

MESSAGES

The data exchange using AIS is based on well-defined messages, each with a predetermined function and structure. The majority of the messages are navigational information, however some messages are application specific or have system management functions.

The most important messages from a AtoN manager point of view are:

MSG ID	TYPE	MSG NAME	DESCRIPTION
6	ATON, BS	Targeted binary message	Targeted message used in AtoN for remote control
7	ATON, BS	Acknowledgment of receipt MSG 6	Acknowledgement of receipt MSG6 from remote control
8	ATON, BS	Broadcast binary message	Broadcast weather message
12	A, B, ATON BS	Targeted security message	Targeted security message
13	A, B, ATON BS	Acknowledgement of receipt MSG12	Acknowledgement of receipt MSG12
14	A, B, ATON BS	Broadcast Security message	Broadcast Security message widespread
21	ATON	AtoN Message	Specified AIS AtoN type message

AIS STATIONS

AIS is not solely used on board ship and can be grouped by type as follows:

AIS Class A: Class A stations are shipborne units which meet and are required on most commercial ships by the IMO.

AIS Class B: Class B stations are also shipborne units which are mainly compatible and very similar with AIS Class A but do not meet IMO technical or carriage requirements primarily because they differ in power output and reporting rate.

AIS base station: Base stations are designed for use by Competent authorities to manage the VDL and enable effective ship to shore / shore to ship transmission of information. They are the core of any AIS Service and can be networked to provide broad VTS or Coastal Surveillance coverage and overall maritime domain awareness.

AIS Aids to Navigation: AIS AtoN stations extend the visual or audible range of a traditional aid and provide current position or status; or they can provide 'aid' where a traditional aid does not yet exist, known as a virtual AtoN.

AIS on Search and Rescue (SAR): AIS provides for a unique message intended for use by Search and Rescue Aircraft and to assist others in a SAR operation.

AIS-SART: Search and Rescue Transmitters (SART) are part of the Global Maritime Distress and Safety System (GMDSS). AIS Search and Rescue Transmitters (AIS-SARTs) can be used in lieu of radar SART. AIS-SARTs provide much greater range than radar SART.

AIS Repeater: A station that repeats all non-system management messages to increase the range of the AIS VDL

