

Paper for Consideration by S-100 WG7

Producer Code Register for S-100

Submitted by:	IHO Secretariat / KHOA
Executive Summary:	This document reports on the progress of the development of the interface and workflows for the Producer Code Register for S-100
Related Documents:	S-100WG2-8.5, S-100 TSM4-7.1, S-100TSM5-5.4, S-62, S-97, S-99, S-100 + associated Product Specifications
Related Projects:	All other S-100 related WG and PTs.

Introduction / Background

The Producer Code Register for S-57 ENC was transferred to the GI registry in 2016 and has been utilized to manage the code information. In addition, in the last S-100WG meetings a database structure for S-100 producer code had been discussed as referenced in the Related Documents.

This document reports on the progress of the development of the interface and workflows for the Producer Code Register for S-100 based on the discussion and decision made during the last S-100WG meetings.

Analysis/Discussion

Database structure for S-100 Code

Annex A - Database structure for S-100 code shows an updated model based on the proposal in the S-100TSM5-5.4 which added management information such as modification date, remark, and attribute “*memberStateStatus*” to identify a status of membership.

Agency Code

Alpha and numerical code for S-100 has been extended to cover a four digit in S-100.

- Numerical code: xxxx (4 digits/S-57) to yxxxx (5 digits/S-100)
- Alpha code: xx (2 digits/S-57) to xxyy or yyxx (4 digits/S-100)

For example:

	Country	Agency	Code (num)	Code (Alpha)
S-57		IHO	1810	AA
	Canada	Canadian Hydrographic Service	50	CA
	Canada	Canadian Coast Guard	51	C4
S-100		IHO	01810	00AA
	Canada	Canadian Hydrographic Service	00050	CA00
	Canada	Canadian Coast Guard	00051	CA01

Maintenance Process for S-100 Code

The interface of S-100 Producer Code has been developed to simplify a maintenance process and support various domains beyond IHO. However information of S-57 agency code can be considered during application procedures as described Figure 2.

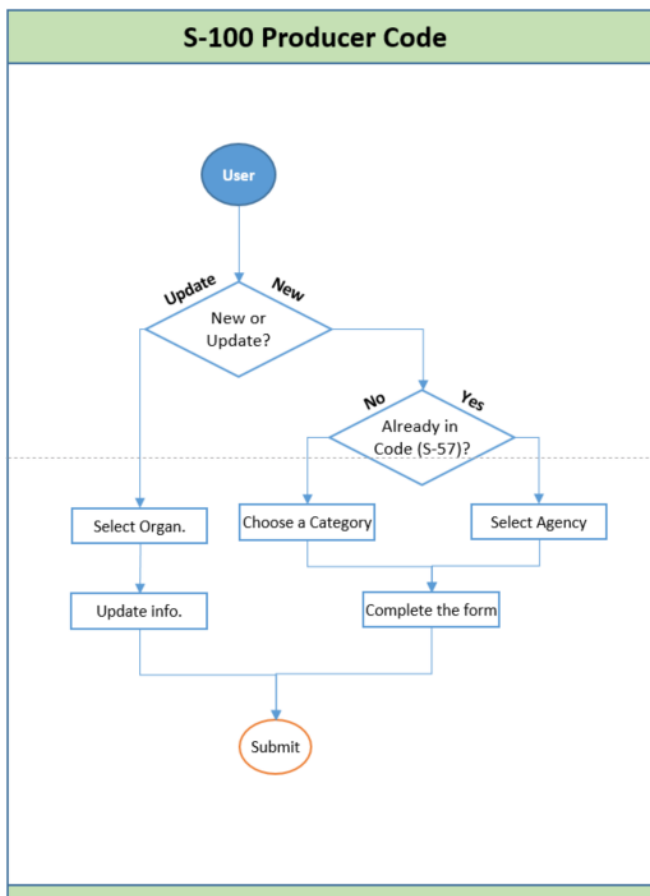
Figure 1 - S-100 Producer Code Interface



The maintenance procedure for S-57 ENC producer code hasn't changed which means the request to addition/modification should be sent out to the register manager via the email. Unlike those of the S-57 code application, the registration of the S-100 code must be processed through the web interface of the GI registry.

The existing S-57 ENC code data is designed to be utilized when registering the S-100 producer code, and if it doesn't consider to use or it is a new agency then the user is able to enter the relevant information from the beginning. Figure 2 describes details the workflow for the application steps.

Figure 2 - Application process of S-100 Producer Code



Experimentation of S-100 Producer Code Interface

KHOA and IHO Secretariat built a test system to check interface of management procedure for S-100 producer code in consultation with S-100WG chair group. Two RENCs (IC-ENC and PRIMAR) and some HOs were participated in the test as set out follows.

- Experimentation with RENCs/HOs: September ~ October 2022
- Report feedback and comment: no later than the end of October 2022
- Review feedback and comment by IHO Sec/KHOA: November 2022
- Report to S-100WG: December 2022

As an outcome of the test, no serious problems were found that interfered with the operation of the procedure, but there was an opinion that additional information such as the authentication procedure via e-mail should be provided in an appropriate place.

Conclusions

In order to produce S-100 based products, the producer code should be provided through the Producer Code Register as agreed in the S-100WG meetings and it can also be used in S-100 Part 15 certification process.

The database structure for S-100 producer code enhanced the metadata necessary for management and built interface for maintenance of the S-100 code with tremendous support from KHOA as usual.

Recommendations

It is required to contact the person in charge of the domain who develops S-100 based product specification and suggested that the management procedure be included in the next version of S-97.

Action Required of S-100WG

The S-100WG7 is invited to:

- a. Take a note of the report.
- b. Endorse to include a management procedure for the producer code register in the S-97 and take appropriate actions if accepted.
- c. Notify domains registered in the GI registry availability of S-100 producer code register.

Annex A - Database structure for S-100 code

IHO Producer/Agency Code Register
Paper S-100WG2-8.5

