## Paper for consideration by HSSC11

#### Architectural Display of S-100 related products

Submitted by:	NIPWG Chair
Executive Summary:	First draft of an overarching presentation of the relations between various S- 100 based products
<b>Related Documents:</b>	HSSC10-05.3A Rev5
<b>Related Projects:</b>	NIL

## Introduction / Background

At HSSC10 NIPWG presented an architectural display of S-100 based products. HSSC considered the intention behind that presentation and invited NIPWG to develop that further. The presentation attached to this document presents the current status and raises questions which need further discussions and considerations, see Annex A.

## Analysis/Discussion

#### General:

A principle discussion of the division into "Front-of-bridge/ECDIS" and "Back-of-Bridge/ECS", since all the "Back-of-Bridge/ECS" layers end up in ECDIS, which makes them subject to IMO regulations anyhow. By saying so more or less all products need IMO consideration which may result significant delay due to IMO routine (SOLAS V amendments need years sometimes). Alternatively, the IMO influence could be limited by defining that some products will be provided in back-of-bridge applications.

The appropriateness of the distinction between "Front-of-bridge/ECDIS" and "Back-of-Bridge/ECS" products as this is the same as deciding whether they are covered by S-98 interoperability or not as to be considered. The fundamental assumption of this diagram is that products affected by S-98 should be somehow presented "front-of-bridge". The discussion of the appropriateness underlines the request to have a clear description of the purpose of a product specification. Saying "the products should be used in ECDIS" implies that the presentation of the diagram is correct. This discussion and the possible uncertainty of a product use justify the request of a better product description.

## Portrayal requirements:

It was proposed that IMO portrayal requirements also apply to product specifications that go via S-98 and the ENC overlay and the arrow only going to S-101 can be misunderstood. The discussion point here is to define how much IHO is eager to define portrayal. It is also possible to provide only portrayal guidelines and offer industry the flexibility to develop portrayal by them.

#### Data Quality applicability:

Should that apply to S-411 and S-412 for harmonisation's sake? It could also be applied to S-124 as this is also under the remit of IHO.

## All "Front-of-bridge/ECDIS" product specifications:

Which level of interoperability applies? It should be more specific as level 0 (overlay) applies to most product specifications of the "back-of-Bridge/ECS" part too. By doing so, it should be questioned what kind of interoperability is intended?

## S-103:

The questions here are to which HSSC WG should this be assigned to? Should this be moved to the "Front-of-Bridge/ECDIS" part?

Which kind of information should be covered; for military submarines or/and to such things as remotely-operated vehicles and underwater drones used in the scientific/civilian sector? Some HOs or defence agencies are the opinion that S-103 is covered by S-101.

## S-121:

It is nowhere stated that this is neither intended for "Front-of-bridge/ECDIS" nor for "Back-of-Bridge/ECS". Assumptions indicate that but it should be noted that defence agencies may provide this information in "Front-of-bridge/ECDIS" for legal reasons; is a military device allowed to enter a particular sea area or not?

S-122:

Should that be moved from "Front-of-bridge/ECDIS" to "Back-of-Bridge/ECS"?

# **Justification and Impacts**

A clear vision of the archirectural infrastructure of S-100 based product specifications under the remit of IHO and of product specifications which could support safe navigation supports the development of the Strategy Implementation.

# Recommendations

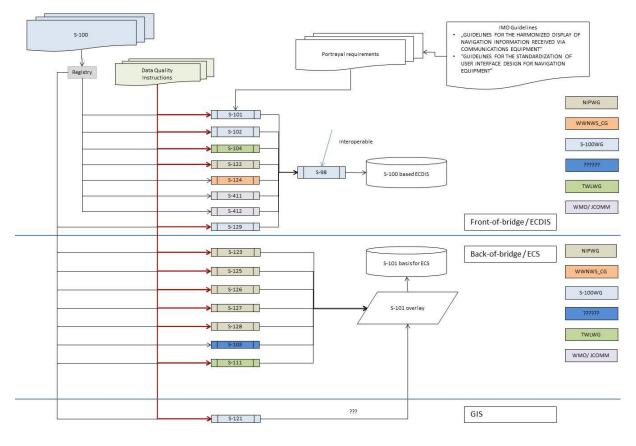
Provision of appropriate descriptions of product specifications purpose is essential and should be initiated as soon as possible. The architectural display and the Strategy Implementation should be kept harmonised.

# Action required of HSSC11

The HSSC11 is invited to:

- a. note this paper,
- b. discuss the presentation and form an ad-hoc team which should develop a position on the raised questions.

Annex A:



As of 14 March 2019