

Marine Notice No. 39 of 2013

*Notice to all Owners, Charterers, Masters, Skippers and Crew
of Fishing and Commercial Vessels*

**Wear a Personal Flotation Device (PFD) and increase
your chance of survival in the event of entering water**

The purpose of this Marine Notice is to inform owners, charterers, masters, skippers & crew of fishing and commercial vessels that correctly selected and worn lifejackets save lives.

Every person on board a vessel wanting to increase their chance of survival in water should be aware of the critical importance of:

- wearing the correct size, type and performance standard of PFD to perform a risk-related activity whilst enjoying the highest level of appropriate protection,
- properly wearing the PFD fitted with a hold-down device, such as a crotch strap or thigh-straps, over the top of all clothing,
- recognising that clothing traps air which may cause a person not to float as would be expected and clothing absorbs water making a person heavier to support. The person may need to use a PFD with a higher performance standard to ensure that they will self-right face up and their mouth and nose will be kept sufficiently clear of the water, and
- following the manufacturer's instructions for maintenance and servicing that must be attached to and accompany their PFD.

Personal Protective Equipment (PPE) Directive – Lifejackets and Buoyancy Aids

The PPE Directive specifies general requirements against all risks encountered, and specifically for **lifejackets and buoyancy aids** for the prevention of drowning. Before making a PPE device available on the Union market, the manufacturer of the PPE device shall draw up a declaration of conformity certifying that the PPE device is in conformity with the provisions of the Directive, and affix the CE marking to it.



Lifejacket designed to prevent drowning must be capable of returning to the surface as quickly as possible without danger to the health of the user, who may be exhausted or unconscious after falling into water, and of keeping them afloat in a position which permits breathing while awaiting help.

Buoyancy Aid clothing which will ensure an effective degree of buoyancy, depending on its foreseeable use, which is safe when worn and which affords positive support in water. In foreseeable conditions of use, this PPE must not restrict the user's freedom of movement but must enable them, in particular, to swim or take action to escape from danger or rescue other persons.

Harmonised standard EN ISO 12402 - Personal Flotation Devices (PFD)

A manufacturer of lifejackets and/or buoyancy aids may choose to follow the harmonised standard EN ISO 12402, and thereby confers a presumption of conformity with the essential requirements of the **PPE Directive**. The standard divides **Personal Flotation Devices (PFD)** into three classes –

- **Lifejackets** – these devices provide face-up flotation with levels of support sufficient for various open and rough water uses. Lifejackets have a buoyancy distribution sufficient to turn most users, when tested on users wearing swimming costumes according to ISO 12402, to a position where the mouth has a defined freeboard above the water's surface, even when the user is unconscious.
- **Buoyancy Aids** – these devices should be comfortable for continuous wear and provide lift, without significant face-up turning ability, to float the conscious user with the level of support marked on the device. Buoyancy aids shall at least be suitable for sheltered waters, but at higher performance levels may be suitable for some users in other waters.
- **Special purpose lifejackets and buoyancy aids** – these devices perform as the two previous classes with different levels of support, but have modifications related to special applications of use. These applications shall not relate to essential requirements such as in-water performance, stability and safety in use. The specific conditions for use shall be stated on their label to maintain essential requirements.

Legal requirements

All Fishing Vessels:

To remind owners, skippers and crew of the legal requirements^{1&2} that:

- every fishing vessel shall carry a suitable personal flotation device (PFD) for every person onboard,
- every person onboard a fishing vessel must wear a suitable PFD when on deck of the vessel, or, in the case of an open undecked vessel, on board the vessel, whether at sea, in harbour or coming to and from moorings, and
- the skipper of a fishing vessel must take all reasonable steps to ensure that every crew member on board wears a suitable PFD.

All Commercial Ships, except Fishing Vessels

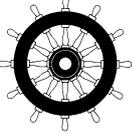
- to remind every employer of their legal duty³ to their employees to provide such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety of persons aboard ship, and
- to remind every employee of their legal duty³ to take reasonable care for the health and the safety of themselves and of other persons aboard ship.

¹ Fishing Vessel (Personal Flotation Devices) Regulations, 2001 – S.I. No.586 of 2001.

² Fishing Vessel (Personal Flotation Devices) (Amendment) Regulations, 2008 – S.I. No.63 of 2008.

³ Merchant Shipping (Health and Safety: General Duties) Regulations, 1988 – S.I. No.109 of 1988.

Personal Flotation Device (PFD) Performance Standards

Type and Markings	Suggested Uses
<p>SURVIVAL LIFEJACKET</p> 	<p>Lifejackets for sea-going ships. Intended primarily for use on seagoing ships under IMO (International Maritime Organisation) rules. Use for abandoning ship. Not intended for everyday use as they are generally bulky and they need to be kept in good condition for use in abandon ship situations.</p> <p>International Standard: IMO SOLAS/EU Marine Equipment Directive</p>
<p>PFD LIFEJACKET</p>  <p>Blue Label</p>	<p>For offshore use and by people who are using items of significant weight and thus requires additional buoyancy. Also of value to those who are using clothing which traps air and which will adversely affect the self-righting capacity of the lifejacket. Designed to ensure that the user is floating with his mouth and nose clear of the surface of the water at an angle and with sufficient freeboard to limit mouth immersions in waves.</p> <p>European Harmonised Standard: I.S. EN ISO 12402-2:2006 – Part 2 Supersedes European Standard: EN 399</p>
<p>PFD LIFEJACKET</p>  <p>Turquoise Label</p>	<p>For swimmers and non-swimmers of any age. For general offshore and rough weather use. Turns most unconscious wearers face up in water. However performance may be affected if the user is wearing heavy and/or waterproof clothing. May be suitable for use in tidal waters or when foul weather clothing is being worn and where the wearers may not be capable of helping themselves due to injury or exhaustion.</p> <p>European Harmonised Standard: I.S. EN ISO 12402-3:2006 – Part 3 Supersedes European Standard: EN 396</p>
<p>PFD LIFEJACKET</p>  <p>Light Brown Label</p>	<p>For swimmers of any age. For use in relatively sheltered/calm waters and are intended for those who may have to wait for rescue. Will not turn unconscious wearers face up in water (particularly when wearing heavy clothing). May be suitable in instances where the wearers remain capable of helping themselves. Whilst these PFDs may be less bulky than other types of PFDs, they should not be used in rough conditions or when there is wave splash.</p> <p>European Harmonised Standard: I.S. EN ISO 12402-4:2006 – Part 4 Supersedes European Standard: EN 395</p>
<p>BUOYANCY AID</p>  <p>Pink Label</p>	<p>Only for good swimmers and for use near to a bank or shore where help is close at hand. Require active participation of the user. Will not hold the face of an unconscious wearer clear of the water and do not have sufficient buoyancy to protect people who are unable to help themselves. May be suitable in circumstances where more bulky or buoyant devices could impair the user's activity or actually endanger them. They have minimum bulk and cost, but they are of limited use in disturbed water and cannot be expected to keep the user safe for a long period of time. Not a lifejacket.</p> <p>European Harmonised Standard: I.S. EN ISO 12402-5:2006 – Part 5 Supersedes European Standard: EN 393</p>
<p>Special purpose lifejackets and buoyancy aids performance levels 50 – 275 Newtons</p>	<p>These are special purpose devices for specific needs that go beyond the requirements of the average user and they rely on the skill, knowledge, special training and participation of the user. This should be stated clearly in the information supplied by the manufacturer of these items. For use when fire fighting.</p> <p>European Harmonised Standard: I.S. EN ISO 12402-6:2006 – Part 6</p>

Why does a lifejacket with a hold-down device increase your chance of survival?

- because if you correctly wear a lifejacket with a hold-down device it is less likely to ride-up your torso resulting from falling into the water and the effect of wave action,
- you should feel safer, less likely to panic, and better able to concentrate on limiting the effects of hypothermia and on alerting recovery people or rescue services, and
- in the event of you entering the water in a disabled or unconscious condition, the lifejacket will stay in the correct position without the need to adjust.

Why can a lifejacket ride-up the torso of a user and what are the consequences?

A lifejacket will ride-up the torso of a user if not worn correctly and secured with a hold-down in the event of water entry. The fall into the water, the upward buoyancy of the lifejacket, swimming movement and wave action all act to force the lifejacket to ride-up the torso. The user may be injured or unconscious and also cold shock may take effect within minutes and the user's mental and physical ability to hold the lifejacket in place will become increasingly difficult, and if not quickly recovered or rescued, inevitably the user will drown.

It is recommended that a user ONLY purchases a lifejacket with a hold-down device

What is a hold-down device?

It is a device, commonly a crotch-strap or thigh-straps, attached to a lifejacket that when worn and adjusted correctly should keep the lifejacket in the correct position on the user to prevent it from riding-up their torso in the event of the user entering water.

How can you reduce the risk of falling or being dragged into the water?

- If handling nets, wear a lifejacket and clothing with no buttons, belts, fittings and connectors to reduce the risk of snagging.
- If working with ropes or wires, keep them coiled neatly and do not stand inside any loops.
- If working with overhead obstacles, wear a hard hat and be aware of the risk of being knocked unconscious and/or injured.
- If working on open deck that is awash, wear a safety harness attaching the lanyard to a strong point or safety line to reduce the risk of being swept overboard.

What is the difference between a PFD lifejacket and a Survival lifejacket?

- **PFD lifejackets** are intended to be worn for any length of time affording the user a level of protection for all types of occupational activities whilst **survival lifejackets** are only intended to be worn in the event of abandon ship.
- **PFD lifejackets** are available in various body mass and chest girth size ranges to suit the user, with various performance standards to provide the highest level of protection depending upon the risk-related occupational activity, being of the buoyant, inflatable or hybrid type, and if inflatable, operation may be automatic or the user may control inflation by manual or oral operation. **Survival lifejackets** are either of the inherently buoyant or twin-chamber inflatable type, available in three body mass and height size ranges for adult, child and infant, with one performance standard and, if inflatable, with automatic and manual operation.
- **PFD inflatable lifejackets** are usually single chamber, whilst **survival lifejackets** are twin-chamber, thus affording greater redundancy.

- **PFD lifejackets** are available with options such as sprayhoods, protective covers, deck safety harness and special purpose lifejackets for certain occupational activities such as fishing, fire-fighting, law enforcement, welders, whilst **survival lifejackets** are only intended to be worn in the event of abandon ship.

Selection of a suitable lifejacket for a person at risk of drowning

Factors to be considered before deciding upon size, performance standard, type, automatic and/or activation and optional extras -

- User's effective body mass and chest girth.
- Geographical area of operation: weather conditions with regard to wind, waves, and water and air temperatures.
- Thermal protection clothing type: swimwear, wind break, thermal or survival with due regard to water and air temperatures, the likelihood of being recovered or rescued, and the anticipated period of immersion.
- Water absorbent clothing may significantly increase the effective body mass that needs supporting when immersed.
- Buoyant clothing may trap air altering the way a person floats when wearing a lifejacket, due to undesirable buoyancy distribution, adversely affecting the ability to self-right the user and other performance tests.
- Occupational environment: a lifejacket that comes into contact with organic matter, chemicals, abrasion, heat, flame or weld-spatter should be provided with a protective cover that may be readily cleaned or renewed.
- The likelihood of recovery or proximity of search-and-rescue (SAR) resources and the anticipated period of immersion.
- Sea state: wave action increases the likelihood of a PFD riding-up the torso; correct wearing of a PFD and its hold-down device greatly increases the chance of survival.
- Snagging on clothing and/or lifejacket and its hold-down device may increase the risk of entering the water.
- Higher performance lifejackets tend to be heavier and bulkier, and restrict the mobility of the user in their occupational activity.
- Type of buoyancy: inherently buoyant, inflatable or hybrid. Lower performance inherently buoyant lifejackets are more easily worn, very reliable and least restrict the mobility of a user. The higher the performance standard the more likely some or all of the buoyancy will be provided by an inflatable chamber.
- If an inflatable lifejacket is at risk of damage from wear and tear due to extremes of the particular occupational activity, such as offshore work or coastal fishing, then it should be twin chamber, however the lifejacket will be heavier, bulkier and more complex.
- Manual and optional automatic activation of an inflatable lifejacket.
If a user is at risk of entering the water in a disabled or unconscious condition then the lifejacket should be fitted with both manual and automatic activation.
For occupations where a user enters the water during the normal course of the activity, the lifejacket should only be fitted with manual activation, but with additional safeguards.
- Automatic activation of an inflatable lifejacket is either by hydrostatic pressure or contact with water. A lifejacket worn by a user exposed to water spray and splashing should be fitted with hydrostatic activation.
- Every inflatable lifejacket should be fitted with the means to manually inflate.

- If a lifejacket is to be worn in temperatures below 0°C, Carbon Dioxide (CO₂), the common inflation gas, will usually be adversely affected and result in only partial inflation, and a user may find it difficult to put on, adjust, manually activate and manually inflate the lifejacket.
- A lifejacket is designed to keep a user face-up and their mouth sufficiently clear of still water, however increasing wave height and breaking waves are likely to invert the user, and water splash and spray may enter their airways. Therefore a spray-hood fitted to the lifejacket will assist the user's breathing.
- Wear a safety harness, possibly integral with a lifejacket if working on a deck with no handrails fitted while the ship is handling equipment over the side.
- A lifejacket light can aid location reducing the recovery or rescue time in bad visibility, day or night.
- An inflatable lifejacket should always be worn over all clothing. This is to ensure there is sufficient space for the lifejacket to inflate and not restrict the user's breathing.

Servicing and maintenance of Personal Flotation Devices

A PFD has a limited lifespan, being dependent on the severity of the environment and occupational activity, and on the PFD being maintained and serviced on a regular basis. **While servicing of PFDs should only be carried out by manufacturers or approved agents in accordance with the manufacturer's instructions, there are a few safety checks that can be carried out by the user prior to each use –**

- Harness straps/stitching inspected and checked for damage/wear;
- External lining inspected for wear/damage;
- All buckles checked/adjusted as required;
- All zips, buckles, fasteners, webbing straps and lights (if fitted) are functioning correctly;
- Hold-down devices, such as crotch-straps and thigh-straps;
- In the case of an inflatable PFD, CO₂ gas firing cylinder(s) is firmly screwed into the inflation valve and has not been fired;
- Manual firing lanyard positioned for use if required;
- Be aware of any marked expiry dates of the firing mechanism components; do not use the PFD with expired components.

If any concern exists regarding a PFD, attachment or component, following a safety check, always refer the PFD to an approved service agent for immediate attention and **remove the PFD from the ship and do not use it.**

Other factors to consider:

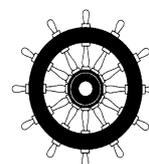
- Store lifejackets in a well-lit drying space where users can check before donning their lifejackets in safety before being exposed to the risk of drowning.
- Additional inflatable lifejackets may need to be carried onboard for use in the event of an inflatable lifejacket being activated; can the lifejacket be readily rearmed and packed onboard for use again? Some inflatable lifejackets can only be rearmed by their manufacturer.
- Every user should read the manufacturer's instructions for wearing, maintenance and servicing of a lifejacket, and be fully aware of how to activate and operate it.

Examples of Occupational Activities

- Crew launching and manning survival craft, rescue boats & marine evacuation systems.
- Crew on the open deck of fishing vessels.
- Crew on the open deck of tugs, workboats, dredgers, barges and pontoons.
- Crew on pilot boats and pilots transferring to and from ships.
- Crew on the open deck of merchant ships, both passenger and cargo, who are engaged in hazardous operations, e.g. during mooring operations or in inclement weather conditions.
- Crew over the sides of vessels maintaining and repairing ships.
- Crew on the open deck of pleasure craft engaged in trade, both motor and sailing.
- Crew on tugs transferring to and from unmanned tows.
- People on ships alongside unloading and loading.
- People in marine civil engineering sites working alongside, over and on water.
- People onboard Class P4 passenger boats engaged exclusively in the course of their employment in connection with marine civil engineering, survey of harbour limits, dredging or similar commercial activities.
- People engaged in shiprepair and shipbuilding working alongside, over and on water.

Marine Equipment Directive (MED) – Survival Lifejackets – Ship’s Wheel marking

The MED Directive specifies the IMO international test standard for adult, child and infant survival lifejackets. Before making a survival lifejacket available on the Union market, the manufacturer of the survival lifejacket shall draw up a declaration of conformity certifying that the survival lifejacket is in conformity with the provisions of the Directive and affix the Ship’s Wheel marking to it.



Help yourself to survive by wearing a lifejacket!

**The high majority of people who will drown at sea
will not be wearing a lifejacket!**

Survival times may be over **7 times longer if a lifejacket is correctly worn,
regardless of water temperature.**

Cold water shock kills

- Stage 1: Cold shock (3–5 minutes)**
- Stage 2: Swimming failure (3-30 minutes)**
- Stage 3: Hypothermia (after 30 minutes)**
- Stage 4: Post rescue collapse (during or hours after rescue)**

What does a correctly sized and worn lifejacket DO for YOU?

Makes YOU feel safe

Keeps YOU alive

Stops YOU from panicking

Supports YOU even when unconscious

Supports and protects YOU until help arrives

But only if you keep YOUR lifejacket from riding-up!

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30/07/2013

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