



Developments and Impact of Digital Nautical Publications on Hydrographic Offices

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Developments



- Nautical publications examined to develop **Scope** – Complete
- **Scope** divided up and allocated to regional sub-WGs to draft objects and attributes – Complete
- Organise IHO NPUBS Register management – Complete
- New sub-WGs formed with new work items



Developments 2



- New sub-WGs work:
 - Feature Data Dictionary (FDD)
 - SNPWG profile of the S-100 product specification paper S-100 part 10
 - Display guidelines
 - NPUBS register control body



Impact on Hydrographic Offices



Passage planning



Fusion of:

- Training
- Experience
- Seamanship
- Regulation
- Company orders
- Charter party
- Cargo
- Ship characteristics
- Classification
- Insurance
- Information from:
 - Chart
 - Nautical Publications
 - Own ship's records



Motives



- Shipping companies want to operate ships as profitably as possible without breaking the law.
- Passage plan is just one instrument to help deliver a profitable and safe voyage.
- HOs are much more concerned with '*safe*' than '*profitable*'.



HO role



- Provide the information that keeps mariners and the environment safe.
- HOs are part of the safety structure.

Shipping company role

- Deliver safe, compliant but profitable voyages.



Regulation





MARPOL



- Increasingly complex
 - Oil
 - Harmful substances
 - Garbage
 - Sewage
 - Overboard discharge from galleys and laundries – Cruise ships
 - Exhaust emissions
- National implementation
- Situation different from one country to the next
- What are the geographic limits of the regulation?



...any thing to do with areas



Inshore

- Speed limits
- Reporting lines

Deep sea

- Weather forecast areas
- NAVTEX areas
- Communication satellite footprints



Climate and current



- Trade winds, monsoons and tropical revolving storms
- Swell
- Ocean current
- Tidal streams
- Fog



Variety





Task ahead



- Assess which information has a geographic component
- Provide the information in a form that can be found easily while passage planning
- This implies that the information which HOs now put in books, needs to be repackaged into a geographic format



Candidate approaches



- Front runners are:
 - Content management system
 - GIS database
- Possibly a hybrid geographic content management system ...
- ...within the S-100 family of standards
- Probably a little early to establish standards



Demonstrators



- The NLHO DigiPilot is an excellent example of what can be done
- The BSH Jeppesen Marine Pilot study demonstrated an XML approach
- Other ideas welcome
- Timescale is totally unclear
- Need to see more demonstrators and build up experience with the evolving data model

