NAOERO
MARITIME ADMINISTRATION

SHIP SECURITY ALERT SYSTEM (SSAS)
(NMA_C10.2018.REV.3)

(a) DEFINITIONS:

The following abbreviations stand for:

1. "CSO" – Company Security Officer
2. "CSSRC" – Cargo Ship Safety Radio Certificate
3. "GMDSS" – Global Maritime Distress and Safety System
4. "GMT"/"UTC": – Greenwich Mean Time / Coordinated Universal Time
5. "GNSS" – Global Navigation Satellite System
6. "GT" – Gross Tonnage in accordance to ITC 69
7. "MODU" – Mobile Offshore Drilling Unit
8. "IMO" – International Maritime Organization
9. "ISM Code" – International Management Code for the Safe Operation of Ships and for Pollution Prevention
10. "ISPS Code" – International Ship and Port Facility Security Code implemented through SOLAS Chapter XI-2 Special measures to enhance maritime security in SOLAS.
11. "ISSC" – International Ship Security Certificate
12. "ITC 69" – International Convention on the Tonnage Measurement of Ships, 1969
13. "PSCO" – Port State Control Officer
14. "RSO" – Recognized Security Organization
15. "SOLAS" – International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended
16. "SSA" – Ship Security Alert
17. "SSAS" – Ship Security Alert System
18. "SSAS-SC" – Self-Contained SSAS
19. "SSO" – Ship Security Officer
20. "SSP" – Ship Security Plan
21. "UPS" – Uninterruptible Power Supply

The term "Administration" shall mean the Naoero Maritime Administration.

(b) PURPOSE:

This Circular serve to provide administrative information and technical guidance to ship owners / operators and RSOs on the requirements of SOLAS Chapter XI-2, Regulation 6 on SSAS.

(c) REFERENCE:

1. SOLAS Chapter XI-2, Regulation 6
2. IMO Resolution MSC.136(76), as amended by MSC.147(77), adopted on 11 December 2002, Performance standards for a ship security alert system
3. IMO MSC/Circ.1072, dated 26 June 2003, Guidance on provision of ship security alert systems
4. IMO MSC/Circ.1155, dated 23 May 2005, Guidance on the message priority and the testing of ship security alert

5. IMO MSC.1/Circ.1190, dated 30 May 2006, Guidance on the provision of Information for identifying ships when transmitting Ship Security Alerts
6. NMA C6 - Contact information for maritime security communication

(d) APPLICATION:

SSAS applies to the following types of vessels on international voyages:
1. Passenger ships, including high-speed passenger craft;
2. Cargo ships, including high-speed craft, of 500 gross tons and upwards; and
3. Mechanically propelled MODUs as defined in SOLAS Chapter IX, Regulation 1.

(e) CONTENTS:

REQUIREMENTS FOR SHIP SSAS:

1. Implementation

SOLAS Chapter XI-2, Regulation 6, requires all ships to be provided with a SSAS, which will transmit a SSA to a designated competent authority when activated in an emergency situation.

1.1. All vessels shall be provided with an SSAS as follows:

1.1.1. Ships constructed on or after 1 July 2004;

1.1.2. Passenger ships, including high-speed passenger craft, constructed before 1 July 2004 - not later than the first survey of the radio installation after 1 July 2004;

1.1.3. Oil tankers, chemical tankers, gas carriers, bulk carriers and cargo high speed craft, of 500 GT and upwards constructed before 1 July 2004 - not later than the first survey of radio installation after 1 July 2004; and

1.1.4. Other cargo ships of 500 GT and upwards and MODUs constructed before 1 July 2004 - not later than the first survey of radio installation after 1 July 2006.

1.2. Regarding compliance with the additional functional requirements of MSC.1/Circ.1190, vessels shall be provided with a compliant or upgraded SSAS and tested as follows:

1.2.1. Ships constructed on or after 1 July 2006 - before the ship enters service; and

1.2.2. Ships constructed before 1 July 2006 - not later than the first survey of the radio installation on or after 1 July 2006.

1.2.3. All SSAS generated by a SSAS shall be sent to the “Security Department” of the Administration and the CSO.

1.3. The CSSRC is not affected as the SSAS is not considered a radio equipment and is therefore not covered by the Safety Radio Survey. Any deficiency in the SSAS is however considered a failure in compliance with the ISPS Code and potentially the ISM Code.

2. Competent Authority

2.1. A competent authority is an organization that receives an alert from a vessel and forwards it to the Administration and the CSO. A competent authority must demonstrate the capability to receive an SSA at any time from a vessel and to immediately forward it.

2.2. Some providers of asset tracking services, such as Globe Wireless, PurpleFinder, Transas, Iridium, etc., incorporating SSAS capabilities, are suitable to take on the role of the competent authority.

2.3. Companies or organizations desiring to provide SSAS services for Naoero flagged vessels should provide the Administration with a detailed description of the equipment to be installed or modified and a coordinated communications plan for acting as the competent authority. The details of the system encompassing the equipment, coverage area, and communications plan, should also be submitted to the RSO for review.

2.4. Companies desiring to send SSAs directly to the Administration and the CSO or organizations desiring to act as competent authorities for the forwarding of SSAs to the Administration and the CSO should confirm the technical arrangements for delivering SSAs to the Administration at the contact details in Naoero Shipping Circular, NMA C6.

3. SSP

3.1. Ship Owners / Operators of SOLAS vessels are to request their RSO to review their vessel's SSAS equipment and procedures in conjunction with the review of the vessel's SSP.

3.2. If the vessel already has an approved SSP, it must be amended to address the SSAS, and affected parts must be available on board for review and approval during the compliance audit following initial installation. This should include documentation of any equipment that may be installed to comply with the SSAS.

3.3. The location of the second activation point may be specified in the SSP and remain confidential. However, in order to avoid the possibility of compromising the objective of the SSAS, this Administration recommends that this information be kept elsewhere on board in a document known only to the Master, SSO and other senior ship's personnel as may be decided by the CSO.

3.4. The ISSC shall confirm, among other things, compliance with the installation of an effective SSAS by the applicable Safety Radio Survey implementation date irrespective of when the vessel may be due for ISPS Code intermediate or renewal audit.

4. System Requirements

4.1. Performance standards for SSASs can be found in IMO Resolution MSC.136(76) as amended by MSC.147(77), while MSC/Circ.1072 and MSC/Circ.1155 give further guidance on the design and functional requirements of SSASs.

4.2. The SSAS may be a component of the vessel's existing radio installations so long as it does not interfere with the normal function of that equipment. If the SSAS uses any new or modifies existing radio transmission equipment, then it should be certified by the manufacturer to comply with the relevant sections of IEC 60945 that are identified as being required for all equipment categories.

4.3. A suitable alternate source of power, or dedicated battery backup, should be provided if the SSAS uses the ship's main source of electrical power, for e.g., systems with an UPS or similar device that is powered from the ship's main power can be considered an alternate source of power.

5. Application

5.1. The transmission of a SSAS should not be included with any other routine reporting that the ship may conduct. The message transmission should be generated automatically with no input from the operator other than the activation of the system. Cellular telephones may not be sufficiently automated to satisfy this requirement. To comply with MSC.1/Circ.1190, the SSA received by a competent authority should include:

5.1.1. Name of ship;
5.1.2. IMO Ship Identification Number;
5.1.3. Call Sign;
5.1.4. Maritime Mobile Service Identity;
5.1.5. GNSS position (latitude and longitude) of the ship;
5.1.6. Date and time of the GNSS position;
5.1.7. Course and Speed;
5.1.8. Email Address and Inmarsat number of the vessel for Administration to respond to;
5.1.9. Name of CSO, 24/7 mobile phone number and Email Address for Administration to respond to;
5.1.10. Name of alternate CSO, and 24/7 mobile phone number and Email Address for Administration to respond to; and
5.1.11. Message stating that the SSAS has been activated and indicating the ship is under threat or it has been compromised.

Please refer to sample SSA in the annex for programming of the SSAS.

5.2. If vessel engages asset tracking services for SSAS, then an active hyperlink to the monitoring agency is to be provided in the message. The hyperlink should operate either automatically or be accessible to the Administration by use of a unique user ID and password assigned to the Administration. This information will expedite the Administration's ability to contact the nearest Coastal State Designated Authority and the CSO when a security alert message is received.

5.3. The security alert transmission must be capable of reaching the Administration and the CSO from any point along the vessel's intended route. This alert should not be transmitted as a general distress call but should be directed solely to the Administration and the CSO. As mentioned earlier, this may be accomplished through a competent authority.

5.4. Line-of-sight transmissions such as encrypted radio transmissions will be closely evaluated, and may be accepted depending on the route of the vessel.

6. Initial Installation and Type Approval

6.1. Ship Owners / Operators are to notify the RSO prior to installing a SSAS.

6.2. There are generally two (2) types of SSASs commonly known as "Normal SSAS" or "SSAS-SC. Ship Owners / Operators should be aware of which type of SSAS is fitted to their ships so that the appropriate software and interfaces are provided to assure that the competent authority receives all the required information listed in sub-section 5.1 above.

6.3. "Normal SSAS":

6.3.1. This is a system which requires interface with, and/or depends on input from, radio and/or navigational equipment required by SOLAS IV and V to meet the performance standards required by SOLAS Regulation XI-2/6. The SSAS is a requirement of SOLAS Chapter XI-2 and is not subject to Safety Radio Certification.

6.3.2. In all cases, the RO responsible for the issue of the CSSRC shall be responsible for the initial installation inspection and testing of the SSAS by an approved radio technician. A copy of the radio technician's report, demonstrating compliance with SOLAS XI-2/6 Paragraphs 2-4 inclusive and MSC.1/Circ.1190, shall be left on board for use by the RSO at the next scheduled audit. A comment such as "The SSAS as fitted meets the requirements of SOLAS Regulation XI-2/6, paragraphs 2-4 inclusive and MSC.1/Circ.1190." shall be entered into the Record of Approved GMDSS Radio Installation. It should be noted that the record of equipment for Form "R" of the CSSRC shall not include details of the SSAS. The SSAS installation shall be subject to annual inspection by an approved radio technician.

6.4. All SSASs shall be reviewed and approved by the RSO during the vessel's SSP review. A list of RSOs with links to their website can be found at https://maritimenaoero.com/ro.

6.5. "SSAS-SC":

This is a system which does not require any interface with, and/or depends on input from, radio and/or navigational equipment required by SOLAS IV and V to meet the performance standards required by SOLAS XI-2/6. However, software revisions may be necessary on existing installations to bring the system in compliance with the added information required by MSC.1/Circ.1190. This equipment is installed and initiated by the ship and no initial installation survey is required.

7. Shipboard Verification

7.1. At the next ISPS shipboard audit following the initial installation of a SSAS, the RSO auditor shall review and approve the related provisions in the SSP, witness a complete SSA test and verify the implementation of the operational requirements of the SSAS in accordance with the requirements of ISPS Code A/9.4.17 to A/9.4.18 and sight the Record of Approved GMDSS Radio Installation, the Statement of Compliance or equivalent (for the case of "Normal SSAS").

7.2. At each subsequent ISPS shipboard audit, the RSO auditor shall examine the records of activities on the SSAS specified in ISPS Code A/10.1.10, witness a complete SSA test, verify the operational requirements of the SSAS, and sight the Record of Approved GMDSS Radio Installation, the Statement of Compliance or equivalent (for the case of "Normal SSAS").

7.3. A "complete" SSA test shall require the sending of a test message to the CSO and the Administration.

8. SSAS Test

8.1. Following the initial installation of the SSAS, the Company has the responsibility:

8.1.1. to ensure that the system is tested and maintained to satisfy operational requirements according to the approved SSP; and

8.1.2. to keep on board the system records specified in ISPS Code A/10.1.10.

8.2. The system shall be capable of being tested to verify proper operation. The testing should include the entire alert system, from activation to CSO receipt of the alert.

8.3. The unit should also be capable of being tested in the presence of a PSCO upon request, but ONLY from the required navigation bridge location and with appropriate prior notification of the CSO and the Administration.

8.4. The procedures for this testing, including the appropriate Administration's maritime security contact details (refer to Naoero Circular NMA C6), should be outlined in the vessel's SSP or in a separate document available only to the Master, SSO or other entrusted senior ship's personnel.

8.5. The Administration should be notified **24 hours in advance** of any test that will result in a SSA message being sent to the Administration. The date and time of SSA test shall be reported in GMT/UTC. The SSA test should be conducted during our office operation hours.

Our office operation hours:
Time Zone: Hong Kong, GMT +08:00 hrs
Monday to Friday: 0900 hrs to 1800 hrs (Lunch Hours: 1300 hrs to 1400 hrs)
Saturday: 0900 hrs to 1300 hrs
Sunday and Public Holiday: Closed.

Note: The response may delay outside of the office operation hours.

8.6. CSOs are reminded that the Administration should only be receiving test alerts on the following occasions:

8.6.1. Installation of the SSAS;

8.6.2. Intermediate Audit/Survey for ISSC Certification; and

8.6.3. Renewal Audit/Survey for ISSC Certification.

8.7. The test message should clearly indicate "THIS IS A SSAS TEST" on the subject title and/or on the message body.

8.8. The SSAS test shall be properly logged in the ship's Official Log Book.

9. SSAS Activation

9.1. The activation of a SSA should only require a single action, excluding the opening of protective covers. There must be at least two (2) activation points. One (1) must be located on the navigation bridge and at least one (1) other in an area where it would normally be immediately accessible, e.g., engine room control, master's stateroom, crew lounge, etc. The activation points must not be capable of deactivating the alarm once initiated and must be protected against inadvertent operation. The activation points shall not be protected by seals, lids or covers that must be broken to activate the alarm since a broken seal would indicate that the alarm has been tripped. Spring loaded covers or similar devices that provide no indication of the status of the alarm is acceptable.

9.2. Once activated, the system should continue to transmit the security alert at a frequency of not less than once every 30 minutes until the status of the alert is confirmed by the CSO and authorization is given by the CSO for the alarm to be reset or deactivated. There should be a confidential procedure to properly verify the status of the alert and any resetting or deactivation of the system. The vessel should initiate the deactivation of the system, unless it can be done remotely by the CSO.

9.3. When the Administration receives a SSA of which the status cannot be readily confirmed with the CSO, the Administration will immediately notify the Coastal State(s) in the vicinity of which the ship is presently operating. It is therefore imperative that the CSO verify immediately the status of each SSA with the Administration in order to avoid false alarms.

For further assistance, please do not hesitate to contact the Administration at: tech@maritimenaoero.com.

Annex
Sample SSA received by Administration

From: **Name of ship <shipname@company.com>**
Sent: Monday, dd MMM yyyy, hh:mm
To: **ssas@maritimenaoero.com; CSO 1 <companysecurityofficer1@company.com>; CSO 2 <companysecurityofficer2@company.com>; Name of ship <shipname@company.com>**
Subject: **< Name of ship> SSAS ALERT REPORT. THIS IS AN SSAS TEST**

--- SSAS ALERT MESSAGE ---
THIS IS AN SSAS TEST.

Vessel Name:
IMO Number:
Call Sign:
MMSI Number:

LAT: Deg Min N/S
LON: Deg Min E/W

Date: dd mmm yyyy (GMT/UTC)
Time: hh:mm (GMT/UTC)

Course: XXX deg
Speed: XXX knots

Should get info from GPS

Vessel Contact: **Email, Inmarsat: +870 123 456 789 (+870 + Inmarsat Number)**
CSO 1: **Name of CSO 1, Email: companysecurityofficer1@company.com, Mobile: +65 1234 5678 (Country Code + Area Code + Mobile Number),**
CSO 2: **Name of CSO 2, Email: companysecurityofficer2@company.com, Mobile: +65 8765 4321 (Country Code + Area Code + Mobile Number)**
Remarks: **SSAS has been activated and the ship is under threat or it has been compromised.**

Note: Blue coloured highlighted shall be programmed into SSAS.