

**1<sup>st</sup> IHO-HSSC Meeting  
The Regent Hotel, Singapore, 22-24 October 2009**

**Paper for Consideration by HSSC**

**UPDATE ON THE PROPOSED MANAGEMENT ARRANGEMENTS FOR THE  
GEOSPATIAL INFORMATION INFRASTRUCTURE (GII)**

<b>Submitted by:</b>	TSMAD
<b>Executive Summary:</b>	This paper reports on further development of the concepts presented in paper CHRIS20-06.1B rev1 that was endorsed by CHRIS20 at its last meeting. CHRIS20-06.1B rev1 contained a detailed description of the existing and proposed management arrangements for the GII. The proposals in this paper are considerably simpler.
<b>Related Documents:</b>	<ol style="list-style-type: none"> <li>1. Chairman of HSSC in HSSC letter (IHB File S3/8151) dated 22 April 2009.</li> <li>2. CHRIS20-06.1B rev1.</li> </ol>

### **Introduction / Background**

1. CHRIS20 considered the long-term support and governance arrangements for the GII, described in CHRIS20-06.1B rev1, and instructed the IHB to develop a proposal for consideration by the 4th EIHC (CHRIS Action 20/15). This was not possible due to insufficient experience with the developing GII and the further development of ideas. This was explained by the Chairman of HSSC in HSSC letter (IHB File S3/8151) that was sent to all attendees of CHRIS20 on 22 April 2009.

### **Analysis/Discussion**

#### **IHO Geospatial Information (GI) Registry**

2. Taking into account the discussions at CHRIS20 and further experience during 2009 regarding the support and governance arrangements for the GII, it is proposed to simplify the structure and management of the GI registry.

The heart of the GI registry will continue to be the following geospatial information register types:

Feature Concept Registers

Portrayal Registers

Metadata Registers

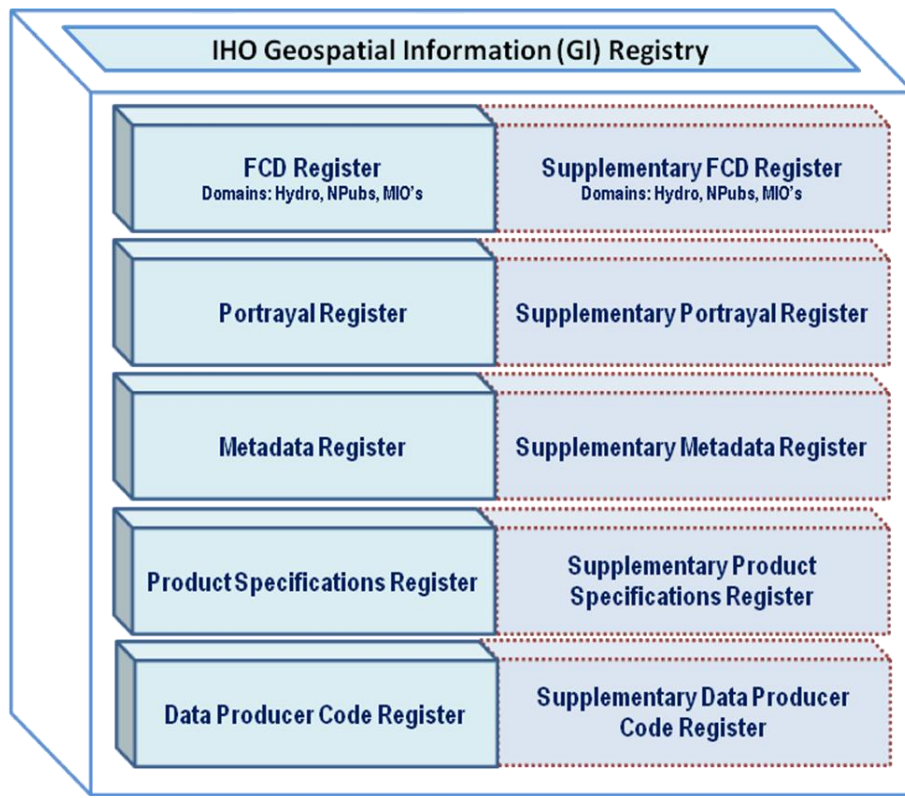
Agency Code Register

Product Specifications Registers

3. However, there will now only be two S-100 registers for each of the above register types; one for IHO maintained items, and a supplementary register for non-IHO hydro-related requirements - for example, ICE coverage, some aspects of eNAV, MIO's, et caetera.

4. The supplementary registers are, in effect, the S-100 equivalent of the Open ECDIS Forum (OEF) register of privately owned S-57 features, agency codes, et caetera. Given that the IHO, through CHRIS, has previously agreed to accommodate the facilities previously provided on the OEF, it seems logical that the IHO provides similar facilities under S-100.

5. This simplified registry will reduce substantially the management requirements for the GI registry. For the convenience of Submitting Organizations and the searching of the registers, each register will be subdivided into logical domains. For example the IHO feature concept register will contain domains for Hydro, NPubs, MIO's, et caetera.



**IHO Geospatial Information Registry**

**GI Registry**

6. The registry system (hardware and software) will be part of the IHB server infrastructure. Management of the system will be available for remote administration using normal permission and security arrangements.

**REGISTRY ADMINISTRATIVE FUNCTIONS**

7. Key roles of the GI Registry are:

- Registry Owner
- Registry Manager
- Registry Control Body

**GI Registry Owner**

8. The GI Registry will be owned by the IHO.

**GI Registry Manager**

9. The GI registry manager, whose role is to manage the registry infrastructure, will be appointed by the IHO.

**GI Registry Control Body**

10. The GI registry control body will consist of senior representatives appointed from the HSSC working groups together with optional representation from non-IHO Submitting Organizations who have a significant stake in a domain included in any of the registers. The GI registry control body will monitor and advise the registry manager and act as arbiters for any decisions or disputes in the register process.

11. The HSSC will act on behalf of the IHO as the owners of the registry and will exercise overall governance of the registry and its functions.

#### **REGISTER FUNCTIONS**

12. Key elements of the GI Registers are:

Register Owners

Register Managers

Register Control Body

#### **Register Owners**

13. The IHO, as owner of the registry and S-100, will own all registers.

#### **Register Manager**

14. The register manager will be responsible for managing the proposal process.

15. There are two options for implementing the roles of register manager:

a. Each register type (FCD, Portrayal, Metadata, etc.) could be managed by a single register manager who will be appointed by the IHO.

b. A single manager could be responsible for all register types.

16. There are advantages and disadvantages for both options, but on balance the TSMAD recommends option b.

17. Option b conforms to the simplified GI registry structure now being proposed. The single manager would seek and take advice, as required, from the GI register control body, whose members will, between them, have broad experience and knowledge across all the registers under the manager's jurisdiction.

#### **Register Control Body**

18. The register control body will adjudicate on the acceptability of all proposals for all the registers. The register control body will consist of domain experts from all stakeholders in both the IHO and the Supplementary registers. For example, members of the various HSSC working groups who will have a vested interest and similarly organisations with a requirement to use both the IHO and the Supplementary registers.

#### **Submitting Organizations**

19. Applications for Submitting Organization status will be processed by the register manager and approved by Registry Control Body.

#### **Conclusions**

20. A major problem with the detailed structure described and endorsed by CHRIS20 was an overcomplicated management chain. This in turn would have led to excessive bureaucracy and the need to rely upon and educate multiple managers and control bodies which, in turn, would also have increased exponentially with the addition of new registers (now domains within a register). The same opportunity for accredited non-IHO Submitting Organizations to take advantage of the GI registry remains under the proposed simplified structure. The proposed simplified structure will require a much reduced level of administrative overheads compared with the earlier model described at CHRIS20.

21. Another issue which was unresolved from previous discussions was the resourcing of the registry management. TSMAD considers that in the first instance this should be undertaken by a Member State, on a voluntary basis. This is the case at present, with the UK providing a de facto Registry and Register Manager. Experience has shown over the last two years that register activity will initially be sporadic. This is expected to eventually level out to a relatively low rate of change once newly accredited Submitting Organizations have completed their initial entry submissions.

## **Recommendations and Action Required of HSSC**

22. The TSMAD invites the HSSC to **agree** the following recommendations:
- a. The IHO is the owner of the GI registry and its registers.
  - b. The IHO provides the GI registry hardware and software as part of the IHO server infrastructure.
  - c. Volunteer Member States should provide the registry and register managers, who will be provided with full access privileges to the registry and its registers.
  - d. The GI registry control body will consist of a senior representative from each of the working groups together with optional representation from Submitting Organizations with domains reflected in a register. The GI Registry Control Body will act as the overall arbiter for any decisions or disputes in the registry process.
  - e. The register control body will consist of volunteer members representing the relevant HSSC WGs and the Submitting Organizations with domains reflected in the registers. The registry manager will organize the formation of the members of the register control body under the advice of the registry control board.