



Mapping Undersea Feature Names in S-100

UFNPT at SCUFN 32
Kuala Lumpur, Malaysia
August, 2019



Content

- Update about UFNPT
- Discovery of Undersea Features



Background

S-57 & S-100

- The cartographic standard for Electronic Navigation Charts (ENC's)
- S-57 first came out in 1992
- S-100 will replace S-57 once becomes operational

INTERNATIONAL HYDROGRAPHIC ORGANIZATION



IHO TRANSFER STANDARD
for
DIGITAL HYDROGRAPHIC DATA

Edition 3.1 - November 2000

Special Publication No. 57

Published by the
International Hydrographic Bureau
MONACO

S-57



Background Continued ...

Decide on requirements

We came up with a list of required attributes base on:

- Definitions in B-6
- Attributes in the existing S-57
- Fields in the SCUFN proposal form
- General Bathymetric Chart of the Ocean's (GEBCO) database

Require attribute	Description
B-6 Generic Term	single choice from the list of generic terms in B-6
Feature Name	basic information
Display Name	basic information
Language	basic information
Name	basic information
Scale Minimum	basic information
Depth range minimum value	vertical distance from highest point of the feature to the sea level, in meters.
Depth range maximum value	vertical distance from lowest point of the feature to the sea level, in meters.
Vertical length	vertical distance between the highest point and the lowest point of the object.
Horizontal length	measurement of the longer horizontal linear axis
Horizontal width	measurement of the shorter horizontal linear axis.
Textual description	additional information such as country of discovery, origin of name, etc.



Background Continued ... Has it been developed?

Review documentation about S-100

The table shows that the elements and documentation of S-57 are comparable to the elements and documentation of S-100

Organization of S-57	Organization of S-100
Object – can be found in the Object Catalogue	Feature – can be found in the Feature Catalogue
Object catalogue – Appendix A, Chapter 1 of S-57*	Feature Catalogue – (in development)
Object acronym – can be found in the Object Catalogue	Feature acronym – n/a in S-100
Object attribute – can be found in the Attribute Catalogue	Feature attribute – can be found in the Feature Concept Dictionary.
Attribute catalogue – Appendix A, Chapter 2 of S-57*	Feature concept dictionary – (in development)
Encoding – can be found in Use of Object Catalogue for ENC	Encoding – can be found in the Data Classification and Encoding Guide
Use of Object Catalogue for ENC – Appendix B.1, Annex A of S-57*	Data Classification and Encoding Guide – (in development)
Symbol – can be found in the Symbol library for the use of ECDIS	Symbol – can be found in the Portrayal Register and Portrayal Catalogue
Symbol library for the use of ECDIS – Annex A of S-52**	Portrayal Register – (in development) Portrayal Catalogue – (in development)
Product specification – the only one that exists is the ENC Product specification	Product specification – various exist or are (in development) , depending on the type of product (S-101 ENC, S-102 Bathymetry, S-103 Nautical Publications, etc.)
ENC Product specification – Appendix B.1 of S-57*	S-101 ENC – (in development) S-102 – Bathymetric Surface Product Specification S-103 – (in development) ...
Domain – n/a	Domain – various exist or are (in development) : Hydrography, Sea Ice, Aids to Navigation, etc.



Result obtained

- Most feature attributes that will meet the requirements for storing descriptive information about UFNs, already exist in the IHO Feature (object) Dictionaries in development.
- Some B6 Generic term definitions are vague



Work Plan of the UFNPT 2018-2019

Action Items (SCUFN 31)	Tasking Lead	Target Completion Date	Status
Explore within existing product specifications in S-100, the expansion of textual description to include - Associated Features - Reason for choice of name - Discovery facts - Survey Data information	Canada and UFNPT	January 2018	Pending
Explore the steps necessary to develop a product specification for UFN	Canada	January 2019	Completed
Prepare and information paper for HSSC 11, with the status of work of the UFNPT and the work plan for the year 2019.	Canada	February 2017	Completed
Hold a video conference call for UFNPT, to discuss if the creation of a product specification is necessary for UFN	Canada and UFNPT	March 2019	Completed
If necessary, hold a Face to Face meeting of the UFNPT or Online workshop, to discuss initial steps to develop the product specification	Canada, UFNPT and Generic Terms WG	June 2019	Deferred to after SCUFN32
Re-evaluate work plan	Canada, UFNPT	August 2019	Completed
Prepare documentation to report progress to SCUFN	Canada, UFNPT	September 2019	Completed



Conclusion

The UFNPT has fulfilled the action items assigned to it at SCUFN 31.

- Further research into the definitions of B-6 is necessary, to complete the initial list of requirements.

Task	Work Item (SCUFN 32)	Priority H-High M-Medium L-Low	Start Date	End Date	Status P-Planned O-Ongoing C-Completed	Contact Person (s) • Indicates leader
1	<p>Hold an online workshop, to discuss the steps to continue the development of the product specification.</p> <ul style="list-style-type: none"> - Assign a Minute Taker - As per the recommendation of HSSC11, we need to assess the practical consequences of the implementation of an S-100 compatible specification for UFN. - Consider, with the Generic Term Working Group, the progress of the Undersea Feature Discovery Project, presented by Canada, and its applicability for interoperability and standardizing UFN - Explore within existing product specifications in S-100, the expansion of textual description to include <ul style="list-style-type: none"> - Associated Features - Reason for choice of name - Discovery facts - Survey Data information - Set project milestones and project plan 	H	November 2020	November 2020	Not started	UFNPT and Chair of Generic Terms WG
2	Prepare minutes of the online meeting and send them to the participants for approval	M	January 2020	January 2020	Not started	Minute Taker
3	Proceed with the project according to the plan discussed during the online workshop	H	February 2020	February 2020	Not started	UFNPT and Chair of Generic Terms WG
4	As per the recommendation of HSSC11, we need to consolidate into one report for HSSC12 (May 2020), the status of work of the UFNPT, including the results of the online meeting, the approved work plan for the year 2019-20 (this table), and a new request for a product specification number that should include the new project milestones and project plan.	M	March 2020	March 2020		UFNPT
5	Prepare update report and presentation for SCUFN33	M	August 2020	August 2020		Canada, UFNPT and Generic Terms WG

Proposed Work Plan 2019-2020



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Italy	TBD		
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Thank You / Merci

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Questions

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