

Paper for Consideration by SCUFN

Report of the work made during the inter-sessional period

Development of the SCUFN Operational Web Services (operated by KHOA) and integration with the GEBCO Gazetteer (operated by NOAA)

Submitted by:	IHO Secretariat (as SCUFN Secretary)
Executive Summary:	This document reports on the evaluation of the SCUFN Operation Web-Services (OWS), which is being developed at the Korean Hydrographic and Oceanographic Agency (KHOA), in particular its Submission Interface.
Related Documents:	Decision SCUFN36/07.3/03
Related Projects:	KHOA SCUFN Operations Web Services (OWS)

Introduction / Background

1. Following the SCUFN-36 meeting, held in November 2023, considering the limited resources available within its Sub-Committee, the Secretariat of the GEBCO Sub Committee on Undersea Feature Names (SCUFN) decided to contract several tasks in order to improve the content of the IHO-IOC online GEBCO Gazetteer of Undersea Feature Names (the Gazetteer) and support SCUFN activities managed by the IHO Secretariat. The following tasks were contracted to the former SCUFN Secretary.

Tasks	Objectives	Outcome reported in
1	<i>Update the Gazetteer from all undersea feature naming decisions and actions taken at SCUFN-36, ensuring quality control and standardization of the documentation provided as part of the relevant proposals. Prepare a draft report as a submission document to SCUFN-37. Deadline: 30 April 2024.</i>	Doc. SCUFN37-07.2B
2	<i>Monitor the list of pending names. Prepare a draft report as a submission document to SCUFN-37. Deadline: 30 April 2024.</i>	Doc. SCUFN37-07.2D
3	<i>Monitor the relationships with NCEI and KHOA to maintain and/or improve the Gazetteer, as necessary and/or appropriate. As part of that work, assess the new version 5.0.0 prior to its launching during 2024. Prepare a draft status report as a submission document to SCUFN-37. Deadline: 30 April 2024.</i>	Doc. SCUFN37-07.1B
4	<i>Launch, monitor and provide advice on the development by KHOA of the prototype UFN database and SCUFN Operations Web services (OWS), as well as the integration of the SCUFN OWS and the existing GEBCO Gazetteer. This will include testing the integrated system in operational mode for a couple of undersea feature names, also covering the direct online submission procedure. Prepare a draft status report as a submission document to SCUFN-37. Deadline: 30 April 2024.</i>	Doc. SCUFN37-07.3B
5	<i>Preload in the Gazetteer tentatively through the SCUFN OWS</i>	Doc. SCUFN37-04.0A

	<i>all undersea feature names from the proposals to be submitted to SCUFN-37, in advance of the meeting. In doing so, quality control and standardization of the documentation provided will be ensured. All preloaded names to be put in Edit mode. Prepare a draft status report as a submission document to SCUFN-37. Deadline: 30 April 2024.</i>	
6	<i>As a complement to Task 4, monitor the development of the SCUFN OWS Repository and the transfer of the IHO SCUFN Digital Archive, the interface to move proposals (in restricted access mode before SCUFN meetings) to the Repository after SCUFN meetings (open access and links to GEBCO Gazetteer). Prepare a draft status report as a submission document to SCUFN-37. Deadline: 30 April 2024.</i>	Doc. SCUFN37-07.3C
7	<i>Support to the outgoing Secretary during the hand-over with the incoming Secretary for a couple of training sessions. Deadline: October 2024.</i>	

2. The objective of this submission paper is to report on Task 4.

Analysis/Discussion

3. In parallel with the existing GEBCO Gazetteer operated and maintained by NOAA and its NCEI¹ Gazetteer Project Team, KHOA undertook to develop over the past years new interfaces on undersea feature names issues, which have been integrated into a single website called [SCUFN Operational Web Services](#) (OWS). These include a Review interface to allow SCUFN members to review all submitted proposals and a Submission interface to allow proposers to upload themselves their proposals. It is planned that the SCUFN OWS will ultimately be S-100 compliant.

4. The Review interface is operational since several years and is now used on a regular basis by SCUFN members to assess any new submitted proposals, in advance of SCUFN meetings. This greatly facilitates consideration of name proposals and decision-making process at SCUFN meetings.

5. The main purpose of this document is to report on the Submission interface. Until now, direct submission of name proposals on the SCUFN OWS, has not been possible. This is because a Submission interface is complex to implement. However, significant progress has recently be made by KHOA, allowing an initial assessment. The latest version has been evaluated by the contractor in June 2024. The resulting comments are summarized in [Annex A](#).

Recommendation

6. It is recommended that SCUFN members and KHOA consider the comments in [Annex A](#).

Justification and Impacts

7. A fully operational Submission interface will allow not only populating a SCUFN OWS database to facilitate the review of submitted proposals by SCUFN members, but also creating an intermediate database that will be used to directly populate the GEBCO Gazetteer.

Action required of SCUFN

¹ National Center for Environmental Information

8. SCUFN is invited to:
 - a. note this report
 - b. consider the recommendation made in section 6.

Annex A to SCUFN37-07.3B Rev1

SCUFN OPERATIONS WEB SERVICES (OWS)

DRAFT SUBMISSION INTERFACE

Tests & Comments (June 2024)

Michel Huet, on behalf of Yves Guillam, SCUFN Secretary

Note: Comments added in Rev1 appear in *italic characters*.

General:

The objective of the Submission Interface is twofold:

- To populate a SCUFN OWS database intended to facilitate the review of submitted proposals by SCUFN members.
- To create an intermediate database that will be used to directly populate the GEBCO Gazetteer (www.ngdc.noaa.gov/gazetteer), in accordance with the “Undersea Feature Names Processing Flowchart” provided as Annex B to Doc. SCUFN35.2-07.1A.

Comments:

1. After entering the Specific Term (not Specific name) and the Generic Term, then selecting ADD FILES (not ADD FEATURES), both Specific and Generic Terms should remain visible in the relevant fields on the first line at the top of the page.
To select a generic term, the first letter only is accepted, for example S for Seamount. The offer should be refined as additional letters are typed.
2. Proposal Upload. One of the Submission goals is to prepare the automatic transfer of the proposal elements back to the GEBCO Gazetteer. Therefore, after uploading the proposal as a PDF file and before clicking on CONTINUE, the following Gazetteer elements should be presented to the proposer for checking and validation:
 - a. Specific Term, e.g. An Điền
 - b. Generic Term, e.g. Hills
 - c. Proposer, e.g. Viet Nam Hydrographic Office (taken from “Proposer(s)” / “Organization” in the proposal)
 - d. Year of Proposal, e.g. 2022 (taken from “Proposer(s)” / “Date” in the proposal)
 - e. Discoverer, e.g. Vietnamese survey vessel "883" (taken from “Discovery Facts” / “Discoverer” in the proposal)
 - f. Year of Discovery, e.g. 2010 (taken from “Discovery Facts” / “Discovery Date” in the proposal)
 - g. Associated Meeting(s), e.g. SCUFN-36 (not in the proposal, it should therefore be the next SCUFN meeting to come)
 - h. Origin of Name (taken from “Reason for Choice of Name” in the proposal)
 - i. Additional Information (taken from “Feature Description” / “Steepness” & “Shape” in the proposal)
 - j. Minimum Depth (m), e.g. 1902 (taken from “Feature Description” / “Minimum Depth” in the proposal)
 - k. Maximum Depth (m), e.g. 2480 (taken from “Feature Description” / “Maximum Depth” in the proposal)
 - l. Total Relief, e.g. 578 (taken from “Feature Description” / “Total Relief” in the proposal)

- m. Dimension/Size, e.g. 31 km x 10 km (taken from “Feature Description” / “Dimension/Size” in the proposal)
3. Main Geometry. Should be Primary Geometry, as in the GEBCO Gazetteer (Polygon(s) or Linestring(s) provided as shape files). After uploading the shape files and before clicking on CONTINUE, the Long Lat coordinates in WGS-84 should be presented to the proposer for checking and validation, for example:
 - a. POLYGON ((111.85682 9.84642, 111.90813 9.85042, 111.9386 9.8833, 111.9755 9.91377, 112.00115 9.90897, 112.0156 9.91538, 112.02843 9.92822, 112.07173 9.94263, 112.10888 9.948, 112.11052 9.98787, 112.08617 10.02765, 112.05248 10.03888, 112.02843 10.03727, 112.00597 10.01322, 111.95625 10.0068, 111.90493 9.99237, 111.87445 9.99237, 111.87125 9.97472, 111.8536 9.9667, 111.84077 9.98113, 111.81832 9.97793, 111.82313 9.95227, 111.8119 9.91538, 111.80548 9.88008, 111.85682 9.84642))
 4. Secondary Geometry (Optional). After uploading the shape files (usually, points or multipoints) and before clicking on CONTINUE, the Long Lat coordinates in WGS-84 should be presented to the proposer for checking and validation, for example:
 - a. MULTIPOINT ((112.04328 10.01233), (111.94142 9.94065))
 5. ATTACH (Optional). Should be ADDITIONAL FILES (Optional), for example reference documents such as scientific articles in support of the proposal. These files, if any, should be uploaded at the very end of the sequence, that is, after the small-scale maps, medium-scale maps etc.
 6. MEDIUM & SMALL. The required supporting maps are described in B-6, Appendix A, Section 3, as follows:
 - a. Small-scale index map
 - b. Medium-scale map
 - c. Large-scale track line map
 - d. Large-scale bathymetric map
 - e. 2D bathymetric oriented profile(s)
 - f. 3D bathymetric imageTherefore, uploading of these maps should be requested in 6 consecutive steps. As they may already be included in the proposal, in part or in full, a caveat is appropriate but should be presented as follows: “If a small-scale index map is already included as part of the proposal, please tick the box and proceed with the CONTINUE button.” Same for Medium-scale map, Large-scale track line map, etc.
 7. After completing the uploading of all files, a map showing the feature geometries is displayed. Again, both Specific and Generic Terms should remain visible in the relevant fields on the first line at the top of the page. Further, the name should appear permanently on top of the geometry, and not only when moving the cursor within the polygon. Finally, adjacent or overlapping undersea feature names, if any, should also be shown with their names on the map, all the time.

At the bottom of that page, the button NEXT should better be SUBMIT. Also, clicking on PREVIOUS amounts to abandon the proposal just uploaded and return to the FRONT page. Better to replace PREVIOUS with a button QUIT, although it’s not clear why a proposer would give up after having uploaded all files (?).

For some reason, the geometries of a submitted CoquilleIHO Seamount were not shown on the map.

8. Save Draft Proposals page. Selecting VIEW leads to a new page Submit Modify for Proposals. Under Proposal Files, selecting Attach Upload results in one single file displayed, even though several files were uploaded. This should be corrected.
At the bottom of the Proposal Modification page, the button PREVIOUS should be replaced with CONFIRM.
9. List of Submitted Proposals page. There should be 2 options to get out of this page. A first option NEW SUBMISSION leading to the page Authenticated User / Submit a proposal. A second option EXIT leading to the page Email Authentication (Proposer Authentication would be better). At present, clicking on FRONT PAGE leads to either of the above pages, which is not satisfactory. Also, if REVISION REQUEST is selected for a name by the proposer, then REQUESTING appears on the relevant line. However, it is not clear why “The revision requires administrator approval”, before the proposer can proceed with the revision. Further, how long has the proposer to wait?
Several proposals have been submitted as Fast-Track proposals, such as ChallengerIHO Bank. However, none of them are marked as FT. All proposals have an X in the FT column.
10. Authenticated User page. It would be clearer to write SAVED DRAFT PROPOSALS, rather than SAVED PROPOSALS since these proposals have not yet been finalized nor submitted.
11. Withdrawing and resubmitting a proposal. After selecting WITHDRAWN for a name previously submitted (NaresIHO Trough in this case), procedure which was successful, I was not able to resubmit same proposal. The screen was systematically frozen after uploading the Main Geometry shape files, with the CONTINUE button being not displayed. I had to reinitiate the process from scratch (Email Authentication, View Proposals Submitted, Resubmit). I tried several times without success.