

## Paper for Consideration by NIPWG

### Report on NIPWG's S-100 extension proposals

<b>Submitted by:</b>	Chair
<b>Executive Summary:</b>	Status of the S-100 extension proposed by NIPWG
<b>Related Documents:</b>	S-100
<b>Related Projects:</b>	none

#### Introduction / Background

Each S-100 based ProdSpec needs to be conformant with a S-100 Edition. This particular S-100 edition provides the overarching frame on which certain parts of a ProdSpec refer to.

The S-122 development process and the practical implementation showed that the current S-100 Edition doesn't provide sufficient support for the S-122 product specification. Based on that experience, the NIPWG provided submissions to the S-100WG to improve the S-100 by adding new parts or by amending parts relevant to the NPUB development.

The S-100Wg met in March 2016 and discussed the submissions for S-100 Edition 3.

#### Analysis/Discussion

**Following items have been submitted or have been supported by NIPWG**

##### **PDF as Support file format (Provided by NIPWG based on Anthropocene Institute request)**

PDF is a common format used by government agencies to provide regulations and information that define and explain marine protected areas. As part of the S-122 MPA Data Standard, we feel it is important that the option to include PDF files that contain the governing regulations for an area be supported.

##### **Allow class S100\_FC\_InformationBinding to have a "role" like S100\_FC\_FeatureBinding, except that it will be optional (that was provided by Jeppesen and supported by NIPWG)**

Information associations can link two information types, in which case role information is needed to disambiguate the ends. S100\_FC\_InformationBinding therefore needs a "role" element like S100\_FC\_FeatureBinding. Since feature/info bindings use a standard role in some product specifications, it will be optional instead of mandatory.

##### **Spatial Model –Approximate Areas for Nautical Information Specifications**

The work on the S-122 (Marine Protected Areas) data sample revealed shortcomings in the ability to represent approximate areas (or "fuzzy areas") in S-100. Approximate areas are relevant to several NIPWG data products. Further, similar issues arise in S-124 (Marine Safety Information) and are likely to arise in other product specifications. The scope of this paper is limited to areas. Approximate points or curves are not addressed.

##### **Request of Unique Identifier (UI) availability in S-100**

The need for Unique Identifiers arises from the fact that different products may contain the same or very similar information of the same feature. In the best case both feature characteristics and spatial definition are identical. However, it is very much likely that at least one or both the feature characteristic and the spatial definition might be different.

##### **The status**

With the exception of the spatial model on approximate areas, all NIPWG submissions have been positively considered and are now part of the new S-100 Edition 3.

##### **New position in S-100**

##### **PDF as Support file format (Provided by NIPWG based on Anthropocene Institute request)**

That has been implemented in part 4a (Metadata). Following statement made to avoid the "overuse" of that file format:

"Product Specification developers should take careful consideration in using PDF as a support file format. It is recommended that PDF never be used in products that will be used on a navigation system as it may impair night vision."

**Allow class S100\_FC\_InformationBinding to have a “role” like S100\_FC\_FeatureBinding, except that it will be optional (that was provided by Jeppesen and supported by NIPWG)**

That has been implemented in part 5 (Feature Catalogue).

**Request of Unique Identifier (UI) availability in S-100**

That has been implemented in part 11 (Product Specification).

#### **Action Required of NIPWG**

The NIPWG is invited to:

- a. Note this paper.
- b. define actions if considered necessary and as appropriate.