Hydrographic Services and Standards Committee

New
S-52 Presentation Library, Edition 4.0
&
S-52, Edition 6.1

HSSC-5 Shanghai

5-8 November 2013

Background

- Nov 2011 – HSSC-3 (Monaco)
  - UKHO paper HSSC3-05.3B “Proposed Revision of S-52 Presentation Library”
- Revision was to address known “ECDIS anomalies” and implementation irregularities, and to improve the overall clarity of the document
- HSSC directed DIPWG to develop new edition (3.5) S-52 Presentation Library

Schedule reported at HSSC-4

- Sep 2012 - DIPWG chair reported the intent to have a draft PresLib Edition 3.5:
  - Ready for discussion at next TSMAD-25 (Jan 2013) and
  - Reviewed at joint TSMAD-26/DIPWG-5 (Jun 2013) and
  - Endorsed at HSSC-5 (Nov 2013)
- Technically, this schedule has been met, but …
- … presentation will provide details affecting
  - the development schedule
  - scope of changes that new PresLib will implement

Expanded Scope of Revision

- Extensive revision of PresLib presented at TSMAD-25 (Jan 2013)
- Concern expressed that extent of changes exceeded the original intent to only correct inconsistencies and clarify ambiguities
- Concern that DIPWG resources, primarily OEMs, would be stretched to an appropriate level of support to develop the new PresLib, complete the S-100 model and other TSMAD activities

Finalization of PresLib4.0

- 2 iterations of review by correspondence prior to DIPWG-5 (June 2013) but more time was needed
- DIPWG established “PresLib 4.0 finalization Sub-WG” to:
  - Review and finalize the draft edition without making any further content changes
  - Report to DIPWG on the disposition of the comments received from the review of the original draft PresLib
  - Complete work in time for approval at HSSC-5

PresLib 4.0 Finalization Sub-WG Meetings

Duration	Date	Location	Participants
3 days	Jun 2013	Washington	12
5 days	Jul 2013	Hamburg	9
4 days	Aug 2013	Taunton	7

Broadening Extent of Changes

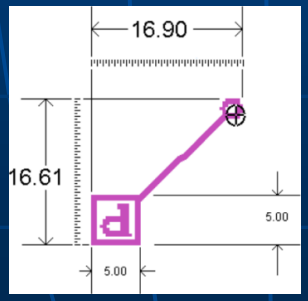
- Consensus grew within sub-working group to broaden scope of changes beyond DIPWG's direction to proceed, "without making any further content changes"
- Additional areas were identified where revision was desired
- Decision to make some optional functions mandatory

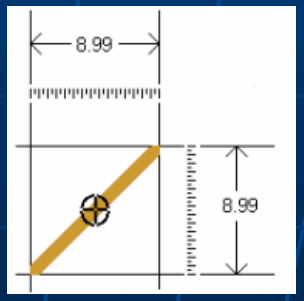
Nature of Changes to PresLib (1 of 4)

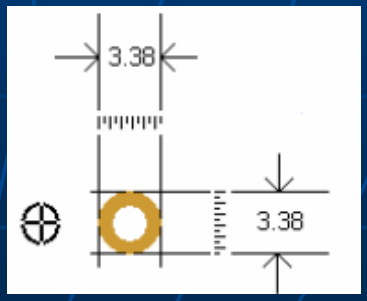
- Language was modernized and simplified
- Old diagrams and examples were updated
- Redundancies and repeated copies of several tables were eliminated
- Multiple options for performing the same task were limited
- Elements that have never been implemented, such as raster symbol definitions, were deleted

Nature of Changes to PresLib (2 of 4)

- Symbolization look-up and color tables were put into separate files
- Detailed examples were added to provide developers with clear guidance for implementing complex parts of ECDIS portrayal
- New symbols were added assist mariners in identifying date dependent features and automatic updates

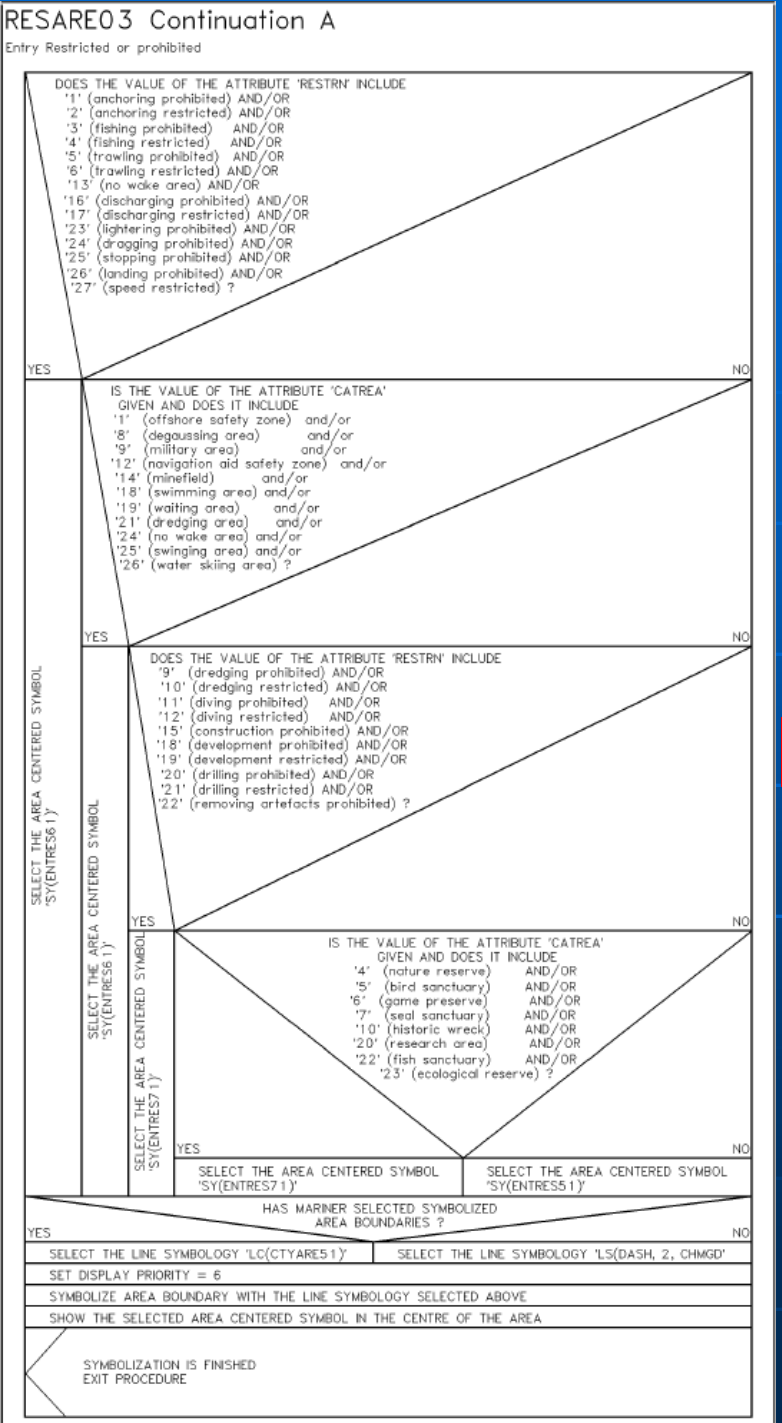






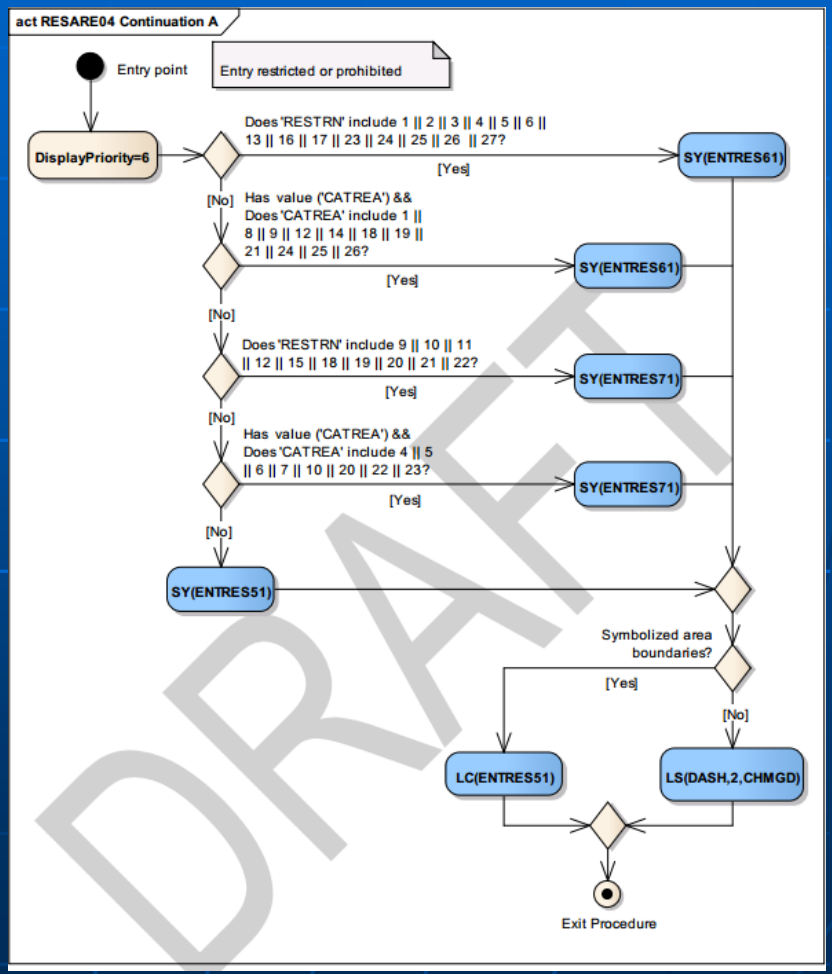
Nature of Changes to PresLib (3 of 4)

- Changes made to reflect the requirements in the revised IMO Performance Standard for ECDIS
  - Added new sections for detection and notification of navigational hazards, detection of areas for which special conditions exist and detection of the safety contour
  - Provide clear guidance on the S-57 objects and attributes that must initiate an alert and/or indication within ECDIS
    - Will reduce the number of extraneous alarms
  - Use of IMO defined viewing groups is now mandatory



Nature of Changes to PresLib (3 of 4)

- Replaced complex Nassi-Shneiderman diagrams used to describe the Conditional Symbology Procedures (CSPs) with Unified Modeling Language (UML)



Changes to the Main S-52 Specification

- A need to revise the colour calibration section of the main S-52 document was identified
- S-52 Annexes B and C contained errors and obsolete references to CRT technology
- Annex B has been deleted, Annex C has been corrected
- Changes will result in new Edition 6.1 of S-52

Dependencies

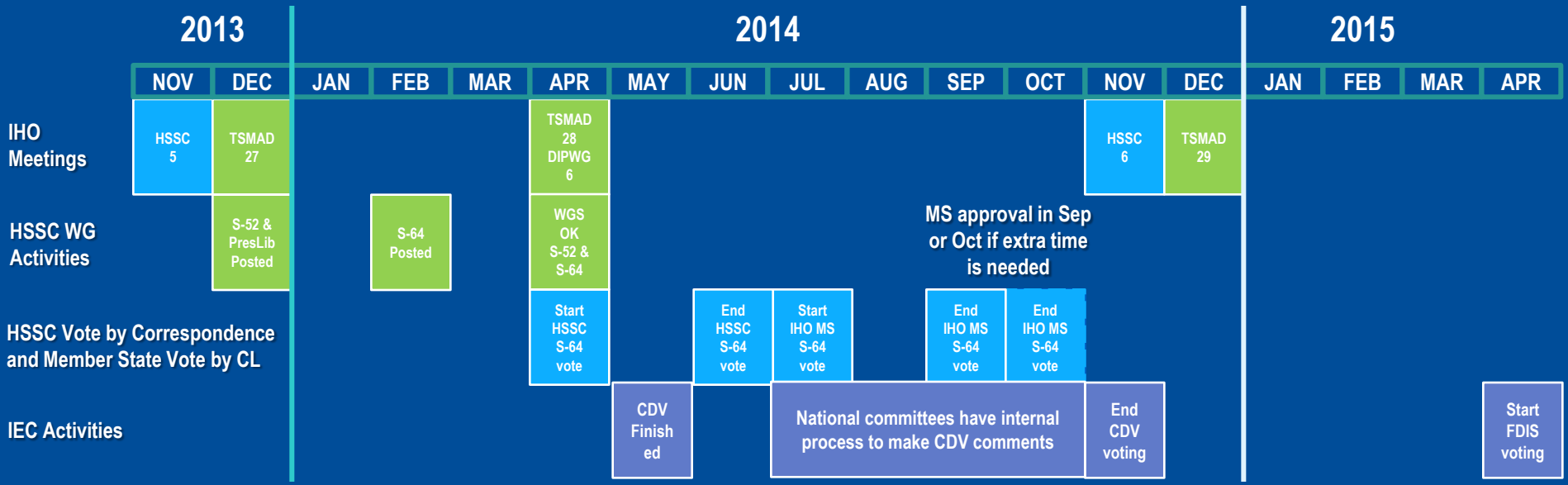
- IEC is working on a new edition of IEC 61174, “ECDIS Operational and performance requirements, methods of testing and required test results“
- Revised IEC 61174 refers ECDIS chart related tests to S-64
- New S-64 will test new requirements in PresLib 4.0
- Many changes in the new PresLib will be carried forward into portrayal aspects of S-100 and S-101

… back to the Schedule

- Schedule for Preslib presented to HSSC4 was not fully realized
- Final drafts of S-52 6.1 and PresLib 4.0 were completed in Sept 2013, some digital files in Oct
- Nearly half of the companies that regularly attend DIPWG meetings participated in crafting the new editions, but …
- … full DIPWG membership has not reviewed the final result drafted by the OEMs and other experts

Action requested of HSSC
(similar to TSMAD request for S-64)

- Approve an initial familiarization version by HSSC to be posted on IHO website
- Allow further review of S-52, Ed 6.1 and PresLib Ed. 4.0 by DIPWG (starting in late-Nov) and
- Acceptance by WG at DIPWG-6 (April 2014)
- Endorsement of final version by HSSC-6 by correspondence
- Approval by MS by CL for publication in 2015, in line with the publication of new IEC 61174


2013
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IHO Meetings
HSSC 5
TSMAD 27
TSMAD 28 DIPWG 6
HSSC 6
TSMAD 29
HSSC WG Activities
S-52 & PresLib Posted
S-64 Posted
WGS OK S-52 & S-64
MS approval in Sep or Oct if extra time is needed
HSSC Vote by Correspondence and Member State Vote by CL
Start HSSC S-64 vote
End HSSC S-64 vote
Start IHO MS S-64 vote
End IHO MS S-64 vote
End IHO MS S-64 vote
IEC Activities
CDV Finish ed
National committees have internal process to make CDV comments
End CDV voting
Start FDIS voting

Rationale / Justification

- Proposed HSSC action will:
  - Enable a thorough review by DIPWG
  - Enable TSMAD to proceed with development of new edition of S-64
  - Enable HSSC to endorse fully vetted new editions of PresLib and S-64 at HSSC-6
  - Enable IHO MSs to approve new editions of PresLib and S-64 in time for concurrent release of:
    - S-52 PresLib, S-64 and EIC 61174