



Hydrographic Services and Standards Committee

DPSWG Chair Report

HSSC-6

November 2014

Presented by Edward Hosken on behalf of Jonathan Pritchard

Report Content

- ✦ Summary of main purposes of DPSWG
- ✦ Status of Data Protection Scheme
- ✦ Progress this year
- ✦ Liaison with other groups
- ✦ Evolution of the S-63 standard



Main Purposes of DPSWG

- ✦ Support to member states and the ENC/ECDIS community.
- ✦ Protection and authentication of member state data in the distribution chain and on ECDIS.
- ✦ Assurance to end users that ENC data derives from an official source.
- ✦ Development of standards to underpin future protection and distribution of ENC and other S-100 based data



Data Protection Scheme

- ✦ Current membership stands at 256, increase of 19 from last year
- ✦ Even split of Navigation systems manufacturers and other stakeholders (eg. VTS)
- ✦ Migration to S-63 ed 1.1 largely complete by data servers
- ✦ Emphasis within DPSWG is now on:
 - Production of new version of S-63 for S-100
 - Support to existing users and stakeholders
 - Liaison between TSMAD and DPSWG



Migration to S-63 edition 1.1

- ✦ Migration and default supply of 1.1 data complete
- ✦ Problems with larger fleets
 - Bought into ECDIS earlier
 - Likely to have larger installed base
 - Less able to upgrade all systems quickly
- ✦ Mandated carriage of ECDIS extends to 2018
 - Some users won't migrate until then



Activities this year

- ✦ DPSWG10 held in Monaco 3rd-5th May 2014
- ✦ Considered the following areas:
 - Current scheme operations including S-63 ed 1.1
 - Input to other working group developments
 - Input to other standard revision, namely S-64
- ✦ Preparation of papers for input to other WGs
- ✦ Preparation of new edition of standard



Achievements

- ✦ Main goal is to define a version of S-63 for use with S-10x product specifications
- ✦ Future structure and contents of standard now defined
- ✦ Also defined
 - Formats – file formats and encodings
 - Algorithms – largely the same as S-63 edition 1.0
- ✦ Submitted to TSMAD for consideration within next version of S-101



Other activities

- ✦ Complete review and retesting of S-64 encrypted test datasets
- ✦ Production of new iteration of test datasets for S-64
- ✦ Updating of documentation for the encrypted test data set
- ✦ Integration of previously external instruction manual to main S-64 TIM



New edition of Standard

- ✦ Current edition of S-63 is 1.1
- ✦ New edition required to support IEC61174 to provide normative reference for ECDIS status report.
- ✦ Report is new mandated functionality required by all ECDIS to report revision of data installed.
- ✦ New draft of S-63 (1.2) produced and reviewed within group
- ✦ No impact on data servers, implementation is all at client (i.e ECDIS). Doesn't change data content, structure or format.
- ✦ Release of new edition will be as soon as possible. DPSWG to work with IHB on release of new edition.



Scope of S-63?

- ✦ HSSC6-05.2B Extending S-63 Digital Signatures beyond ENC (US)
- ✦ S-63 initially intended as data protection scheme for ENCs
- ✦ US have requested consideration to allow for the use of digital signatures for other navigational products, to create a harmonized security mechanism for the entire maritime community.
- ✦ Clarification of DPSWG TOR would be required.



Problems

- ✦ Usual issues with resource – member states within the group have been very supportive this year.
- ✦ Big Bang approach of multiple standards being released together does not help. Overall structure of ECDIS-related standards difficult to manage.
- ✦ Support for S-64 reviewing and update has pushed back the new edition of S-63 and drafting of new edition.
- ✦ Still support required for existing scheme members, this is likely to remain.



Future Plans

- ✦ Get point release (1.2) released.
- ✦ Draft new version of standard (2.0).
 - Drafting group likely to be held in early 2015 for new edition. Should provide documentation for main meeting mid 2015.
- ✦ Well developed draft of 2.0 for review at HSSC7
- ✦ Test Beds – need to be considered with TSMAD and manufacturer community.



Work Plan

- A Maintain and extend Publication S-63
- B Provide S-63 technical and operational support to Data Servers and OEMs
- C Develop a more detailed work plan for future standards relating to Data Protection and Security of ENC data.
- D Engage stakeholders in drafting of new edition of S-63 to support S-101 development
- E Support transition to latest edition of S-63 (1.1)



Restructure?

- ✦ Needs to be carefully considered.
- ✦ DPSWGs needs are for specialised members of the distribution community
- ✦ Access to skilled technical experts still necessary
- ✦ Risk of dilution with other responsibilities of key members.
- ✦ Clear proposals need to be evaluated by the group.



HSSC6 is requested:

- to note the report
- endorse the continued activity of the WG
- approve the Work Plan at Annex B
- advise on potential extension of S-63 beyond ENCs

