Paper for Consideration by SCUFN

Report of the work made during the inter-sessional period

Wish-List of Enhancements to the On-line Interface of the GEBCO Gazetteer

Submitted by: IHO Secretariat (as SCUFN Secretary)

Executive Summary: This document reports on the monitoring, since SCUFN-30, of the

Wish-List of Enhancements to the On-line Interface of the GEBCO

Gazetteer.

Related Documents: SCUFN30-07.1A, SCUFN31-07.1B

Related Projects: N/A

Introduction / Background

1. Following the SCUFN-30 meeting in October 2017 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 IHB. The following tasks were contracted to the former SCUFN Secretary.

Tasks	Objectives	Outcome reported in
1	Update the Gazetteer from all undersea feature naming decisions and actions taken at SCUFN-30, 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-31. Deadline: 31 May 2018 .	Doc. SCUFN31-07.2B
2	Monitor the list of pending names. Prepare a draft report as a submission document to SCUFN-31. Deadline: 31 May 2018 .	Doc. SCUFN31-07.2C
3	Monitor the draft new edition of Publication B-6 ("red line" version), taking into account SCUFN-30 decisions and any related development following SCUFN-30, with a view to submitting a consolidated draft for comments to SCUFN members. Deadline: 31 March 2018. Monitor and implement all comments from SCUFN members and prepare a draft report as a submission document to SCUFN-31, as well as a submission to the appropriate IRCC meeting, taking into consideration IHO Resolution 2/2007 on the impact study. Deadline: 30 June 2018.	Doc. SCUFN31-06.2A
4	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	Doc. SCUFN31-07.1A

	Gazetteer, as necessary and/or appropriate. Prepare a draft status report as a submission document to SCUFN-31. Deadline: 30 June 2018.	
5	Launch, monitor and provide advice on the development by KHOA of the prototype UFN database and web-based associated services (the Beta-Gazetteer). Prepare a draft status report as a submission document to SCUFN-31. Deadline: 30 June 2018.	Doc. SCUFN31-07.3B

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

Analysis/Discussion

- 3. Document SCUFN30-07.1A presented a wish-list of 27 Enhancements, needed or desirable, on the interface of the on-line Gazetteer and which had been submitted to NOAA's NCEI¹ Gazetteer Project Team for assessment, as responsible organization for the maintenance of the Gazetteer. Thanks to the excellent cooperation between the contractor and the NCEI team, and the dedication and competence of the latter, it has been possible to fix a significant number of items in the wish-list during the intersessional period. This has resulted in a much improved version of the Gazetteer interface, which became operational and was made available in the spring of 2018.
- 4. Several decisions or actions from SCUFN-30 related to the maintenance and/or improvement of the Gazetteer interface. They are listed in <u>Annex A</u> with their respective status. Most of them have been completed.
- 5. Based on additional experience gained through the use of the Gazetteer Interface to maintain the database, the contractor could complement the wish-list with several new requirements. This has resulted in an updated wish-list of 25 enhancements, which is provided in Annex B. The items marked "ASAP" reflect genuine errors which should be corrected as a matter of priority. The other items are prioritized as "Short Term", Medium Term" or "Long Term" depending on their importance/urgency.
- 6. It is comforting to learn from Doc. SCUFN31-07.1B that an annual funding of ~50K/year for the maintenance and enhancements of the Gazetteer has been secured at NCEI, and that a new software developer has been recruited and is expected to start working on the Gazetteer from early 2019. It is hoped that this will allow fixing as soon as possible the errors identified so far in the interface, and implementing progressively the other enhancements listed.
- 7. It should be noted that implementation of Item A.16 of the wish-list (link to the SCUFN review website) is dependent on the ability of the Application Programmable Interface (API) used in the Gazetteer, to allow for accessing and pull information from an external website, such as the SCUFN review website, into the GEBCO Gazetteer. In effect, the existing protocols to control security issues at NCEI may prohibit this possibility.

Recommendations

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¹ National Center for Environmental Information

It is recommended that:

8. SCUFN Members consider and review the wish-list of enhancements in Annex B, including the suggested priorities and assessment results, and based on their own experience of the Gazetteer, propose any changes they deem appropriate.

Justification and Impacts

- 9. Benefits: incremental improvements of the Gazetteer, and correction of anomalies when they exist. Better monitoring and management of the actions to be done. Better visibility on resources needed and better efficiency.
- 10. Resource implications: impact on NCEI resources to be budgeted. Solutions through GEBCO funding to possibly be considered.

Action required of SCUFN

- 11. SCUFN is invited to:
 - a. note this report.
 - b. consider / agree on the recommendations made in section 8.

DECISIONS AND ACTIONS FROM SCUFN-30 RELATING TO TASK 4

Decision/ Action	Details	Status (Oct 2018)	Comments & Suggestions
	Matters remaining from Previous Meetings		
	Review of Actions from SCUFN-29 and transfer to the relevant agenda items		
SCUFN30/07 (former SCUFN29/07 and SCUFN28/95)	Sec. to provide all SCUFN Members with their GEBCO Gazetteer Editors username and password so they can: - log in; - assess the new proposed feature names in EDIT mode; - make editorial corrections directly.	Complete	SCUFN members have been informed that they can receive their codes on request (last e-mail from Sec. 21 Jun 2018).
	Gazetteer of Undersea Feature Names		
	Maintenance of the on-line interface to GEBCO Gazetteer database		
SCUFN30/146	SCUFN Chair to report at GGC-34 on the issues raised in the report from NOAA/NCEI for long-term support (Doc. SCUFN30-07.1B) and seek guidance from GGC on the way forward (funding issue).	Complete	Mid-Nov 2017.
	Interoperability and Prototyping		
SCUFN30/148	SCUFN Members to test the Beta-Gazetteer developed by KHOA and report to Han.		
SCUFN30/149	KHOA to prepare a Beta-Gazetteer project management plan (tech spec. roles and responsibilities, lifecycle maintenance and upgrade, acceptance tests, documentation,) to be further submitted to SCUFN Members (Walter lead + UFN PT + SCUFN Sec.)	In progress	Report drafted by KHOA received by Sec. on 28 June under consideration.

Wish-List of Enhancements to the On-line Interface of the GEBCO Gazetteer

(Updated to October 2018)

No.	Improvement	Suggested Priority	Assessment by contractor Oct 2018
A.	GAZETTEER INTERFACE MANAGEMENT		
A.1	Moving the cursor on the chart background. The names popping up when moving the cursor on the map are wrong. Normally, moving the cursor on the displayed geometry of a feature led to the relevant feature name being shown in an adjoining window, which is very convenient to identify any name at a glance. This is not the case. If, for example, the cursor is moved on the geometry for Darvin Guyot (Point), off New Zealand, the name popping up is Aurora Canyon, which is located off the Antarctic Peninsula! This observation is valid for any feature geometry displayed on the chart background. This is a real nuisance.	ASAP	New. To be done.
A.2	Polygon or line crossing the date line. Clicking on any feature with polygon geometry crossing the date line (Meridian 180°) results in the centre of the basemap being relocated somewhere in the South Atlantic, around the Meridian 0° and at similar latitude. Same if the name of a feature crossing the date line is selected in the SW corner. This means that the feature geometries for those selected names are not visible (in yellow) on the basemap on display.	ASAP	New. To be done.
A.3	Geometry entered from shapefiles. If a Shape file package includes several geometries for a given name, for example 20 line strings as for Kerama Ridges, only the first geometry is read by the Gazetteer interface. All geometries should be read instead.	ASAP	New. To be done.
A.4	Display of geometry on the basemap. The geometry of any name contained within the basemap on display, whether point, line or polygon, is normally shown in blue. However, the primary geometry only appears in blue. The secondary geometry is not visible, e.g. Acapulco Seamounts or Guling Seamounts.	ASAP	New. To be done.
A.5	Input and Display of Information – Diacritical Characters. It should be possible to enter and display the following characters: ā, ē, ī, ō and ū, as part of a specific name, e.g. Pūkākī Rise, or as part of the information in the fields "Origin of Name" and/or "Additional Information". At present, those characters can be entered and saved in "Edit" mode but are not recognized if the "Edit" mode is selected again. Diacritical characters are then replaced with "¿".	ASAP	No change.
A.6	Cursor coordinates on the Arctic and Antarctic basemaps. When selecting the Arctic or Antarctic basemap, coordinates attached to the cursor should be Long, Lat, as on the Mercator basemap. Currently, the coordinates shown are meaningless to the average user of the Gazetteer.	Short Term	New. To be done.

No.	Improvement	Suggested Priority	Assessment by contractor Oct 2018
A.7	Cancel Option under Edit Function. Under the "Edit" function, two options are available, that is, "Cancel" and "Save". To end up under the "Edit" function, one has to select "Edit" under either the "Approved" or "Ready" or "Pending" or "Edit" status. Selecting the option "Cancel" always results in a new "Edit" status, which is fine only if the previous status was "Edit". Rather, one should revert to the actual previous status, whether "Approved", "Ready", "Pending" or "Edit".	Short Term	Done for "Edit" and "Ready" status. No change for "Pending" and "Approved" status.
A.8	Display of information - Geometry. The primary geometry, only, is shown in the "information" window, below the basemap. There should be an additional line showing the secondary geometry. The titles shown should then be "Primary Geometry" and "Secondary Geometry", respectively.	Medium Term	No change
A.9	Display of Position on the Chart Background. At present, the coordinates associated with the cursor's position on the basemap are expressed as Long, Lat with format ±LLL.DDD, ±III.ddd, e.g. — 119.833, 13.475. There should be an option to express them as Long, Lat with format LLL°MM.M'E/W, II°mm.m'N/S, e.g. 119°50.5'W, 13°27.1'N. The latter format for geographical coordinates is more familiar to the average user of the Gazetteer.	Medium Term	No change
A.10	Display of Information - Geometry — Coordinates. Importing geometry from shape files often results in coordinates with an unnecessary great number of decimals, e.g35.79992945866667 - 21.76742849571431. It is recommended to limit to five the number of decimals (the fifth decimal being rounded), which corresponds to an accuracy of the order of 1 metre on the ground (the sea in fact). In the above case, the coordinates would become -35.79993 - 21.76743. The other additional decimals are meaningless.	Medium Term	No change
A.11	Polygon or line crossing the date line. A feature geometry crossing the date line (Meridian 180°) - line or polygon – is split into two new geometries of same type, one of each side of the date line, which results into MULTILINESTRING or MULTIPOLYGON geometries. While this solution works, it is not totally satisfactory. A line or polygon depicting an undersea feature should remain one single geometry, even if it crosses the date line.	Medium Term	New. To be done.
A.12	SW search window, list of names. At present, all specific terms starting with ' (apostrophe), such as 'Arere Seamount, appear first in the list of names. They should appear in the appropriate alphabetic order, without taking any consideration to the apostrophe. For example, 'Arere Seamount should be listed between Arensberg Seamount and Argentina Rise.	Medium Term	New. To be done.
A.13	Editor name. After logging in as Editor, the Editor name should be shown under "Editor" for all status, whether APPROVED, PENDING, EDIT or READY. At present, the Editor name (in fact, his/her e-mail address, which is fine) is shown for the EDIT and READY status only.	Medium Term	New. To be done.

No.	Improvement	Suggested Priority	Assessment by contractor Oct 2018
	Further, the editor's e-mail address shown should always be that of the latest intervenor, which is not the case if the feature name remains under EDIT status. Finally, the title "Editor" should be replaced with "Latest Editor".		
A.14	Undersea Feature Search NW window. Accented letters, such as é, è, à, ñ are not recognized when used as part of the specific term in the field "Name". Thus, typing "Chiloé" results in the message "Search results: 0 features found." To get to Chiloé Basin, the name entered should be limited to "Chilo".	Medium Term	New. To be done.
A.15	Undersea Feature Search NW window. The search functionality should be extended to accept in the field "Name" words or group of letters which are part of the specific term. For example, it should be possible to get to La Confiance Ridge by entering "Confiance" only, or to get to 'Arere Seamount via "Arere". This is not possible at present.	Medium Term	New. To be done.
A.16	Edit Function – Link to SCUFN Review website. The SCUFN Review website (www.scufnreview.org) provides details on the proposals submitted as well as their status following examination by SCUFN (Accepted, Adopted, Not Accepted, Pending, Withdrawn or Deferred). It is suggested to include a new key "Review Proposal" on the "state" line of the Edit Function (but separate from the other state keys, for example in the middle of that line), with a hyperlink to the SCUFN Review website, for example as follows: "Review Proposal Cancel Save" Thus, an editor would be able to populate this page in advance of a SCUFN meeting from the proposal details found on the SCUFN Review website. After the meeting, he would also find there the final status of the proposal (Accepted, Adopted, Not Accepted, Pending, Withdrawn or Deferred) so that he could select the appropriate state key ("Hold", "Summit" or "Delete") for the next step.	Long Term	No change.
A.17	Display of Information — Associated Meeting. At present, one Associated Meeting only is allowed. In a number of cases, a name has been the subject of successive changes, relating to the generic term, the position(s) or even the specific term. These are reported in the relevant meetings. It would therefore be useful to be able to enter up to three associated meetings, shown on same line, in order to trace back the history of a name if needed. The title would then become "Associated Meeting(s)".	Long Term	No change
A.18	Display of Depth on the Chart Background. In addition to the coordinates Long, Lat associated with the cursor's position on the basemap, it would be useful to have the possibility of displaying the depth in meters, that is, Long, Lat, Depth, using the GEBCO gridded bathymetry database	Long term	No change

No.	Improvement	Suggested Priority	Assessment by contractor Oct 2018
В.	GAZETTEER ADMINISTRATION		
B.1	Contact List. It is not possible to amend an existing contact in the Contact List. Any editing of an existing contact results, after selecting "Update", in a new contact created and which includes the changes made. The existing contact is kept as it was. All relevant names in the Gazetteer continue to refer to the existing contact. The new contact is useless, unless all concerned names are amended one by one to refer to the new contact.	ASAP	New. To be done.
B.2	Feature Type List and Contact List. It should be possible to reach a given feature type or contact, for example "Seamount" or "Survey Vessel", directly by entering some initial letters or a key word, such as "sea" for a feature type or "vessel" for a contact, in an additional small window "Filter by name" somewhere at the top right of the page. This used to be the case for the Contact List in an earlier version of the Gazetteer Interface. However, for some unknown reason, this facility has disappeared in the new version. At present, reaching a particular feature type or contact may be tedious.	Short Term	No change
B.3	Feature Type List. If, during the editing of a feature type, one clicks on the "return" key to start a new line, this change is not reflected in the updated text on display.	Medium Term	No change
B.4	Feature Types List. For consistency purpose, it is recommended that the expression "Feature Type" be replaced with "Generic Term", which is the accepted wording in B-6. Accordingly, the words "Name" and "Description" at the top of each page should be replaced with "Generic Term" and "Definition", respectively. As a result, the words "Name" and "Type" in the Undersea Feature Search window of the Gazetteer Interface should also be replaced with "Specific Term" and "Generic Term".	Medium Term	No change
B.5	Feature Types List. Wherever the description of a Feature Type is not provided because reference is made to another Feature Type, e.g. "Cap: see BANK", there should be a hyperlink from the relevant word – here, "BANK" – to the actual description for that Feature Type, in this case under "Bank".	Medium Term	No change
B.6	Feature Types List. The following "Note" should be included at the top of each page, preferably in the line "Feature Type List" (to become "Generic Term List"): "NOTE: Terms written in CAPITALS in the definitions are themselves defined elsewhere in the list."	Medium Term	No change
B.7	Contacts List. It should be possible to enter up to two e-mail addresses in the "Email" field. At present one address only can be entered.	Long Term	No change