a seamless land-sea DEM. Although chart data was freely available, bathymetry data remained classified due to security concerns.

Estonia; Working towards a common framework but data availability remained a problem. No metadata catalogue existed at present but topographic mapping to support land mapping and web services. It was unsure whether the hydrographic service would take part in this, however this would be eased as a common datum and coordinate reference system was in use.

<u>Denmark</u>; There was no marine SDI, only on land. This was being driven by all public data to be made available and a framework had been established by the Ministry of Science; plus change in structure of local communities requiring supporting data. Marine data was divided between different agencies and to create a seamless or

harmonoized infrastructure was proving to be a difficult challenge. Australia; ANZ Land Information Council had established a framework for metadata and elevation data, with a policy for pricing, in 2001. A spatial directory had been developed with links to agency data which is provided under licence some free of charge. Some datasets were available on-line and interlinking web pages provided information on bathymetry and other fundamental datasets. Very few datasets existed in suitable digital formats, with a programme of data capture driven by the creations of ENCs. The National Oceans Office had developed a portal and used an extended ANZLIC metadata profile in its implementation. There is programme to move this towards ISO19xxx and the hydrographic service was represented in this work. Sweden; A paper had been submitted (see WG website for details). In the ensuing discussion, RW expressed concern that HOs were not properly represented in the INSPIRE drafting teams. He was aware that only the UKHO has put forward a technical expert. Land interests would set the agenda if the hydrographic community was not careful. This position was re-iterated by Admiral Maratos later in the proceedings based on his meeting with the European Commission and supported the case for the MSDI WG. TP provided an update on the status of S-100. The majority of the documentation has been completed and CHRIS is expected to ratify the draft S-100 standard at its meeting in Nov 2008. The IHB is hosting the S-100 registry. Participants were asked to comment of the state of data in their respective countries and whether, in their view, it was in a fit condition to support a MSDI. The responses are described below: Australia; A hydrographic database was set up in 2004. Presently, the database is being populated to support the production of ENCs. Expansion to include bathymetry and other source datasets is planned. Denmark; Chart data is stored in a file based system. A new system is planned. Raw data is stored elsewhere. Estonia; There are 2 databases. The first holds bathymetric data, the other stores chart data for ENC production. Finland; There is a database for ENCs. Source data is restricted. <u>France</u>; There is a database which supports ENC production. Netherlands; Some data held in a database. ENC production data is held in file based system. A comprehensive hydrographic DB is

planned but access over the Internet is unlikely [note: this is not a prerequisite for the data to support an MSDI].

<u>USA</u>; ENCs are held as flat files.

Norway: A primary database is updated daily and provides data to digital Norway.

<u>Slovenia</u>; Data is held in a database but there are problems with decision making and funding.

<u>UK</u>; ENC data is held as flat files. There are a number of source databases and datasets. A hydrographic database is in development.

In summary, it appears that where participant's data is held in a database, it is there to support the production of ENCs (and other navigational products) and certainly not to support the population of SDI. Many countries hold their hydrographic data in file systems and not on a central database.

9 Participants were asked to consider what the key objectives of the MDSI WG should be.

<u>Australia</u>; Review understanding and readiness of HOs to support SDI creation to gauge where to pitch future activities. Promoting knowledge and benefits of SDIs is a key short-term deliverable. Care is needed as often data is owned by third parties not the HOs and this should be respected. HOs may not be the relevant authority for some types of data e.g. shipwrecks

<u>Denmark</u>; As Australia plus identifying key players and existing initiatives.

Estonia; In many countries policy does not allow data to be shared. An aim for the WG may be to review the reasons and provide encouragement to HOs as restrictions may be irrational. Perhaps thinning or otherwise de-sensitizing the data may permit release.

<u>Finland</u>; Gain knowledge of different countries' strategies and what is able to be delivered i.e. status of the data and whether it supports SDIs. Harmonisation issues are also important. For example, ENCs are being matched within the Baltic Sea.

<u>France</u>; It is important to understand whether and how HOs should get involved in INSPIRE. What skills, knowledge, technology are required for HOs to support SDIs.

<u>Netherlands</u>; It is important that the WG is able to measure compliance and progress. Delft University has done this for land mapping in NL. Help with how HOs can implement web services would be useful.

USA; Key is for the WG to ask HOs what assistance they require. A web page for the WG should be set up on the IHO web site to aid communication. Norway; Provide more detail in respect of what is an SDI and what is required especially by users. What kinds of users will SDI support? What are there needs? How should HOs influence National SDIs? Slovenia; SDI requires definition, as does the role hydrography in it, including the types of data and any legislative requirements especially regarding data release. Admiral Maratos noted that the SDI concept is very new. Most HOs are aware of SDI but know little about it and hence are wary. Consequently, the WG should concentrate on informing member states of what SDI is, their role in it and the benefits. What information and data is required and what support can be provided by the WG to HO's wanting to make progress. The following was agreed as the immediate objectives for the WG: 1) Self assessment questionnaire (IHB to manage communication) - leader and background - pro forma - statements to support self assessment questionnaire 2) Analyse the results and define benchmark (use UKHO s/w and undertake work in breakout groups – see below). 3) Prepare Marine SDI 'cookbook' 4) Provide report to CHRIS. 'Best practice' page + results + proposals for future work (if any). It was agreed that participants would divide into sub-groups to review the areas to include in the self assessment and develop the content. This proved to be a worthwhile exercise resulting in the document attached. Sub-groups – 1. Strategy/Policy (UK / US)

- 2. People /Communicating (Australia / Denmark / MH)
- 3. Data Management (France / NL / MO)
- 4. Frameworks / Standards (Estonia / Finland / TP)
- 5. Data Dissemination (Slovenia / Norway).

Afternote: Sweden will assist sub group 4.

Denmark to take ownership of the questionnaire.

12 AOB

10

11

The mandate of the WG was requested by Netherlands. It was explained that the WG had been established by Conference and CHRIS.

Finland noted that participation in the WG needed to be justified.

Admiral Maratos summarized that the WG had already raised many important issues for consideration by the IHO and hence it was likely that the WG would continue beyond its initial phase of work. A standing agenda item on SDI at the Regional Hydrographic Commissions was noted. He suggested WG helps supply input and WG members brief commission reps.

JP to review EC / IHO MOU and comment.

# IHO/CHRIS Marine Spatial Data Infrastructure Working Group (MSDIWG) 1<sup>st</sup> Meeting, IHB, Monaco, 4-5 February 2008

#### **AGENDA**

# [P] = Paper/presentation provided

# DAY 1 (10.30-17.30)

### SDI CONTEXT

- 1. Welcome and Introductions Approval of Agenda (indicative time = 15 min)
- 2. State Terms of Reference for the Group [P] ALL (10 min)
- 3. Review of SDI Paper submitted to IHO in Autumn 2007 [P] UKHO/SeaZone (15 min)
- 4. Output from IHO SDI Conferences (Rostock & Havana) [P] IHB (15 min)
- 5. Reports from Nations on SDI development [P] ALL (80 min)

# LUNCH (12.45 -14.00)

- 6. SDI Drivers / obligations [P] ALL (40 min)
- 7. Review results of EuroSDR land-sea interoperability workshop-March 2007 [P] UKHO/SeaZone (15 min)
- 8. State of data in HO's (30 min)
- 9. S-100 update [P] IHB (15 min)

#### TEA & COFFEE (15.40 -16.00)

- 10. Best Practise Networks examples to draw from [P] ALL (60 min)
- 11. Define WG objectives (30min)

# **DAY 2 (09.30 – 16.00)** THE WORK PROGRAMME

- 1. Work Plan creation (60min)
  - Responsibilities
  - Milestones
  - Deliverables

#### COFFEE (10.30 - 10.45)

- 2. Research analysis programme Review subject areas [P] ALL (60 mins)
  - Data audit
  - HO capability audit
  - Environment for engagement

- Role & responsibilities
- Impact of NSDI
- Timescales
- Review of responses
- 3. Communications Plan (30mins)

## LUNCH (12.15 -13.30)

- 4. Development of Best Practise Guidelines (30 mins)
  - EU eContentPlus funding submission [P] SeaZone/UKHO
- 5. IHO SDI Hand Book development [modelled on M2] (30 mins)
- 6. Assign Roles & Responsibilities (30 mins)
- 7. Review & Confirm Terms of Reference (10 mins)
- 8. Review Action Plan (20 mins)
- 9. AOB (15mins)

**CLOSE** 

### **Useful References:**

## **INSPIRE**

Infrastructure for Spatial Information in the EU: <a href="www.ec-gis.org/inspire/">www.ec-gis.org/inspire/</a>
Legally Mandated Organisations [LMO's]:
<a href="www.ec-gis.org/inspire/ir/list\_registered\_lmos.cfm">www.ec-gis.org/inspire/ir/list\_registered\_lmos.cfm</a>
Spatial Data Interest Communities [SDIC's]:
<a href="www.ec-gis.org/inspire/ir/list\_registered\_sdics.cfm">www.ec-gis.org/inspire/ir/list\_registered\_sdics.cfm</a>

## SDI's

Digital National Framework[DNF]: www.dnf.org

Project Atlantis: <a href="https://www.dnf.org/applications/atlantis">www.dnf.org/applications/atlantis</a>

Marine Data & Information Partnership [MDIP] www.oceannet.org

www.lantmateriat.se/geodata

www.ga.gov.au/nmd/asdi/ www.fgdc.gov/nsdi/nsdi.html www.gsdi.org/SDILinks.asp

www.geoconnections.org/publications/Technical Manual/html e/s1 ch3.html