

International Practices of Naming Undersea Features and the Implication for Naming Those in East Sea

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Abstract

This paper reviews international practices of naming undersea features, centered on SCUFN (Sub-Committee on Undersea Feature Names), and draws some implications on the newly announced undersea feature names in East Sea. Even though the history of the activities of naming undersea features in Korea is very short, recent years have witnessed considerable progress in finding and naming undersea features. In view of the guidelines for naming undersea features by SCUFN, it is evaluated that most of these names have been appropriately selected. But more justification should be made for specific terms using historical persons, symbolic term, and two names proposed for those already listed in the Gazetteer. For further works on naming undersea features, three steps are suggested: first, conducting surveys and accumulating data on undersea features, second, naming, announcing newly found features and publicizing them, and third, making attempts to achieve international standardization of domestically announced names.

Naming Undersea Features in Korea

It is not until the middle of 1990s that the Korean academics and government officials began to have interests in standardizing undersea feature names within its jurisdiction. Scientists of geophysics and ocean geology have just used unstandardized names, both domestically and internationally, in their works. There have sometimes been confusions in calling the same undersea features with different names.

The government of Korea, in the late 1990s, began to conduct systematic analyses for undersea features within its jurisdiction, examining and identifying the features, and naming them. Basic undersea feature information, including

three dimensional data, has been extensively collected by National Oceanographic Research Institute (NORI) of the Ministry of Marine Affairs and Fisheries.

Along with the maritime survey on the undersea features, there has also been domestic standardization process of their names under the direction of the Korean Committee on Marine Geographical Names (KCMGN). In 2005, the KCMGN approved sixty-six new marine names which are registered in the government official gazette. Among these, eighteen names are of undersea features in East Sea. The KCMGN has been preparing to submit these names to Sub-Committee on Undersea Feature Names (SCUFN) which is in charge of international standardization of undersea feature names.

The establishment of KCMGN and on-going progress of its activities were already reported in the Eighth United Conference on the Standardization of Geographical Names (UNCSGN), held in Berlin, 2002 and in the twenty-second session of the United Nations Group of Experts on Geographical Names (UNGEGN), held in New York, 2004.

Functions of SCUFN

Sub-Committee on Undersea Feature Names (SCUFN) was organized in 1974 to take the task of standardizing undersea feature names shown on all the nautical or bathymetric charts produced by International Hydrographic Organization (IHO) and Intergovernmental Oceanographic Commission (IOC) under UNESCO. SCUFN is operated as one of the major works of General Bathymetric Chart of the Oceans (GEBCO), which is a joint project between IHO and IOC. For this reason, SCUFN is controlled by GEBCO Guiding Committee (GGC).

The setting up of SCUFN arose from the need for a uniform policy for handling undersea feature names, in order to achieve consistent naming on bathymetric maps and nautical charts. The role of SCUFN is twofold: One is to define the nomenclature pertaining to undersea features, e.g. canyon, plateau, fracture zone, etc., as well as naming guidelines, and the other is to consider and decide on names which have been submitted to the Sub-Committee.

SCUFN prepares and maintains international gazetteer and supplements of undersea feature names. As of the end of 2005, 3,321 names are registered in this gazetteer. SCUFN is now composed of twelve members, seven plus five, recommended by IHO and IOC, respectively. These members are experts acting exclusively for the benefit of the IOC and IHO communities, not representing their governments. Since the 19th meeting of SCUFN, held in June 2006, an expert from Korea has been acting as a member.

SCUFN is supposed to maintain close liaison with the UNGEGN and international or national authorities concerned with the naming of undersea features. UNCISG, based on the works of UNGEGN has produced five resolutions so far regarding undersea features: I/8(1967), II/23(1972), II/26(1972), III/22(1977), and IV/12(1982). To be specifically noted among these is II/23 which initiates the recommendation that UNGEGN work on model statements on the treatment of undersea feature names and develop model forms for proposing these names.

Guidelines for the Standardization of Undersea Feature Names

SCUFN makes a full review and discussion for each proposed name with two steps: The first is to identify the feature found and judge the appropriateness of its generic name which represents the shape and process of its creation. The second is to judge the appropriateness of its specific name. The judgement is made on the basis of the *Guidelines for the Standardization of Undersea Feature Names*, published by IHO and IOC. This publication, which is called B-6, designates the principles of standardization of undersea features, conditions and methods of submission, and procedures.

First of all, objects for international standardization of undersea feature names are limited to those features entirely or mainly, more than 50 percent, outside territorial sea, which is twelve miles from the baseline. This means that within territorial sea official names for domestic use have also the international prestige of use, unless there are problems on territorial limit.

Generic terms are to be selected from the list of 53 types of features defined to reflect the physiographic descriptions. Of specific concern are guidelines for specific terms. The following seven principles are noted:

- Short and simple terms (or names) are preferable.
- Effective, conveniently usable, and appropriate reference should be provided.
- The first choice, where feasible, should be one associated with a geographical feature.
- Specific terms can be used to commemorate ships or other vehicles, expeditions or scientific institutes involved in the discovering and/or delineation of the feature, or to honour the memory of famous persons.
- If names of living persons are used (surnames are preferable), they should be limited to those who have made an outstanding or fundamental contribution to ocean sciences.
- Groups of similar features may be named collectively for specific categories of historical persons, mythical features, stars, constellations, fish, birds, animals, etc.

- Descriptive names are acceptable, particularly when they refer to distinguishing characteristics.

The judgement on each proposed name may be either 'accepted', 'rejected', or 'reserve'. When a proposed name is not accompanied by sufficient supporting materials or faced with some unsolved problems, then it is sorted to belong to the reserve section of names. A name with reserve status is open to be cared in the next meeting with additional information. As the judgement is made separately for each of generic and specific names, either one can be accepted or rejected.

Results of Judgements on the Recently Proposed Names

An examination of the results of judgements made on the recently proposed undersea feature names could reveal the tendency of recent naming practices and decisions. This section is dedicated to an analysis of the decisions made on the names proposed in the SCUFN meetings of 2003 to 2005.

Total 185 names were proposed in the last three years: 87 in 2003, 48 in 2004, and 50 in 2005. Russia has been the most active in proposing as many as 97 names, which is followed by the U.S.(42), Mexico(15) and Germany(13). Besides, just U.K., New Zealand and Chile belong to this group of proposers, which shows that the concerns on undersea feature names are restricted to very few countries.

Of the 185 names proposed, 144 names(77.8%) were accepted, among which 23 names were conditionally accepted, 26 names(14.1%) were rejected, and 15 names were reserved. To be specifically noted is the fact that the year 2005 witnessed more cases of rejected or reserve than ever, implying that judgements on proposed names are becoming more strict.

Table 1. Results of Judgements on the Names Proposed, 2003~2005

Year Proposing Country	Total Proposed	Accepted	Conditionally Accepted	Rejected	Reserve
2003(16th)	87	74	6	7	0
2004(17th)	48	24	11	4	9
2005(18th)	50	23	6	15	6
Total	185	121	23	26	15
%	100.0	65.4	12.4	14.1	8.1
2003	87	74	6	7	0
Russia	37	30	5	2	0
U.S.A	24	21	0	3	0
Germany	11	10	1	0	0
Mexico	15	13	0	2	0
2004	48	24	11	4	9
U.K.	4	1	3	0	0
Russia	33	20	7	4	2
New Zealand	2	1	1	0	0
Chile	7	0	0	0	7
U.S.A.	2	2	0	0	0
2005	50	23	6	15	6
Russia	27	9	4	11	3
U.S.A.	16	12	0	3	1
Germany	2	0	2	0	0
unknown	5	2	0	1	2

Source: Reports of the 16th, 17th and 18th SCUFN meetings.

Of 121 unconditionally accepted specific terms, 78(64.5%) were named after historical persons and 31(25.6%) were after associated geographical features. The rest include names to commemorate ships, persons in myth, project, or to be adopted from international charts. The proportion of using person names increased recently, while those associated with geographical features decreased. One of the characteristics of proposing countries is that Russia has proposed names after its ocean scientists, whereas Mexico and the United States have in more cases used adjacent geographical features. This seems due to the fact that Russia is more active in identifying and naming undersea features in high seas which do not have specific geographical features. This trend of using person names in Russian proposals, however, resulted in more rejected or reserved names than others.

Table 2. Types of Specific Terms Accepted, 2003~2005

	2003(16th)	2004(17th)	2005(18th)	Total
Historical person	42	18	18	78(64.5)
Associated geographical feature	25	5	1	31(25.6)
Ship	2	1	2	5(4.1)
Person in myth	3	-	-	3(2.5)
Adopted from international charts	2	-	-	2(1,7)
Project	-	-	1	1(0.8)
unknown	-	-	1	1(0.8)
Total	74	24	23	121(100.0)

Source: Reports of the 16th, 17th and 18th SCUFN meetings.

Reasons for the conditionally accepted, rejected or reserve include uncertain features, inappropriateness of specific terms, and insufficient data. Of specific note is the fact that inappropriate person names have recently increased as reasons for rejection. This trend goes hand in hand with that of absolute increase of using person names.

An analysis of the IHO-IOC GEBCO Gazetteer conveys the whole picture of the characteristics of currently used undersea feature names. This Gazetteer supplies the information on each name's generic type, latitude and longitude, chart type and reference, history of identifying and naming, and other remarks. Some additional information on the 3,321 names registered as of the end of 2005 is provided in the attachment.

Evaluation on the Undersea Feature Names in East Sea

Of the eighteen undersea feature names in East Sea which were announced by the Korean government, fourteen names are those to be submitted to SCUFN. The others include *Korea Plateau*, which is already registered in the Gazetteer as *Korean Plateau*, and three names for the features located within the limit of the Korean territorial sea.

Regarding the types of generic terms, fourteen names are those for four seamounts, three basins, two plateaus, and each one of trough, escarpment, gap, bank, and tablemount. Regarding the types of specific terms, seven names are after associated geographical features, four are after historical persons, and each one after ship, shape and symbolic meaning. Geographical features used include country, province, island, port, ancient name. Four historical persons are navy

general, administrator, explorer, and army general.

In view of the guidelines for naming undersea features by SCUFN, it is evaluated that most of these names have been appropriately selected. Sufficient data have been prepared to support for justifying all the generic terms. To be more justified, however, would be specific terms using historical persons, Kiminu, Igyuwon, Anyongbok, Isabu, and symbolic term Saenal which means new day or new generation. Historical literature needs to be provided to inform that these persons were famous and associated with the area around East Sea.

Those features which are already registered in the Gazetteer, Ulleung Basin listed as Tsushima Basin and Isabu Tablemount as Syun-Yo Bank, would also need further justifications for new names. It is required to raise some problems these names have in the respects of generic types, territorial limit the feature belongs to, or historical background of their specific terms, and to develop logical arguments to support new names.

Further Works on Undersea Feature Names In Korea

Concerns for undersea feature names can be more effectively activated with three steps. The first is to conduct surveys and accumulate data on undersea features within the territorial limit encompassing territorial sea and exclusive economic zone. This maritime survey needs to be carried out officially by government-affiliated institute.

The second step is to name and officially announce newly found features and publicize them. It is inevitable to make full consideration of the guidelines for standardization provided by SCUFN. This step also includes using newly announced names in all the nautical charts and inserting them in middle and high school textbooks.

Table 3. Undersea Feature Names in East Sea

International name	Korean name	Type of generic terms	Type of specific terms	Remarks
Gangwon Plateau	강원대지	Plateau	Geographical feature	
Ulleung Plateau	울릉대지	Plateau	Geographical feature	
Usan Trough	우산해곡	Trough	Geographical feature	
Usan Escarpment	우산해저절벽	Escarpment	Geographical feature	
Korea Gap	한국해저간극	Gap	Geographical feature	
Onnuri Basin	온누리분지	Basin	Ship	
Saenal Basin	새날분지	Basin	Symbolic meaning	
Ulleung Basin	울릉분지	Basin	Geographical feature	already registered as <i>Tsushima Basin</i>
Hupo Bank	후포퇴	Bank	Geographical feature	
Kiminu Seamount	김인우해산	Seamount	Historical person	
Igyuwon Seamount	이규원해산	Seamount	Historical person	
Anyongbok Seamount	안용복해산	Seamount	Historical person	
Haeoreum Seamount	해오름해산	Seamount	Shape	
Isabu Tablemount	이사부해산	Tablemount	Historical person	already registered as <i>Syun-Yo Bank</i>
Korea Plateau	한국대지	Plateau	Geographical feature	not to be submitted to SCUFN (name change)
East Gap of Ulleung	울릉동해저간극	Gap	Geographical feature	not to be submitted to SCUFN (within territorial sea)
West Gap of Ulleung	울릉서해저간극	Gap	Geographical feature	not to be submitted to SCUFN (within territorial sea)
Simheungtaek Tablemount	심흥택해산	Tablemount	Historical person	not to be submitted to SCUFN (within territorial sea)

The third step is to make attempts to standardize domestically announced names internationally, and ultimately have them submitted to SCUFN and registered in the Gazetteer. In addition, it is also required to report these activities to international institutions, e.g. UNCSGN, UNGEEN, and IHO. To make it further, it is possible to extend from within the territorial limit to high seas, finding unnamed features and giving new names to them.

Continuous investment in researches is inevitable. As researchers on undersea features are users as well as creators of names, a supporting system for promoting their researches in such fields as marine geology, geomorphology, and geophysics is to be prepared. These researches can be extended to high seas including the arctic or antarctic areas.

In addition, as undersea features could be found by examining accumulated bathymetric data as well as by field survey, giving incentives on these activities would bring good results in proposing new undersea feature names. It goes without saying that it is required to name them in accordance to SCUFN guidelines.

Attachment: Characteristics of Undersea Feature Names shown in the Gazetteer

Attached Table 1. Types of Generic Terms

Types	Number	%
Seamount	909	27.4
Bank	357	10.7
Canyon	351	10.6
Ridge	226	6.8
Basin	204	6.1
Fracture Zone	133	4.0
Guyot	93	2.8
Seamounts	90	2.7
Knoll	77	2.3
Rise	77	2.3
Valley	74	2.2
Reef	53	1.6
Plateau	52	1.6
Abyssal Plain	50	1.5
Escarpment	50	1.5
Others	525	15.9
Total	3,321	100.0

Attached Table 2. Year of Discovery

Year of discovery	Number	%
~ 1950	61	12.4
1951 ~ 1960	94	19.1
1961 ~ 1970	94	19.1
1971 ~ 1980	84	17.0
1981 ~ 1990	86	17.4
1991 ~ 2000	70	14.2
2001 ~ 2005	4	0.8
계	493	100.0

Attached Table 3. Characteristics of Name Proposers

	Number	%
Institution	988	67.3
Individual	478	32.5
Project	3	0.2
Total(proposer recorded)	1,469	100.0
Institution		
<u>Institution</u>	<u>988</u>	<u>100.0</u>
- Japan	239	24.2
- U.S.A.	193	19.5
- Russia	189	19.1
- France	156	15.8
- Germany	74	7.5
- Columbia	33	3.3
- Others	104	10.5
Individual		
<u>Individual</u>	<u>478</u>	<u>100.0</u>
- France	125	26.2
- U.S.A.	76	15.9
- Australia	59	12.3
- Portugal	51	10.7
- Russia	18	3.8
- Japan	6	1.3
- Others	143	29.9

Attached Table 4. Types of Specific Terms

Types	Number	%
Person	555	36.5
Geographical feature	353	23.2
Ship	226	14.9
Administrative name	87	5.7
Terms of American Indians	26	1.7
Era	19	1.3
Institution	14	0.9
unknown	11	0.7
Others	229	15.1
Total	1,520	100.0

Attached Table 5. Institution and Year of Approval

Institution of approval	Number	%
ACUF	15	0.9
BGN	136	8.3
SCGN	362	22.0
SCUFN	1,135	68.9
계	1,648	100.0
Year of approval by SCUFN	Number	%
1984	1	0.1
1985	7	0.2
1987	23	2.0
1989	3	0.3
1991	11	1.0
1993	13	1.1
1994	5	0.4
1995	131	11.5
1996	2	0.2
1997	166	14.6
1999	149	13.1
2000	16	1.4
2001	409	36.0
2002	70	6.2
2003	101	8.9
2004	27	2.4
2005	1	0.1
Total	1,135	100.0