GIS and Hydrographic surveying for Port Authorities

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A bit of background

- Peel Ports- second largest ports group in the UK
- Contains 5 separate and diverse Port Authorities
- Headquarters in Liverpool
- Conservancy obligations throughout group
Group Marine Department

- Appointment of Group Harbour Master October 2013
- Centralised Hydrographic and dredging function completed August 2014
- Combination of in house data production and 3rd party operations
- Larger emphasis on data management
- Group Standardisation
The role of GIS in centralised function

- Issue of disparate practices and presentation across group from previous 3 hydrographic departments
  - Requirement to standardise into instantly recognisable Peel Ports survey chart
  - Requirement for improved data management practices for group hydrographic data
  - Opportunity for development as practices and structure matures and develops
- Combination of effort from Oceanwise and permanent GIS technician to deliver requirement, training and ongoing development
The Process - Sorted soundings input

- Data processed in house or by 3rd party company and signed off for QA/QC

- Uploaded into data server

- Data sorted according to charting scale and saved in standard data structure

- Separate .swd for each charting area, opened in Cadcorp, containing Soundings bds, contours bds, mapping and installations dbs. Sorted Data input using Oceanwise Maritime Toolbar- added to soundings bds

- Contours uploaded from dxf source file and replicated into bds
The Output

- Separate Print swd for each survey area- uploaded into Map Modeller after all final check made in data swd

- Information is simply changed such as date of survey, surveyor and survey number

- Published!
Further development - Presentation
In summary

- Charting through GIS has enabled and ensured good practise in terms of approach to data management and group marine strategy.

- Single changes requested by GHM can be swiftly put into practise.

- Streamlining of process- surveyors can now produce charts within minutes if required for critical operations.

- Centralised database of AtoNs, installations and obstructions.
Any Questions?

Thanks