

Dark activities

In accordance with the IMO International Convention for the Safety of Life at Sea (SOLAS), all ships of 300 gross tonnes or more engaged in international voyages, cargo ships of 500 gross tonnes or more not engaged in international voyages, and all passenger ships irrespective of size must be equipped with an AIS system. The AIS system is important for navigating waterways and safe sailing, so disabling it is only permitted in extraordinary circumstances. To increase awareness of what this entails, we explain the possible consequences of switching off the AIS system in this circular.

What is the AIS system?

AIS technology was developed by the IMO technical committees to prevent collisions between vessels at sea. It identifies every vessel individually, along with each vessel's specific position and movements, enabling a virtual picture to be created in real time. The AIS standards include a variety of automatic calculations based on these position reports, such as closest point of approach (CPA) and collision alarms.

When a ship is at sea, information about the movement and identity of other ships in the vicinity is critical for navigators to make decisions to avoid collisions with other ships and dangers (shoal or rocks). Historically, visual observation, audio exchanges and radar or automatic radar plotting aids were used for this purpose. However, these preventive mechanisms sometimes failed and resulted in collisions. Even though AIS is only required to display very basic text information, the data obtained can be integrated with a graphical electronic chart or a radar display, providing consolidated navigational information on a single display.

How does AIS work?

AIS automatically sends and receives information to and from appropriately equipped shore stations, other ships and aircraft, while monitoring and tracking ships. AIS works by transmitting VHF radio waves which carry this data. Due to the curvature of Earth, the distance VHF radio waves can travel horizontally is limited to about 24 nautical miles or about 44 kilometres from vessel to vessel.

In more remote or busy areas, a ground station can be used to amplify signals in the vicinity. Vertical signals can be received by lower orbit satellites, which in turn transfer the data to ground-based stations, making satellite coverage available in almost all areas. Nevertheless, signals can be lost due to atmospheric disturbances or solar activity.

Regulations

Transmission of AIS signals is regulated by the IMO International Convention for the Safety of Life at Sea (SOLAS). In 2000, as part of a revised Chapter V, IMO adopted a requirement for all ships to carry automatic identification systems (AIS) capable of providing

information about a ship to other ships and coastal authorities automatically. This regulation requires AIS to be fitted aboard all ships of 300 gross tonnes or more engaged in international voyages, cargo ships of 500 gross tonnes or more not engaged in international voyages, and all passenger ships irrespective of size.

Disabling the AIS system

If a vessel intentionally turns off its AIS system in order to stop transmitting its position and other details of the vessel, it's known as 'going dark'. There are legitimate reasons to switch off AIS transmission. For example, it could be to protect the crew's safety, the cargo, or the operation of the vessel itself. [IMO Resolution A. 1106 \(29\)](#) provides revised guidelines for the onboard operational use of the AIS. These guidelines authorise the master to switch off the AIS in certain circumstances where safety and security are an issue. The relevant section of this resolution reads as follows:

The AIS system should always be in operation when ships are underway or at anchor. If the master believes that the continual operation of AIS might compromise the safety or security of their ship or where security incidents are imminent, the AIS may be switched off. Unless it would further compromise safety or security, if the ship is operating in a mandatory ship reporting system, the master should report this action and the reason for doing so to the competent authority. Actions of this nature should always be recorded in the ship's logbook with the reason for doing so.





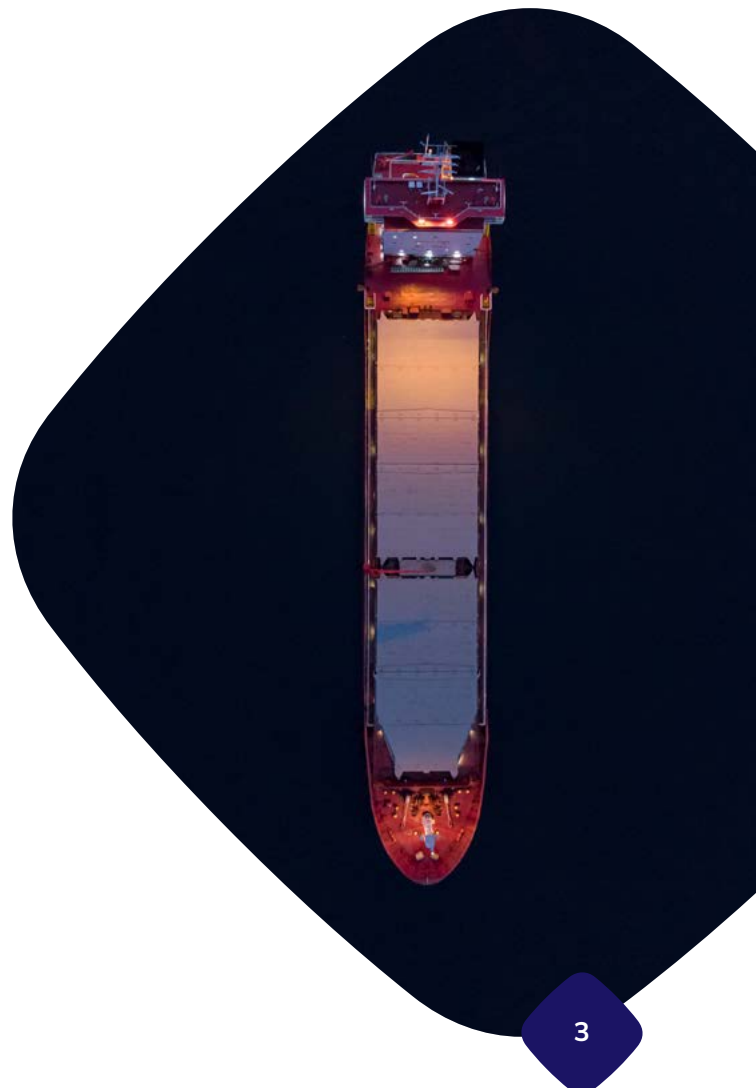
Reasons for switching off the AIS system

Legitimate reasons for switching off the AIS system:

- to conceal the vessel's location, position or identity in areas where pirates operate. This increases the safety of those on board and decreases the risk of pirates boarding and capturing the vessel.
- to avoid detentions by sanctioned authorities
- if a vessel is involved in operations related to confidential projects, such as laying important secret data cables or military operations

However, the AIS can also be switched off to hide a ship's illegal activities. Examples of such illegal activities:

- trading with sanctioned countries, where ships disable their AIS system to conceal visits to ports of sanctioned countries;
- illegal cargoes involving drugs or weapons and human trafficking are often not loaded and unloaded in the most obvious ports. Intermediate stops to load and unload these illicit cargoes and people are usually concealed by disabling the AIS;
- ship to ship transfers with ships or cargoes associated with sanctioned countries, such as oil trade;
- illegal fishing, where the AIS is disabled to fish illegally in the territorial waters of another country.



Consequences

Unless necessary to preserve the safety or security of a ship, going dark constitutes a breach of the SOLAS Convention and puts the ship in breach of Flag State requirements. Moreover, as the AIS system is important for navigation of the vessel, disabling the AIS system increases the risk of collision, damage to other ships or floating objects, pollution, and loss of life at sea.

Switching off the AIS may lead to issues with a vessel's insurance cover. For example, in accordance with the standard JHA2021-008 AIS Operation clause, disabling the AIS system may invalidate insurance cover. Moreover, most insurance policies include a provision stating that shipowners must act in accordance with the law and not in a reckless way. Not complying with SOLAS regulations will therefore likely prejudice insurance cover. In addition, there might be grounds to reject insurance cover on the basis of imprudent or unlawful trading where an owner uses their vessel to trade in breach of sanctions, disguising its location by manipulating or withholding the transmission of AIS data.

From a contractual perspective, as a preventive measure and to safeguard any rights, it is recommended to include a clause covering disabling AIS, such as the BIMCO AIS switch-off clause 2021, in the charter party. These AIS switch-off clauses often give charterers the right to terminate a contract on the simple basis that the AIS transponder is not transmitting without considering those circumstances in which the AIS can be disabled legitimately.

If you have any questions about the SOLAS convention and the AIS system, please contact our Loss Prevention Department via LPS@msigspecialtymarine.com for further assistance.

For any questions regarding insurance cover, please contact your underwriter at MSIG Europe.



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