Impact study for S-100 Phase 1 Product Specifications

The S100WG has been managing the development of the S-100 Framework and several product specifications that have been identified as Phase 1 implementation as part of the IHO's S-100 Implementation Plan. These specifications include, *S-101 – Electronic Navigational Charts*, *S-102 – Bathymetric Surface and S-129 – Underkeel Clearance Management*. In addition, Tides, Water Levels and Currents working group (TWCWG) is responsible for the development of *S-104 – Water Level Information* and *S-111 – Surface Currents.* The development of these product specifications is aligned with the procedural framework for developing new or revised standards as described in IHO resolution 2/2007, which emphasizes the necessity for the Committee to assess proposals while considering the impact on pertinent stakeholders. This evaluation process entails a comprehensive analysis encompassing risk and feasibility, along with an estimation of the resources requisite for implementing a new or revised standard. Such considerations extend to the Member States Hydrographic Services.

The primary objective of the current impact study lies in the identification of stakeholders and the awareness of their readiness for the formal recognition of the S-101, S-102, S-104, S-111 and S-129 product specification. It is noteworthy, however, that given the study pertains to edition 2.0.0 (3.0.0 for S-102) which is the operational edition, the intent and scope of the investigation are relatively moderate.

Stakeholders

Given that the Phase 1 product specifications represent a different variety of navigational data for different use cases the spectrum of stakeholders is notably extensive. They encompass entities ranging from data producers to equipment manufacturers. This comprehensive list reflects the diverse array of contributors and participants involved in the production, dissemination, and utilization of nautical information. The inclusion of stakeholders across the entire supply chain underscores the broad spectrum of uses for S-101, S-102, S-104, S-111 and S-129. As such, the impact study aims to engage with and prepare each stakeholder group, recognizing their unique perspectives and contributions within the broader context of the nautical information landscape.

This includes (but is not limited to):

- Data producers
- Regulators
- Product/data distributors
- RENCs
- VARs
- Equipment manufacturers
- End Users

Questions

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?

- Data producer
- Regulator
- Distributor
- RENC
- VAR
- Type Approval
- Production Software
- Navigation Equipment Manufacturer

If you are a data producer do you plan to produce any S-100 datasets?

- Yes (list which specific S-1xx products)
- Not yet decided/undecided
- No

If Yes, which datasets do you plan to produce?

- Yes
- Yes, under conditions (please describe including dates where known)
-

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?

- Yes (list which specific S-1xx products)
- Not yet decided/undecided
- No

If Yes, which datasets do you plan to implement?

- Yes
- Yes, under conditions (please describe including dates where known)
-

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?

- We have read and fully understand the details of the product specification/s
- We have a reasonable understanding, and are confident we can implement
- We understand the concept, but lack confidence in full understanding
- We haven't yet studied the product specification/s
- Other (please describe)

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?

- Yes
- Yes, under conditions (please describe)
- No

If you are a regulator, how do you intend to use S-100 and associated product specifications?

- To support the regulatory functions for which you carry responsibility
- For general awareness of the product specifications within the organization
- Not at all

Replies

In the following we tried to answer the questions according to the stakeholder as we see the current awareness right now.

Data Producers

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
Data producer (encompasses UKCM Service Provider)

If you are a data producer do you plan to produce any S-100 datasets?
Yes

If Yes, which datasets do you plan to produce?
S-129 – Under Keel Clearance Management

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
N/A

If Yes, which datasets do you plan to implement?
N/A

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
N/A

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
- Provision/distribution of S-129 datasets
- Implementation/consumption of S-100 datasets (e.g. S-102, S-104, S-111) and S-421, where applicable, for generation of S-129 datasets

If you are a regulator, how do you intend to use S-100 and associated product specifications?
N/A

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
Regulator (e.g. AMSA)

If you are a data producer do you plan to produce any S-100 datasets?
- N/A for S-129
- Yes for others

If Yes, which datasets do you plan to produce?
S-124, S-125
Possibly others

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
N/A

If Yes, which datasets do you plan to implement?
N/A

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
N/A

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
Some S-100 datasets (e.g. S-124, S-125) may be used for distribution.
Will not use S-129 datasets specifically for navigation, distribution, nor implementation in equipment.
However, S-129 (and other S-100 datasets) may be used internally (e.g. analysis purposes, assisting mariners with navigational safety).

If you are a regulator, how do you intend to use S-100 and associated product specifications?
S-129 (and other S-100 products) to be used:
- To support the regulatory functions for which you carry responsibility
- For general awareness of the product specifications within the organization
- Other safety of navigation purposes

<u>Distributors</u>

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
Distributor

If you are a data producer do you plan to produce any S-100 datasets?
N/A

If Yes, which datasets do you plan to produce?
N/A

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
(As a distributor) Not yet decided/undecided if S-129 datasets will be handled.

If Yes, which datasets do you plan to implement?
(As a distributor) Unsure if S-129 datasets are to be implemented

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
N/A
(If to be implemented) We have a reasonable understanding, and are confident we can implement.

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
May or may not distribute S-129 datasets

If you are a regulator, how do you intend to use S-100 and associated product specifications?
N/A

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
RENC

If you are a data producer do you plan to produce any S-100 datasets?
N/A
(Although a RENC may become a producer of S-129 data)

If Yes, which datasets do you plan to produce?
N/A

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
(As a RENC) Not yet decided/undecided if S-129 datasets will be handled.

If Yes, which datasets do you plan to implement?
(As a RENC) Unsure if S-129 datasets to be implemented

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
N/A
(If to be implemented) We have a reasonable understanding, and are confident we can implement.

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
May or may not distribute S-129 datasets

If you are a regulator, how do you intend to use S-100 and associated product specifications?

N/A

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
VAR

If you are a data producer do you plan to produce any S-100 datasets?
N/A

If Yes, which datasets do you plan to produce?
N/A

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
(As a VAR) Not yet decided/undecided if S-129 datasets will be handled.

If Yes, which datasets do you plan to implement?
(As a VAR) Unsure if S-129 datasets to be implemented

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
N/A
(If to be implemented) We have a reasonable understanding, and are confident we can implement.

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
May or may not distribute S-129 datasets

If you are a regulator, how do you intend to use S-100 and associated product specifications?

N/A

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
Equipment manufacturer

If you are a data producer do you plan to produce any S-100 datasets?
N/A

If Yes, which datasets do you plan to produce?
N/A

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
(As an OEM) Yes
(An OEM could also be a distributor.)

If Yes, which datasets do you plan to implement?
S-129 datasets to be implemented
If an ECDIS OEM is also an online distributor of the current S-57 charts and updates, then they could add S-129 (or any S-10X product) to their distribution.

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
We have read and fully understand the details of the product specification/s.
S-129 Product Specification is not complex.

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
For implementation in equipment
An ECDIS OEM could implement dual-fuel ECDIS capable of handling IHO S-100 Phase 1 product specifications.

If you are a regulator, how do you intend to use S-100 and associated product specifications?

N/A

In what capacity do you see yourself being involved with S-100 Phase 1 product specifications (select multiple if needed)?
End user

If you are a data producer do you plan to produce any S-100 datasets?
N/A

If Yes, which datasets do you plan to produce?
N/A

If you are a distributor/RENC/VAR/OEM do you plan to handle any S-100 datasets?
N/A

If Yes, which datasets do you plan to implement?
N/A

If Yes, how confident are you that you understand how to implement S-100 and associated product specifications?
N/A

How do you plan to use S-100 datasets (i.e, for navigation, distribution, implementation in equipment)?
For planning and execution of safe navigation

If you are a regulator, how do you intend to use S-100 and associated product specifications?

N/A