

Interim Guidance on Systems for Management of SCF in a Digital Format

8 March 2016

Introduction

Model Information Technology (IT) specifications of minimum level for SCF Archive Centers and associated IT companies are described in this Interim Guidance on Systems for Management of SCF in a Digital Format (SCF GS) so that SCF archive service systems can be developed in a consistent manner and system & procedural compatibility can be provided in a practical way.

The functional requirements and model procedures for SCF archive service systems are shown in Annex to the Interim Supplementary Guidance (SCF SG) of the SCF Interim Industry Standard (SCF IS).

Notwithstanding the guidance in this document, IT specifications, SCF Archive Centers and associated IT companies should give due consideration to standard hardware/software systems in the market, including operating systems, and take appropriate measures for IT and cyber security.

1. Specifications

1.1 Registration for electronic access by qualified accessing persons such as the Shipowner, Seafarer and Shipowner Agent

- Procedures and a system should be provided for each type of authentication method so that names and user IDs of qualified accessing persons to the SCF Onboard and their organizations are available on the registration list stored on the terminal under the purview of the Shipowner or their Representative(s), Shipowner Agent Representative(s) or Seafarer Representative(s).
- When a person is no longer qualified for access because of retirement or crew changeover etc., procedures and a system should be provided so that they can be taken off the registration list.

1.2 Authentication

Various authentication options as referred to in 1.2.1, 1.2.2, 1.2.3 or 1.2.4 should be adoptable to the system provided by the Archive Center(s) to meet preferences of users (Shipowners, etc.). An override function to skip each authentication process (plug-in) should be arranged for emergency access to the SCF Onboard.

1.2.1 Password

- Procedures should be provided for an authentication process by Password (plug-in) so that each qualified accessing person registers their Password with the terminal upon the first use of browser software for the SCF Onboard.
- Password should normally consist of eight alphanumeric characters with case-sensitivity as standard.
- Password expiration date is set for renewal and the standard period of validity for a Password is usually two months (maximum three months).
- Minimum recent Password history count of three should be applied to avoid the repeated use of recent Passwords.
- Function of Password Lock should be implemented for successive error count of five standard. Procedures should be provided so that Password Lock can be released by Shipowner Representative(s), Shipowner Agent Representative(s) or Seafarer Representative(s).
- Authentication by Password on each use of the browser software for the SCF Onboard should not be terminated throughout the Ship's Operational lifetime.

1.2.2 IC-ID Card

- For various users' option, authentication process by IC-ID card (plug-in) should be provided. Preset standard period of validity and IMO number(s) of the Ship(s) accessible by the IC-ID card should be embedded in the IC-ID card by the Archive Center.
- Standard period of validity should align with the Periodical Renewal of the Electronic Media Onboard, i.e., around one year and seven or eight months until elapse of ten years from the delivery of the Ship. With the Periodical Renewal of the Electronic Media Onboard, existing IC-ID cards should be renewed by new IC-ID cards.
- When authentication process by IC-ID card is adopted, ten years elapse after the delivery of the Ship and Periodical Renewal of the Electronic Media Onboard is terminated, subsequent use of IC-ID cards may be terminated. Authentication by IC-ID card on each use of the browser software for the SCF Onboard, however, may be continued throughout the Ship's Operational

lifetime. In that case, standard period of validity set for the last IC-ID cards is fifty years standard.

- Procedures and a system should be provided so that each qualified accessing person registers his pin code with the terminal and his IC-ID card on the first use of the browser software for the SCF Onboard.
- Pin code consists of four digits standard and need not have an expiration date (periodical renewal is unnecessary).
- The Periodical Renewal of validity of IC-ID card may be carried out via the Internet if the equivalent level of security is provided.

1.2.3 Onetime Password

- For various users' option, authentication process by Onetime Password (plug-in) may be provided.
- Onetime Password needs access via the Internet or equivalent.
- It should be noted that the arrangement of Internet service is not mandatory on board the Ship under the current requirements of IMO and that maritime Internet services cannot cover Arctic and Antarctic areas so far.

1.2.4 Authentication process other than by Password, IC-ID card and Onetime Password

- For various users' option, other authentication process (plug-in) providing equivalent security may be proposed.
- Such methods may be applied subject to the agreement of the Shipowner and the IP-Holders.

1.3 Period for Renewal of Electronic Media Onboard

- The Electronic Media Onboard should be SD memory for the best compatibility.
- The Shipowner may choose, for example, to align the Periodical renewal of the Electronic Media Onboard may be carried out concurrently with the annual surveys of the Ship.
- Annual surveys of the Ship are generally carried out within a period of three months before or after the Anniversary Date which is unique to the Ship.
- The standard period for Renewal of Electronic Media Onboard might therefore need to cover the period until the next annual survey.
- Furthermore the Electronic Media Onboard may need to be delivered to the Shipowners' Office Ashore because the actual date of calling at port by the Ship is unpredictable for the Archive Center. Consequently, forwarding of the Electronic Media Onboard by the Shipowner to the Ship would require an additional time period.
- The Standard period of validity set for the Electronic Media Onboard may therefore need to be around one year and seven or eight months.
- When ten years elapse after the delivery of the Ship and Periodical Renewal of the Electronic Media Onboard is discontinued, standard period of validity set for the last Electronic Media Onboard is fifty years standard.
- In the case where the Electronic Media Onboard can be accessed via the Internet setting of new period of validity may be carried out via the Internet.

1.4 Access Registration

- Logging of electronic access to SCF Onboard is carried out by the operating system and

recorded in the Electronic Media Onboard by the browser software for the SCF Onboard upon the ending of each session for secure storage.

- Where agreed by the Shipowner, the access log can be collected and stored by the Archive Center with the Periodical Renewal of the Electronic Media Onboard.
- Access log should be encrypted and accessed only through the Shipowner.

1.5 Printout function

- Normal Default setting of printout is anticipated to be “Current page”.
- “Designated pages” or “All pages” may be specified at the accessing person’s option.
- Larger technical drawings etc. may require the availability of printing facilities for formats other than the usual office document formats. At least the Archive Center should possess such printing facilities.
- Browser software provided by the Archive Center should have the function to print the drawings in formats other than the usual office document formats into a series of printouts in the usual office document formats (e.g. A3 size).

1.6 File format

- When digital SCF documents are provided to the Archive Center, they should be provided in the Portable Document Format (PDF).
- The Archive Center should encrypt all digital SCF Onboard and SCF Supplement files in the PDF and securely keep them. The cipher strength of the encryption should be equivalent to 256-bit AES or above.

2. Revision of Interim Guidance on Systems for Management of SCF in a Digital Format

In the event that the IMO requirement is amended or a relevant issue concerning IT progress or use of the SCF IS, SCF SG and/or this SCF GS arises and a proposal is made by any member of the cross industry group below, or by any Archive Center through any member of the cross industry group, for the revision of this SCF GS, the cross industry group will consider the need for a revision. Following agreement on such a need, this SCF GS may be revised as appropriate.

In addition it is anticipated that in the absence of significant issues arising, a general review will be initiated by the cross industry group within 24 months from 1 July 2016 to take account of experience gained in the initial use of this SCF GS.

CANSI (China Association of the National Shipbuilding Industry);
CESA (Community of European Shipyards' Associations);
KOSHIPA (Korea Offshore & Shipbuilding Association);
SAJ (The Shipbuilders' Association of Japan);
SCA (Shipbuilders Council of America);
BIMCO;
ICS (International Chamber of Shipping);
INTERCARGO (The International Association of Dry Cargo Shipowners);
INTERTANKO (The International Association of Independent Tanker Owners);
OCIMF (Oil Companies International Marine Forum); and
IACS (International Association of Classification Societies, Ltd.)

References

- [1] The Ship Construction File Interim Industry Standard and Interim Supplementary Guidance - Executive Summary - (8 March 2016)
- [2] The SCF Interim Industry Standard (8 March 2016)
- [3] Interim Supplementary Guidance of the SCF Interim Industry Standard (8 March 2016)