Potential Impacts of S-100 etc… on IMO and IEC standards

TSM4 3.5

Introduction

* Recognize that S-100 is maturing
* Increased development of S-1xx Product Specifications
  * S-101
  * S-111
  * S-102
  * S-412 etc…

The ECDIS Recipe

Background

* Issue presented at TSMAD24 in 2014
* Resulting conclusions
  * Needed to examine the implications for implementing S-101 and other S-100 specifications
* No further work has occurred on this item

IMO MCS.232 (82)

* Outlines the MINIMUM requirements that are needed for ECDIS.
* ECDIS defines chart information:
  * The chart information to be used in ECDIS should be the latest edition, as corrected by official updates of that issued by or on the authority of a Government, government-authorized Hydrographic Office or other relevant government institution, and conform to IHO standards.
* To update to use S-101, theoretically only the footnotes need to be updated

IMO MCS.232 (82)

* What about the greater S-100 suite of products?
* Is their a change in the minimum requirements for ECDIS?
* Is just a general requirement for adding S-100?
* Because the S-1xx suite of products would keep growing, it is impractical to cite every specification.

IEC 61174 and S-64

* Everyone recognizes that S-100 requires changes to these standards.
* What are the changes needed
  * How do we go about to implement the changes

Conclusions

* We now change is needed
* How do we go about enacting the change
* What is the optimal timeline
* Where does the S-100 Interoperability Specification fit in.

Recommendation

* S-100WG is slowly progressing the test bed
* It is appropriate to re-visit this issue
* Does the S-100WG request that the IMO/IHO Harmonization Group on Data Modelling be stood up.
  * Is this right group?
  * The focus is for data modelling and not how the standards will be used in an ECDIS
  * Where does IALA, IEC, WMO fit in?

Actions Required

* The TSMAD and DIPWG are invited to:
  * a. note this this report
  * b. discuss other S-100 implications
  * c. agree to develop some preliminary papers (INF) for consideration at HSSC.

Complicated Portrayal Rules in S-100 (really S-101)

TSM4 4.1

A brief history (Portrayal Hokey Pokey)

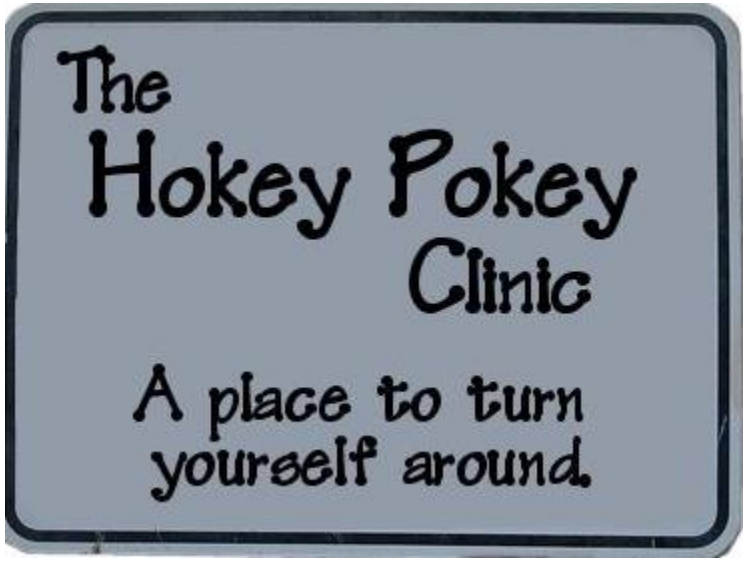
* 2008 – 2013 – fits and starts
* 2014 – Hamburg meeting
  * No minutes
  * Outcome – agreed to utilize XSLT 1.0 for CSPs for S-101
  * Supposedly the safety contour was out of scope
* 2015 – IHB contract to build the Portrayal Catalogue Builder according to what was agreed to in S-100!!!!!

A brief history

* 2015-2016 – Caris drafted some of the CSPs in the XSLT 1.0 (per what is prescribed by S-100) for testing purposes
* 2016 – Testbed participants questioned the feasibility of XSLT for the more complicated CSPs
  * No Volunteers for the additional work
* 2016 – Survey Sent out to determine which CSPs were in Scope and to establish a priority

CSPs in XSLT

* 2016 – NOAA found a bit a funding for IICT to officially draft the CSPs in XSLT 1.0 for review by this Focus Group
  * Needed to determine if it was feasible and put forward an effort
* 2016 – in parallel SPAWAR began to investigate alternative options (in case the XSLT 1.0 did not accomplish the task)


The
Hokey Pokey
Clinic
A place to turn
yourself around.

Conclusions

* The work from both IICT and SPAWAR will be presented
* There needs to be strong justification to pivot away from what was determined to be included in S-100
  * Impacts to the PCB
  * Additional Delays
* Lua may be a good option for other items such as alerts and indications and S-100 is extensible

Portrayal Register Interfaces

TSM 4.2

Background

* In 2015 we updated the Portrayal Register model to align with S-100 and created a new table structure
* ROK has offered to build the portrayal register interfaces
  * Large scope of work
  * Need to establish priorities
  * Modular approach

Draft Priorities

Portrayal Register Item	Priority	Comment
colorToken	Medium	We already have the ones that are used in S-52. Would there be any reason to add others for non-navigation applications
colorProfile	High	
Symbol	High	
lineStyle	High	
areaFill	High	
Pixmap	Low	
Font	Low	
viewingGroup	Medium	Can be visible using lookup tables for the time being.
viewingGroupLayer	Medium	Can be visible using lookup tables for the time being.
displayMode	Medium	Can be visible using lookup tables for the time being.
displayPlane	Medium	Can be visible using lookup tables for the time being.
contextParameter	Low	
symbolSchema	Low	
lineStyleSchema	Low	
areaFillSchema	Low	
pixmapSchema	Low	
colorProfileSchema	Low	
cascadingStyleSheet	Low	

NOTE: It should be noted that the portrayal register does not have a mechanism to store the XSLT rules needed for the CSPs for S-101. The author is unsure of where these are stored other than as part of the portrayal catalogue.

Recommendations

* Determine which items needs full mechanism for clarification, supersession, and additions
* Prioritize the items that are needed now versus what can be delivered at a later stage.