DEVELOPMENT OF A COMPREHENSIVE ONLINE CATALOGUE OF AVAILABLE OFFICIAL CHARTS.

18th CHRIS Meeting
September 2006

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Requirement to Determine ENC Coverage

6th WEND COMMITTEE MEETING Norfolk, Va, USA, 18-19 May 2001

“Germany recommended that IHB produce a catalogue that accurately shows the actual coverage and availability of ENC data for the shipping community”.

IHB issued CL 67/2002 asking

“.....Member States are requested to provide the information below for every ENC cell already produced, under production or planned”

- ENC Cell name
- Navigational purpose code,
- **Cell limits**
- S-57 Edition, i.e. 3.0 or 3.1;
- Date of production;
- Date of issuance, i.e. when the ENC cell is on the market;
- **Website and/or e-mail address** where further details on the cell and information on how to obtain the data can be found.
Responses from CL 67/2002

IHB Developed a static catalogue – available on the IHO web site.

Presented to the:

- **7th WEND** Meeting (Lima, Peru, May 2003)
- **15th CHRIS** Meeting (IHB, June 2003)

**Norway offered to assist the IHB in developing an interactive web catalogue**
Thematic criteria were to establish what ENCs were:
- planned or in production (red)
- released but not yet commercially available (blue)
- commercially available (black)

Administrative interface developed to enable MS and RENCS to login and update the system.
Requirement for a new Catalogue

**IMO/IHO Corresponding Group (CG)**

- NAV50 established a CG
- CG endorsed a proposal from IHO to develop an online catalogue.
- NAV51 **endorsed** this proposal
- NAV51 prepared a **draft specification**
- NAV51 re-established the CG and tasked it to review the draft specification.
Focus and Scope of the New WEB Catalogue

Focus

Only those **ENCs that are available for use. (i.e. on the shelf).**

Scope

The new catalogue need to show;

- **ENC** coverage
- **RNCs** coverage for those areas where **no ENC coverage exists**
- A list of "**adequate backup**" paper charts.
Lessons Learned from Previous Catalogue Development

- Requirement for **ENC data limits** – not just cell limit
- Need to keep a **historical record** of coverage evolution.
- Need to improve the mechanism for **acquiring coverage and metadata information** (harvesting tools).
- Need for **more detailed metadata**
- Need to be **standards based** – interoperability
- Need to develop **mechanisms to keep the catalogue current**
- As far as possible, **take account of the needs of stakeholders** (RENCs, Data Servers/VARs, Distributors and OEMs).
- Need to make a **coverage (dataset)** and **metadata resource** available for use by all stakeholders.
Sources of Coverage Information and Metadata

- RENC 1
- RENC 2
- HOs

ENC

- HO 1
- HO 2
- HO 3

RNC

- Maritime Authorities
- and HOs

“adequate backup” paper charts
Types of Information Required

Coverage Information

Metadata Information

**Identifier** (ENC Cell name - RNC/Chart number)

**Issuing authority** (possibly on behalf of another Member State)

Producer Authority

**Standard format** (e.g. S-57 Edition 3.1, BSB, HCRF)

**Distribution Method** (e.g. issuing HO, RENC, free download)

**Allowance of SENC distribution:**

Yes/No

**Compilation scale / usage band**

**Co-ordinates of edges**

**Edition date**
ENC - Stockholm

Data format: S-57
Coordinate system: Geographic
Location: http://Iho4//www.IHO.Internet/S-59.AntArctic/SW22564.000

ENC Metadata

- Metadata Information
- Resource Identification Information
- Spatial Representation Information
- Reference System Information
- Distribution Information
- Update Information

Metadata Information

*Metadata language: English
*Metadata character set: utf8 - 8 bit UCS Transfer Format
*Last update: 20060308
*Scope of the data described by the metadata: dataset
*Scope name: dataset

*Name of the metadata standard used: ISO 19115 Geographic Information - Metadata
Coverage Information

Metadata

<extent>
  <EX_GeographicBoundingBox>
    <westBoundLongitude>-127.46</westBoundLongitude>
    <eastBoundLongitude>-122.48</eastBoundLongitude>
    <southBoundLatitude>43.71</southBoundLatitude>
    <northBoundLatitude>49.73</northBoundLatitude>
  </EX_GeographicBoundingBox>

  <EX_BoundingPolygon>
    <polygon>-123.45, 43.71  -123.00, 46.23  -123.00, 48.35  -123.22, 49.23  -123.45, 49.73</polygon>
  </EX_BoundingPolygon>
</extent>

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  <attribute name="metadata" type=URI "http://www.responsibleRENC.com#sw33492.mta" use="required"/>
</extension>
The ENC and RNC Coverage Files;

- will be used to generate ENC and RNC coverage limits in the **new catalogue**
- should be **made available** on the IHO web site in a standard format **for all stakeholders to use**
- should be **regularly maintained** through the issue of updates, and new editions
- all **historical versions** of coverage data files should be kept.
Paper Chart Layer

List of paper Charts

CHART12200
TITLE Cape May to Cape Hatteras
SCALE 1/200 000

CHART1521
TITLE Baleto to Punchino
SCALE 1/200 000

Paper Chart lists maintained by Maritime Authorities/HOs via a form interface situated on the IHO catalogue server.
Summary of Key Components

- Needs the cooperation of RENCs, HOs, and MSA to ensure coverage and metadata information is kept current.
- As far as possible, the generation of coverage and metadata information should be automated as output from a database or using harvesting tools.
- It should take into account the needs of Distributors, VARs, OEMs, and other stakeholders.
- Should be standards-based – ensure interoperability.
Thank You