Impact study for S-128

For an extended period, the Nautical Information Products Working Group (NIPWG) has been dedicated to the advancement of S-128 – Catalogue of Nautical Products, serving as a novel product specification for the Nautical Publication Information Overlay (NPIO). This initiative aligns with the procedural framework for developing new or revised standards as delineated 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-128 product specification. It is noteworthy, however, that given the study pertains to edition 2.0.0, the intent and scope of the investigation are relatively moderate.

Stakeholders

Given that S-128 is fundamentally a catalogue of nautical products, the spectrum of stakeholders is notably extensive, encompassing 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 collaborative nature of S-128 and acknowledges the interconnected roles played by various parties in ensuring the effectiveness and applicability of the catalogue. As such, the impact study aims to meticulously engage with and prepare each stakeholder group, recognizing their unique perspectives and contributions within the broader context of the nautical information landscape.

- Data producers
- Regulators
- Product/data distributers
- RENCs
- VARs
- Equipment manufactures
- End-users

Questions

How do you see yourself (select multiple if needed)?
- Data producer
- Regulator
- Distributer
- RENC
- VAR
- Manufacture
- End-user

Do you plan to produce any S-100 datasets?
- Yes (list which specific S-1xx products)
- No

If Yes, do you plan to produce S-128 datasets?
- Yes
- Yes, under conditions (please describe)
- No

If Yes, how confident are you that you understand how to implement S-128?
- We have fully read and understand the details of the product specification
- 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
- Other (please describe)

If Yes, how frequently do you plan to update S-128 datasets?

If Yes, which specific products do you plan to expose in your S-128 datasets?

If No, do you rely on other parties to produce S-128 datasets with your data?
- Yes, we plan to use the RENC as the producer of our S-128 datasets
- Yes, we plan to use the VAR as the producer of our S-128 datasets
- Yes, we plan to support external party with additional data to produce our S-128 datasets
- Yes, none of the above (please describe)
- No, (please describe)

Do you plan to use S-128 datasets?
- Yes
- Yes, under conditions (please describe)
- No

If Yes, do you know where to obtain the S-128 dataset?
- Yes
- Yes, under conditions (please describe)
- No

If Yes, which specific products do you plan to retrieve by the S-128 datasets?

Replies

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

Data producers

Questions:

> How do you see yourself (select multiple if needed)?
> *Data producer*
>
> Do you plan to produce any S-100 datasets?
> *Yes, throughout 2026 we expect a full portfolio of all our datasets in S-101 with a subset of corresponding S-102 datasets.*
>
> If Yes, do you plan to produce S-128 datasets?
> *In the early period of S-100 we don't see the need to produce/publish a S-128 dataset if using a RENC. If we don't use a RENC we need to generate a S-128 dataset with all our products.*
>
> If Yes, how confident are you that you understand how to implement S-128?
> *Right now we are still trying to adopt the concept of S-128 and plan to be compliant right after the final edition 2.0.0 is released.*
>
> If Yes, how frequently do you plan to update S-128 datasets?
> *Our S-128 dataset should be updated on a daily basis.*
>
> If Yes, which specific products do you plan to expose in your S-128 datasets?
> *S-57, S-101 and S-102 and optional our paper chart products.*
>
> If No, do you rely on other parties to produce S-128 datasets with your data?
> *Yes, we plan to use the RENC as the producer of our S-128 datasets.*
> *Right now, we don't expect the RENC to include our paper chart products.*
>
> Do you plan to use S-128 datasets?
> *No.*

Recommendations:

As a data producer you should already be in close contact with your distributor (RENC/VAR) if you don't plan to distribute your datasets by yourself. If using a distributor, it's quite important that you are in close contact so you know how your data must be shared. If you plan to distribute your data by yourself or if your distributor supports harvesting your data from your own S-128 service, we really need to start developing such system. The S-128 product specification doesn't define how S-128 is published!

Regulator

Questions:

> How do you see yourself (select multiple if needed)?
> *Regulator*
>
> Do you plan to produce any S-100 datasets?
> *No.*
>
> If No, do you rely on other parties to produce S-128 datasets with your data?
> *No, we don't see the need for generating S-128 datasets.*
>
> Do you plan to use S-128 datasets?
> *Yes, we like to harvest S-101 and S-102 (S-124 and S-125) to have the data for internal use.*

Recommendations:

As a regulator you should first of all focus on figuring out if you are going to build produce S-128 datasets or not. If so you need to start designing such service and follow the finalizing of the S-128 product specification closely.

Distributer

Questions:

> How do you see yourself (select multiple if needed)?
> *Distributer*
>
> Do you plan to produce any S-100 datasets?
> *No.*
>
> If No, do you rely on other parties to produce S-128 datasets with your data?
> *No, we produce the S-128 datasets for the data producers and plan to support S-57, S-101, S-102 and S-124 from January '26.*
>
> Do you plan to use S-128 datasets?
> *Yes, we need to harvest the datasets from data producers or RENC's to be able to generate our S-128 dataset.*

Recommendations:

As a distributer you need to follow the finalizing of the S-128 product specification very closely so your implementation of a S-128 service will be as smoothly as possible. You should already start thinking about how such service should be implemented (REST, FTP, etc.) since this might not a trivial task. Keep in mind how to incorporate product equivalency into your service!

RENC

Questions:

How do you see yourself (select multiple if needed)?
RENC

Do you plan to produce any S-100 datasets?
No.

If No, do you rely on other parties to produce S-128 datasets with your data?
No, we produce the combined S-128 datasets for the data produces and plan to support S-57, S-101, S-102 and S-124 from early '26.

Do you plan to use S-128 datasets?
Optional – we either need to harvest datasets from the data producers using their S-128 datasets or providing the data producers another mechanism to send us their datasets.

Recommendations:

As a RENC you should already be very familiar with the S-128 product specification and already thought about how data producers should provide their data too you. An important question here is if you plan to harvest data providers own implementation of a S-128 service or if you plan to support a custom way for the data producers to send you data like for instance FTP or similar protocol. If you don't plan to support harvesting S-128 services you need to focus on how to incorporate equivalency in your S-128 datasets! You also need to think about how your consumers plan to use your service – is there a need for regional splitting, custom datasets or something else.

VAR

Questions:

How do you see yourself (select multiple if needed)?
VAR

Do you plan to produce any S-100 datasets?
No.

If No, do you rely on other parties to produce S-128 datasets with your data?
Yes, we plan to use the RENC as the producer of our S-128 datasets.

Do you plan to use S-128 datasets?
Yes.

If Yes, do you know where to obtain the S-128 dataset?
Yes, RENC

Recommendations:

Like for a RENC you should already be familiar with the S-128 product specification and already thought about your implementation of a S-128 service. As a VAR you need to be in close contact with RENC's and other data producers to support delivery of their datasets.

Manufactures

Questions:

> How do you see yourself (select multiple if needed)?
> *Manufactures*
>
> Do you plan to produce any S-100 datasets?
> *No.*
>
> If No, do you rely on other parties to produce S-128 datasets with your data?
> *Yes, we plan to use the VAR as the producer of our S-128 datasets.*
>
> Do you plan to use S-128 datasets?
> *Yes.*
>
> If Yes, do you know where to obtain the S-128 dataset?
> *Yes, VAR*

Recommendations:

As a consumer of S-128 services you should already be an expert in the S-128 product specification and follow the development closely. Since the S-128 product specification doesn't define how S-128 datasets are distributed you need to work closely together with all parties planning on distributing S-128 datasets since they might not implement it in the same way. It is also very important that you try to figure out a concept of getting new and updated data and feedback any suggestions and findings to your different sources.

End-users

Questions:

> How do you see yourself (select multiple if needed)?
> *End-user*
>
> Do you plan to produce any S-100 datasets?
> *No.*
>
> If No, do you rely on other parties to produce S-128 datasets with your data?
> *No*
>
> Do you plan to use S-128 datasets?
> *Yes.*
>
> If Yes, do you know where to obtain the S-128 dataset?
> *Yes, All*

Recommendations:

As an end-user you should wait for the official edition 2.0.0 of the S-128 product specification to be finalized. However, you should already start investigating how you are going to obtain S-128 datasets. Since the S-128 product specification doesn't define how a S-128 service is implemented it is considered a good idea to start communicating with your expected providers and follow their development. You should be aware that your needed S-1xx dataset may be published in different S-128 datasets and even services.