

Guidelines for the examination of a Bridge Navigational Watch Alarm System (BNWAS) on GL classed vessels

1. Application

The purpose of a Bridge Navigational Watch Alarm System (BNWAS) is to monitor bridge activity and detect operator disability which could lead to marine accidents. The system monitors the awareness of the Officer of the Watch (OOW) and automatically alerts the Master or another qualified OOW if for any reason the OOW becomes incapable of performing the OOW's duties.

2. Carriage requirements

The performance standards for BNWAS are defined in [MSC.128\(75\)](#) which entered into force on 1 July 2003. SOLAS Ch. V, Reg.19 as amended by Resolution MSC.282(86), entered into force on 1 January 2011, established an implementation schedule for the carriage of BNWAS as follows (SOLAS V, Reg.19.2.2.3):

- *cargo ships of 150 gross tonnage and upwards and passenger ships irrespective of size constructed on or after 1 July 2011;*
- *passenger ships irrespective of size constructed before 1 July 2011, not later than the first survey* after 1 July 2012;*
- *cargo ships of 3,000 gross tonnage and upwards constructed before 1 July 2011, not later than the first survey* after 1 July 2012;*
- *cargo ships of 500 gross tonnage and upwards but less than 3,000 gross tonnage constructed before 1 July 2011, not later than the first survey* after 1 July 2013; and*
- *cargo ships of 150 gross tonnage and upwards but less than 500 gross tonnage constructed before 1 July 2011, not later than the first survey* after 1 July 2014.*

The bridge navigational watch alarm system shall be in operation whenever the ship is underway at sea; a bridge navigational watch alarm system (BNWAS) installed prior to 1 July 2011 may subsequently be exempted from full compliance with the standards adopted by the Organization, at the discretion of the Administration.

The BNWAS should be type approved by the administration (SOLAS V, Reg. 18.1) and is listed in the Marine Equipment Directive (MED) 96/98/EC in Annex 2, item A2/4.32.

Therefore, as long as BNWAS is not shifted to Annex 1 of the directive, no MED-approval ("no wheelmarking") for BNWAS is possible, only national type approvals may be issued (in case of GL only MCA certificates issued).

3. Acceptance of BNWAS

During the first survey of safety equipment as per the implementation schedule under paragraph 2 above the flag State Administration or recognized organization on behalf of the flag State checks provision and specification of the BNWAS (initial surveys) and whether the equipment is in working order (initial and annual surveys).

Please observe the ITS Chapter 6 "Authorization and Statutory National Requirements". National requirements for BNWAS are included in the additional survey checklists for safety equipment surveys.

3.1. Actual type approval certificate available

Generally, all BNWAS already installed on vessels shall conform to MSC.128(75) and can be accepted without additional testing when a type approval acc. to following standards are available:

* Refer to the Unified interpretation of the term "first survey" referred to in SOLAS regulation ([MSC.1/Circ.1290](#)).

- IMO Res. A.694(17), MSC.128(75), MSC.191(79), MSC/Circ.982
- Test standards: IEC60945, 61162, 62288, 62616

At least it should be stated in the type approval certificate that the BNWAS is in accordance to MSC.128(75) and is tested for the Electromagnetic compatibility (EMC), IEC60945, IACS UR E10.

3.2. BNWAS installed prior 1 July 2011 and no type approval available

If on board a ship no evidence can be provided that its BNWAS conforms to MSC.128(75), and the carriage requirement is not yet mandatory for this ship, a Memo to Owner should be issued in the Survey Statement. (Text proposal: "Documentary evidence that Bridge Navigational Watch Alarm System (BNWAS) is in conformity with MSC.128(75) is not available on board. Owners are requested to provide such evidence to GL Head Office. Only a type approved BNWAS can be accepted after the due date for installation stipulated in SOLAS V/19.2.2.3."). The form 411KE should be filled in.

3.3. BNWAS installed prior 1 July 2011 and type approval not in compliance with MSC.128(75)

An exemption for BNWAS installed prior 1 July 2011 which are not in full compliance with the MSC.128(75) may be recommended by GL to the flag state administration when the minimum requirements of MSC.128(75) listed in Form F411KE are fulfilled.

Note: When for an existing BNWAS the requirements of MSC.128(75) acc. to Form F411KE are not fulfilled the flag state administration has to be asked for advice. Please document instructions received from the flag State Administration in the Survey Statement under 'Additional'.

3.4. BNWAS not installed but already mandatory

If the carriage requirement for BNWAS is already mandatory for a ship, but on board BNWAS is not fitted, this is a SOLAS non compliance. The general procedures for handling of statutory deficiencies and the national procedures for surveyors in ITS Chapter 6 have to be observed and followed.

4. Documents subject to examination by GL HO, MC-EM

4.1. For vessels keel laid before 1 July 2011 which are already fitted with BNWAS

- Copy of type approval certificate, Name of manufacturer, Type of BNWAS, Serial number.
- Filled in Form F411KE.

4.2. Newbuildings and Retrofits after 1 July 2011

- Cable diagram examined by GL HO including location of reset buttons, buzzers and power supply to the BNWAS.
- Bridge Layout examined by GL HO including the location of reset buttons and buzzers.

For technical questions please contact: FS-Radio-Nav-Support@gl-group.com