

**18<sup>th</sup> CHRIS MEETING**  
**Cairns, Australia, 25-29 September 2006**

**Report of the Data Protection Scheme Working Group (DPSWG)**

<b>Submitted by:</b>	Robert SANDVIK, Primar Stavanger, Norwegian Hydrographic Service
<b>Related documents:</b>	
<b>Related Projects:</b>	Not applicable

<b>Chair:</b>	Robert SANDVIK, Primar Stavanger, Norwegian Hydrographic Service
<b>Vice-Chair:</b>	Chris SMITH, United Kingdom Hydrographic Office
<b>Secretary:</b>	Michel HUET/Anthony PHARAOH, IHB
<b>Member States:</b>	Norwegian Hydrographic Service, UK Hydrographic Office, Canadian Hydrographic Service, Bundesamt für Seeschifffahrt und Hydrographie, Service hydrographique et Océanographique de la Marine (SHOM)
<b>Expert Contributor Organisations:</b>	Electronic Chart Centre AS, SevenCs, SAM Electronics, Transas, Kelvin Hughes, Japan Radio Company Ltd, IIC Technologies Private Ltd, Chartworld

**Meetings Held During Reporting Period**

31 Aug-01 Sept 2006, IHB, Monaco

**Date and Venue for Next Meeting**

28-30 May 2007, IHB, Monaco

**Work Program**

The work in DPSWG has since the publication of the IHO S-63 in October 2003 been focused mainly on:

- Provide technical support to all organisations implementing the S-63 standard
- Provide support to Data Servers operating protected ENC services
- Monitor progress among the S-63 stakeholders and their compliance with the S-63 standard

The DPSWG produced the “Implementation of IHO S-63 Data Protection Scheme – Guidance notes for OEMs and Data Servers” in 2004 to address some of the initial issues raised by industry during their implementation of the S-63 standard after the standard was published.

A growing number of organisations have registered with the IHB as being compliant with the protection scheme. Status in mid-September is that 13 Data Servers and 76 OEMs are

compliant. DPSWG believes that not all registered Data Servers and OEMs have completed all their developments.

IC-ENC and Primar Stavanger distributed a questionnaire to OEMs and Data Servers during summer 2006 to obtain a better understanding of the status in developing fully compliant OEM systems and the status in delivering protected ENC services. The responses to the questionnaires revealed that:

- Differences among OEMs in how much of the S-63 standard and guidelines they have implemented
- Majority of OEMs do not support the described data authentication properly (this includes lack of support for a multi supplier environment); this largely invalidates this element of the scheme at present.
- Majority of OEMs can not support permit key management in a multi supplier environment
- Data Servers are ready to deliver fully compliant and protected ENC services when a substantial number of their end-users have compliant ECDIS/ECS systems
- Scheme administrator responsibilities have been transferred to IHB, but awaiting full scheme operation due to incomplete data authentication in OEM systems

The Data Servers have established interim solutions and cooperation which ensures delivery of protected ENC services.

The new drafted IMO ECDIS Performance Standards includes a reference to the IHO S-63 standard as a reference to deliver protected ENC services. It implies that the IEC61174 test standard for ECDIS must be appropriately amended to include specific tests to check for compliance with the S-63 data protection scheme.

DPSWG will use the opportunity provided with formal S-63 compliance tests in IEC61174 to ensure that all future type approved systems will have a fully compliant S-63 implementation. It will ensure that compliant OEM systems will be made available in the market which will support data protection in a multi-supplier environment.

Another feedback from industry was to provide a more explicit description on the use of the protection elements defined in S-63, and to integrate the separate guidance notes into the standard.

DPSWG has developed a plan to produce a new edition of the S-63 standard which properly addresses the above issues and which also meets the timetable for amending IEC61174. The new edition will mainly be a reorganisation of the current standard into sections applicable for the Scheme Administrator, OEMs and Data Servers. It will also include a rewording of the text to a more specific wording accompanied with process diagrams. The next edition will also omit optional and redundant protection elements.

- The next edition will provide a more explicit description of the data protection elements and their use. Changes to the standard will be kept to a minimum consistent with ensuring that the new version is robust and a sound basis for user-friendly services in a multi-supplier environment.
- The new edition will be available in time for IEC TC80 and their work to amend IEC61174 with S-63 compliance tests.

In addition to developing a new edition of S-63, the DPSWG will also prepare an amended and comprehensive S-63 test data set which better enables test of protected ENC services in a multi supplier environment.

The work plan is attached to the report and the main milestones are:

- First draft of new S-63 edition available 01 February 2007
- Circulation of first draft to stakeholders for review February-March.
- Editorial work planned for spring/summer 2007 with completion of the new edition 15. September 2007. (Amendment of IEC61174 is expected to start in September 2007).
- Preparation of comprehensive S-63 test data set to be produced during 2007 and available with the next edition of the standard 15. September 2007.

### **Justification and Impacts**

The attached work plan to produce a new edition of S-63 will ensure fully compliant OEM systems will be available in the market and Data Servers can start delivering fully compliant protected ENC services.

There will be some impact on OEMs and potentially Data Servers as a result of the changes proposed at the last meeting. DPSWG is of the opinion that these are necessary to obtain a robust and reliable system for the future; the changes to software and or procedures should be small and it is judged that the time scale for implementation is sufficiently long for any changes to be absorbed without problem by stakeholders.

### **Actions Required of CHRIS**

The CHRIS is invited to:

1. Approve the attached work programme to prepare IHO S-63 edition 1.1 as a mean to ensure compliant implementation and operation among all S-63 stakeholders.
2. CHRIS to inform the IHB about the preparation of a new S-63 edition 1.1 and tentative completion date to ensure IHB can initiate its procedures to ensure official approval of the new edition among the IHO member states

## IHO Data Protection Scheme Working Group (DPSWG) Proposed Work Plan 2006-07

### 1. Work Plan 2006-07

#### 1.1 DPSWG Tasks

- A Prepare S-63 edition 1.1 to provide a more precise description for a compliant implementation of the data protection scheme. New edition is scheduled for release September 2007 which will meet the time schedule planned for the IEC working group responsible for amending the IEC61174 to reflect the new proposed IMO ECDIS Performance Standard.
- B Provide technical and operational support to Data Servers and OEMs developing or operating systems or services compliant with S-63.

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard
A.1	Prepare S-63 edition 1.1	H	Ist Draft by 1 Feb Circulation to / feedback from stakeholders - Feb-Mar 07	01.09.06	15.09.07	P	Richard Coombes / Jonathan Pritchard, UKHO	S-63 edition 1.0
A.2	Prepare a comprehensive test data set for edition 1.1 .including full support for a multi supplier environment.	H		01.09.06	15.09.07	P	Robert Sandvik, Primar Stavanger	S-63 edition 1.0
A.3	Provision of S-63 edition 1.1 to to CHRIS for adoption with IHB for publication.	H		15.09.07	15.09.07	P	Robert Sandvik, Primar Stavanger	S-63 edition 1.0
B.1	Provide S-63 technical and operational support to Data Servers and OEMs	H		01.08.03		O	Robert Sandvik, Primar Stavanger And other DPSWG members???	S-63 edition 1.0/1.1

Date	Location	Activity
May 2007	IHB, Monaco	Meeting scheduled to review a draft edition of S-63 and agree activities to prepare the final edition of S-63 edition 1.1 to be submitted to CHRIS for approval with IHB for publication. Use feedback from OEM and Data Server representatives to assess the new structure and clarity in descriptions to ensure development of fully compliant systems.

\* H = High, M = Medium, L = Low

\*\* P = Planned, O = Ongoing, C = Completed

## IHO Data Protection Scheme Working Group (DPSWG)

### *Membership and Contacts (01.09.06)*

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