

**Defence Geospatial Information Working Group (DGIWG)
Liaison Brief to the International Hydrographic Organisation (IHO)**

11 January 2013

1. Outline

This brief highlights key activities within the Defence Geospatial Information Working Group (DGIWG) that may be relevant to IHO. The activities take account of the recent DGIWG Technical Conference held during 14-19 October 2012.

2. NGIF Maintenance

The NATO Geospatial Information Framework (NGIF) is a key focus within DGIWG. A white paper outlining NGIF in more detail is available on request.

DGIWG continues to develop the concept of NGIF. Key progress includes:

- Acknowledgement of NGIF within the DGIWG Enterprise Framework (1-3 year timeframe)
- Establishment of NGIF management process within DGIWG. This has included the setting up of a:
 - NGIF Modelling Maintenance Team (NMMT)
 - NGIF Product Maintenance Team (NPMT)
 - DGIWG NGIF Management Team (J05)
- Commitment of resource from Nations to undertake NGIF activity

3. Geospatial Web Services Road Map

The Geospatial Web Services Working Group is currently working on the development of a Web Services Road Map. As technology is rapidly changing and new interfaces and services emerge there is continued requirement from the DGIWG Requirements Group (RG) to work on new OGC standards. The Web Services Road Map is essentially a technology Road Map for the integration of new interfaces and services within the DGIWG community.

Developing a Road Map has three major uses. It helps reach a consensus about a set of needs and the technologies required to satisfy those needs; it provides a mechanism to help forecast technology developments and finally it provides a framework to help plan and coordinate technology developments and the required resources.

4. Portrayal Registry

DGIWG is developing the schema for a DGIWG Portrayal Registry prior to implementing a portrayal registry and register maintenance process. The DGIWG Portrayal Registry is being developed concurrently with a (US) National System for Geospatial Intelligence (NSG) Portrayal Registry. The development is structured around two TC 211 standards:

- ISO 19117, Geographic Information Portrayal
- ISO 19135, Geographic Information, Procedures for Item Registration

5. Other Projects

DGIWG also continues to:

- Develop symbols for digital display of topographic data
- Develop symbols for portrayal of topographic data on 1:50,000 and 1:000,000 scale maps
- Coordinate and influence the ISO work on metadata (ISO 19115, ISO 19119, ISO 19115-2, ISO 19139(-2) and ISO 19157) to ensure that military needs are met. Noting that DGIWG now have a final draft military metadata profile that is being ratified within the NATO community.
- Establish and provide for the maintenance of a DGIWG Metadata Register, its content, and respective supporting documentation.
- Develop a standard elevation surface data content model. This is addressing the needs and requirements of the military community, especially for higher resolutions of elevation data. The development of a metadata schema for enforcement of metadata rules is also underway. IHO involvement in this work is always welcome and any one wishing to take part in the review of this work can contact Nicholas Mort (nicholas.mort@ukho.gov.uk).
- Define and document the set of use cases within which Keyhole Markup Language (KML) may be appropriately applied in the provision of geospatial intelligence
- Develop a military implementation profile of the following Open Geospatial Consortium specifications:
 - Web Coverage Service (WCS)
 - Web Mapping Service (WMS)
 - Web Feature Service (WFS)
- Draft a DGIWG profile of GMLJP2 for georeferenced orthoimagery, raster maps, and elevation/bathymetric data.

Further information on DGIWG, please contact Nicholas Mort (nicholas.mort@ukho.gov.uk).

Nicholas Mort

NATO Geospatial Maritime Working Group (GMWG) and DGIWG Representative