

Paper for Consideration by SCUFN

Undersea Feature Names Integrated System

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

Submitted by:	IHO Secretariat (as SCUFN Secretary), KHOA and NOAA-NCEI
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).
Related Documents:	Annex A to Doc. SCUFN32-07.3A
Related Projects:	N/A

Introduction / Background

- Following the SCUFN32 meeting in August 2019 and 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-32, ensuring modification of polygons delimiting features, as required, in liaison with the relevant proposers. Prepare a draft report as a submission document to SCUFN-32. Deadline: 30 April 2020.</i>	Doc. SCUFN33-07.2B
2	<i>Monitor the list of pending names. Prepare a draft report as a submission document to SCUFN-33. Deadline: 31 May 2020.</i>	Doc. SCUFN33-07.2D
3	<i>Monitor / upgrade the wish-list of improvements to the Gazetteer interface and test any new developments by NCEI. Monitor the relationships with NCEI to maintain the Gazetteer, as necessary and/or appropriate. Prepare a draft status report as a submission document to SCUFN-33. Deadline: 30 June 2020.</i>	Doc. SCUFN33-07.1A
4	<i>Launch, monitor and provide advice on the development by KHOA of the prototype UFN database and web-based associated services (the Beta-Gazetteer). This will include testing the Beta-Gazetteer in operational mode for a couple of undersea feature names (Action SCUFN32/190). Prepare a draft status report as a submission document to SCUFN-33. Deadline: 30 June 2020.</i>	Doc. SCUFN33-07.3A
5	<i>Preload in the Gazetteer all undersea feature names from the proposals that will be submitted to SCUFN-33, 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</i>	Doc. SCUFN33-04A

<i>a submission document to SCUFN-33. Deadline: 30 September 2020.</i>

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

Analysis/Discussion

3. A GEBCO Gazetteer, developed at NOAA, was launched in September 2013 (www.ngdc.noaa.gov/gazetteer/). It comprises a database of those undersea feature names selected by the GEBCO SCUFN, and web services allowing to query, display, update and export features. The Gazetteer maintenance is provided by NOAA National Centers for Environmental Information (NCEI). At SCUFN 31 (2018), NCEI reported that the funding requirements for the Gazetteer maintenance were ensured for the following years and that a new programmer had been hired, who would work in this area. As a result, a much improved version 4.2 of the Gazetteer, taking into consideration all previously SCUFN suggested enhancements, was released in 2020.

4. In parallel, KHOA developed new interfaces on SCUFN undersea feature terms and definitions, on submission of proposals to SCUFN, and on review of proposals by SCUFN members. These three new interfaces aimed at facilitating the preparation of proposals and their review by SCUFN members. An additional interface was developed, known as Beta-Gazetteer, for use in the event that the existing gazetteer would not work properly and a substitution would be needed. The four interfaces above have now been integrated into a single website, still under development, which has been called [SCUFN Operation Web-Site](#) (OWS). It is planned that the SCUFN OWS will ultimately be S-100 compliant.

5. In 2019, SCUFN, NOAA and KHOA agreed that the GEBCO Gazetteer would be dedicated to the public use and that the SCUFN OWS would be used by name proposers to upload proposals and SCUFN members to review the proposals, and also as a backup system. The linking up of the two systems was described in Annex A to Doc. [SCUFN32-07.3A](#).

6. An evaluation of the “Submission of proposals” interface of the SCUFN OWS has been conducted by the contractor during the intersessional period. The results are provided in [Annex A](#), in the form of comments and suggested improvements.

Recommendations

It is recommended that:

7. SCUFN members and KHOA take note of the comments and suggested improvements to the SCUFN Operation Web-Services (OWS), as listed in [Annex A](#).

Justification and Impacts

8. The development made by KHOA will achieve the integration of web services that were developed initially as stand-alone projects. This is from their reliable, sustainable, full and seamless integration that users (proposers, SCUFN Secretary, SCUFN Members, DCDB Administrator, end-users (machine-to-machine, and general public users)) can make the best benefit of internationally recognized undersea feature names.

Action required of SCUFN

9. SCUFN is invited to:

- a. note this report ;
- B. consider the recommendation made in sections 7.

Comments and suggested improvements to the SCUFN Operation Web-Services (OWS)

Submission of name proposals

1. Log out. To log in there is a procedure (e-mail + password) but not to log out. Most of applications in use have log out buttons.
2. Grouping of proposals. Often naming proposals are presented in a group form, for example because they are located in the same area. Part of the supporting documentation is common to all proposals in the group, such as an overview map. This is for instance the case with the 6 Australian proposals for 2020: five supporting documents are valid for all proposed names. However, there is currently no possibility to upload supporting documents which are common to a group of proposals. As a result, these documents must be uploaded for each naming proposal of the group. For the sake of simplification and space optimization, it is proposed to add the following functionalities in association with a group of naming proposals:
 - a. **Overview Map(s)**. One or several documents can be uploaded (pdf, jpeg ...).
 - b. **Supporting Documentation – General**. One or several documents can be uploaded (pdf, jpeg ...).
3. Submission / Revision of Proposals. It is suggested:
 - a. To replace “Proposed Date” with “Proposal Date” (on the proposal form) and to add “Submission Date” (date of first uploading).
 - b. To allow the possibility to alter the specific and/or generic terms. For example, Jeffery Canyon had to be changed to Jeffrey Canyon. This is not possible at present.
 - c. To limit the uploading of documents associated with a given name to:
 - i. **Naming Proposal**. Normally, one single PDF file.
 - ii. **Shape files**.
 - iii. **Supporting Documentation**. One or several documents can be uploaded (pdf, jpeg ...).
 - d. It should be possible to delete any file previously uploaded.
 - e. In the current application, it should be noted that files uploaded via “Small Scale Images” (at the end of the page), cannot be deleted. In fact, it looks like this function does not work.
 - f. It seems that it is not possible to make a 2nd revision. In effect, after making the necessary changes, final validation results in a message “File is nothing” (?). Indeed, the page “Check proposal information” which follows is empty.
4. Page “Submitted Proposal Lists”. Rev number and Index number should be monitored by the proposer. A revision can be made through several steps, possibly over several days, and the revision number should remain the same, for example rev1. Also, the Index number should be determined by the proposer. For instance, Boongorang Canyon was ranked 1 on the list while it should have been 6. However, no change is possible at present.
5. Check proposal information. After revision of a proposal, one is invited to check the result.
 - a. What is the purpose of “Small Scale” and “Medium Scale” at the end of the page? The relevant files should have already been uploaded during the revision process.
 - b. Uploaded files are presented. However, the PDF file of the proposal itself is missing, as well as the map files uploaded via “Small Scale” and “Medium Scales”.
 - c. A reconstituted proposal form is presented. However for each section, such as “steepness”, “associated features” or “discovery facts”, only the first line has been included. Some fields

are even left empty, such as “positioning system”. As a general note, what is the purpose of this reconstituted proposal form, which the reviewer will not see anyway?

6. Revision of a proposal. On the page “Submit Revision for proposal”, the proposal file previously uploaded is not shown under “PDF upload”. However, when a revised proposal file (PDF) is tentatively re-uploaded, the message “ERROR: File already exists” is displayed, implying that a file is already there, but not shown. Similarly, if one single file is shown under “Attached File Upload” and that one wants to upload additional files, the message “ERROR: File already exists” is displayed. Under “Image Files”, it seems not possible to upload any file via “Small Scale Image”. At the end of the revision process, clicking on CONFIRM leads to the message “File is nothing” (???). Further, the following page (reconstituted proposal form) is empty. This should be clarified.
7. Revision of proposals – Shape files. It seems possible to upload revised shape files, with a view to replace the existing shape files for a given name proposal. However, when clicking on “Confirm” to validate the new shape files, the resulting page “Check Proposal Information”, with a request “Please check the data”, is empty; there is nothing to check. Further, there seems to be no way to get out of this page, even by clicking on “Confirm”. In fact, going back to another revision attempt, via “Submission”, “View Lists”, etc, it appeared that the revised shape files had not been uploaded. In any case, the uploaded shape files should be listed somewhere on the “Geometry” page.
8. Link between the SCUFN-33 page on the IHO website and the SCUFN OWS. At present, the same link is used, that is <https://scufn.ops-webservices.kr/login>. This is acceptable since the number of name proposals which have been uploaded for SCUFN-33 is limited (35 proposals). However, when the number of proposals is higher, as expected in future (187 proposals in 2019), it would be preferable to divide the list into sections, one per country, and sub-sections if there are several organizations concerned, as KHOA has done for “[2019] SCUFN-32 Meeting - LIST OF PROPOSALS”, with each section, that is, each country, being reached individually, through a specific internet address.
9. Removing a name proposal. It should be possible, for a proposer, to remove from the SCUFN OWS any name proposal he had previously uploaded.
10. Uploading a new name proposal. During the process of creating a new name proposal, the function “Medium-Scale Map Upload” must be actioned. Otherwise, one cannot proceed further. However some name proposals may not have associated medium-scale maps to upload. For example, the proposals for Gliere Seamount or Tropiquito Seamount have no associated maps, yet they appear in the SCUFN-33 list. This seems to indicate that their uploading did not follow the procedure. Whatever, it should be allowed to skip that function. Additional remarks:
 - a. Specific and generic terms should appear with the first letter in capital and the following letters in lower case, throughout the uploading process. For example, Vĩnh Lương Sea Channel.
 - b. Error messages should be “Please click on CHECK above” (rather than “Please enter the proposed name area”); “File is already parsed” (not “paresed”); “This file is in a wrong format” (rather than “This xml file is the wrong format”).