**16<sup>th</sup> CHRIS MEETING**
**Ottawa, Ontario, Canada, 28-31 May 2004**

**REPORT OF THE DATA PROTECTION SCHEME WORKING GROUP (DPSWG)**

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| *Submitted by:* | Robert Sandvik, Primar-Stavanger |
| *Executive summary:* | Report on the work undertaken and progress made by the Data Protection Scheme Working Group, since CHRIS15, and future plans. |
| *Actions to be taken:* | CHRIS to note the report, and endorse the future plans. |
| *Related documents:* | CHRIS letter No. 2/2004 (call for reports) |
| *Related Projects:* | Not applicable |

*Introduction*

The DPSWG is responsible for maintaining a data protection standard (S-63) to be used by organisations wishing to secure their ENC products. The S-63 standard defines the security constructs used to protect and digitally sign the ENC data together with procedures for decrypting and accessing the ENC information.

The IHB is the Scheme Administrator for the S-63 security scheme. It issues security credentials to all organisations participating in the security scheme. IHB has published the S-63 standard on their web pages together with the official test data and software kernel to ease the understanding and use of the security scheme.

Current status on the support of IHO S-63:
- Three Data Servers (Primar Stavanger, UKHO VAR and 7Cs) have received a certificate from IHB for use with their secure ENC services
- 41 OEMs have received their security credentials for use with the S-63 scheme.

Chairman of DPSWG is also aware of companies who are in the progress of developing integrated ENC services containing official ENC data made available by multiple suppliers compliant with S-63.

*Achievements*

The DPSWG has made the following achievements since the last CHRIS meeting:
- The S-63 Data Protection Scheme has been published on the IHO website. It includes the standards documentation, testdata and software kernel with source code.
- Two discussion forums are in operation on the Open ECDIS Forum related to S-63:
   - DPSWG: For communication and information exchange between members of the working group.
   - S-63: An open forum for everyone wishing to raise technical questions, or request specific support related to the understanding or implementation of S-63.

- Transfer of the S-63 Scheme Administrator role from Primar Stavanger and Electronic Chart Centre (ECC) to IHB and agreed technical support from ECC.
- Published *Guidance Notes for Data Servers and OEMs for the Implementation of S-63* containing more detailed information on the implementation and operational procedures.
- DPSWG meeting in November 2003 at IHB focusing primarily on support related questions, feedback on the standard, and preparation of support information to the industry.

### *Planned work items*

The DPSWG has been aware of that some OEMs have not correctly or properly implemented the management of digital certificates in a multi supplier environment. After the publication of the S-63 standard, the <u>current focus</u> within DPSWG is to ensure a fully operational protection scheme with a proper implementation of all security aspects among the OEMs. The published testdata and testdescription enable the manufacturers to self assess all aspects of their implementation.

The published guidance notes also include detailed advise on a proper S-63 implementation together with a questionnaire for OEMs to provide feedback to DPSWG on the status of their implementation and full compliance with the standard. The OEMs have until early June to complete the questionnaire.

The next DPSWG meeting is scheduled 22-23 June 2004 at IHB. The outcome will basically define the high priority work items and the time schedule for the working group after the current standard and guidance notes have been published.
- The meeting will review the questionnaire feedback from the OEMs and try to identify any areas where more specific support are required and agree how the support can be made available; e.g. further guidance notes, S-63 discussion forum, workshops etc.
- Review general feedback on the S-63 standard and identify a proper handling on all issues
- Monitor the general operation and obtain experience from the participants of the S-63 protection scheme
- Review the list of suggested extensions to the S-63

### *Special considerations required by CHRIS*

The current Terms of Reference for DPSWG enable the preparation of a S-63 v.2 (ref. ToR 3 a) (ii)) based on operational experience, international developments in security services and specific extensions raised by industry. DPSWG is currently maintaining a list of suggested extensions and will start working with specific suggestions when a stable and fully operational S-63 service is achieved. Current focus in the mean time is supporting the OEMs during the transition period.

An immediate publication of a new S-63 v.2 will create confusion in the market and can possibly lead to some organisations delaying their support for S-63 until v.2 is published.

When amendments to the S-63 standard are published it will require software changes. It will probably require ECDIS manufacturers to update their type approval certificates, update ECDIS/ECS software installations on vessels, service providers to deliver a transitional service during the migration from the current version of S-63 to the next version.

DPSWG is requesting confirmation from CHRIS that the objective must be to work for a stable transition and operation of the current S-63 protection scheme. DPSWG shall then

collect operational experience from users of the protection scheme and use that to discuss and agree with the industry a proper implementation and time schedule for the publication of S-63 v.2. The publication of a new version can also be tied to the publication of other relevant standards documents from e.g. IHO or IEC.

*Liaison with other organisations and standardisation bodies*
DPSWG will investigate if there is a need to harmonise with the IHO TSMAD in their final stages of the publication of S-57e4 if they make references to S-63.

Since there are several industry representatives in DPSWG, they will also be participating in the work of IEC/TC80/WG7 when they start their revision of IEC 61174 and provide detailed feedback on S-63 data protection issues.

The industry recently had a meeting independently of DPSWG to discuss possible extensions to the current S-63 standard. It appears that their focus is related to the service delivery aspects. Some of the DPSWG members attended the meeting and possible liaison activities will be discussed at the next DPSWG meeting. The IHB is an observer of the work among the industry.