

**4th IHO-HSSC Meeting
Busan, Republic of Korea, 10-13 November 2015**

Paper for Consideration by HSSC

NATO Geospatial Maritime Working Group (GMWG) Report to HSSC

Submitted by:	NATO Geospatial Maritime Working Group (GMWG)
Executive Summary:	This paper informs the HSSC of the intent of the NATO Geospatial Maritime Working Group (GMWG) to utilize the S-100 standard for a new generation of AML product specifications. This paper requests that a Domain is established within the IHO GI Registry for AML concepts.
Related Documents:	1. S-100 2.0.0 2. S-99 1.1.0
Related Projects:	S-100

Introduction / Background

1. In order to support the requirements of NATO, the Geospatial Maritime Working Group (GMWG) has developed a number of S-57 based product specifications for Additional Military Layers known as AML. Given the development of S-100 and associated product specifications, the GMWG is now seeking to develop a new generation of AML product specifications using S-100 and to be known as AML+. This paper reports on GMWG plans to use S-100 and makes one specific request to the HSSC.

2. GMWG plans to develop product specifications based on S-100 to support situational awareness for military users. This will benefit from the support in S-100 for gridded data, multiple encodings including GML and from the enhanced Portrayal Model included in S-100 Part 9. This will require that AML concepts be registered within the IHO GI Registry in both the Feature Concept Dictionary and the Portrayal Register. This will begin with the registration of AML 3.0 items not currently registered. New concepts will be submitted as they are developed.

3. AML contains a large number of feature and attribute concepts, some of which are specific to military users. Largely these are registered in the Defence Geospatial Information Working Group (DGIWG) DFDD. However in order to create and maintain S-100 Feature and Portrayal catalogues, GMWG needs to register these concepts in the IHO GI Registry. In order to clearly group AML concepts, it is suggested that a Domain should be established for AML. This would be used to register AML specific concepts, however concepts used by AML but which fit within other Domains will be registered in those Domains. A specific proposal for a domain is provided at Annex A of this paper as required by S-99.

4. The GMWG plans to register its products specifications in the Product Specification Code Register as Other Product Specifications. The identifiers for these products will begin with the prefix AML+. Submissions will be made in accordance with S-99 part 5.

Conclusion

5. The GMWG would like to utilize S-100 for a new generation of AML specifications. This paper puts in place the enablers which allow the GMWG to use S-100 in line with IHO standards and guidelines.

Recommendations

6. The recommendations of this paper are as follows:
- a. Establish a Domain for AML within the IHO GI Registry based on annex A of this paper.
 - b. Note the use of S-100 by NATO GMWG and consider GMWG as a stakeholder in the evolution of S-100.

Justification and Impacts

7. The impact of this change is the register manager of the Feature Concept Dictionary establishing a new domain. This is considered to be a small amount of effort and it is suggested can be accommodated within the resources assigned to the register manager.

Action Required of HSSC

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

Annex A

GI Registry AML Domain Proposal

Proposing Organization

The proposing organisation is the NATO Geospatial Maritime Working group (GMWG). The GMWG provides NATO with standards for maritime geospatial information. These have previously built on the IHO S-57 standard to provide AML products for use within WECDIS and other systems.

Point of Contact

The point of contact on behalf of the GMWG is the UKHO Defence Standards Manager details as follows;

Name - Mr Thomas Richardson
Job Title - Defence Standards Manager
Email address - Thomas.richardson@ukho.gov.uk

Name

AML

Full title – Additional Military Layers

Scope

Military information relevant to the maritime environment and which may be included in products for military users in the maritime domain. No classified concepts shall be registered. This encompasses disciplines such as mine warfare, amphibious warfare and environmental information.

Justification

NATO GMWG is developing S-100 based product specifications for AML. These require the creation of S-100 AML feature catalogues. In order to fully utilize S-100 the GMWG wishes to register AML concepts within the FCD. This is logically supported by a specific AML domain.

UKHO as custodian of AML specifications on behalf of GMWG is willing to act as the Domain Owner and Domain Control Body.