

# Development of the integration of SCUFN Operations Web Services

Aug. 2019.

Republic of Korea

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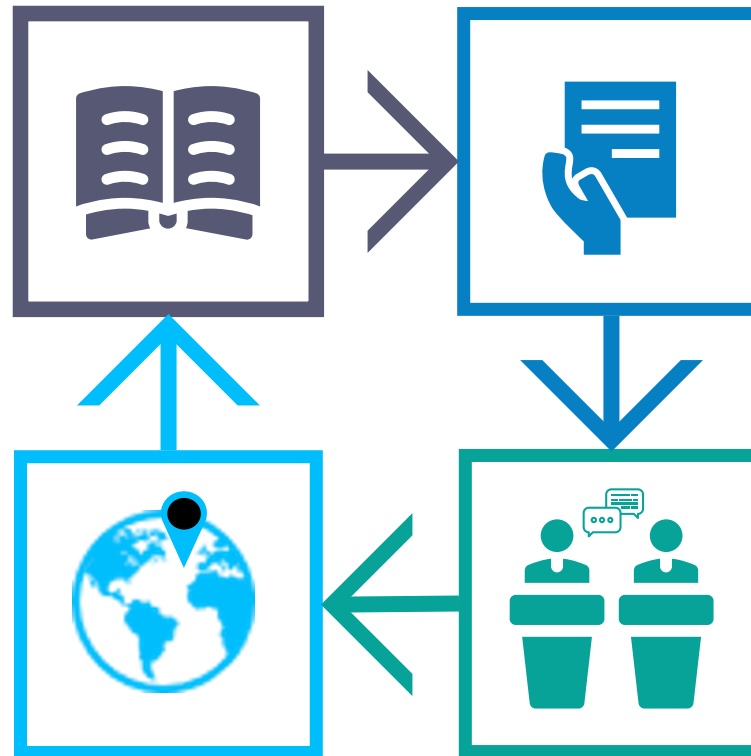
# I. Overview of SCUFN Operations Web Services

## Aims

- Provide support for simplifying & automating the process of registering int'l UFNs
- Systematically manage UFN proposals and database
- Enhance the utilization of UFN Data with S-100

**Generic Term  
and Definition**  
List of generic terms and  
definitions (IHO B-6)

**Beta-Gazetteer**  
Visualization of int'l UFNs



## Proposal Submission

Uploading & managing Proposals,  
- Support various formats such as  
web form, PDF, MS-Word

## Proposal Review

Status and statistics of reviews,  
History of reviews

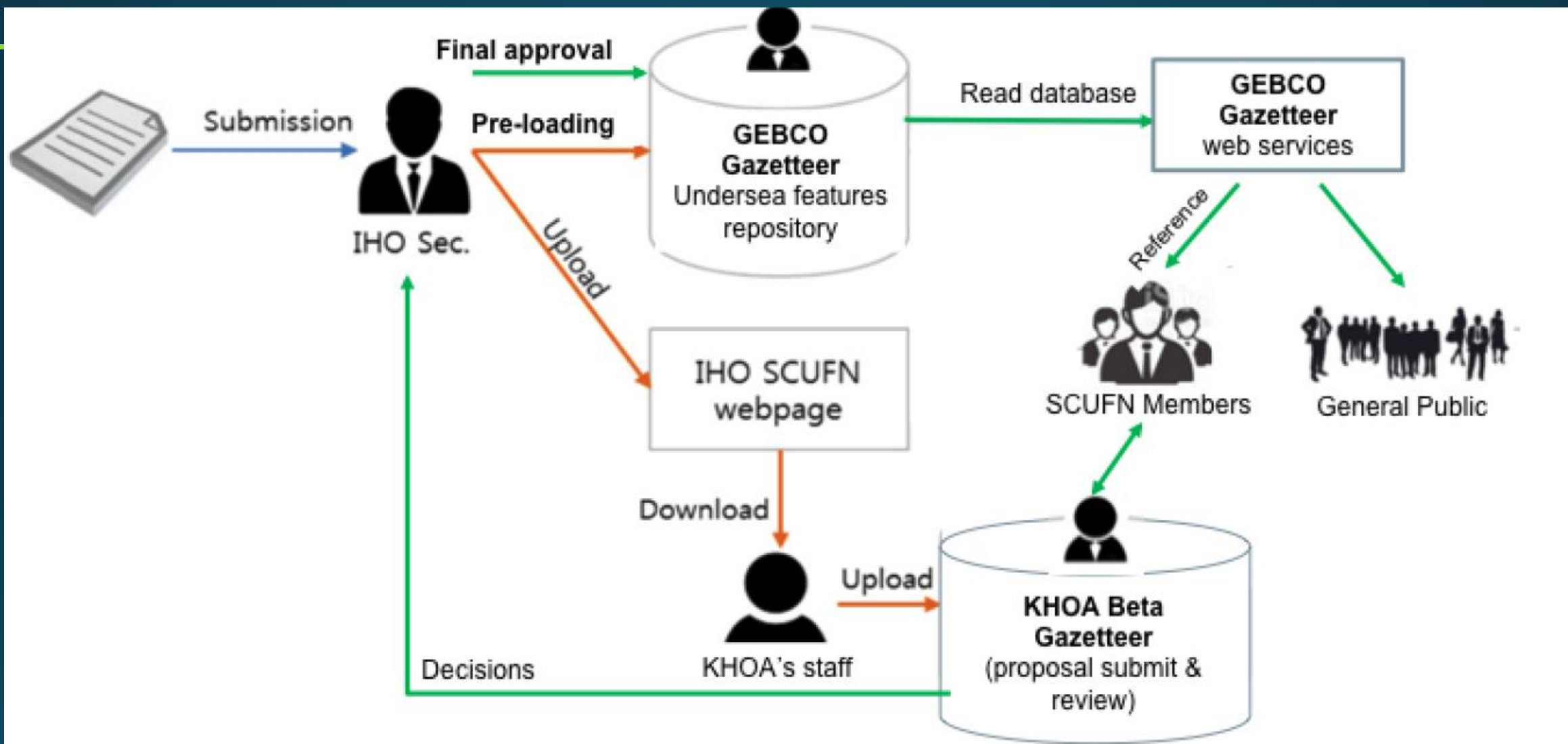
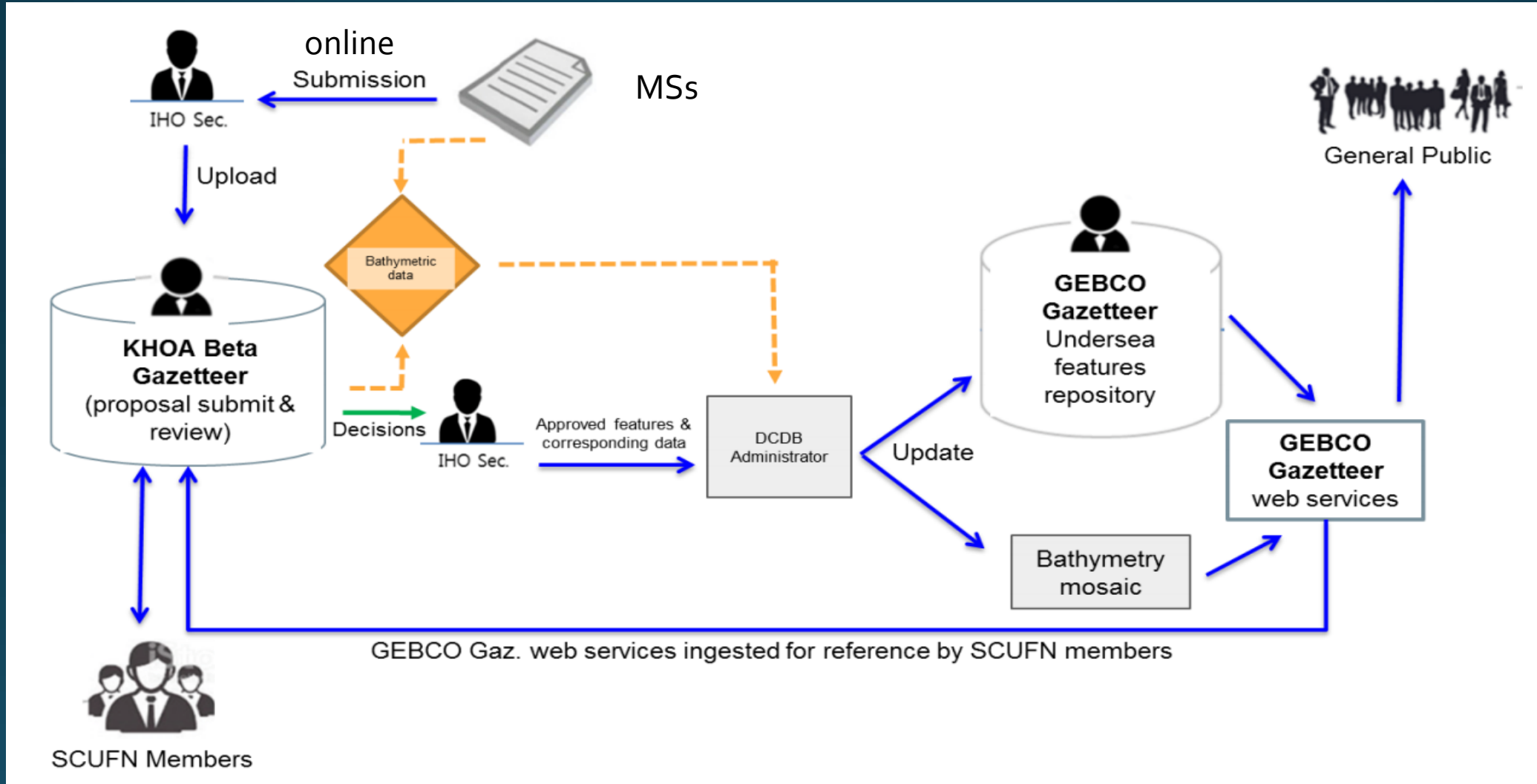


Figure 1: The current undersea feature name workflow.

# Future Integrated Beta & GEBCO Gazetteer

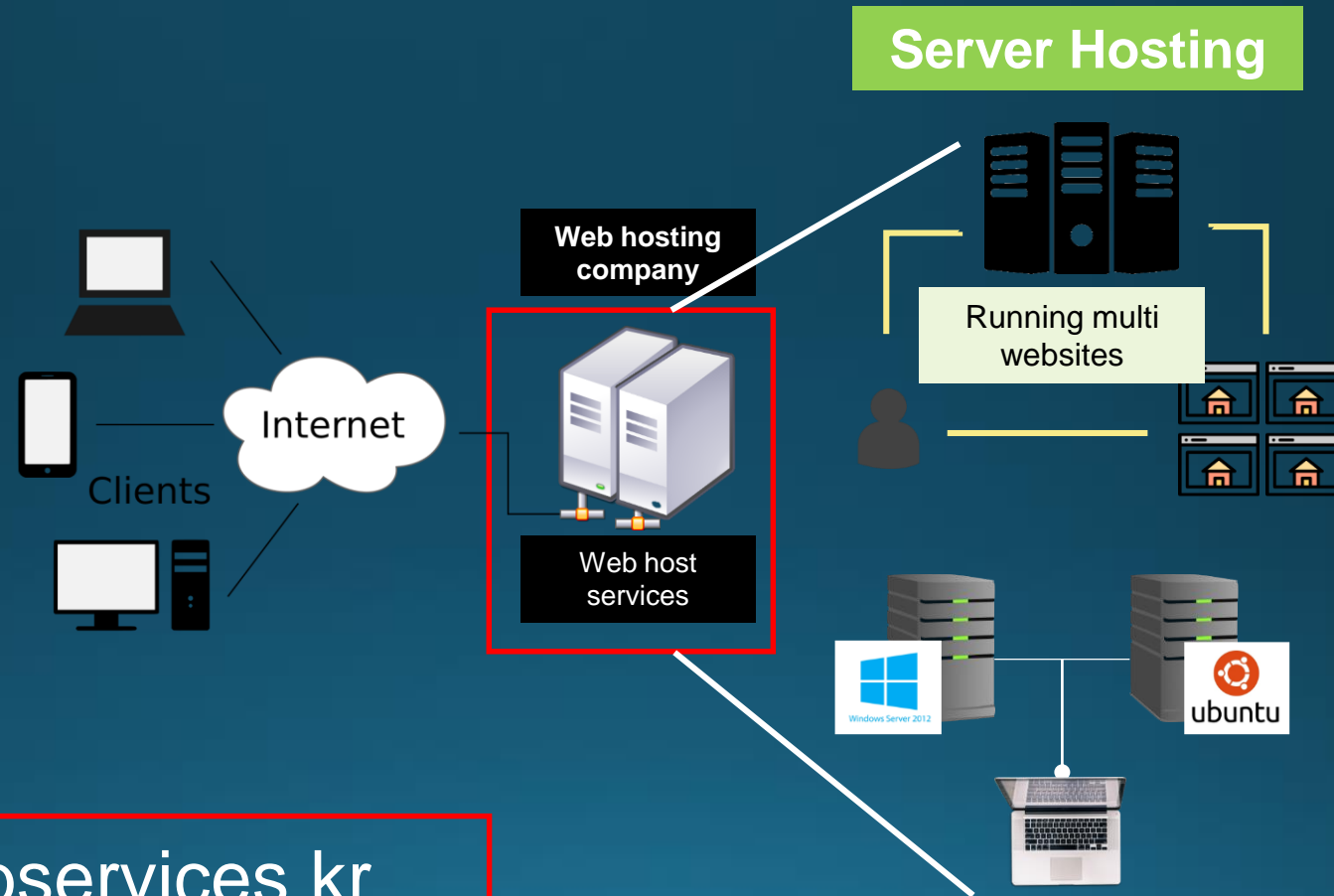


## II. Improvements (2018 - 2019)

### ✓ Speedy & stable service through the web hosting

### ✓ Official domain

<http://scufn.ops-webservices.kr>



Dual OS / 1TB Capacity / 10 Mbps

# Improvements submit and review (2018 - 2019 )

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## Submit

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upgrade the submission interface and tooltip icon service for guidance (B-6)

Minimized duplicate input

Managed submission of proposals by E-Mail address



## Review

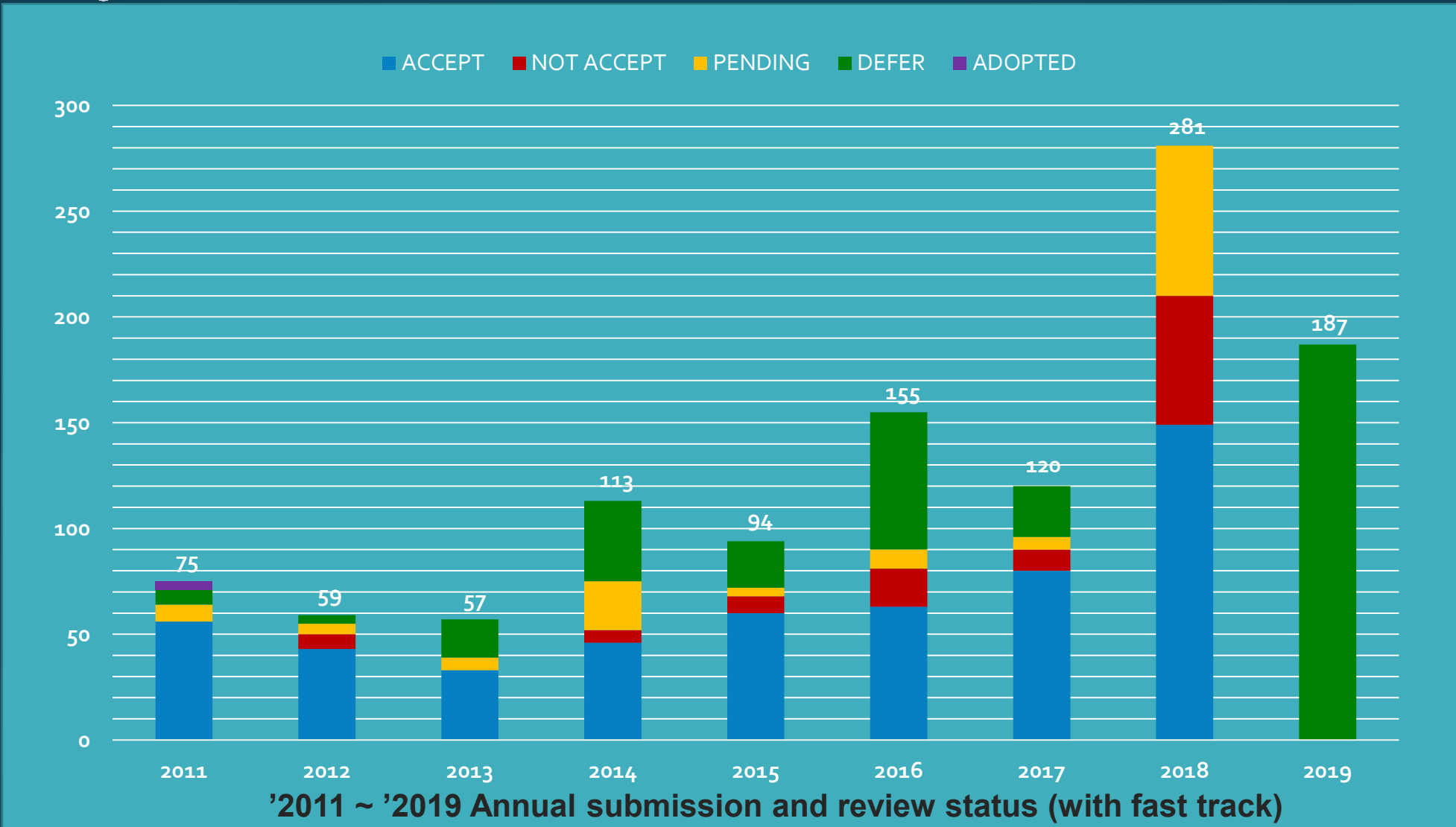
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Added review management in each of SCUFN member account

Displayed the status of the review using chart

Improved convenience of review

# Database updated



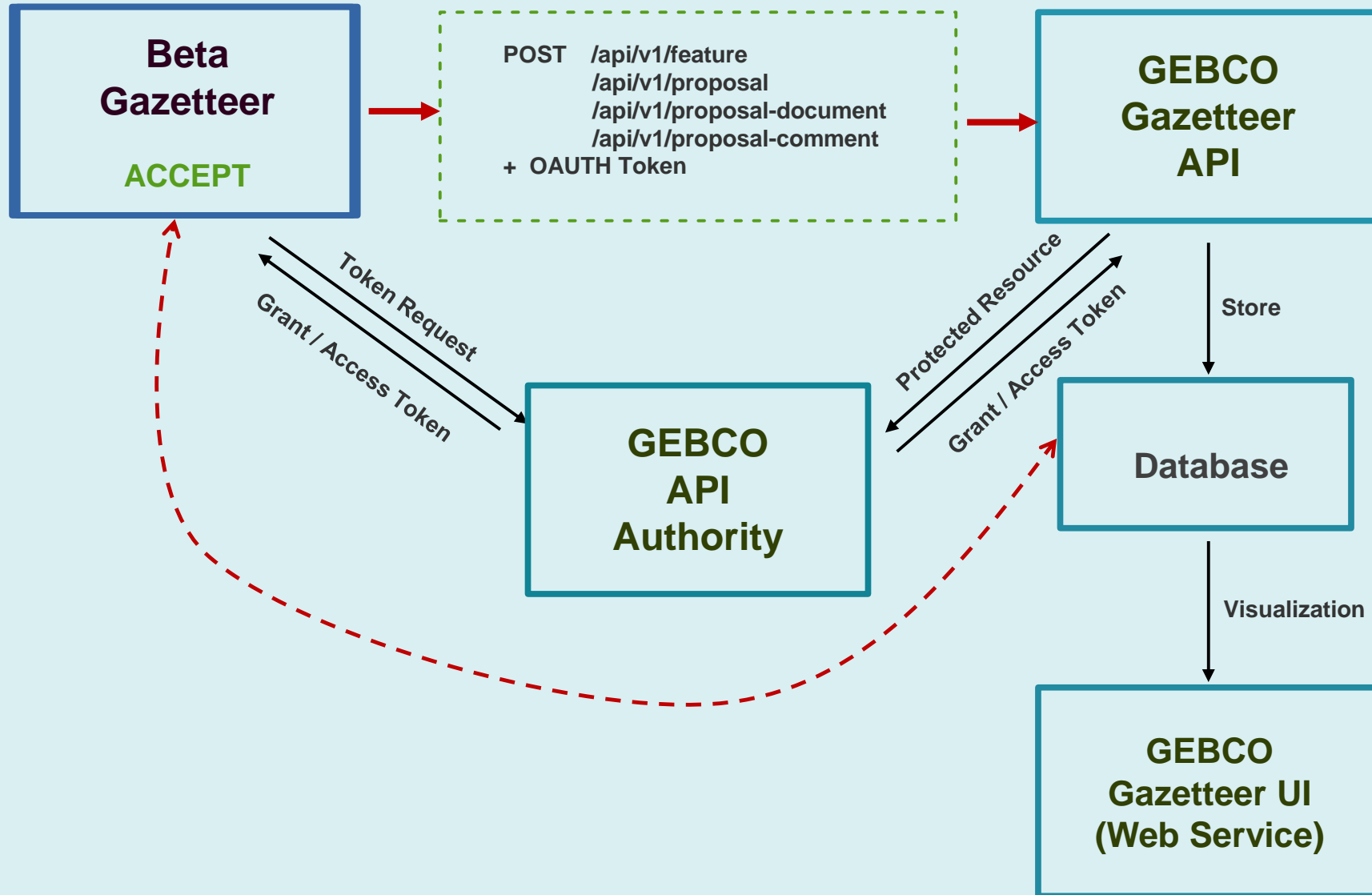


# III. Current issue



	Beta Gazetteer	GEBCO Gazetteer	Marine Region
Strength	Proposals submission & review	Authority service of UFNs	Integrated UFNs DB & Quality control
Cooperation	(KHOA ↔ NOAA) reduce duplicated works, DB	(NOAA ↔ M.R) Sharing data & quality control	(KHOA ↔ M.R) Support for check up procedure (review), Sharing data

# Data Sharing methods: RESTful API



Do not follow the format given in B-6

■ Incorrect geometry type and coordinates

→ Consider the maximum and minimum of depth point ??

Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
		Yes				

\* Geometry should be clearly distinguished when providing the coordinates below.

	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	10°06.9'N ( top )	152°12.1'W ( top )
	10°23.5'N ( bottom )	152°55.4'W ( bottom )
	10°23.1'N	152°51.9'W
	10°18.2'N	152°38.3'W
	10°12.0'N	152°09.3'W
	10°15.7'N	151°50.1'W
	10°14.2'N	151°34.0'W
	10°11.2'N	151°15.1'W
	10°02.7'N	151°13.4'W
	10°02.1'N	151°33.2'W

Coordinates:



Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
		Yes				

\* Lines / polygons / geometries should be clearly distinguished when providing the coordinates below.

	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	24°37' S	85°29' W

Coordinates:

Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
Yes	Yes	No	No	Yes	No	Yes

\* Geometry should be clearly distinguished when providing the coordinates below.

	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	Point (3618 m) 57° 44.0'N	Point (3618 m) 177° 02.7'W
	Line1 Start (133 m) 58° 44.5'N	Line1 Start (645 m) 175° 48.1'W
	Line1 Mid1 (623 m) 58° 29.6'N	Line1 Mid1 (623 m) 175° 52.5'W
	Line1 Mid2 (3352 m) 58° 07.0'N	Line1 Mid2 (3352 m) 176° 38.1'W
	Line1 End (3589 m) 57° 44.8'N	Line1 End (3589 m) 176° 59.3'W
	Line2 Start (131 m) 58° 53.1'N	Line2 Start (131 m) 175° 46.4'W
	Line2 Mid1 (131 m) 58° 52.5'N	Line2 Mid1 (131 m) 175° 52.1'W
	Line2 Mid2 (138 m) 58° 42.2'N	Line2 Mid2 (138 m) 175° 33.8'W
	Line2 Mid3 (2708 m) 58° 09.3'N	Line2 Mid3 (2708 m) 176° 02.9'W
	Line2 Mid4 (3186 m) 58° 03.5'N	Line2 Mid4 (3186 m) 176° 01.8'W
	Line2 Mid5 (3410 m) 57° 51.5'N	Line2 Mid5 (3410 m) 176° 19.9'W
	Line2 Mid6 (3589 m) 57° 44.8'N	Line2 Mid6 (3589 m) 176° 59.3'W
	Line2 Mid7 (3618 m) 57° 44.0'N	Line2 Mid7 (3618 m) 177° 02.7'W
	Line2 Mid8 (3725 m) 57° 18.2'N	Line2 Mid8 (3725 m) 178° 24.5'W
	Line2 End (3743 m) 57° 26.6'N	Line2 End (3743 m) 178° 52.3'W

Coordinates:

## Multiple geometry :

Geometry that best defines the feature (Yes/No) :		
Point	Line	Polygon
		Yes

\* Geometry should be clearly distinguished when providing the coordinates below.

	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)	
Canyon1:	19°43.7'N	114°48.4'E	
	19°47.2'N	114°47.0'E	
	19°49.9'N	114°45.9'E	
	19°51.9'N	114°45.0'E	
	19°54.6'N	114°43.9'E	
	19°55.8'N	114°43.8'E	
	Canyon2:	19°45.4'N	114°50.6'E
		19°47.9'N	114°50.1'E
		19°50.2'N	114°49.0'E
		19°52.8'N	114°47.8'E
	19°55.0'N	114°47.7'E	
	19°57.3'N	114°46.7'E	
Canyon3:	19°44.3'N	114°54.9'E	
	19°47.4'N	114°53.5'E	
	19°50.2'N	114°52.8'E	
	19°52.2'N	114°52.6'E	
	19°53.6'N	114°52.2'E	
	19°55.2'N	114°51.2'E	
19°55.7'N	114°50.9'E		
Canyon4:	19°45.6'N	114°58.9'E	
	19°47.9'N	114°57.8'E	
	19°50.5'N	114°56.8'E	
	19°54.6'N	114°55.8'E	
	19°56.9'N	114°55.8'E	

Coordinates:

Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
			Yes			

\* Geometry should be clearly distinguished when providing the coordinates below.

	Lat.	Long.
Coordinate:	(A) 67°16.1'S	179°03.1'W
	(B) 67°16.1'S	179°04.2'W

Geometry that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
No	No	No	Yes	Yes	Yes	Yes

\* Geometry should be clearly distinguished when providing the coordinates below.

	Lat. (e.g. 19° 48.6783' S)	Long. (e.g. 39° 08.1417' W)
Coordinates:	19° 31.9417' S	39° 02.8633' W
	19° 44.2850' S	39° 07.6750' W
	19° 56.9800' S	39° 08.7433' W
	19° 34.2800' S	39° 01.2108' W
	19° 37.2867' S	39° 03.2817' W
	19° 41.6967' S	39° 04.8188' W
	19° 48.6783' S	39° 08.1417' W
	19° 51.8867' S	39° 08.1583' W
	20° 02.1467' S	39° 06.7783' W
	20° 04.0233' S	39° 01.3117' W

## IV. Future Plan (2019 ~ 2021)

Supporting various formats of UFN's information



Improvement search functions such as registration, and more detail search options



Expanding the database structure and providing format for S-100

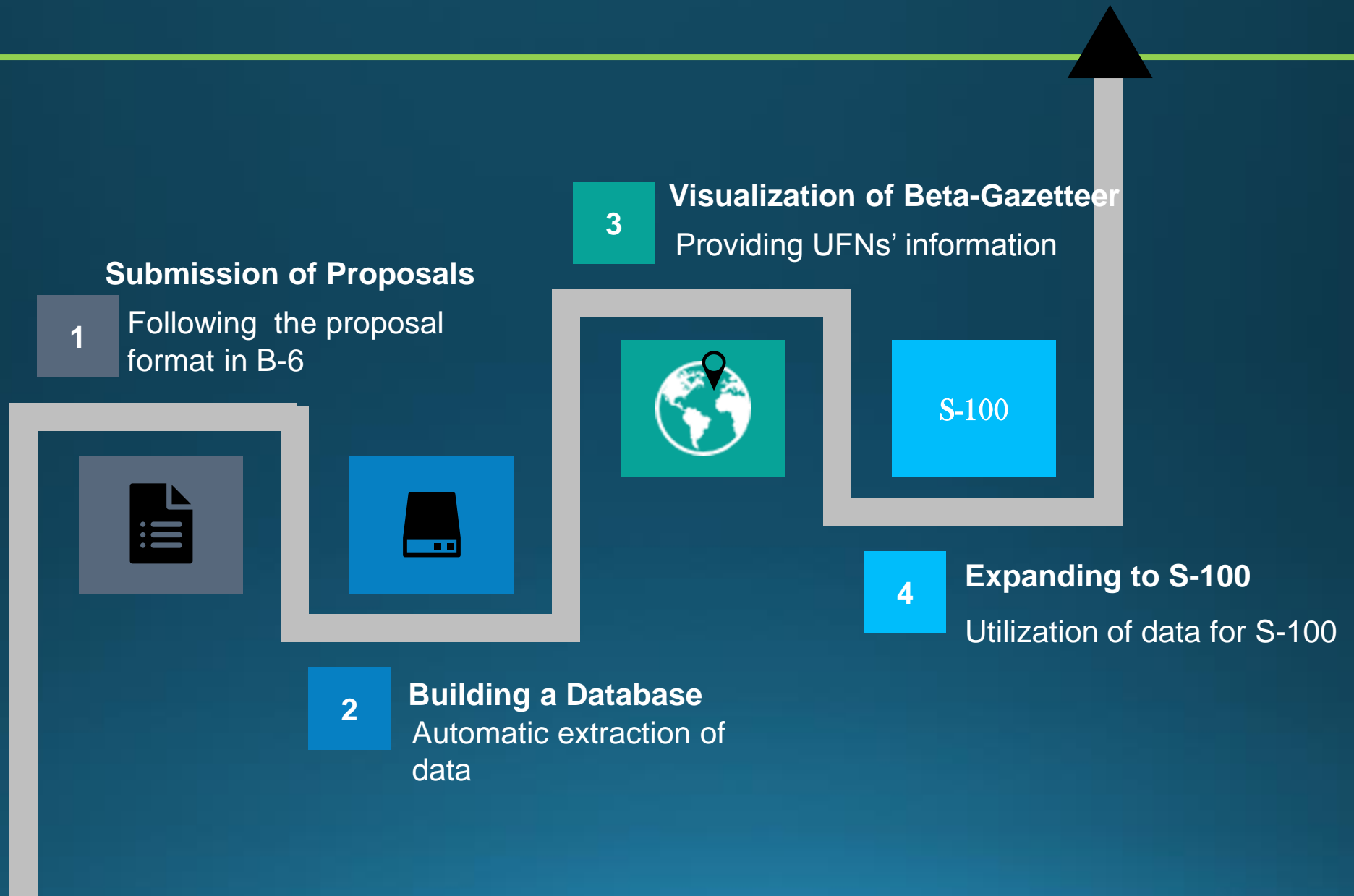


Improvements reflecting feedback by expert groups, end users.



Dual system operation in case of system interruption and failure (GEBSCO Gazetteer, Beta Gazetteer)





## Action required

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1. MSs will submit the UFN proposal using SCUFN integration web site from SCUFN-33(2020).
  - submission pre-test, response the manual etc.
2. The KHOA will discuss with DCDC how to provide UFN survey data and provide suggestions.
3. KHOA will keep on updating the Beta gazetteer.

**Thank you**