



## 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







- 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







### Fusion of:

- Training
- Experience
- Seamanship
- Regulation
- Company orders
- Charter party
- Cargo

- Ship characteristics
- Classification
- Insurance
- Information from:
  - Chart
  - Nautical Publications
  - Own ship's records







- 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'.







- 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.















- Increasingly complex
  - Oil
  - Harmful substances
  - Garbage
  - Sewage
  - Overboard discharge from gallies 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



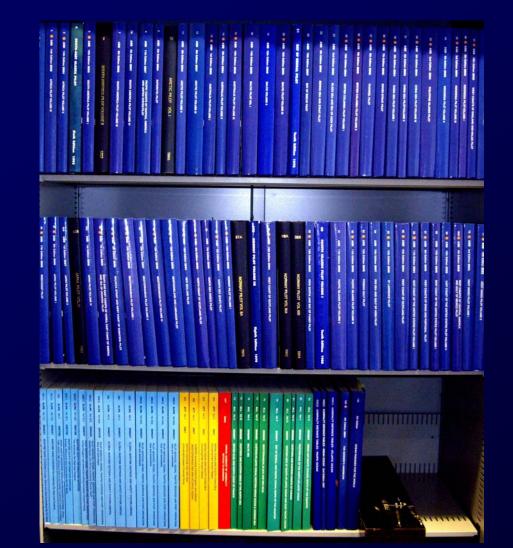
## **Climate and current**



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















- 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







- 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





