

Subject:	BNWAS - interface with Voyage Data Recorders (VDR) and Simplified Voyage Data Recorders (S-VDR) and standards
To:	Shipowners, Companies, Operators, Recognized Organizations and Masters

1. PURPOSE

The purpose of this Circular is to inform Shipowners, Companies, Operators, Recognized Organizations and Masters of the position of the Portuguese Maritime Administration concerning, not only the requirement of interfacing the bridge navigation watch alarm system (BNWAS) with the voyage data recorder (VDR) or with the simplified voyage data recorder (S-VDR), but also the situations where an exemption from the BNWAS standards may be obtained.

2. INTERFACING BNWAS WITH VOYAGE DATA RECORDERS (VDR)

2.1 Directive 2002/59/EC of the European Parliament and the Council requires that passenger ships, irrespective of size, and all ships other than passenger ships, of 3000 gross tonnage and upwards engaged on international voyages, which call at a port of a Member State shall be fitted with a voyage data recorder (VDR) in accordance with the technical and performance standards¹ laid down in chapter V of SOLAS.

Section 5.4 of IMO resolution A.861(20) identifies items to be recorded on a VDR. Paragraph 5.4.9, *Main alarms*, states: *"This should include the status of all mandatory alarms on the bridge"*.

The Portuguese Maritime Administration considers BNWAS as a mandatory alarm on the

¹ Resolution A.861(20) - Performance standards for shipborne voyage data recorders (VDRs), valid for equipment installed on or after 27 November 1997; resolution MSC.163(78) - Performance standards for shipborne simplified voyage data recorders (S-VDRs); resolution MSC.214(81) - Adoption of amendments to the performance standards for shipborne voyage data recorders (VDRs) A.861(20) and performance standards for shipborne simplified voyage data recorders (S-VDRs) MSC.163(78), valid for equipment installed on or after 1 June 2008.

bridge; therefore, the status of BNWAS has to be recorded by the VDR, both in new and existing ships.

2.2 Even though sometimes challenges were experienced and extra provisions had to be made (e.g. additional cables or additional interface boxes), the connection between BNWAS and VDR always proved to be feasible.

Moreover, with the SOLAS mandatory carriage requirement for BNWAS for cargo ships of 150 gross tonnage and upwards and passenger ships irrespective of size constructed on or after 1 July 2011, BNWAS has become an IMO mandatory alarm, also for existing vessels (pending on the category in accordance with regulation SOLAS V/19.2.2.3).

The Portuguese Maritime Administration considers that the connection of BNWAS (including existing installations) to the VDR shall be effective.

3. INTERFACING OF BNWAS WITH SIMPLIFIED VOYAGE DATA RECORDERS (S-VDR)

3.1 Paragraph 5.4.9 of resolution MSC.163(78) (performance standard for S-VDR) reads as follows: *"Other items - 5.4.9 Any additional data items listed by IMO with the requirements set out in resolution A.861(20) should be recorded when the data is available in accordance with the international digital interface standards using approved sentence formatters."*

For existing ships fitted with an S-VDR, BNWAS needs only to be connected where it is possible to do so, as per the international digital interface standards identified in paragraph 5.4.9 of Resolution MSC.163(78).

The above text provides leeway to apply flexibility as far as the connection of BNWAS to the S-VDR is concerned, in the event that BNWAS does not provide the required data for input in the S-VDR.

However it shall be established, for instance, by means of a declaration from the manufacturer of the BNWAS, that the required data is not available and that the BNWAS cannot be adapted for this.

The Portuguese Maritime Administration draws your attention to the fact that this flexibility can only be applied in the event of a S-VDR equipment.

In these circumstances the Company should apply for an exemption of the Interfacing of

BNWAS with Simplified Voyage Data Recorders (S-VDR), according to circular 33 (Application for exemptions, waivers and equivalents) and its Form 1.

4 EXEMPTIONS RELATED WITH THE BNWAS PERFORMANCE STANDARD

All BNWAS installed on Portuguese flagged vessels have to be in conformity with the performance standard adopted by the Maritime Safety Committee as specified in Res. MSC. 128(75)², and also with the requirements defined by Directive 96/98/EC³ as amended.

BNWAS installed prior to 1 July 2011 may be exempted from full compliance with the standards, as long as the minimum requirements of MSC.128 (75) listed in the attached checklist are fulfilled.

However, equipment working only in the automatic mode will not be accepted, as this mode is not suitable on a ship conforming with regulation SOLAS V/19.2.2.3 which requires BNWAS to be in operation whenever the ship is underway at sea.

In these circumstances the Company should apply for an exemption, according to circular 33 (Application for exemptions, waivers and equivalents) and its Form 1.

Lisbon, 16 June 2016

The Director of the Maritime Administration Services Directorate

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² Res. MSC. 128(75) Performance standard for a bridge navigational watch alarm system (BNWAS).

³ Directive 96/98/EC means the Council Directive 96/98/EC on marine equipment, also known as the MED Directive.



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No.	Functionality	Statement
1	The BNWAS operational modes can be selected between <ul style="list-style-type: none">- Manual ON (in operation constantly) and- Manual OFF (does not operate under any circumstances)	According to SOLAS V/19.2.2 "the bridge navigational watch alarm system shall be in operation whenever the ship is underway at sea. Taking in due consideration the guidance provided in MSC.1/Circ.1474, the Portuguese Maritime Administration considers the automatic mode as not suitable for use on a ship conforming with SOLAS V/19.2.2.3, and should not be used.
2	The selection of the operational modes is protected by a key switch or password	The selection of the Operations mode and the duration of the dormant period should be protected against unauthorized use
3	Once operational, the systems remains dormant for a period between 3 and 12 min	The operational sequences of indication and alarms should be in accordance with MSC.128(75), 4.1.2
4	At the end of this dormant period a visual indication is initiated on the bridge	See no. 3
5	If not reseted, the system sounds additionally a first stage audible alarm on the bridge 15 sec after the visual indication is initiated	See no. 3
6	If not reseted, the system sounds additionally a second stage audible alarm in the back-up officers and/or Master's location 15 sec after the First stage	See no. 3
7	If not reseted, the system sounds additionally a third stage remote audible alarm at the locations of further crew members minimum 90 sec and maximum 180 sec after the second stage	See no. 3
8	The audible alarm for the third stage is easily identifiable by its sound and indicates urgency. Moreover, the sound must clearly distinguish itself from the firealarm, general alarm, etc.	The Portuguese Maritime Administration only accepts the alarm for the third stage to be connected to the General Alarm System if and only if its sound is clearly distinguish from the Fire Alarm, General Alarm or others, and this shall be written in the ISM Manual.
9	The reset push buttons are only available in positions on the bridge giving	It will not be accepted reset buttons installed in áreas where the field of

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	proper look out, which is the conning position, workstation for navigation and maneuvering, the workstation for monitoring and the bridge wings	vision is impaired
10	The BNWAS is connected to a distribution panel supplied from Main Switchboard and Emergency Switchboard via an automatic changeover facility	BNWAS is part of SOLAS V/19.2.2.3 since 1 January 2011. Navigational systems and equipment, power to navigation equipment should be supplied by two circuits, i.e. from main and emergency source of energy
11	BNWAS is suitable for installation on board of vessels, i.e. is tested for the Electromagnetic compatibility (EMC) IEC60495	SOLAS V/17 establishes that electrical and electronic equipment shall be so installed that electromagnetic interference does not affect the proper function of navigational systems and equipment.