



Engine power limitations on ships in coastal pilotage areas

Purpose

This Marine Notice provides guidance about risks associated with the operation of engine power limiters (EPL) and similar power restriction systems onboard ships transiting Australian compulsory coastal pilotage areas.

Guidance is provided for

- Ship operators
- Masters
- Officers in Charge of a Navigation Watch (OICNW)
- AMSA-licensed coastal pilots

Background

The shipping industry is making changes to improve the energy efficiency of ships and reduce greenhouse gas emissions. These changes will help deliver the targets outlined in the International Maritime Organization's (IMO) [revised strategy on the reduction of greenhouse gas emissions from ships](#) and ensure compliance with the associated requirements in [Marine Order 97](#) for:

- [Energy Efficiency Ship Index \(EEXI\)](#)
- [Carbon Intensity Indicator \(CII\)](#)

Ships may be fitted with the following power restriction/limiting systems to meet these requirements:

- shaft power limitation systems (ShaPoLi)
- EPL (which use load limiting / automated acceleration limiting software programs)
- permanent de-rating of engines to limit the power of the ship.

The use of power limiting systems must not limit the effectiveness and safety of the ship to operate in accordance with the *International Regulations for Preventing Collisions at Sea, 1972* (COLREGS), including safe speed requirements.

Whilst power limiting systems are used to ensure compliance with EEXI and CII, immediate access to the full power range of the main engine by overriding the power limiting system may be necessary:

- to ensure safe navigation through Australia's compulsory coastal pilotage areas
- if requested by the attending coastal pilot
- in areas of strong tidal influence
- in an emergency.

The IMO has recently amended the [ShaPoLi and EPL guidelines](#) to ensure sufficient information is available to marine pilots about these systems when they have the con of the ship. These amendments are available [here](#). Owners and operators must be familiar with the guidelines and make any necessary changes as a result of these amendments.

To ensure safe navigation and environmental protection in Australian coastal pilotage areas, AMSA seeks to address this risk in accordance with this Marine Notice.

Requirements for ship operators, masters and OICNW

SOLAS Chapter V, Regulation 34, via the cascading requirements found in IMO Resolution A.893(21), requires voyage planning to take into consideration:

- ship manoeuvring characteristics
- known navigation hazards
- environmental conditions.

Accordingly, engine limiting devices should be considered as part of the voyage planning appraisal, including when considering:

- frequency of course
- speed changes necessary
- duration of transits in restricted waters
- whether an override may be required during operation in confined waters.

Operators of ships with an engine limiting device installed are expected to indicate this in their:

- pilot cards
- wheelhouse poster
- manoeuvring booklet.

It is also a requirement under the *International Management Code for the Safe Operation of Ships and for Pollution Prevention* (ISM Code) that a risk assessment is in place that would consider immediate access to override an EPL when the ship's full manoeuvrability is required to ensure safe passage. Hence, AMSA's expectation is that such a risk assessment be in place and available upon request when navigating through the Australian coastal pilotage areas.

Masters and OICNW should be familiar with any load limiting or automatic acceleration limiting devices fitted onboard the ship and be familiar with the operation of their overrides.

Ships are expected to be able to answer all engine and helm commands provided by a pilot at all times while underway in a coastal pilotage area.

Pre-boarding requirements for coastal pilots and pilotage providers

Pilots should be familiar with the changing environment in which they operate. The addition of ShaPoLi or EPL to ships means that pilots may need to adapt their approach to coastal pilotage.

Pilotage providers should ensure that their Master-Pilot Exchange (MPX) process specifically includes a requirement for the pilot to verify the existence (and potential limitations) of any EPL (or similar power limitation arrangement) onboard, prior to the pilot taking the con.

Pilotage providers should obtain (at least) the following information as part of the pre-boarding communication with the ship / operator:

- Is the ship equipped with an engine or shaft power limiter? If yes, is the limiter mechanical or software based?
- If the ship is equipped with a mechanical limiter, will it be removed or disabled prior to the pilot boarding the ship?
- If the ship is equipped with a software-based limiter, will the ship's crew be able to override it immediately at the request of the pilot?
- Can the main engine/s attain the posted manoeuvring power (RPMs) without delay?

- Are the master and all bridge navigational watchkeepers familiar with the override feature for the EPL (if fitted)?
- Does the vessel have a risk assessment with appropriate control measures in place for immediate access to the EPL when full manoeuvrability is needed for safe passage?

Based on the responses to the questions above, the pilotage provider and the assigned pilot should decide if they need to conduct a targeted risk assessment of the planned passage before boarding. This will determine if the ship's manoeuvrability presents a significant risk to the conduct of a safe passage noting the expected environmental factors and the scheduled timing of the passage.

If the pilotage provider's risk assessment indicates the ship's manoeuvrability presents a significant risk, the provider should consider implementing extra control measures like weather, tidal and/or timing restrictions to address the risk.

The pilotage provider should notify AMSA immediately (via email to coastal.pilotage@amsa.gov.au) if:

- the pilot card onboard the ship does **not** reflect the existence of an EPL (or similar arrangement), where such a system exists; and/or any additional controls are intended to be implemented after a risk assessment is conducted for any particular voyage.

Further reading

Further information about shaft / engine power limitation systems can be found in the following IMO references:

- [MEPC.335\(76\) – 2021 Guidelines on the shaft / engine power limitation system to comply with the EEXI requirements and use of a power reserve](#)
- [MEPC.390\(81\) – Amendments to the 2021 guidelines on the shaft / engine power limitation system to comply with the EEXI requirements and use of a power reserve \(Resolution MEPC.335\(76\)\), as amended by Resolution MEPC.375\(80\)](#)