

19th CHRIS MEETING
Rotterdam, Netherlands, 5-9 November 2007

Report of the Data Protection Scheme Working Group (DPSWG)

Submitted by:	Robert SANDVIK, Primar Stavanger, Norwegian Hydrographic Service
Related documents:	CHRIS19-06.3B - Draft IHO S-63 edition 1.1
Related Projects:	Not applicable

Chair:	Robert SANDVIK, Primar Stavanger, Norwegian Hydrographic Service
Vice-Chair:	Jonathan PRITCHARD, United Kingdom Hydrographic Office
Secretary:	Michel HUET, IHB
Member States:	Norway, UK, Canada, Germany, France, Japan, Australia
Expert Contributor Organisations:	Electronic Chart Centre AS, SevenCs, ChartWorld, SAM Electronics, Transas, Kelvin Hughes, Japan Radio Company Ltd, IIC Technologies Private Ltd

Meetings Held During Reporting Period

28-30 May 2007, IHB, Monaco

Date and Venue for Next Meeting

Work Program

At CHRIS18 the DPSWG presented a work programme to prepare an amended version of the S-63 Data Protection Scheme publication based on operational experience and feedback from surveys. The main motivation for introducing changes was to:

- Change structure and grouping of protection elements to ease reading for various types of users (use different parts of the standard)
- Introduce text from published guidance notes into the standard
- Introduce some minor changes to ease operability and remove some problems identified with implementation issues

The work within DPSWG has during this reporting period been spent preparing the new edition of S-63 together with input and reviews with the industry. A draft edition of IHO S-63 is made available as document CHRIS19-06.3B and submitted to CHRIS-9 for approval.

Work with the test data has been delayed and is expected to be completed by the end of 2007. The delays are caused by unavailability of resources during this period and the challenges associated with producing the test data and its associated documentation. The test data is to be

used by data servers and OEMs to verify their implementation and operations, and must include examples of both correct and erroneous situations. Most production systems are designed to produce error free data. The standard, however, has now been completed and the complete test dataset will be included as a separate annex. As it is defined in rigid terms by the standard it is considered imperative the standard is published as soon as possible to give early sight to both IHO MS and manufacturers.

With a new amended version of the S-63 standard there is also a challenge with how it will be introduced into the market and set in operation since there are already many systems in use which will require updating. The new edition of the standard has been prepared with backwards compatibility in mind and was designed primarily to consolidate the multiple workarounds and guidelines which previously supported the standard. ECDIS manufacturers have spent a considerable amount of time and effort in fine-tuning their implementations of S-63 to meet customer needs and research by DPSWG members indicates that the majority of legacy ECDIS will be able to import and manage data formatted according to S-63 edition 1.1. Preparation of a comprehensive test dataset is in operation and once complete a programme of testing with manufacturers will take place.

For the first time this version of S-63 will be referenced by the upcoming new edition of the ECDIS performance standard, iec61174. This will ensure that, for the future, crucial ENC import and management functions within ECDIS are performed consistently across all manufacturers and included in type approval testing. Whilst there will undoubtedly be legacy systems which require extra manual work to fully manage S-63 ed 1.1 data, the ECDIS' data integrity is protected by the existing high standards of operation and it is left to individual data servers to manage and support their services as appropriate with guidance from the DPSWG and IHO. The DPSWG will assist both data servers and OEMs with support for their implementation of S-63 edition 1.1 and offer advice and guidance if some legacy systems remain incompatible with the new edition.

The upcoming work programme for DPSWG will be to:

- Work with IHB to finalize the new edition test data and make it available for publication on the IHO web site.
- Provide support to users of the S-63 protection scheme. Currently only a handful requests a year are forwarded to the S-63 discussion group requesting support on technical or operational issues.

IHO S-63 Implementation Status

Currently 94 OEMs are registered as being capable of reading protected ENC data or is in the process of developing support for the protection scheme.

Currently 14 data servers (organisations with functionality to protect ENCs) are registered as users of the scheme or are in the process of developing support for the protection scheme.

Justification and Impacts

The process will ensure fully compliant systems will be available in the market and data servers can start delivering fully compliant protected ENC services.

Impacts are minimal since the OEMs and data servers have established interim operational solutions for delivering protected ENC services to resolve issues identified with data authentication.

Actions Required of CHRIS

The CHRIS is invited to:

1. Approve the completed draft of S-63 edition 1.1 and initiate its procedures to ensure official approval of the new edition among the IHO member states.
2. Approve the attached work programme to finalise and publish the completed IHO S-63 edition 1.1 test dataset as a means to ensure compliant implementation and operation among all S-63 stakeholders.

IHO Data Protection Scheme Working Group (DPSWG)

Proposed Work Plan 2007-08

1 1. Work Plan 2007-08

1.1

1.1 DPSWG Tasks

- A Prepare the S-63 edition 1.1 test dataset as defined by the completed standard to provide a precise testing environment against the completed standard and to ensure a compliant implementation of the data protection scheme.
- 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	Draft complete	01.09.06	01.11.07	C	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	15.12.07	P	Robert Sandvik, Primar	S-63 edition 1.0
A.3	Provision of S-63 edition 1.1 to IHB for publication.	H		15.12.07	01.01.08	P	Robert Sandvik, Primar	S-63 edition 1.0
B.1	Provide S-63 technical and operational support to Data Servers and OEMs	H		01.08.03		O	DPSWG members	S-63 edition 1.0/1.1

Date **Location** **Activity**

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

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

**IHO Data Protection Scheme Working Group (DPSWG)
MEMBERSHIP AND CONTACTS**

<i>Name</i>	<i>Company</i>	<i>Phone</i>	<i>Fax</i>	<i>E-mail</i>
Robert Sandvik	Norwegian Hydrographic Service	+47 51 93 95 03	+47 51 93 95 01	robert.sandvik@primar.org
Jonathan Pritchard	UK Hydrographic Office	+44 1823 337 900	+44 1823 284 077	jonathan.pritchard@ukho.gov.uk
Richard Coombes	UK Hydrographic Office	+44 1823 337 900 x3350		Richard.Coombes@ukho.gov.uk
Tony Pharaoh	International Hydrographic Bureau	+377 93 10 81 08	+377 93 10 81 40	apharaoh@ihb.mc
Michel Huet	International Hydrographic Bureau	+377 93 10 81 04	+377 93 10 81 40	mhuet@ihb.mc
Greg Levonian	Canadian Hydrographic Service	+1 (613) 996-2018	+1(613) 996-9053	levoniang@dfo-mpo.gc.ca
Mathias Jonas	Bundesamt für Seeschifffahrt und Hydrographie	+49 40 3190 7330	+49 40 3190 5000	mathias.jonas@bsh.de
Bruno Tréguier	EPSHOM	+33 2 98 22 17 49	+33 2 98 22 03 66	bruno.treguier@shom.fr
Nick Ligacs	Australian Hydrographic Service			nick.ligacs@defence.gov.au
Toru Kajimura	Japan Hydrographic & Oceanographic Department			tooru-kajimura@kaiho.mlit.go.jp
Raj Alla	IIC Technologies Private Ltd	+91-40-335 4806	+91-40-335 6349	rajalla@iictechnologies.com
Takeshi Tokoi	Japan Radio Company Limited	+81-422-45-9881	+81-422-45-9922	tokoi.takeshi@jrc.co.jp
Martin Taylor	Kelvin Hughes	+44 208 500 1020	+44 208 559 8524	martin.s.taylor@kelvinhughes.co.uk
Andy Fromings	Kelvin Hughes	+44 208 500 1020	+44 208 559 8524	Andy.Fromings@kelvinhughes.co.uk
Gert Büttgenbach	SevenCs	+49 40 851 72 40	+49 40 851 54 40	bue@sevencs.com
Juergen A. Kuternoga	ChartWorld			ku@chartworld.com
Peter Scott	ECC AS	+47 51 93 95 07	+47 51 93 95 01	peter.scott@ecc.as
Bernhard Noeggerath	SAM Electronics			bernhard.noeggerath@sam-electronics.de
Wolfgang Pieper	SAM Electronics	+49 421 1784 1197		Wolfgang.Pieper@sam-electronics.de
Konstantin Ivanov	Transas			Konstantin.Ivanov@transas.com