

**25<sup>th</sup> TSMAD Meeting**  
**15 - 18 January 2013 (Tokyo, Japan)**

**Note to TSMAD on SNPWG Activities**

<b>Submitted by:</b>	SNPWG
<b>Executive Summary:</b>	Some SNPWG issues that require action by the TSMAD Working Group.
<b>Related Documents:</b>	S-100, S-101
<b>Related Projects:</b>	SNPWG data model; S-100

## 1. SNPWG Meetings

Since the last TSMAD meeting SNPWG held its 15<sup>th</sup> meeting in Helsinki, Finland. At this meeting Mr. Jens Schröder-Fürstenberg, was elected as SNPWG chairman and Mr. Thomas Loeper as vice chairman.

Work on the Marine Product Specification was continued, and this resulted in the production of several datasets. The schemas for this work are described in paper TSMAD25-4.3.13A (Marine Protected Area Schema), and the XML schema files are included as a zip file under TSMAD25-4.3.13B. As a result of discussions at the HSSC meeting SNPWG will decide at SNPWG16 on which Product Specification the work will be focused. The most potential candidate would be Radio Signal. TSMAD are requested to discuss and provide feedback on items 2 and 3 below that will have an impact on the future work of SNPWG.

## 2. Register related work / and SNPWG Point of Contact for NPUBs Registry

Introduction - The SNPWG has spent a considerable amount of work modelling nautical publications information. As a result of this work, it has identified many feature classes, attributes, and enumerated values that are needed for nautical publications, but are not in the IHO registry. These items have been documented in the SNPWG wiki which has been a temporary placeholder while this development work has taken place. An important lesson learned from this work is that, feature classes, attributes and enumerated values should not be submitted to the registry, until there is confidence that they will not be changed. This is the primary reason for establishing the SNPWG WIKI.

Taking into account the e-nav work which is based on S-100, SNPWG proposed that the IHO registry includes a sandbox facility that can be used as a temporary storage area for feature classes, attributes and enumerated values that are being used for new modelling work. Once they are agreed they can be moved to the permanent registers. This would allow other communities (e.g. IALA) to benefit from the modelling work being currently undertaken, and would minimise the possibility duplication of work effort.

Analysis/Discussion - SNPWG is responsible for the NPUB register. It is proposed that as only few contacts have been made regarding the NPUBs register in recent years, and due to retirement of some WG members, SNPWG15 decided that a single point of contact should be established for NPUBs Registry issues. It was decided that Jens Schröder-Fürstenberg ( [jens.schroeder-fuerstenberg@bsh.de](mailto:jens.schroeder-fuerstenberg@bsh.de) ) should act as point of contact in his position as SNPWG chairman for;

- Register Manager
- Executive Control Body Members
- Domain Control Body Members
- Submitting Organization Representatives

Recommendation: TSMAD are invited to update of the appropriate contact details at [http://registry.iho.int/s100\\_qj\\_registry/home.php](http://registry.iho.int/s100_qj_registry/home.php).

### 3. Harmonized model for Light Information.

Introduction - SNPWG is working on a data model which will enable data providers to structure their nautical publication information in an ECDIS compatible format. TSMAD is working on an S101 Product Specification for ENC's that contains light information. IALA is also working on creating an S-100 model for light information.

Light information is required to be encoded and stored in paper charts, ENC's, sailing directions and List of Lights publications. There is a need to ensure that light information contained in these navigational products is kept current. This implies the use of a common data model and a single data source for light information.

As IALA is the International Association representing those bodies that are responsible for maintaining navigational lights, it is proposed that TSMAD and SNPWG should work together with IALA to ensure that the models used for light information are compatible. TSMAD is invited to discuss how light information can be maintained in multiple navigational products and whether a common source for this information can be established. Furthermore, TSMAD is working on extending the S-57 model for light information, and SNPWG would like to provide the following observations on this work, with respect to nautical publications work.

Analysis - TSMAD is trying to improve the current S-57 based Light attributes by introducing a complex attribute for light numbers. SNPWG has developed a complex attribute LITNUM (<http://www.fuerstenberg-dhg.de/mediawiki/index.php/LITNUM>) which was taken into consideration by TSMAD DCEG Subgroup and the group suggested a different approach by eliminating the distinction between the whole number and the decimal and using a single simple attribute:

Complex Attribute	Acronym	Allowable Encoding Value	Type	Multi
Light Number	LITNUM		C	0,*
Letter Designator	LITNML		(S) TE	0,1
Number of a Light		XX.XX	(S) RE	1,1
National Number			BO	1,1

This new proposal was discussed at the SNPWG15 meeting.

We agree with the new "Number of a Light" attribute. The encoding value should reflect the reality by using 4 digits in front and 5 digits after the decimal point.

We do not agree with the National number at all. Rather we suggest a further improvement by using a national designator (NATION) as used in S57. That would allow us to establish a data stream as suggested by e-Nav from the source (IALA-level) to the end user (ECDIS or List of Lights) without any modification by of the ENC and List of Lights issuing HOs.

Conclusions - Both HSSC WGs can benefit from a harmonised approach of the issues to be solved. The e-Nav idea becomes reality with the first data stream. The workload for HOs would be reduced.

More importantly, data modellers should not be forced to switch between different ways of modelling the same kind of information when modelling either chart content or nautical publication content. A further benefit can be seen at the stakeholder's side. A harmonised data model is essential to earn as much as possible benefits from the new S100 world.

#### Recommendations

1. TSMAD DCEG sub-WG is requested to review the SNPWG proposal.
2. TSMAD and SNPWG should develop a common paper to HSSC5 describing the idea and obtain endorsement to contact IALA in that regard.
3. SNPWG should obtain endorsement to review the appropriate sections of S-12 to establish the legal basis for using only one unique number.

Justification and Impacts - The idea of establishing a data stream for light information from source to user underlines the IMO e-Nav idea. Once established the workload for HOs will be reduced significantly. The work will have very little impact of the current workload.

Action Required - TSMAD is invited to:

- a. note this paper,
- b. consider the data stream idea,
- c. respond if the described way of involving HSSC5 is appropriate.