AMENDMENT TO THE PERFORMANCE STANDARDS FOR VDR AND S-VDR

Proposal to amend the Performance Standards for VDR and S-VDR, and the relevant SOLAS regulation V/20

Submitted by the Republic of Korea

SUMMARY

Executive summary: This document provides comments and proposes draft amendment to the performance standard for VDR and S-VDR, and the relevant SOLAS regulation V/20

Strategic direction: 5.2

High-level action: 5.2.4

Planned output: -

Action to be taken: Paragraph 13

Related documents: MSC 83/28; MSC 84/24; resolutions A.861(20), MSC.163(78) and MSC.214(81); and SOLAS regulation V/20

Introduction

1. The Sub-Committee on the Safety of Navigation, at its fifty-fourth session, noted that MSC 83 considered and had agreed to include a new work programme item on “Amendments to the Performance standards for VDR and S-VDR” to this Sub-Committee as a high-priority item.

2. The Sub-Committee further noted that MSC 84 had also agreed to expand the existing work programme item on “Amendments to the Performance standards for VDR and S-VDR” to consider the proposal contained in document MSC 84/22/18 (Egypt), and increased the number of sessions needed to complete this work item in three sessions.

3. Taking into account the decisions of MSC 83 and MSC 84, the Sub-Committee decided to consider the work programme item on “Amendments to the Performance standards for VDR and S-VDR” at this session.
Review of the Performance Standards for VDR and S-VDR

4 With respect to the above, the Republic of Korea carefully reviewed the Performance Standards of VDR and S-VDR. Upon review of the Performance Standards for VDR and S-VDR, it was discovered that there existed the possibility of losing the stored information over the period before and after a subsequent incident in the final recording medium.

Problems

5 VDR and S-VDR, if electrical power is supplied to them as usual, should be able continuously to maintain sequential records of preselected data items by the following requirement of the Performance Standards for VDR and S-VDR:

[Performance Standards for VDR and S-VDR]  
(resolutions A.861(20) and MSC.163(78))

5. OPERATIONAL REQUIREMENTS

5.1 General

5.1.1 The VDR and S-VDR should continuously maintain sequential records of preselected data items relating to the status and output of the ship’s equipment, and command and control of the ship, referred to in 5.4 (Data items to be recorded).

------(Omitted)-----

5.3 Continuity of operation

5.3.1 To ensure that the VDR and S-VDR continues to record events during an incident, it should be capable of operating from the ship’s emergency source of electrical power.

------(Omitted)-----

5.3.3 Recording should be continuous unless interrupted briefly in accordance with 6 (Operation) or terminated in accordance with 5.3.2. The time for which all stored data items are retained should be at least 12 h. Data items which are older than this may be overwritten with new data.

6 The Republic of Korea noticed that the above requirements, even if those requirements are essential to achieve the intended purpose of the equipment, can cause the possibility of losing the stored information over the period before and after a subsequent incident in the final recording medium.

7 For example, if an incident happened on a certain ship, VDR or S-VDR records the events and information during that incident and that information is recorded in the final recording medium. However, unless that incident would seriously affect the power supply system on that ship, VDR or S-VDR continuously maintains sequential records of preselected data items required by paragraph 5.1.1 of the Performance Standards.
8 However, after time passes by, if the saved information was not downloaded to be playback, that information automatically becomes overwritten with new data in accordance with paragraph 5.3.3 of the Performance Standards. Consequently, this information could not be made available to either the Administration or the shipowner.

Proposal to amend the Performance Standards for VDR and S-VDR, and the relevant SOLAS regulation V/20

9 Based on the above problem, the Republic of Korea is of the opinion that there is need to amend the Performance Standards for VDR and S-VDR so as not to lose the stored information over the period before and after a subsequent incident. In that respect, the Republic of Korea makes the proposal for the amendment to the Performance Standards, which enables copies to be made of that information thorough a saving process. This is done to improve the performance and solve the problems related to VDR and S-VDR, and those are contained in annex 1 to this document.

10 In addition, it was noted that even if VDR and S-VDR were able to perform the saving process, there is no way to perform that function automatically because of the uncertainty of the marine incident, such as the estimation of the possibility of the incident happening.

11 Therefore, the Republic of Korea is of opinion that some mandatory procedures should be established to perform the saving process on shipboard. With that respect, the Republic of Korea makes the additional proposal to amend SOLAS regulation V/20. That proposal is described in annex 2 to this document.

Action requested of the Sub-Committee

12 The Sub-Committee is invited to consider the above proposals and to take action as appropriate.

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ANNEX 1

DRAFT AMENDMENTS TO THE PERFORMANCE STANDARDS FOR
SHIPBORNE VOYAGE DATA RECORDER (VDRs) AND SIMPLIFIED
VOYAGE DATA RECORDER (S-VDRs)

Annex 1

AMENDMENTS TO RECOMMENDATION ON PERFORMANCE STANDARDS FOR
SHIPBORNE VOYAGE DATA RECORDER (VDRs)
(Amendments to resolution A.861(20))

(Only modified parts to the text of the Performance Standards are provided hereunder. Changes are shown as underline (additions) and strikeout (deletions).)

The following are the draft amendments for the Performance Standards.

4. DEFINITIONS

4.6 Saving process means preserving a copy of the data contained in the final recording medium. A saved data set shall be protected against unauthorized or inadvertent overwriting.

6. OPERATION

6.1 The unit should be entirely automatic in normal operation.

6.2 Means should be provided whereby recorded data can be saved by an appropriate method (i.e., saving process) following an incident, with minimal interruption to the recording process and without requiring opening of the protective capsule.

   1. Controls for use during the saving process should be simple and easy to use.

   2. The recording process to the final recording medium should not be interrupted for more than 10 min during the saving process. The data recorded in the final recording medium shall not be erased.

   3. The data saved should be automatically checked in order to ensure that it is identical to the recorded data on the final recording medium. Any failure should be indicated.

   4. When the saving process has been completed, means shall be provided so as to enable copies to be made of this or of data relating to a subsequent incident.

   5. When the saving process has been completed, means shall be provided so as to enable the transfer of this data set to another storage device in order to allow data relating to a subsequent incident to be saved.
Annex 2

AMENDMENTS TO RECOMMENDATION ON PERFORMANCE STANDARDS FOR
SHIPBORNE SIMPLIFIED VOYAGE DATA RECORDERS (S-VDRs)
(Amendments to resolution MSC.163(78))

(Only modified parts to the text in the Performance Standards are provided hereunder. Changes are shown in underline (additions) and strikeout (deletions).)

The following are the draft amendments of the Performance Standards.

4 DEFINITIONS

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1 Controls for use during the saving process should be simple and easy to use.

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4 When the saving process has been completed, means shall be provided so as to enable copies to be made of this or of data relating to a subsequent incident.

5 When the saving process has been completed, means shall be provided so as to enable the transfer of this data set to another storage device in order to allow data relating to a subsequent incident to be saved.

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The following new paragraph 4 is added after existing paragraph 3:

“4. To assist in casualty investigation, the saving process defined in the appropriate performance standards shall be implemented by the master of a ship after any incident has happened, but not later than 11 hours, in order to avoid the losing of the stored information over the period before and after a subsequent incident.”