



NAUTICAL INFORMATION PROVISION WORKING GROUP

NIPWG Letter 1/2019

15 February 2019

NIPWG Members

Dear colleagues,

Re: Paper to HSSC Chair on “Provision” of nautical information

NIPWG6 discussed at several agenda items how S-100 based products should be used, which requirements should be considered and how the products should be managed sufficiently.

Considering C-2/31 which invited the HSSC Chair to contribute to an S-100 Strategy Implementation Plan, it was decided to provide the HSSC Chair with a collection of the related NIPWG6 findings. Action item 6/13 was assigned to the NIPWG chair to draft a paper which collects the NIPWG6 findings and this paper should be reviewed by the group (NIPWG 6/14). At NIPWG6 it was decided to provide the paper as an input to HSSC.

However, taking into account that the S-100 Strategy Implementation Plan should be delivered to C-3, and taking into account the resulting time constraints, I propose to provide the paper to the HSSC Chair as early as possible. That means, your comments on the paper will be considered and the paper will be sent to HSSC Chair by the 5 March.

I intend to provide a note on this substantial work in the NIPWG report to HSSC11.

The paper is provided as an Annex to this letter and as a separate file for convenience. Please send your **comments by the 28 February** at the latest, as stated in action item NIPWG6/14.

Tacit approval applies to this letter. It is not needed to reply on this letter if you are content with the paper.

Best regards,

A handwritten signature in black ink, reading 'Jens Schröder-Fürstenberg'. The signature is written in a cursive style with some flourishes.

Jens Schröder-Fürstenberg,
Chair, NIPWG

Paper for Consideration by HSSC Chair**Provision of S-100 based products**

Submitted by:	NIPWG
Executive Summary:	Brief summary outlining the intention of the paper.
Related Documents:	C-2 Report Action item C2/31; HSSC10-05.3D
Related Projects:	S-100 based products

Introduction / Background

Council-2 meeting defined a work item C2/31 which was assigned to Council, HSSC/IRCC Chairs and SecGen to draft an implementation strategy/roadmap for a transition plan aiming to the regular and harmonized production and dissemination of S-100 based products for further discussion at A-2 and for the preparation of the 2021–2023 IHO Work Programme. That work item bases on the HSSC10 paper submitted by Canada/Germany and NIPWG/TWCWG respectively.

During the recent NIPWG6 meeting the group discussed the provision of S-100 based products under the remit of NIPWG. S-100 based products, such as S-122 and S-123, will be available in a foreseeable future. Member States and stakeholders invested considerable resources to the development of these products. Now, they need the possibility to make them available to the mariner and GIS market. Due to this fact, an S-100 Strategic Implementation Plan (S-100SIP) should contain solutions for the IMO acceptance, the business case, the scope of SOLAS relevant products, the infrastructure and descriptions of validation procedures. The S-100SIP should also contain a reliable timeline indicating when these solutions will be available.

This paper discusses several S-100SIP technical and administrative aspects which are summarised and listed below. The findings are not exhaustive but should be taken into consideration by the commissary.

Analysis/Discussion**S-100 strategic implementation plan**

The S-100 SIP should consider three maturity levels:

- The provision of standards (that are the S-100 based product specifications),
- The establishment of a governance authority, and
- The synchronisation of standards and products.

The provision of standards

The S-100SIP should consider that currently 14 different S-100 based product specifications under the remit of the IHO are either released or under development. It should also be considered that more product specifications are in preparation. Interoperability aspects, as described in S-98, should be considered. That includes the consideration on the establishment of a governing body for affected product specifications. The S-100SIP should specify if backward compatibility of S-100 and of S-100 based product specifications is required or not.

The establishment of a governance authority

The S-100SIP should clarify the role of the RENCs in the new global system architecture. Are the RENC functions (for example data/product qualification, quality control, data consistency, data encryption, data integrity, product distribution) still needed or should this work being done by national portals?

The S-100SIP should describe further whether the WEND principles are applicable and to which extent.

It should be discussed whether the current IHO Registry operational mode needs revision. Especially the controlling of entries and the fitness of the Domain Control Body for purpose should be questioned.

The synchronisation of standards and products

Consideration should be given to the provision of synchronised products. The S-100SIP should discuss two principle data handling approaches:

- a) The provision of semantically separated information and the merging of this information on board, and
- b) The provision of information in products as a whole.

Description of IHO Responsibility

The S-100SIP should provide a clear statement on the IHO responsibility on S-100 based product specifications. That might have also effects on the S-98 maintenance.

Nautical information, that includes for the subject of this paper charted and other information relevant to support the safety of navigation, the situation awareness and good seamanship, will be provided in ECDIS or other electronic devices on board ships.

ECDIS may operate in two different modes:

Mode1 is for navigation purpose only. That includes route planning and route monitoring. For that purpose ECDIS must follow the rules defined by IMO.

Mode2 is for the provision of other information. For that purpose ECDIS becomes a non-regulated device which offers more flexibility for data provision, updating mechanism, display modes etc.

Possible side effects on IMO SOLAS Chapter V should be considered. That includes statements on how the carriage requirement could be satisfied.

Conclusions

Member States and stakeholders demanding an S-100SIP to have planning certainty for S-100 based product placement on the market. That reimburses their invested money and allows an allocation of budget for further development of S-100 based products.

The paper provides a list of findings which should be considered during the S-100SIP development.

Recommendations

The collection of ideas on the S-100SIP should be considered. Additions are requested to describe the whole picture. Due to the fact that NIPWG is not able to identify a HSSC WG that is able to discuss these issues, a contact should be nominated.

Justification and Impacts

This is a high priority work. The S-100SIP should be discussed at Council-3 and subsequently at Assembly-2. It forms part of the 2021-2023 IHO work programme.

Action Required of HSSC Chair

The HSSC Chair is invited to:

- a. Note the paper.
- b. Reflect the discussed findings in the S-100SIP development.
- c. Act as appropriate.