



Australian Government

Australian Maritime Safety Authority

Carriage of float-free EPIRBs on domestic commercial vessels

**Consultation paper – alternative options for
vessels less than 7.5 metres long**

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1. Who

This consultation applies to domestic commercial vessel owners and operators of vessels less than 7.5 metres long, operating in [B waters](#) (offshore operations) or [C waters](#) (restricted offshore operations), where the vessel **does not have level flotation**.

2. What

From 1 January 2021, more domestic commercial vessels will be required to carry a float-free emergency position indicating radio beacon (EPIRB).

For vessels less than 7.5 metres long without level flotation operating in [B waters](#) or [C waters](#), we understand it may not be practical or feasible to carry a float-free EPIRB on these kind of vessels and have proposed several alternative options.

The options we propose include:

- **Option 1:** carry a float-free EPIRB (no alternative)
- **Option 2:** wear a personal locator beacon (PLB), in addition to carrying a manually activating EPIRB
- **Option 3:** carry a manually activating EPIRB and wear a lifejacket
- **Option 4:** carry a manually activating EPIRB in a buoyant storage device

AMSA is also seeking feedback on any additional alternative options, which stakeholders consider will achieve an equivalent or acceptable level of safety.

3. When

Submissions can be made anytime up until **Thursday 28 February 2019**.

AMSA will publish the details of the approved alternative options for smaller vessels, as well as the feedback received. AMSA anticipates this will occur in March 2019.

The requirement for specified vessels to carry a float-free EPIRB does not become mandatory until 1 January 2021, however the standards allow for operators of vessels affected by the changes to commence transitioning from 1 January 2019.

4. Background

4.1 Float-free EPIRB requirements from 1 January 2021

From 1 January 2021 it will be mandatory to carry a float-free EPIRB on certain [Class 1, 2, and 3](#) vessels, and [Class 4C](#), specifically vessels that are:

- equal to or greater than 12 metres long operating beyond 2 nautical miles from land

- less than 12 metres long that operate in [B waters](#) or [C waters](#) and **do not have level flotation**.

The requirement, regardless of length, will apply to new vessels, existing vessels, and transitional vessels. It also applies to vessels that are exempt from the requirement to have a certificate of survey (also referred to as ‘non-survey’ vessels).

This paper relates to vessels less than 7.5 metres long only.

Vessels that are required to carry a float-free EPIRB can commence transitioning to this new requirements from 1 January 2019.

More information on the float-free EPIRB requirements is available on the AMSA website (<https://www.amsa.gov.au/safety-navigation/distress-beacons>).

NOTE: Vessels less than 12 metres long operating in [D waters](#) (partially smooth water operations) or [E waters](#) (smooth water operations) will not be required to carry a float-free EPIRB regardless of flotation. Similarly, vessels operating within 2 nautical miles of land will not need to carry a float-free EPIRB.

4.2 Industry concerns about applying float-free EPIRB requirement to smaller vessels

A number of incidents in Australia and internationally have highlighted the need for domestic commercial vessels to carry float-free EPIRBs. Investigations have found that masters and crew may not be able to manually transmit a distress signal in an emergency situation for a number of reasons, including an inability to access the distress-alerting device due to the speed that the vessel capsizes or sinks and the location of the device. Importantly, these investigations considered the potential limitations of EPIRBs that are not designed to automatically activate and float free.¹

AMSA conducted industry consultation on proposed new arrangements for carriage of float-free EPIRBs between 31 October 2017 and 2 February 2018. AMSA received 46 submissions provided by owners and operators of domestic commercial vessels, accredited marine surveyors, marine safety agencies and manufacturers of float-free EPIRBs. A number of submissions were also from industry associations representing members from various fishing sectors.

Overall, many of the submissions supported the proposed changes and the concept of mandating broader carriage of float-free EPIRBs.

Stakeholders were also invited to provide comment on whether there are any kinds of vessels where it would be impracticable or of no safety benefits to carry a float-free EPIRB. AMSA received a number of submissions in response to this question. Of these submissions, it was suggested that smaller vessels, especially those that are ‘open’ in design should not be required to carry a float-free EPIRB because:

- the risk of not being able to access a manually activated EPIRB was reduced
- it would be impractical or impossible to fit a float-free EPIRB on a smaller vessel
- the risk to the float-free EPIRB inadvertently activating due to continuous water coverage from spray and waves.

¹ These investigations include [Inquest into death of Paul Gregory Clifford](#); [Inquest into the suspected death of Peter Joseph Trcka](#); [Inquest into the Death of Murray Allan Turner and Mason Lawrence Carter and Chad Alan Fairley](#); and [Marine Investigation Report \(M15P0347\), Transportation Safety Board of Canada](#) and [Transport Canada’s response](#).

By contrast, one stakeholder stated that modern float-free category 1 EPIRBs are relatively small in size, cost effective and are provided with multiple mounting options, such that nowadays it is possible to mount them on almost any vessel.

The Consultation Feedback Report outlining all of the submissions received during the consultation and AMSA’s responses to each submission is available on the [AMSA website \(https://www.amsa.gov.au/news-community/consultations/closed-consultations\)](https://www.amsa.gov.au/news-community/consultations/closed-consultations).

AMSA considers that the added safety benefits that a float-free EPIRB can provide, that a manually activated EPIRB cannot, are that it can signal a request for help within minutes automatically and without human-assisted activation. This functionality may have resulted in a different outcome in past situations where a manually-activated EPIRB was carried on a vessel and for various reasons, was not activated by the master or crew on board the vessel. These safety benefits are equally important on a larger vessel as they are on a small vessel, particularly where a vessel is operating offshore and does not have flotation.

However, we recognise that there may be a number of other ways in which appropriate safety outcomes can still be achieved on smaller vessels without carrying a float-free EPIRB.

5. Options

AMSA is seeking feedback on the following alternative options that, if approved, will be available for owners of vessels less than 7.5 metres long operating in [B waters](#) or [C waters](#) without level flotation.

AMSA would also like feedback on any other alternative options which stakeholders consider will achieve an equivalent or acceptable level of safety as carrying a float-free EPIRB.

As vessels less than 12 metres long are only required to have a float-free EPIRB when the vessel does not have level flotation, it may be more cost effective in some circumstances to add flotation to the vessel. Vessel owners are therefore encouraged to consider this option first as this may mean that a vessel is not impacted by float-free EPIRB changes.

Option 1: Carry a float-free EPIRB (no alternative unless specific exemption granted)	
Description of option	<p>This option requires that vessels comply with the new requirements and carry a float-free EPIRB on board a vessel that is less than 7.5 metres long, operating in B waters or C waters which does not have level flotation.</p> <p>This option means that vessel owners not wanting to comply with this requirement will need to apply to AMSA for a specific exemption.</p>
Comments	<p>For the reasons noted in this paper, carriage of a float-free EPIRB may not be practicable or desirable for some kinds of vessels. For those vessels, a specific exemption would need to be granted by AMSA.</p>

Option 2: Wear a personal locator beacon (PLB) in addition to carrying a manually activating EPIRB

<p>Description of option</p>	<p>This alternative option would allow vessels less than 7.5 metres long without level flotation operating in C waters or B waters to wear a PLB instead of carrying a float-free EPIRB.</p> <p>To use this option, the following criteria would need to be met:</p> <ol style="list-style-type: none"> 1. A PLB must be worn by each person on board the vessel at all times. For example the PLB could be on a lanyard attached to the person. Alternately, where the lifejacket is designed and manufactured to enable a PLB to be fitted, the PLB can be fitted in the lifejacket by the lifejacket manufacturer. It is essential that the PLB must not restrict the inflation of the lifejacket or damage it. 2. The PLB must be: <ul style="list-style-type: none"> - GPS enabled and comply with <i>AS/NZ 4280.2 - 406 MHz satellite distress beacons Personal locator beacons</i> - waterproof - registered with AMSA, with registration being renewed every two years - in service, including the battery being in date. 3. Each person on board must wear a lifejacket at all times.
<p>Comments</p>	<p>A PLB is a smaller portable beacon and is designed to be worn or carried by an individual.</p> <p>PLBs are small and easy to wear and will not restrict space, or interfere with work being carried out on board the vessel.</p> <p>PLBs usually operate for a minimum of 24 hours once activated.</p> <p>Some PLBs do not float and may not be designed for use in water so vessel owners purchasing a PLB will need to ensure that the PLB purchased floats and meets the specifications listed above.</p> <p>Locating a distress site is usually much faster if the beacon signal provides a GPS location.</p> <p>Vessel owners will need to ensure that the master of the vessel, or the hirer for Class 4C vessels, wear the PLB at all times.</p> <p>A PLB can cost around \$250 and above. Most vessels are already required to carry lifejackets, which will need to be worn by all persons on board. Older style life jackets which are large and bulky may be uncomfortable or awkward to wear at all times, and may need to be replaced with a more contemporary style lifejacket.</p> <p>Lifejacket manufacturers may be able to provide guidance on how to attach the PLB to the lifejacket without restricting its inflation.</p>

	<p>AMSA's report 'Safety Equipment Trial Report' (August 2017) provides useful case studies and operator experiences regarding the use of PFDs and PLBs.</p> <p>A manually activating EPIRB will still need to be carried on board the vessel.</p>
<p>Option 3: Carry a manually activating EPIRB and wear a lifejacket</p>	
Description of option	<p>This option is to carry a manually activating EPIRB on board a vessel that is less than 7.5 metres long that operates in B waters or C waters which does not have level flotation.</p> <p>Each person on board will also have to wear a lifejacket at all times.</p>
Comments	<p>A manually activated EPIRB has to be activated by a person, which is not always possible in an emergency.</p> <p>See comments above on the wearing of lifejackets.</p>
<p>Option 4: Carry a manually activating EPIRB in or attached to a buoyant storage device</p>	
Description of option	<p>This alternative option would allow vessels less than 7.5 metres long without level flotation operating in C waters or B waters to carry a manually activating EPIRB in or attached to a buoyant storage device.</p> <p>To use this option, the following criteria need to be met:</p> <ol style="list-style-type: none"> 1. The buoyant storage device must be assessed and verified as meeting the criteria specified in (2) by a: <ul style="list-style-type: none"> - recognised testing and listing organisation in Australia - JAS-ANZ accredited product certification body - recognised organisation. 2. The device must be assessed against the criteria specified for a buoyant appliance Annex F of NSCV Part C7A. 3. The buoyant storage device must be: <ul style="list-style-type: none"> - fitted with a handle or lanyard - placed in a location on the vessel which allows it to float free and be readily accessible to persons on board the vessel.
Comments	<p>AMSA's Generic Equivalent Solution (GES 2017/09) provides an alternative arrangements regarding buoyant storage devices. The technical specifications listed above are based on this GES. This alternative may benefit operators of vessels who are already accessing GES 2017/09.</p> <p>A buoyant storage device may cost around \$300 and above however there may be cheaper kits on the market.</p> <p>The buoyant storage unit could be used to store other distress-related equipment in one handy location, which on a smaller boat, having everything together in one kit may be a more convenient and reliable option.</p>

6. Tell us what you think

AMSA is seeking feedback on each of the proposed alternatives outlined above. In particular AMSA would like your feedback on:

- whether you think the options are practical to implement
- whether you would use any of the options, or another option, for smaller vessels you operate
- whether the options are safe
- whether you do not support any of the options
- any other reasonable alternative options we have not included.

7. Making your submission

Submissions can be made anytime up until **Thursday 28 February 2019**.

You can make a submission in two ways. You can either:

- Use our [online feedback system](#). Where you see the 'Enter your submission online' links in the table below, click through to provide your feedback, or
- Complete our [public comment form](#). If using this form, then you can either:
 - **email** the form to consultation@amsa.gov.au or
 - **post** the form to:

Standards Secretariat
Australian Maritime Safety Authority
GPO Box 2181
Canberra ACT 2601