



Bundesrepublik Deutschland

Federal Republic of Germany

Bundesamt für Seeschifffahrt und Hydrographie

Federal Maritime and Hydrographic Agency



BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

Konformitätsbestätigung

Statement of Conformity No.

Nr. BSH/4542/002/4322971/15

Die nautische Ausrüstung
The nautical equipment

AIS AtoN

mit der Typbezeichnung
with the type designation

VegaAIS AIS AtoN

des Herstellers
manufactured by

**Vega Industries Limited
21 Heriot Drive
Porirua
WELLINGTON 5022
NEW ZEALAND**

ist nach den folgenden Normen/Standards, soweit für diesen Ausrüstungsgegenstand anwendbar, erfolgreich geprüft worden.

has been tested successfully according to the following standards as applicable for this equipment:

| Norm/Standard | Prüfnorm/Test Standard |
|--|--------------------------|
| ITU-R M.1371-5 (as far as relevant for an AtoN) | IEC 62320-2 Ed.1 (2008) |
| | IEC 61108-1 (2003) |
| | IEC 61162-1 Ed. 4 (2010) |

Dem Antragsteller wie oben / *as above*
It is hereby confirmed to the applicant

wird die Eignung für den nachstehenden Verwendungszweck bestätigt: AIS AtoN
that the equipment is suitable for use as: AIS AtoN

Hamburg, 2015-10-02

Im Auftrag

For the Federal Maritime and Hydrographic Agency

Dienstsiegel
Official seal



Doreen Thoma

1. Bestandteile der Ausrüstung
Components of the equipment

1.1 Bestandteile, die zum Betrieb erforderlich sind
Components necessary for operation

| Component | Type or part number | Remarks |
|-------------|---------------------|--|
| AIS AtoN | VAIS | Tested with software version 5.13.11635M |
| GPS antenna | MA-700 | Or equivalent |
| VHF antenna | --- | |

1.2 Zusätzliche Optionen / Anlagenkombinationen
Additional options / combinations of the equipment

2. Ausnahmen
Exceptions

3. Dokumentation
Documentation

VegaAIS AtoN Station, Installation and Operation Manual
Version 1.0.11, 24th September 2015

Test report BSH/4542/001/4322514/14-1
Assessment report BSH/4542/002/4322970/15-4
Assessment report BSH/4542/002/4322514/15-5
Test report BSH/46162/4321414/10

(Test for IEC 62320-1)
(Physical radio tests)
(Environmental tests IEC 60945)
(GPS test)

Composition of the AIS AtoN station

AtoN station name:

VegaAIS AIS AtoN

Type of AIS AtoN Station

☒ Type 1

☐ Type 2

☒ Type 3

Configuration method

☒ Standard PI sentences

☒ Proprietary manufacturer sentences

☐ Control receiver

☐ AIS Standard VDL messages

Positioning device

☒ EPFS and surveyed position

☐ Surveyed position only

Transmission

☐ Single channel transmission only

☒ Tx message 21 for synthetic/ virtual AtoN

Note) A marked "Single channel transmission only" means that the device is not able for dual channel mode. The unit can transmit on one channel only.

Transmit power:

12.5 W

Virtual AtoNs

Up to 3 virtual AtoNs are supported

Access mode msg 21

☒ FATDMA

☒ RATDMA (type 3 only)

Access mode other messages

☒ FATDMA

☒ RATDMA (type 3 only)

☐ CSTDMA (type 3 only)

Synchronisation:

☐ Indirect UTC (type 3 only)

☐ Semaphore station (type 3 only)

Chaining:

☐ Chaining implemented (type 2 and 3 only)

Implemented alternatives

According to last column of table 1 of IEC 62320-2

| Option | For type | AtoN | Implemented | Remark |
|------------------|-------------|------|-------------|---|
| Tx of message 6 | 1, 2, 3 | | Yes | Index 0: Internally generated, Destination MMSI defined by \$PVSP,ATON,ADDR,<MMSI> Index > 0: Content defined by MEB |
| Tx of message 7 | 3 | | Yes | Ackn. of message 6 |
| Tx of message 8 | 1, 2, 3 | | Yes | Index 0 & 1: Internally generated, Index > 1: Content defined by MEB |
| Tx of message 12 | 1, 2, 3 | | Yes | Data applied by MEB sentence |
| Tx of message 13 | 3 | | Yes | Ackn. of message 12 |
| Tx of message 14 | 1, 2, 3 | | Yes | Data applied by MEB sentence |
| Tx of message 25 | 1, 2, 3 | | No | |

Five MEB payloads may be stored. The corresponding CBR is used to determine the broadcast rates for the stored message.

For message 6, index 0, the Destination MMSI is applied through a private sentence with the following field usage:

\$PVSP,ATON,ADDR,<MMSI>*hh

External Interfaces:

RS232 on the Beacon connector.

There are further interfaces for specific optional functions.