

## Information Paper for NIPWG Consideration Harmonization of Maritime and Terrestrial Vector Data.

<b>Submitted by:</b>	Mexico
<b>Executive Summary:</b>	Harmonization of maritime and terrestrial vector data.
<b>Related Documents:</b>	A Statement of Shared Guiding Principles for Geospatial Information Management (United Nation- Global Geospatial Information Management, <b>GGIM</b> ).
<b>Related Projects:</b>	Working Group Development of a Shared Statement of Principles on the Management of Geospatial Information (GGIM). General Bathymetric Chart of the Oceans GEBCO, ( <i>IHO</i> and <i>Intergovernmental Oceanographic Commission (IOC) of UNESCO</i> ). Worldwide ENC Database (WEND), IHO. Internationals Oceanographic Data Base and Nautical Standards Projects (S-100, E-Navigation, Etc.), Geographic and Sadistic National Information System Project (Mexican).

### Introduction / Background

The harmonization of maritime terrestrial vectored data will allow maritime and land use vector data in geographical information systems with a common datum, providing to the users the possibility to perform geospatial analysis.

### Analysis/Discussion

Usually the nautical charts are produced by nautical cartography authorities using as bathymetric reference datum the average of the lower middle tides (MLLW) and the topographic charts and most of the land surveys use as vertical datum for terrestrial heights the mean sea level (MSL).

To share Geographic Information (nautical and terrestrial) into a global platform the vectorial data has to have a common protocol for the standardization of datum's to achieve its compatibility in geographic information systems GIS.

A working group that carry out the challenge to promote and coordinate the standards protocols to share the vectorial data from different international hydrographic and topographic agencies is necessary, looking for developing a Worldwide geospatial data base with nautical and terrestrial vector data bringing access to the international maritime community, coastal engineers and investigators that require consult and use this important tool.

The annex A, describes the discussion.

### Conclusions

The harmonization between nautical and terrestrial vectorial data information will improve the interoperability of this data into GIS. In this way governments and agencies in charge to generate geographic information will have a global principles to share and increase the worldwide geospatial data base.

### Suggested Recommendations

Create a working group that coordinate the interchange of hydrographic data between IHO States members and every other agency that work to developing vectorial data standards as the UN-GGIM WGP to enhance its compatibility in GIS as possible.

### Justification and Impacts

With an international standard or solution to harmonization of vectorial data, the IHO can easily invite to the hydrographic commissions and other agencies to share and create a better worldwide data base that includes nautical and terrestrial data.

### Suggested Action Required of NIPWG

The NIPWG is invited to:

- a. Endorse this issue to the hydrographic community to participate with an initiative to support the objective.
- b. Note this paper.