7th Meeting of the IHO- Inter Regional Coordination Committee (IRCC7)

Mexico City, Mexico, 1-3 June 2015

Update on the IHO ENC Catalogue

Submitted by:	IHB; Secretary WENDWG
Executive Summary:	This paper provides updated information on the development of the IHO ENC Catalogue.
Related Documents:	Final minutes of WENDWG5
Related Projects:	N/A

Introduction and Background

- 1. The IHO ENC catalogue is referred to in the guidance provided to ECDIS users by the International Maritime Organization (IMO).
- The draft MSC Circular providing a consolidated "ECDIS Guidance for Good Practice," as endorsed by NCSR 1, includes the following statement (NCSR 1/WP.8):

"The IHO provides an online chart catalogue that details the coverage of ENCs together with references to coastal State guidance on any requirements for paper charts (where this has been provided). The catalogue also provides links to IHO Member States' websites where additional information may be found. The IHO online chart catalogue can be accessed from the IHO website at: <u>www.iho.int</u>."

It is worth noting that the IHO Strategic Performance Indicator No 2 ("Growth in ENC coverage worldwide, as reported in the IHO on-line catalogue, relative to the existing gap in adequate coverage (as defined by IMO/NAV) from the benchmark 01 Aug. 2008") and IHO IRCC Working Level Performance Indicator No 15 (= *SPI2*) should be based on this IHO online chart catalogue.

- 3. The IHO ENC catalogue has been upgraded since the WENDWG3 meeting with the intention of providing the most complete and authoritative display of available ENC coverage. This is the main scope of the IHO ENC Catalogue.
- 4. The greatest difficulty with building and maintaining the catalogue has always been getting comprehensive ENC coverage metadata. Attempts to get ENC coverage metadata directly from Member States, on a regular basis, in a consistent format, even through RHCs or the WENDWG, has proven to be very difficult. For practical reasons, the primary source of ENC coverage information shown in the catalogue is therefore based on AVCS coverage data supplied by the UKHO on a monthly basis. These include (in addition to data coverage limits) the following attributes: cell name, usage band and scale.

Catalogue Application

5. The catalogue can be accessed from the IHO web site at <u>http://www.iho.int</u> > ENCs & ECDIS > ENC Availability.

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Figure 1 - IHO ENC Catalogue (as of April 2015)

- 6. The IHB is currently moving its GIS applications to the ESRI ArcGIS environment and made the IHO ENC Catalogue available in April 2015 as an ArcGIS online layer. The final solution is "industry-neutral" from a user point of view and it is assumed that an up-to-date web-browser should be sufficient.
- 7. The updating cycle of the IHO ENC Catalogue is expected to be aligned with the provision of appropriate data updates. However, for practical reasons and resources available at the IHB, this will be at intervals of not less than every two months, unless an automated flow is set-up.

Way ahead

- It is the intention of the IHB to improve the IHO ENC Catalogue within the IHO/IHB GIS environment in order to be able to link it to the GIS-based INT paper chart catalogue (schemes/production status) now under development (IRCC7-12A refers).
- 9. Other functions proposed by IHO Member States (actions WENDWG4/14 and /15 refer) or ICCWGs can be considered for implementation in accordance with the maintenance and upgrade procedures that still need to be defined. The IHB is perfectly aware that more metadata would be helpful to users of the IHO ENC online catalogue. However, based on previous experience, the IHB is in the opinion that an incremental approach is the most appropriate as it is clearly an issue to get the data from various sources. These additional functions could be:
 - search functions by ENC name and Producer Code, issue date, update date, distribution points;
 - typical GIS functions such as: opacity, layering,..;
 - polar projections that are more suitable for displaying ENC coverage in the polar regions;
 - designated and reliable additional source datasets (such as Ports);
 - robust controlled-version of the database in force (ENC released or under preparation, ENC schemes when they exist to display planned ENCs, etc.)
 - availability of base maps (GEBCO08, World Schematic, etc.) for most of the servers (as some ports might be blocked by some servers);
 - downloading functions in XLS, SHP formats if possible;
 - availability of URLs from Independent Service Providers for getting the most comprehensive coverage.

10. At the WENDWG5 meeting, the IHB presented the principles for the evolution of the IHO ENC Catalogue which were agreed. PRIMAR made a presentation of the ENC Coverage and Overlap Checker tool. This tool is intended to be made available to the IHO, using password-protected access for <u>internal use only</u> (IHO MS, RHC, ICCWG, RENCs, IHB). This tool developed by PRIMAR provides, in a very user-friendly environment, basic but essential information on ENC coverage and overlap reports.

Recommendations

- 11. The WENDWG recommends:
 - a. To accept the offer made by the RENCs¹ (on the RENC coverage and overlap checker on-line tool), and suggests that IRCC invites the IHB to issue a CL announcing the availability of this tool for RHCs/ ICCWG Coord., IHB (password protected for every charting Region)²
 - b. To continue the incremental development of the IHO ENC Catalogue within the IHO GIS Environment.

Action Requested of IRCC7

- 12. The Committee is invited to:
 - a) Note the report
 - b) Agree on the way forward as provided in recommendation 11 a/ and b/.

¹ PRIMAR leads.

² IHB has already been provided with user name and password for every charting region.