



13th Meeting of the Hydrographic Services and Standards Committee

Report on IHO GI Registry Management

Agenda Item 05.1B



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS



- Registry content standardization and consistency check - **completed**
 - FCD Register content standardized (format, syntax, item field consistency)
 - Standardization based on decisions at IHO GI Registry Workshop (February 2019)
- Harmonization of Producer Code Register content with S-62 Database - **completed**
 - Additional Register interface functionality identified - **completed**
- Migration of FCD Register content to Concept Register (“Beta” Registry) - **completed**
- Promotion of Concept Register content to Data Dictionary Register (“Beta” Registry) to duplicate FCD Register data modelling – **completed**
- Registration of IHO Hydrographic Dictionary terms in Concept Register to facilitate single-point management of terms and definitions – **completed**

The screenshot shows a spreadsheet with columns for Agency Code, Country Name, Code, Agency Name, Agency Code Alpha, Date Assigned, and Date Amended. The data is organized into rows for various countries and their respective hydrographic agencies.

HSSC-13, Remote Meeting, 03-07 May 2021

The screenshot shows the S-100 Geospatial Information Registry Producer Code Register interface. It displays a table with columns for Agency Code, Country Name, Code, Agency Name, Agency Code Alpha, Date Assigned, and Date Amended. The data is organized into rows for various countries and their respective hydrographic agencies.

Agency Code	Country Name	Code	Agency Name	Agency Code Alpha	Date Assigned	Date Amended
1	Argentina	AR	Servicio de Hidrografía Naval (SHN)	1	AR	2008-10-16
2	Australia	AU	Australian Hydrographic Office (AHO)	19	AU	2017-12-31
3	Bahrain	BH	Hydrographic Survey Office	20	BH	2008-10-16
4	Bangladesh	BD	Hydrographic Department	400	BD	2008-10-16
5	Belgium	BE	MID - Offshore Unit - Ghent Coast	30	BE	2008-10-16
6	Brazil	BR	Directorate of hydrography and navigation (DHN)	40	BR	2008-10-16
7	Canada	CA	Canadian Hydrographic Service (CHS)	30	CA	2008-10-16
8	Canada	CA	Canadian Coast	51	CA	2008-10-16
9	China	CL	Servicio Hidrográfico y Oceanográfico de los Armados (SHO)	60	CL	2008-10-16
10	China	CH	Maritime Safety Administration (MSA)	70	CH	2008-10-16
11	China	CH	The Navigation Customs Department of the Chinese Navy Headquarters	71	CH	2008-10-16
12	China	CH	Hong Kong Special Administrative Region	72	CH	2008-10-16
13	China	CH	Macau Special Administrative Region	73	CH	2008-10-16
14	Colombia	CO	Ministerio de Defensa Nacional	700	CO	2008-10-16
15	Costa Rica	CR	Ministerio de Transportación y Comunicaciones	700	CR	2008-10-16
16	Croatia	HR	Hydrografijski zavod	80	HR	2008-10-16
17	Cuba	CU	Oficina Nacional de Hidrografía y Navegación	80	CU	2008-10-16



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS (2)

International Hydrographic Organization

- Commissioning of current “Beta” Registry as operational IHO GI Registry (version 3.1) **(completed)**
- Enable full Domain Control Body (DCB) functionality **(May 2021)**
- Activate Producer Code Register as interface for IHO Publication S-62 (as replacement for the current active S-62 database **(Pending)**)
- Align Producer Code Register to S-100 requirements **(in progress)**
- Align draft Part 2 of S-100 Edition 5.0.0 to new GI Registry structure and functionality **(In progress)**
- Complete IHO GI Registry user guidelines (S-99 Annex A) **(In progress)**
- IALA request for an IALA Domain within the Portrayal Register **(New)**



Welcome to the S-100 Geospatial Information Registry (Version 2.1)

This registry is owned by the International Hydrographic Organization (IHO) and managed by the Secretariat of the IHO. The site contains many registers of hydrographic information together with registers of supplementary information owned by coastal domain experts. Each register type is further sub-divided into domains as a hydrographic, nautical publication for related ENC etc. The administration of the registry conforms to IHO Publication S-100 Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry a copy of which can be downloaded [here](#).

The information contained in the Registry can be freely accessed. However, forms can only be added or changed by the managers of approved Submitting Organizations. Application to become a Submitting Organization can be made by fulfilling the requirements of the proforma form available [here](#). Please note: It is not necessary to be a Submitting Organization in order to request new S-100 Data Producer codes. Requests for new Data Producer codes, or changes to existing codes should be sent to the following email address: info@iho.org.

Once accepted as a Submitting Organization you are free to submit proposals to any register. The Registry interface undergoes periodic improvements and any difficulties using the site should be reported to the [Support Manager](#).

Feature Concept Dictionary Register according to S-100				Portrayal Register					
No.	Type	Total	Approved	Noted	No.	Type	Total	Approved	Noted
1	Feature Type	228	228	0	1	Domain	228	0	0
2	Information Type	22	22	0	2	Line Style	22	0	0
3	Simple Attribute Type	655	655	0	3	Area Fill	655	0	0
4	Enumerated Type	2023	2023	0	4	Point	2023	0	0
5	Complex Attribute Type	39	39	0	5	Color and Tone	39	0	0
6	Color and Tone	22	22	0	6	Value and Value Type	22	0	0



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PRINCIPAL ACTIVITIES AND ACHIEVEMENTS (3)

• Outreach (Ongoing)

- Engage with all Registry Stakeholders on the role and functionality of the IHO GI Registry; resolve remaining conflicts in Registry content (in progress)
- Educational sessions; possible 2nd IHO GI Registry Workshop

• Statistics:

- Concept register: 7321 valid items (NOTE: Items still to be registered for some PSs).
- Data Dictionary Register: 366 Features; 26 Information; 667 Attributes; 92 Complex Attributes; 2273 Enumerates; 117 Codelist Values.
- Portrayal Register: 1015 Symbol/Line/Area Fill; 309 Portrayal Management items.
- Product Specification Register: 10 (published); 6 (in development (testbed)).
- Producer Code Register: 392 items.

No	Name	CodeName	Definition	Status	Date Accepted
1	Vertical Datum of Data	verticalDatumOfData	Any level surface for example Mean Sea Level taken as a surface of...	Valid	2021-03-30
2	Zone of Confidence	zoneOfConfidence	The several indications of the quality of bathymetric data within an area...	Valid	2021-03-01
3	Spatial Accuracy	spatialAccuracy	Provides an indication of the vertical and horizontal positional uncertainties...	Valid	2021-03-01
4	Display Uncertainties	displayUncertainties	A statement defining whether an annotated feature is to have horizontal...	Valid	2021-03-01
5	New Danger Marking	newDangerMarking	A mark used to indicate the existence of a recently identified new danger...	Valid	2021-03-10
6	Buoy New Danger Marking	buoyNewDangerMarking	A new danger marking buoy is a buoy moored on or above a newly identified...	Valid	2021-03-09
7	Active Submarine Marking	activeSubmarineMarking	An active submersible vehicle which may be submerged or projecting above...	Valid	2020-12-15
8	Weather Hazard	weatherHazard	A specific weather scenario or event that threatens people or property...	Valid	2020-12-09
9	Bag	bag	Prints unselected collection of related items (objects or values) that meet...	Valid	2020-10-26
10	IMSO	IMSO	International Mobile Satellite Organization.	Valid	2020-10-26
11	ISLAS	ISLAS	International Commission on Safety of Life At Sea.	Valid	2020-10-26
12	ENC Text Data Set	encTextDataSet	In ECDIS, a standardized data set supplied on behalf of the International...	Valid	2020-10-22
13	Encapsulation	encapsulation	In ECDIS, the representation of data and metadata per the grouping of the...	Valid	2020-10-22
14	Encoding Conventions	encodingConventions	In ECDIS, a set of rules to be followed when encoding data for a particular...	Valid	2020-10-22
15	Exchange Format	exchangeFormat	In ECDIS, a specification for the structure and organization of data to be...	Valid	2020-10-22
16	Exchange Set	exchangeSet	In ECDIS the set of files representing a complete, single purpose (i.e. pr...	Valid	2020-10-22
17	Face	face	In ECDIS, a two dimensional spatial object. A face is a continuous area...	Valid	2020-10-22
18	Feature	feature	In ECDIS, a representation of a real world phenomenon.	Valid	2020-10-22
19	Feature Object	featureObject	In ECDIS, an object which contains the navigational information about...	Valid	2020-10-22
20	Feature Record	featureRecord	In ECDIS, a feature record is the implemented term used in the S-57 data...	Valid	2020-10-22

No	Name	CodeName	Definition	Status	Date Accepted
1	Vertical Datum of Data	verticalDatumOfData	Any level surface for example Mean Sea Level taken as a surface...	Valid	2021-03-30
2	Quality of Bathymetric Data	qualityOfBathymetricData	An area within which a perform assessment of the quality of the...	Valid	2021-03-01
3	Sounding	sounding	Measured or charted depth of water (may be a drying height) or th...	Valid	2021-03-01
4	Underwater Hazard Rock	underwaterHazardRock	A concreted mass of stony material or coral which dries, is wash o...	Valid	2021-03-01
5	Obstruction	obstruction	In marine navigation, anything that hinders or prevents movement...	Valid	2021-03-01
6	Wreck	wreck	The remains of a vessel or surface vessel which has been...	Valid	2021-03-01
7	Buoy New Danger Marking	buoyNewDangerMarking	A new danger marking buoy is a buoy moored on or above a newly...	Valid	2021-03-09
8	Weather Hazard	weatherHazard	A specific weather scenario or event that threatens people or prop...	Valid	2020-12-09
9	Compass Rose	compassRose	A circle graduated in degrees (clockwise from 0) with 0, 90 and...	Valid	2020-08-11
10	Marine Protected Area	marineProtectedArea	Any area of the littoral or sub-littoral terrain together with its over...	Valid	2020-07-22
11	Inland Waters	inlandWaters	A feature denoting water found on the inland side of the Ocean...	Valid	2020-07-14
12	Lake Shore	lakeShore	The line between the water area of a lake and the area of land...	Valid	2020-07-14
13	Lighthouse	lighthouse	A distinctive structure on or off a coast emitting a light signal...	Valid	2020-07-14
14	Color Line of the Contourline	colorLineOfTheContourline	A line not extending beyond 200 nautical miles from the base line...	Valid	2020-07-14
15	Color Line of the Contourline	colorLineOfTheContourline	A line not extending beyond 200 nautical miles from the base line...	Valid	2020-07-14
16	Color Line of the Contourline	colorLineOfTheContourline	A line not extending beyond 200 nautical miles from the base line...	Valid	2020-07-14
17	Color Line of the Contourline	colorLineOfTheContourline	A line not extending beyond 200 nautical miles from the base line...	Valid	2020-07-14
18	Color Line of the Contourline	colorLineOfTheContourline	A line not extending beyond 200 nautical miles from the base line...	Valid	2020-07-14
19	Priority Signal	prioritySignal	The discrete wave system of water waves which has left to gener...	Valid	2020-07-14
20	Radio Service Area	radioServiceArea	The area where a radio service can be obtained on the character...	Valid	2020-07-14

No	Name	CodeName	Definition	Item Type	Status	Date Accepted
1	MMR0023	MMR0023	Use three power connection (B, 12 of CEVNS)	symbol	Valid	2020-01-30
2	BS07A04	BS07A04	Power supply	symbol	Valid	2019-08-26
3	MMR002V	MMR002V	Headroom limited (C, 2 of CEVNS) - virtual	symbol	Valid	2019-08-26
4	MMR002V	MMR002V	No entry (A, 1 of CEVNS) - virtual	symbol	Valid	2019-08-26
5	SG07010	SG07010	Signal float - on position	symbol	Valid	2019-08-26
6	SG0701M	SG0701M	Signal float - off position - missing	symbol	Valid	2019-08-26
7	SG0701F	SG0701F	Signal float - off position	symbol	Valid	2019-08-26
8	BS0700V	BS0700V	River buoy yellow float (B.C of CEVNS) - virtual	symbol	Valid	2019-08-26
9	BS0700S	BS0700S	River buoy yellow float (B.C of CEVNS) - on position	symbol	Valid	2019-08-26
10	BS0700M	BS0700M	River buoy yellow float (B.C of CEVNS) - off position - missing	symbol	Valid	2019-08-26

No	Product ID	Name	Version	Status	Date Accepted
1	S-100	Universal Hydrographic Data Model	4.0.0	Published	2019-08-26
2	S-101	Electronic Navigational Chart	1.0.0	Published	2019-08-26
3	S-102	Bathymetric Surface	2.0.0	Published	2019-08-26
4	S-111	Surface Current Product Specification	1.0.0	Published	2019-08-26
5	S-121	Maritime Limits and Boundaries	1.0.0	Published	2019-08-26
6	S-122	Marine Protected Areas	1.0.0	Published	2019-08-26
7	S-123	Marine Radio Services	1.0.0	Published	2019-08-26
8	S-127	Salmon Hatch Management	1.0.0	Published	2019-08-26
9	S-128	Coastal Area Management Product Specification	1.0.0	Published	2019-08-26
10	S-401	Inland ENC Product Specification	1.0.0	Published	2019-08-26

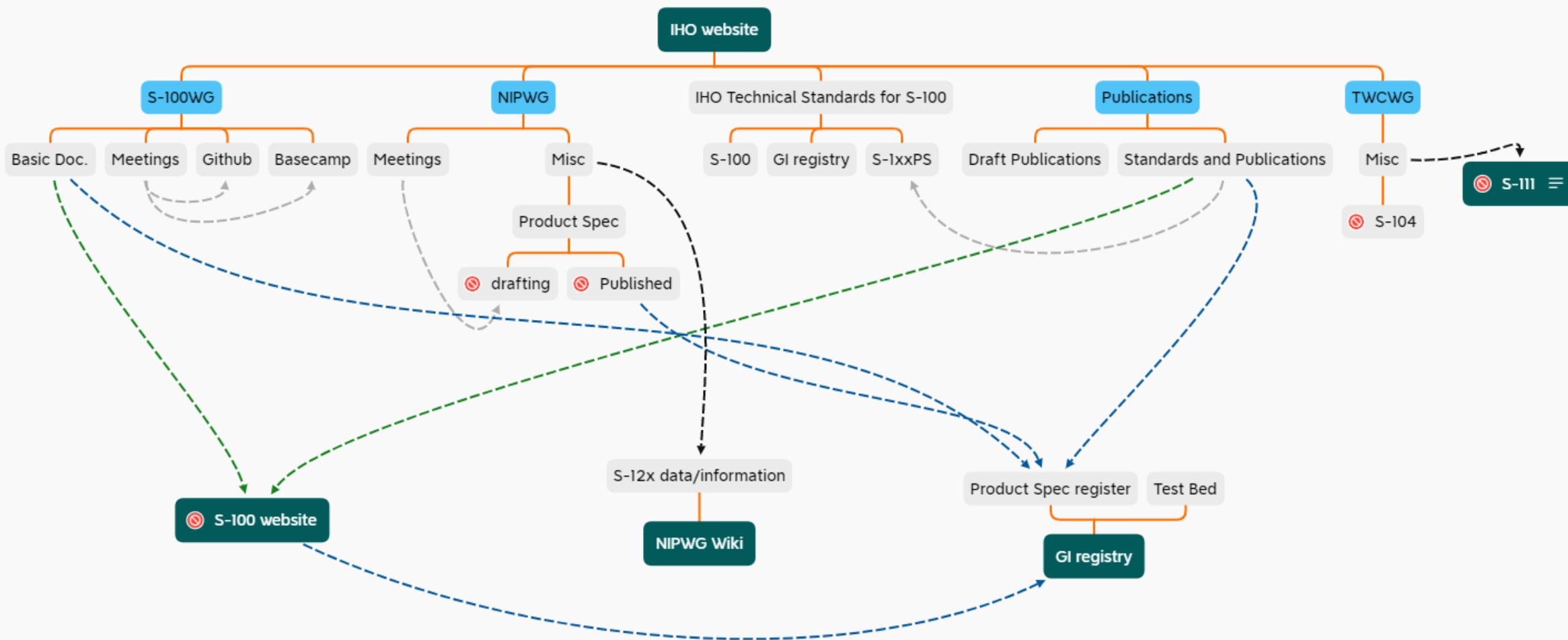


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MANAGING S-100 MATERIALS (1/2)

International Hydrographic Organization

- Complexity to search S-100 materials and versions



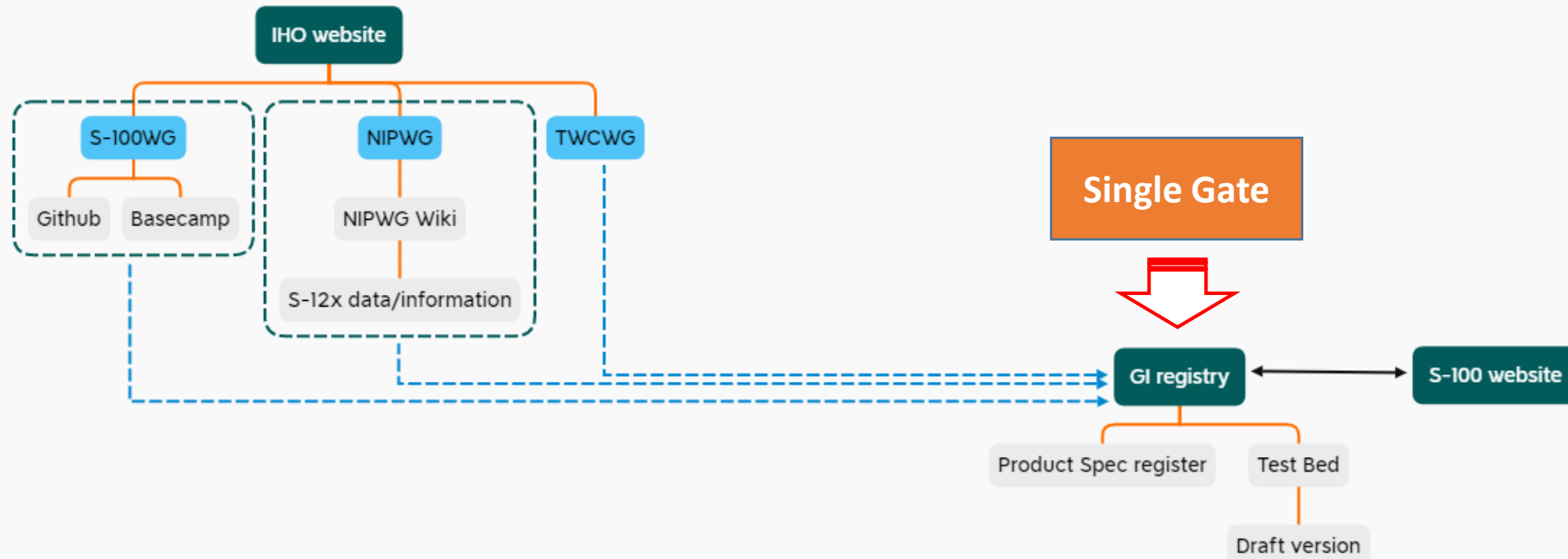


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MANAGING S-100 MATERIALS (2/2)

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- Single gateway to search S-100 latest information and data.



S-100 PS developers required to upload and make links in the registry



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ACTIONS REQUESTED OF HSSC

International
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- Note this report.
- Approve the addition of an IALA Domain to the Portrayal Register of the IHO GI Registry.
- Encourage Product Specification developers to register their items, if not already registered.



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FURTHER INFORMATION

International
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<http://registry.iho.int/main/main.do>

Contact IHO GI Register Manager:

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