

**25<sup>th</sup> TSMAD Meeting  
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**Paper for Consideration by TSMAD**

**Based on paper HSSC4-05.1D as submitted to HSSC4**

**Proposal to formalize the identifiers for S-100 based product specifications**

<b>Submitted by:</b>	UK
<b>Executive Summary:</b>	This paper was submitted to HSSC4 and proposes a formalized method of identifying S-100 based products. As S-100 is used within the wider community and in e-navigation a formal system of identifiers is required. This paper outlines an approach which would require changes to the GI Registry and S-99.
<b>Related Documents:</b>	1. S-100
<b>Related Projects:</b>	e-Navigation

### Introduction / Background

1. S-100 edition 1.0.0 was published in January 2010 and the first S-100 based product specification S-102 was published in 2011. TSMAD is continuing to develop S-101 and other organizations such as JCOMM ETSI and ETMSS, IEHG and IALA are developing or preparing to develop S-100 compliant product specifications. Currently the S-XXX identifier has been used for IHO product specifications but there is a need to formalize product specification identifiers as the wider community uses S-100.

Following submission of an earlier iteration of this paper to HSSC4 action HSSC4/11 was assigned to TSMAD as follows;

**TSMAD** to develop, with IHB support and in consultation with the relevant stakeholders, a nomenclature for S-100 based product specifications as part of the GI registry management, and revise S-100, taking into account the following guidance:

- S-100 to S-199 should be reserved for IHO product specifications;

Non IHO product specifications identifiers should be assigned by the registry manager on a first come first served basis from S-200 onwards.

### Analysis/Discussion

2. Currently, S-100 part 11 (Table 11-2) specifies that a product specification identifier must be unique but gives no further guidance. To date the HSSC has used S-XXX identifiers in accordance with IHO resolution 3/1957 (as amended). As S-100 is used more widely by other organizations a formal nomenclature would enable the immediate identification of an S-100 based product specification and its responsible organization.

However, S-99 1.0.0 makes the following distinction;

**IHO Product Specifications.** Product Specifications that have been adopted by the IHO will be recorded in the Main part of the Register. These Product Specifications will carry the identifying code S-1 *nn* and will also have a plain language title.

**Other Product Specifications.** Product Specifications that have been developed by other competent organizations will be included in the Supplementary part of the Register provided that:

- a) they use S-100 as the underlying standard (organizations are encouraged to populate Feature Catalogues, either using existing entities registered in the GI Registry or proposing new ones where appropriate);
- b) any identification number of a plain language title used does not infer that it is an IHO standard or that it has received any endorsement or approval of the IHO; and
- c) the content description in plain language.

Therefore adopting S-XXX as the identifier for IHO adopted product specifications is already documented. Also the need to ensure identifiers do not conflict with IHO endorsed product specifications is also reflected.

3. Any identifier must be unique (as stated in S-100 Part 11) and it is proposed that it should also immediately indicate the producer organization of the product specification. It is logical to include a numerical element but to avoid confusion it is necessary to assign a range of numerical values to avoid confusion between product specifications with the same number and different responsible organizations. Consequently the proposed format for identifiers would be as follows;

“Producer identifier” – “Numeric identifier”

Where the producer identifier is assigned in a product specification responsible organization register and the numeric identifier is from a range allocated within that register. Example register entries;

Producer identifier	S
Organization	International Hydrographic Organization
Numerical range minimum	101
Numerical ranger maximum	199

Producer identifier	A
Organization	An Authority
Numerical range minimum	200
Numerical ranger maximum	299

This would support the following identifiers and examples

S – 101-199 = IHO Endorsed product specification, identifier assigned by the HSSC

A-200-299 = An Authority endorsed product specification, identifier assigned by ‘authority within other organization’(within range assigned in register)

3. To support this approach changes would be necessary to the GI Registry and to S-99. S-100 would also require modification at its next revision. It should also be clarified that for IHO product specifications the HSSC is responsible for assigning identifiers.

5. The major benefit of this approach over that proposed by HSSC4 is that this approach makes the competent authority for a product specification immediately clear.

## Conclusion

6. The proliferation of S-100 is already beginning, to ensure product specifications can be clearly identified a formal system of identifiers is required. The proposal in this document supports the currently assigned identifiers; it ensures identifiers cannot be confused and offers easy identification of the producer organization. TSMAD is the appropriate body to agree the details and action required changes to the GI Registry.

## Recommendations

7. The recommendations of this paper are as follows:
  - a. A formal nomenclature is required for S-100 based product specifications.
  - b. TSMAD should prepare detailed proposals for modifications to IHO standards and the registry based on the proposal outlined in this document.

## Action Required of TSMAD

8. The TSMAD is invited to:
  - a. Endorse the above recommendations.