



International Hydrographic Organization

- S-100 -

New Geospatial Standard for Marine Data and Information

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S-57 - International Transfer Standard

- IHO Transfer Standard for Digital Hydrographic Data
- established 1992
- intended for wide use



S57 - shortcomings

- content and carrier (ISO 8211) combined
- lacks flexibility and ease of extension / development
- difficult to update / introduce new editions
- used almost exclusively for nautical charts
- no longer a contemporary standard
- requires specific tools to use in GIS



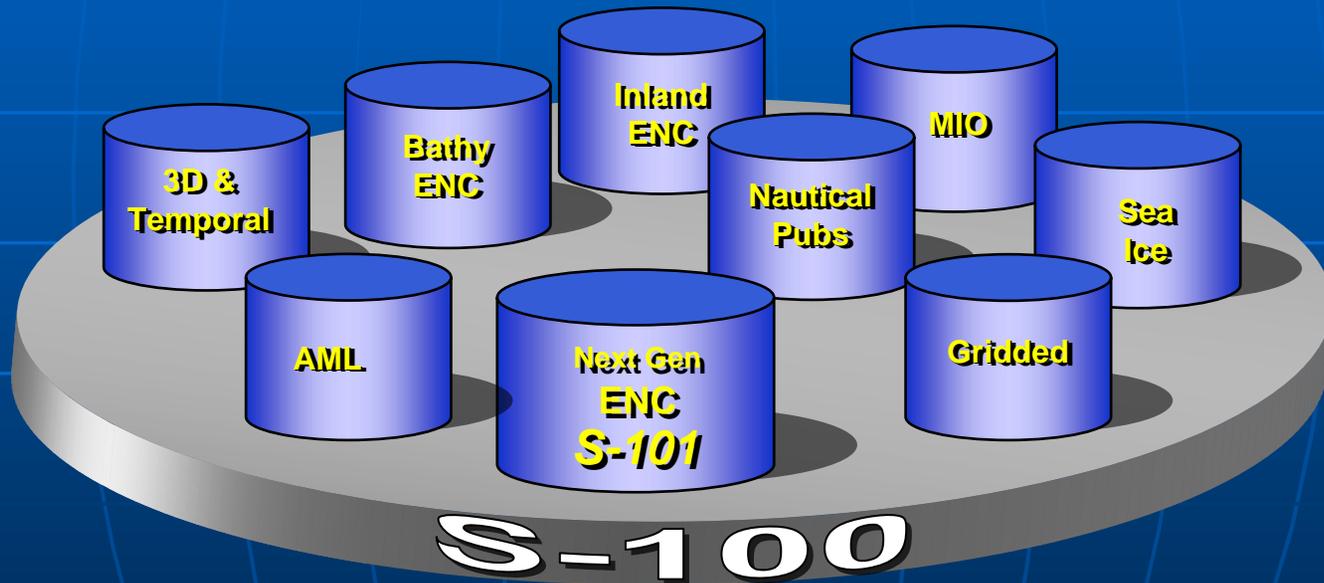
S-100 - Geospatial Standard for Hydrographic Data



- need to develop and maintain a contemporary standard
- wider user base
- compatible with ISO 19100 series of geographic information standards



S-100 - Geospatial Standard for Hydrographic Data





S-100 - Geospatial Standard for Hydrographic Data

- Data content separated from carrier
- S-100 aligned with ISO 19100 series of standards
- Standard never “frozen”
 - valid (latest version)
 - superseded (previous version/s)
 - retired (no longer recommended for use)
- ISO 19100 ... and S-100 data can be used together



S-100 - Geospatial Standard for Hydrographic Data



- S-100 "family" developed and maintained via an ISO-conforming, web-based IHO Registry

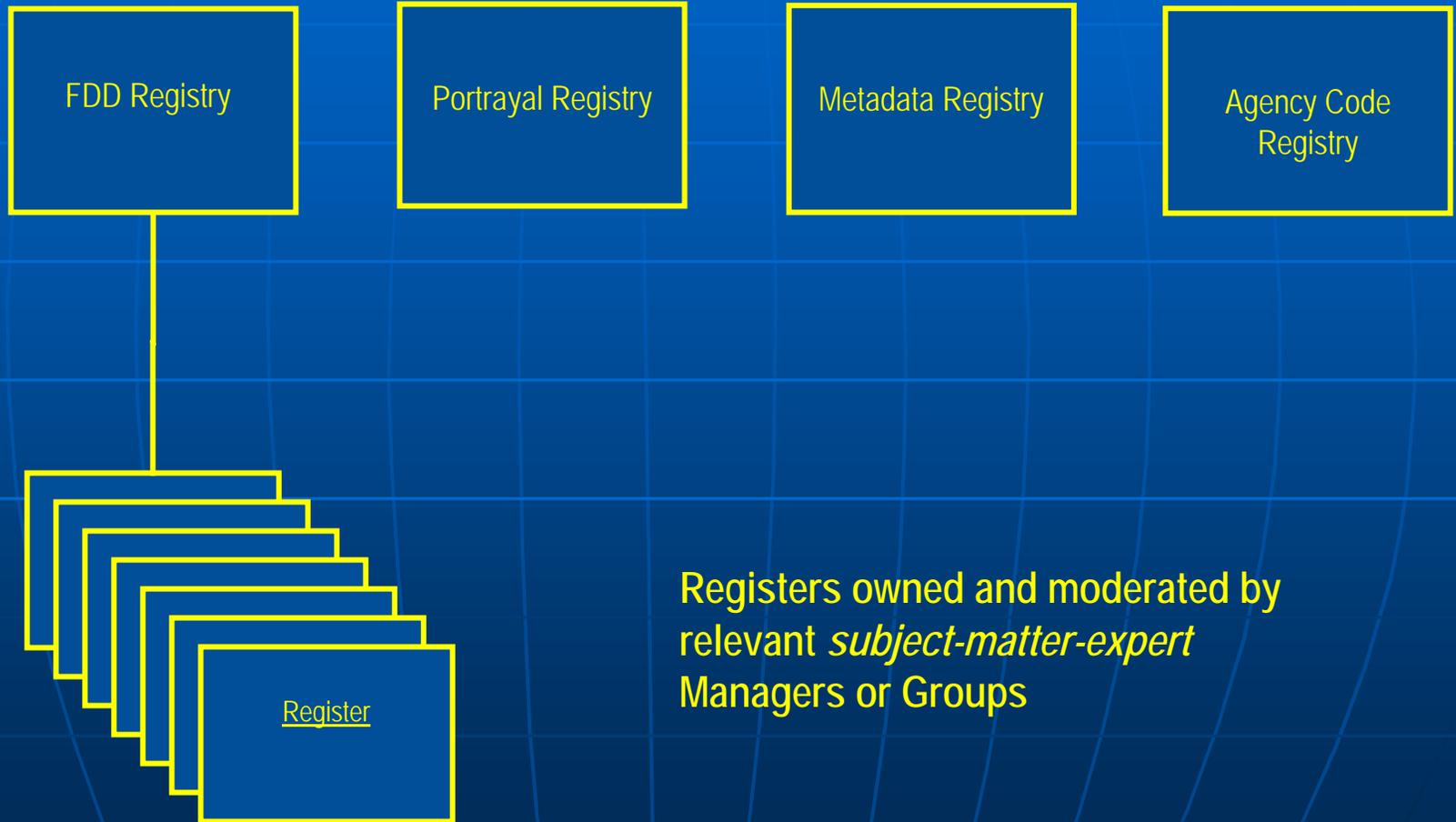


IHO Registry

- Web-based database
 - http://195.217.61.120/iho_registry/
- Ready to use NOW
- Draft S-100 released 2008; in force ~2010
- Open to IHO and non-IHO users/developers



IHO Registry



Registers owned and moderated by relevant *subject-matter-expert* Managers or Groups



Register Owners

■ IHO-owned Registers:

- Data required to support official hydrographic products and services
- Examples:
ENC, Nautical Publications, Survey Bathymetry



Register Owners

■ Non IHO-owned Registers:

Hydro-related Registers -

- data that complements marine navigation and supports the activities of national hydrographic authorities but are not required to meet the SOLAS obligations of national hydrographic authorities.

Examples:

InlandENC, Dynamic Ice Coverage, Marine weather/climate, Additional Military Layers,
Vessel traffic information



Register Owners

■ Other Registers:

- data with indirect relationships with the primary marine navigation roles of national hydrographic authorities
- Owned, managed and maintained by the appropriate non-IHO competent authorities under their own Registry arrangements; for example, in other ISO 19100 Registries

■ Examples:

Maritime Spatial Data Infrastructures (MSDI), Oil and Gas Industry applications, Coastal Zone/Littoral Management



IHO Registry Control Board

FDD Registry

Portrayal Registry

Metadata Registry

Agency Code Registry

IHO FDD Registers

(Tides/WL, Tidal Streams, ...)

Hydro-related FDD Registers

(IENC, MIO, RIO, Sea Ice, Weather, MEP, ...)

HO Metadata Register

Hydro-related Metadata Register

IHO Product Specifications Register

Links to Hydro-related Product Specifications Registers

IHO Portrayal Registers

(Tides/WL, Tidal Streams, ...)

Hydro-related Portrayal Registers

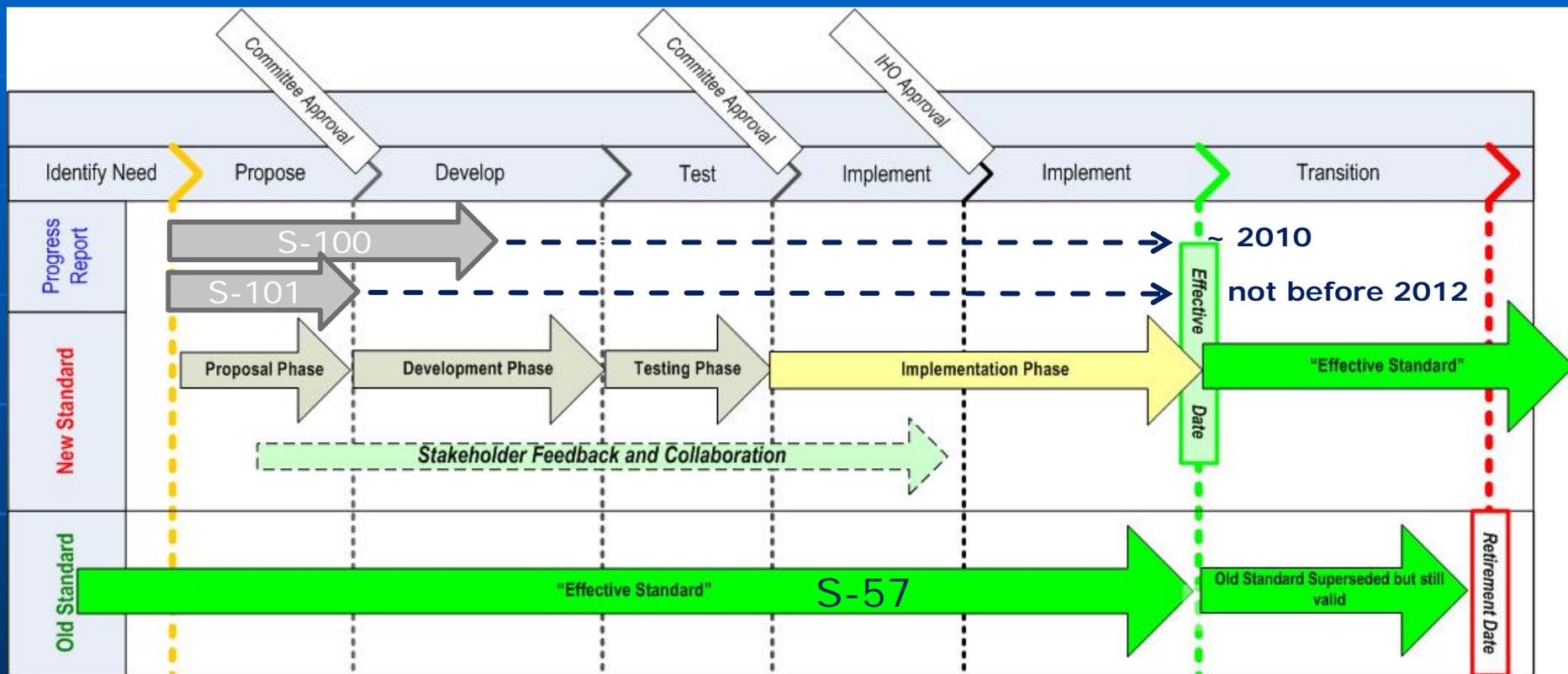
(IENC, MIO, RIO, Sea Ice, Weather, MEP ...)

HO Data Producer Code Register

Hydro-related Data Producer Code Register



Timetable



S-57 will live for a long time to come



More Information

<http://www.iho.int/COMMITTEES/CHRIS/TSMAD/tsmadintro.htm#S-100>



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