

9th CSPWG MEETING
Seoul, Republic of Korea, 13-16 November, 2012

Paper for Consideration by CSPCWG

INT1 REGISTER

Submitted by:	Chairman
Executive Summary:	CSPCWG8 Action 30 required Chairman to take advice from UKHO colleagues on practicalities of populating an INT1 references register
Related Documents:	None
Related Projects:	None

Background

The S-100 standard creates a framework which includes a series of registers which sit within the IHO Registry. Each register has a number of domains for example the feature concept dictionary covers hydro (ENC), and nautical publications. Currently registers are also separated into main (IHO) and supplementary (other organizations) although this division is to be removed (HSSC4).

The registers allow definitions of the following items to be registered in a single location for re-use and harmonisation between domains. They are submitted and can be superseded with new versions or retired if required. The processes for this are laid out in IHO standard S-99.

The registers are as follows (some are not currently available);

Feature Concept Dictionary – features (objects), attributes, attribute values

Portrayal Register – symbols, colours

Product Specification Register – Product specifications

Producer Agency Register – Producer agency codes

Metadata Register – metadata values

S-100 based product specifications take items from the register and use them as the building blocks within catalogues. These define the objects and attributes allowable within a product and the symbols and rules which determine their display.

The S-100 Portrayal Registry is now available in test form. This will allow symbols from S-52 and new symbols for S-101 and other products to be registered and used. It has been proposed that the paper chart can be considered a product specification although not defined in an S-100 format. Therefore paper chart symbols could be registered in the S-100 Portrayal Register.

http://registry.iho.int/s100_gi_registry_test/PortrayalRegisters/pr_home.php?register_type=6

Screenshots explaining the layout of the register can be found in Annex.

How this might work

Firstly all the symbols would need to be listed and defined in a suitable graphic format for inclusion within the register. This would require separation into individual point symbols for composite symbols.

CSPCWG would register as a submitting organisation and nominate a point of contact.

A domain would need to be created with an appropriate name.

Then the symbols would need to be submitted in accordance with the procedures laid out within S-99.

In future, any changes (new symbols, retired symbols) could then be proposed through the registry system and procedures. A CSPCWG rep would need to be included on the appropriate control body for the register. This control body approves submissions.

Advantages of this approach

- INT1 paper chart symbols would be available in an accessible form to all (however, not as a user document)
- A common set of digital symbol files could be used by different HOs to improve commonality and avoid the manual creation of new symbols
- The register would allow tracking of retired symbols
- Aligns (to some extent) paper chart with the S-100 family of products
- Paper chart symbols can be reused within other digital products where appropriate
- A process for consideration by wider stakeholders will be in place using the control body mechanisms

Disadvantages of this approach

- Effort required, creating and sorting out the list of symbols is a significant task

Summary

Inclusion of INT 1 paper chart symbols within the IHO Registry would have a number of benefits. However, significant effort would be required and ongoing resources (albeit small) would be required to support the registry process.

Supplementary Index	Alpha Code	Status	Date Accepted
	PO_FSHRES51	Valid	2011-03-11
	PO_ENTRES51	Valid	2011-03-11
	PO_BCNCAR01	Valid	2011-03-11
	PO_BCNCAR02	Valid	2011-03-11
	PO_BCNCAR03	Valid	2011-03-11
	PO_BCNCAR04	Valid	2011-03-11
	PO_BCNDEF13	Valid	2011-03-11
	PO_BCNISD21	Valid	2011-03-11
	PO_BCNLAT15	Valid	2011-03-11
	PO_BCNLAT16	Valid	2011-03-11
	PO_BCNLAT21	Valid	2011-03-11
	PO_BCNLAT22	Valid	2011-03-11
	PO_BCNSAW13	Valid	2011-03-11
	PO_BOYDEF03	Valid	2011-03-11

Figure 1 Point symbol register

Supplementary Index

Domain: HYDRO

Item Type: Point Symbols

Status: Valid

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HYDRO Point Symbols

Point Symbol Details	
Alpha Code:	PO_BCNGEN01
Definition:	beacon in general, paper-chart
Remarks:	
Status:	Valid
Accepted:	2011-03-11
Amended:	0000-00-00
Pivot point:	00185 00445
Bounding Box Width:	00370
Bounding Box Height:	00370

Graphic Instructions				
Fill Colour	Line Style	Line Colour	Line Stroke	Shape Used
CO_CHBLK	SL_SOLD	CO_CHBLK	0.6	PO_BASE_013 PO_BCNGEN00

Management Details

Proposal Status:	Pending
Proposal:	Addition
Submitting Organization:	IHO (TSMAD)
Proposed Change:	New
Justification:	New
Proposed:	2011-03-15
Disposed:	0000-00-00
Disposition:	Not Yet Determined
Successor:	Unspecified
Predecessor:	Unspecified
Reg Manager Notes:	<input type="text"/>

[Close](#)

Figure 2 – Detailed point symbol information

Alpha Code	Status	Date Accepted
PO_CIRCLE	Valid	2011-02-24
PO_TRI_HITO	Valid	2011-02-24
PO_BASE_006	Valid	2011-02-24
PO_TRI_BCNC	Valid	2011-02-24
PO_TXT_QMRK	Valid	2011-02-24
PO_TRI_BOYC	Valid	2011-02-24
PO_REC_1350	Valid	2011-02-24
PO_QUA_BOYS	Valid	2011-02-24
PO_TRI_BOYG	Valid	2011-02-24
PO_QUA_BOYG	Valid	2011-02-24
PO_TXT_EXPT	Valid	2011-02-24
PO_TXT_INFO	Valid	2011-02-24
PO_VESSEL00	Valid	2011-02-24

Figure 3 – Shape (symbol component) register

Alpha Code	Output	Status	Date Accepted
CO_NODTA		2	2011-03-02
CO_CHYLW		2	2011-03-02
CO_CHWHT		2	2011-03-02
CO_CHRED		2	2011-03-02
CO_CHMGF		2	2011-03-02
CO_CHMGD		2	2011-03-02
CO_CHGRN		2	2011-03-02
CO_CHBLK		2	2011-03-02
CO_CHBRN		2	2011-03-02
CO_CHGRF		2	2011-03-02
CO_CHGRD		2	2011-03-02
CO_ADINF		2	2011-03-02
CO_APLRT		2	2011-03-02
CO_ARPAT		2	2011-03-02
CO_BKAJ1		2	2011-03-02
CO_BKAJ2		2	2011-03-02
CO_CHCOR		2	2011-03-02
CO_CSTLN		2	2011-03-02
CO_CURSR		2	2011-03-02
CO_DEPCN		2	2011-03-02
CO_DEPDW		2	2011-03-02
CO_DEPIT		2	2011-03-02

Figure 4 – Colour register



INTERNATIONAL HYDROGRAPHIC ORGANIZATION
ORGANIZATION HYDROGRAPHIC INTERNATIONALE
Producer Agency Codes

		Home	Regional	Administration	Donors	Main				
Main Producer Code Index		Country	Agency				Alpha Code	Numeric Code	Date accepted	
Domain		Algeria	Service Hydrographique des Forces Navales				DZ	610	2008-10-16	
<input type="text" value="IHO MS"/>		Argentina	Servicio de Hidrografia Naval (SHN)				AR	1	2008-10-16	
Status		Australia	Australian Hydrographic Service (AHS)				AU	10	2008-10-16	
<input type="text" value="Accepted"/>		Bahrain	Hydrographic Survey Office				BH	20	2008-10-16	
<input type="text" value="Go to Index"/>		Bangladesh	Hydrographic Department				BD	660	2008-10-16	
		Belgium	MDK - Afdeling Kust - Division Coast				BE	30	2008-10-16	
		Brazil	Directorate of Hydrography and Navigation (DHN)				BR	40	2008-10-16	
		Cameroon	Port Autonome de Douala (PAD)				CM	740	2008-10-16	
		Canada	Canadian Hydrographic Service (CHS)				CA	50	2008-10-16	
		Canada	Canadian Forces				C4	51	2008-10-16	
		Chile	Servicio Hidrográfico y Oceanográfico de la Armada (SHOA)				CL	60	2008-10-16	
		China	Maritime Safety Administration (MSA)				CN	70	2008-10-16	
		China	The Navigation Guarantee Department of The Chinese Navy Headquarters				C1	71	2008-10-16	
		China	Hong Kong Special Administrative Region				C2	72	2008-10-16	
		China	Macau Special Administrative Region				C3	73	2008-10-16	
		Colombia	Ministerio de Defensa Nacional				CO	760	2008-10-16	
		Congo (Dem. Rep. of)	Ministère des Transports et Communications				CD	590	2008-10-16	
		Croatia	Hrvatski Hidrografski Institut				HR	80	2008-10-16	
		Cuba	Oficina Nacional de Hidrografia y Geodesia				CU	90	2008-10-16	
		Cyprus	Hydrographic Unit of the Department of Lands and Surveys				CY	100	2008-10-16	
		Denmark	Kort-Og Matrikelstyrelsen (KMS)				DK	110	2008-10-16	
		Dominican Rep.	Instituto Cartografico Militar				DO	120	2008-10-16	
		Ecuador	Instituto Oceanográfico de la Armada (INOCAR)				EC	130	2008-10-16	
		Egypt	Shobat al Misaha al Baharia				EG	140	2008-10-16	
		Estonia	Estonian Maritime Administration (EMA)				EE	870	2008-10-16	
		Fiji	Fiji Islands Maritime Safety Administration (FIMSA)				FJ	150	2008-10-16	
		Finland	Finnish Maritime Administration (FMA)				FI	160	2008-10-16	
		France	Service Hydrographique et Océanographique de la Marine (SHOM)				FR	170	2008-10-16	
		Germany	Bundesamt für Seeschifffahrt und Hydrographie (BSH)				DE	180	2008-10-16	
		Greece	Hellenic Navy Hydrographic Service (HNHS)				GR	190	2008-10-16	
		Guatemala	Ministerio de la Defensa Nacional				GT	200	2008-10-16	

Figure 5 – Producer Agency Code Register. This is also used to generate the S-62 PDF document automatically.