

Impact study for S-124

Submitted by Canadian Coast Guard

SUMMARY

Executive Summary: The management of IHO product specifications is governed by Resolution 2/2007. An amendment is currently under vote by IHO Member States (Letter 32/2019) and anticipating its approval without major amendments it has been used for this paper.

Action to be taken: Initiate necessary preparations to do an impact study for S-124.

Related documents: S-124 Product Specification Draft 2.0.0

Resolution 2/2007, under Member State vote, speaking of the Committee responsible for product specification development states in 3.1.2 “the Committee should always consider the impact on relevant stakeholders when assessing a proposal and planning any subsequent work on standard changes; likewise, the Committee should assess the impact on other IHO standards or guidance, especially for interoperability, data/product quality and portrayal”. Resolution 2/2007 also provides guidance for how to conduct impact study (see Annex A).

The S-124 Correspondence Group should therefore prepare for conducting an impact study on the S-124 Product Specification.

IHO-NIPWG has conducted impact studies for S-122 and S-123, and has shared their survey questions for S-122 (see Annex B) to assist S-124CG with the preparations.

Questions to consider;

1. Is draft S-124 Product Specification sufficiently complete to start drafting the questions for the impact study?
2. Is the S-122 impact study by NIPWG (Annex B) a sufficient starting point?

Annex A – From draft Resolution 2/2007

APPENDIX 3

Guidance on Conduction of an Impact Study

Description of the purpose of the study (testable hypotheses)

An impact study plan should include the general description of the impact assessment and a plan to conduct the study. The general description should specify a set of hypotheses about the outcomes and impacts of the study. The impact should consider all the outcomes, also the updating process of existing data.

There are three distinct levels of potential impact that a change to the standard might have:

- Does the new version of a standard impact on the market and business procedures?
- Does the new version of a standard impact on producing offices/agencies/institutions?
- Does the new version of a standard impact on the stakeholders?

Specification of the result assessment methods

The intended assessment method should be proposed by the WG for HSSC/IRCC endorsement before the survey is initiated. This ensures that the assessed results are transparent and that misinterpretations will be prevented.

Identification of a minimum of measurable indicators

Measurable indicators should be defined that can be used to determine potential impacts to the community. The results of the survey questionnaire will populate the indicators. The impact study shall take into consideration the following minimum set of subject items:

- Impact on software development;
- Impact on equipment development;
- Impact on data distributors;
- Cost/effectiveness of the implementation;
- Readiness of implementation.

Suitability of impact study questions

The success of a survey depends on the questions asked. Thus, the set of the survey questions has to be checked to determine whether they are useful for this purpose. This check should be conducted by professional survey experts.

Identification of potential stakeholders

An impact study should be done in two parts. The first part should be the feasibility study and conducted before the development starts. This study should address the feasibility of the intended Product Specification. The second part is an impact study should be initiated before the release and should address the potential users. The audience of both studies can be different. The first study should approach the interested parties, whereas the latter should approach software developers, OEMs and Member States.

A list of potential stakeholders is being maintained by the IHO Secretariat and should be available. The initiator of the impact study should select those stakeholders on which the intended new Standard has significant impact. It is recommended to approach the following stakeholders:

- IHO Member States,
- International organizations,
- Software developers,
- Equipment manufacturers,
- RENCs,
- Product/data distributors,
- End users (hydrographic community),
- End users (marine community)

Identification of appropriate survey tools and methods

Professional online tools should be used for the survey. Stakeholders should be approached by e-mail. The survey should be conducted under the supervision of the initiating Organisation or IHO Working Group. To assist stakeholders who are uncertain about specific survey questions, the initiating Organisation should provide point of contact information for the survey duration.

Specification of the survey duration

The survey time should be limited to 3 months as the maximum duration.

Specification of requested actions and dissemination of the findings

The findings of the impact study should be summarized and the findings should be made public on the IHO website. The in-depth analyses should be conducted by the initiating Organisation and be supervised by the IHO Secretariat. This ensures that the analytic capacity is available and that the results will be compiled correctly. The raw data should be stored for backward research and for transparency in a repository hosted by the IHO Secretariat. The cleaned data should be provided in tables, diagrams or other appropriate formats. The final report and the outcome of the study should be forwarded to the IHO Secretariat and should be publicly available on the IHO website at an appropriate place. This will ensure the further use of the study results.

Annex B – S-122 Questionnaire

Questionnaire for S-122 implementation impact study

Abstract:

A Marine Protected Area (MPA) is a protected area whose boundaries include an area of the ocean. They include areas of the intertidal or sub-tidal terrain, together with their overlying water and associated flora, fauna, historical and cultural features, which have been reserved by law or other effective means to protect part or all of, the enclosed environment. For example, MPAs may be established to protect fish species, rare habitat area, or entire ecosystems.

MPAs can range from, simple declarations to protect a resource, to areas that are extensively regulated. The degree to which environmental regulations affect shipping varies according to whether MPAs are located in territorial waters, exclusive economic zones, or high seas. These limits are regulated by the law of the sea. Most MPAs are located in the territorial waters of coastal states, where enforcement can be ensured. MPAs can also however be established in a state's exclusive economic zone and even within international waters. For example in 1999, Italy, France and Monaco jointly established a cetacean sanctuary in the Ligurian Sea named the Pelagos Sanctuary for Mediterranean Marine Mammals. This sanctuary includes both national and international waters.

Specific Purpose:

The purpose of the product is to describe marine protected area information in the maritime domain for utilization in ECDIS, and to allow the producer to exchange marine protected area information with interested stakeholders.

What is your stakeholder group?

- Software developer
- Data Producer
- Service Provider
- End user

What is your role in the stakeholder group?

- HO (hydrographic product/service delivery)
- Other government agency
- Navigation System Manufacturer (ECDIS)
- Navigation System Manufacturer (ECS)
- Navigation System Manufacturer (PPU)
- Production Tool Developer
- Service Provider
- Developer (SDK)
- Developer (Kernel)
- Navigator
- Ecologist
- GIS user
- Coast Guard
- MPA management authority
- Other (in your own words)

Do you plan to produce or use S-122/S-123 datasets?

- Yes
- Yes, under conditions
- If yes under conditions, please describe.
- No

If Yes, what benefit do you expect from S-122/123 compared with existing mechanisms?

- Ease of access to data/information
- Interoperability with other data/information
- More frequent/up to date information
- Other (in your own words)

If Yes, how confident are you that you understand how to implement S-122/S-123?

- We have fully read and understand the details of the product specification
- We have a reasonable understanding, and are confident we can implement, but have not yet studied the product specification in detail
- We understand the concept, but lack confidence in full understanding
- We haven't yet studied the product specification
- Other (in your own words)

If Yes, what is the main driver for implementation?

- Internal data management
- Standardised data transfer between organisations
- Delivery of data/services to end users

If Yes, do you expect implementation issues?

- Inconsistencies with ENC content
- Insufficient access to information needed
- Insufficient availability of information needed
- Lack of understanding of how to implement
- Lack of production capability (e.g. application software)
- Other (in your own words)

If Yes, when do you plan to start the implementation?

- Within a 3 year time frame
- Within a 5 year time frame
- Not specified yet
- Other (in your own words)

If No, what are the issues preventing you from implementation?

- No customer request to provide this information
- Lack of available data
- Not responsible for handling this type of information
- Lack of maturity of S-100 environment
- Other (in your own words)

Do you foresee any disadvantages, risks and issues for your organization?

- From a technical perspective (in your own words)
- From a commercial or resources perspective (in your own words)

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