

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00001MY
Revision No:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Bridge Navigational Watch Alarm System (BNWAS)

with type designation(s)
K-Bridge BNWAS

Issued to

KONGSBERG MARITIME AS
Kongsberg, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773,**

**item No. MED/4.57. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res. A.694(17),
IMO Res. MSC.128(75), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO MSC.1/Circ.1474**

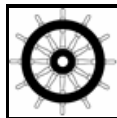
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-01-30.**

Issued at **Høvik** on **2019-09-02**

DNV GL local station:
Sandefjord

Approval Engineer:
Steinar Kristensen



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd 2019..

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-003678-3**
Certificate No: **MEDB00001MY**
Revision No: **1**

Kongsberg Maritime K-Bridge BNWAS is implemented within the Kongsberg K-Bridge system platform, and comprises the following modules :

Hardware:		Model/Type:
K-Bridge Operator Station	:	As defined in separate certificate*)
Main Alarm Reset Panel	:	308358
Pre-Warning Reset Panel	:	8100319
Alarm Buzzer (Bridge)	:	3700825
Alarm Buzzer (Cabins)	:	3700688

Option:		
Kongsberg Motion Sensor	:	349880

Software modules:		
K-Bridge System Platform SW	:	As defined in separate certificate*)

*) Type Examination Certificate for K-Bridge and K-Nav System Platforms, see Type Examination documentation.

Application/Limitation

- Installation to be performed according to the manufactures documentation. See Type Examination documentation below for details.
- The K-Bridge BNWAS may be delivered in K-Bridge Console KM05 or as built in version for other consoles
- K-Bridge BNWAS may fulfil the additional DNV GL requirements for BNWAS used onboard ships with NAUT notifications, depending of system configuration and installation.

Tests carried out

- | | |
|---|--------------------------------------|
| • Performance testing: | IEC 62616 (2010) |
| • Environmental testing: | IEC 60945 (2002) incl. Corr.1 (2008) |
| • Serial interface testing: | IEC 61162-1 (2016) |
| • Presentation of Navigation information: | IEC 62288 (2014) |
| • Performance testing: | DNV GL Rules Pt.6 Ch.3 (July 2016) |

Job Id: **344.1-003678-3**
Certificate No: **MEDB00001MY**
Revision No: **1**

Type Examination documentation

DNV GL No	Doc. Id	Rev.	Description
29	429327	B	Manual: Kongsberg Maritime, K-Bridge BNWAS, Operator Manual Release 8.2
28	426750	A	Manual: Kongsberg Maritime, K-Bridge BNWAS, Operator Manual Release 8.1
27	TAA00000FJ	Latest rev.	Certificate: DNV GL, Type Approval certificate for K-Bridge and K-Nav system platforms
26	349952	B	Manual: Kongsberg Maritime, Kongsberg Motion Detector Junction Box, Maintenance Manual
24	419028	A	Report: Kongsberg Maritime, K-Bridge BNWAS renewal test report
10	2011-10-25		Report: Kongsberg, K-Bridge BNWAS 4.0.x Type Approval System
9	2011-10-25		Report: Kongsberg, K-Bridge 5.1.x BNWAS Type Approval System
8	2010-3212	01	Report: DNV, Maritime Tests of Motion Sensor
7	DANAK-1910004	2008-01-09	Report: DELTA, Type Approval testing of SONF1DC24G
3	334399	C	Manual: Kongsberg Maritime, K-Bridge BNWAS, Installation Manual
2	349856	C	Manual: Kongsberg Maritime, Kongsberg Motion Detector, Installation Manual
1	349951	C	Manual: Kongsberg Maritime, Kongsberg Motion Detector Junction box, Installation Manual

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.