

# The Jersey Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels

To comply with this code, key matters that owners will be required to do are:

- Meet the requirements for the construction and use of fishing vessels as set out in this code;
- complete the annual self-certification record in the form laid out in Annex 1 of this code;
- present new vessels for survey during and on completion of construction, or on transfer to the Jersey Register prior to issue of a Jersey certificate;
- present the vessel for renewal survey at intervals not exceeding 5 years;
- present the vessel for survey prior to completing major repairs or modifications;
- present the vessel for survey on change of ownership, where the vessel is intended to remain on the Jersey Fishing Vessel Register.

## Notice to all Designers, Builders, Owners, Employers, Skippers and Crew of Fishing Vessels

### PLEASE NOTE:-

Any guidance on the law contained in this code should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel. You should consider seeking independent legal advice if you are unsure of your own legal position.

## 1 Foreword

1.1 The aim of the Code of Practice (hereinafter simply referred to as the code) is to improve the safety of fishing vessels of less than 15 metres Length Overall (LOA) sector of the fishing industry and to raise the safety awareness of all those involved with the construction, operation and maintenance of such vessels.

1.2 The equivalent UK code (MSN 1813) has been the subject of extensive discussion with representatives of the small vessel sector of the fishing industry in the UK within a steering committee set up by the Fishing Industry Safety Group to oversee this code's development. If this code needs to be up-dated at any time to take account of new statutory requirements that apply to vessels operating under this code, the relevant Jersey Fishermen's organisations will be consulted.

## 2 Application

2.1 This code applies to all fishing vessels, registered in Jersey, of less than 15 metres Length Overall (LOA). Vessels of 15m (LOA) to less than 24m Registered Length (L) operating solely in categorized waters may comply with the requirements of this code for decked vessels of 12m (L) to less than 15m (LOA). This code entered into force on 14 July 2015 being the same day as the Shipping (Fishing Vessels Safety Codes of Practice) (Jersey) Regulations 2015 come into force.

## 3 Code Requirements

### Safety equipment

3.1 The vessel owner shall ensure that the vessel complies with the checklist of safety equipment requirements appropriate to the length and construction of the vessel contained in Annex 1 to this code.

### Inspection of fishing vessels

3.2 The owner of the vessel shall present the vessel for inspection on first registration and at intervals not exceeding five years from the date of the last inspection.

3.3 On the purchase of an existing vessel, the new owner shall present the vessel for inspection on first registration as owner.

3.4 On the change of mode of fishing (such as when a trawler is used as a potter) a vessel of 12m registered length or over shall have a stability check in accordance with Annex 3 of this code. This is also a recommendation for vessels of any length.

3.5 In addition to any other requirements, the inspection will verify that the vessel –

3.5.1 complies with the checklist of safety equipment, and

3.5.2 in the opinion of the inspector, is not dangerously unsafe<sup>1</sup>.

3.6 On satisfactory completion of the inspection, a Certificate and Annual Self-Certification Record will be issued.

3.7 Inspection is subject to a fee and if deficiencies are found which necessitate follow-up visits, additional fees may be charged to the owner.

3.8 A vessel may be inspected by those appointed in accordance with Regulation 4 of the Shipping (Fishing Vessels Safety Codes of Practice) (Jersey) Regulations 2015 or article 154 of the Shipping (Jersey) Law 2002 as approved inspectors or surveyors at any time to check compliance with code requirements. Such persons are to produce their authority<sup>2</sup> to carry out inspections, if requested to do so.

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<sup>1</sup> In accordance with Article 57 of the Shipping (Jersey) Law 2002

<sup>2</sup> In the form of a letter from the Registrar of Shipping or other appropriate identification.

### **Annual self-certification**

3.8 The owner of the vessel shall ensure that every year, within 1 month of the anniversary of the vessel's registration the vessel owner (or other competent person employed by the vessel owner) inspects the vessel to confirm that the:

1. safety equipment carried on board the vessel has been suitably maintained and serviced in accordance with the manufacturer's instructions;
2. safety and other specified equipment continues to comply with the checklist appropriate to the length and construction of the vessel;
3. crew under 18 years of age work aboard in compliance with the Shipping (Employment of Young People) (Jersey) Order 2007; and
4. the skipper and crew are trained in accordance with the Shipping (Fishing Vessels – Safety Training) (Jersey) Order 2004.

On completion of these annual checks, the owner must sign the self-certification record as contained in Annex 1 confirming that the vessel complies with this code and retain a copy of the declaration onboard for inspection purposes.

### **All fishing vessels of 12 metres (L) to less than 15 metres (LOA)**

3.9 These vessels require a stability book, in accordance with Annex 3.

3.10 Inspection on first registration and at intervals not exceeding five years from the date of the last inspection will include a lightship check. This is to verify that the stability information remains valid.

### **Fishing vessels new to the Jersey Register**

3.11 In addition to the requirements contained in sections 3.1 to 3.10 fishing vessels new to the Jersey Register, (defined as those which are presented for registration for the first time on or after the date that this code entered force) and with a length of less than 15 metres (LOA), must comply either with the latest release of the Construction and Outfit Standards issued by the Sea Fish Industry Authority<sup>3</sup>, or equivalent standards established by an organisation approved for the purpose by the Registrar. Table 1 below lists the certification required in respect of those standards.

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<sup>3</sup> <http://www.seafish.org.uk/> 18 Logie Mill, Logie Green Road, Edinburgh EH7 4HS Tel 0131 524 86781 ("SEAFISH")

**Table 1 Build Certification Required**

<b>Vessel Length</b>	<b>Hull Construction Certificate</b>	<b>Outfit Compliance Certificate</b>	<b>Safety Checklist (Annex 1)</b>	<b>Stability Information</b>
Under 7m (LOA)	Yes	Not Required	Yes	Not Required
7m (LOA) to less than 15m (LOA)	Yes	Yes	Yes	See Annex 3 below

3.12 On first registration of a new vessel, the owner shall supply the required hull construction and outfit certificates to the Registrar of Shipping in Jersey.

### **Vessels of 15m (LOA) and over**

3.13 Where vessels of 15m (LOA) and over which operate solely in categorized waters, comply with this code as an alternative to complying with the Jersey Code of Safe Working Practice for the Construction and Use of Fishing Vessels of 15 metres or more in length (LOA) and less than 24 metres in length (L), they shall in addition to sections 3.1-3.10 above, report their intentions to the nearest Coastguard Rescue Centre before proceeding outside categorized waters.

### **Penalties**

3.14 A vessel that is found, in the course of inspection, not to be equipped, or the safety equipment not to be properly maintained and self-certified in accordance with this code, or is in an unsafe condition to proceed to sea, may be liable to detention by authorized officers<sup>4</sup>. In order to be released the vessel must be inspected and a fee will be charged. An owner whose vessel fails to comply with this code or who makes a false declaration may be liable to prosecution. A skipper who fails to operate the vessel in accordance with this code may also be liable to prosecution.

## **4 Additional Guidance**

4.1 The guidance contained in this section is a reminder of other requirements which may be relevant to fishing vessels covered by this code. It does not form part of the statutory requirements of the code.

<sup>4</sup> Authorized officers being those referred to in 3.5 above.

## **Risk Assessments**

4.2 Owners and skippers are recommended to make a suitable and sufficient assessment of the risks to the health and safety of workers arising in the normal course of their activities or duties. Guidance on the principles of risk assessment is contained in a Marine Guidance Note (currently MGN 20 M+F).

Risk and Health assessments for those under the age of eighteen are compulsory in accordance with articles 4 and 6 of the Shipping (Employment of Young People) (Jersey) Order 2007<sup>5</sup>.

4.3 A risk assessment is intended to be a careful examination of what, in the nature of operations, could cause harm, so that decisions can be made as to whether enough precautions have been taken or whether more should be done.

4.4 The assessment should first identify the hazards that are present and then establish whether a hazard is significant and whether it is already covered by satisfactory precautions to control the risk, including consideration of the likelihood of the failure of those precautions that are in place.

4.5 It is not a requirement that risk assessments be written but it is strongly recommended that such assessments be written. An example of a suitable standard of written risk assessment is included in the Fishing Vessel Safety Folder developed by and available from SEAFISH (Website: [www.seafish.org.uk](http://www.seafish.org.uk) or Telephone: 01472 252300, which also provides pro-forma guidance on fishing vessel risk assessment, both generally and in relation to particular modes of fishing.

4.6 The health and safety risk assessment must also be checked to ensure that it remains appropriate to the vessel's fishing method and operation. If there has been a change of fishing method or of operational practice, the assessment must be revised accordingly.

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<sup>5</sup> Owners and skippers should be aware of all matters covered in this Order including the need for medical certification, periods of rest and record-keeping.

## Safety Training

4.7 All crew working on a Jersey registered fishing vessel are required to ensure that they have undertaken the appropriate training courses <sup>1</sup>.

Course	Experienced Fisherman	New Entrant
1 Day Sea Survival Techniques	X	X
1 Day Fire Prevention and Fire Fighting	X	X
1 Day Elementary First Aid	X	X
1 Day Safety Awareness and Risk Assessment	X <sup>2</sup>	
1 Day Health and Safety (safe working practices)		X <sup>2</sup>

1. Further details of these requirements and possible exemptions are available from the Harbour Master at Jersey Harbours.
2. The Safety Awareness and Health and Safety courses are recommended but not yet compulsory. They will only become so when the Shipping (Fishing Vessels – Safety Training) (Jersey) Order 2004 is amended or replaced.

## Radio Licences

4.8 All vessels must have a radio licence, which can be obtained from:

<http://licensing.ofcom.org.uk/radiocommunication-licences/ships-radio/>

Tel - 0300 123 1000 or 020 7981 3040

4.9 Failure to obtain a radio licence (which also records the radio's unique Maritime Mobile Service Identity (MMSI) Digital Selective Calling (DSC) Identifying Code may result in the DSC function operating incorrectly in an emergency, as unregistered identifying codes are reallocated.

4.10 All vessels are also required to have at least one person onboard who holds a Short Range Radio Certificate if operating in sea area A1. These can be obtained by undertaking a one-day course at a Royal Yachting Association (RYA) accredited training centre. For vessels operating in sea Area A2, at least one crew member should have a Restricted Global Maritime Distress Signal System (GMDSS) Operators Certificate. These can be undertaken at an appropriate Nautical College such as Warsash Maritime Academy - [www.warsashacademy.co.uk](http://www.warsashacademy.co.uk)

## **Inspection Standards**

In February 2014, the MCA issued a revised voluntary Code of Practice for UK fishing vessels. Certain aspects have been incorporated into the Jersey Code, such as the requirement for the inspector to issue an inspection certificate and for an inspection to take place on change of ownership. The remainder of the UK voluntary Code contains valuable additional guidance. See MGN 502(F) -

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/296318/mgn502.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296318/mgn502.pdf)

## **UK Merchant Shipping Notices**

4.11 A number of other UK Merchant Shipping Notices, Marine Guidance and Information Notes are produced by the MCA. These can contain very useful and relevant information. Those relevant to fishing vessel owners and skippers have the letter F added as a suffix to the number or M+F where applicable to both merchant shipping and fishing vessels.

4.12 These documents can be accessed and downloaded from:

<http://www.mcga.gov.uk/c4mca/mcga07-home/shipsandcargoes/mcga-shipsregsandguidance/marinenotices.htm>

4.13 Jersey Harbours recommends owners and skippers to be familiar with and where relevant to act on the contents of these notices.

## **5 Appeal Procedures**

5.1 If an owner is dissatisfied with an inspection then this should be discussed in the first instance with the person who carried out the inspection.

5.2 If agreement cannot be reached with the person who carried out the inspection the owner may refer the matter to the Registrar of Shipping in Jersey.

5.3 Should the above procedure fail to resolve the dispute, the owner may refer the matter to the Minister for Economic Development.

5.4 If an owner is still not content with the way in which the dispute has been handled, the owner may apply to the Greffier of the States to have the matter reviewed by a Board in accordance with the Administrative Decisions (Review) (Jersey) Law 1982.

02.07.2015



## SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS (Vessels less than 15m Overall Length)

Item	State yes / no if held on board	Expiry or Next Service Date
Lifejackets - 1 per person		
Liferaft ( <i>Only if vessel is of 10m or more</i> )		
<i>Vessels under 7m:</i> - 1 Lifebuoy <i>Vessels of 7m or more:</i> 2 Lifebuoys (1 with 18m buoyant line attached) <u>or</u> 1 Lifebuoy (with 18m buoyant line) +1 Buoyant Rescue Quoit.		
Coastal flare pack – minimum of 2 red parachute flares, 2 red hand-held flares and 2 orange smoke signals (buoyant or hand-held)		
Smoke alarm ( <i>decked vessels only</i> )		
Gas detector ( <i>decked vessels with gas cooker only</i> )		
<i>All vessels if 7m in length &amp; fitted with in-board engine:</i> 2 Multi-purpose Fire extinguishers – one with fire rating 5A/34B and another with rating 13A/113B (for oil fires)		
1 Fire blanket (light duty) in galley or cooking area (if applicable)		
2 buckets, one with lanyard <u>or</u> 1 Fire pump + hose		
<i>Decked vessels of 10m or more:</i> 1 Fire pump + hose <u>or</u>  1 Fire bucket and lanyard + 1 Multi-purpose fire Extinguisher (fire rating 5A/34B) + 1 fixed Fire Extinguishing system for the machinery space		
VHF Radio – fixed or hand held <sup>2</sup>		
Bilge Pump		
Bilge level alarm ( <i>decked vessels only</i> )		
Navigation Lights & Sound Signals		
Radar Reflector <sup>3</sup>		
Anchor, cable & warp, adequate for vessel size & use		
Compass		
Waterproof Torch		
Medical Kit		

**Notes**

1. Decked vessel – means a vessel with a continuous watertight deck extending from stem to stern, with positive freeboard throughout, in any condition of loading.
2. For distress and urgency communications, it is recommended that VHF DSC is fitted. Outside Jersey the Coastguard maintain a listening watch only on VHF Channel 16 via loudspeaker. The primary means of distress and urgency alerting should be via VHF DSC.
3. A radar reflector is required by law if practicable and if the vessel is operating outside the Jersey inter-tidal zone.
4. The checklist represents the minimum safety equipment requirements. Owners should consider carrying additional safety equipment. Carriage of a liferaft and EPIRB (or PLB) are recommended even where these are not legally required.

Name of Owner .....

Address .....

Name of Vessel .....

J No..... Length Overall.....

Registered Length ..... Date of Registration .....

I HEREBY CERTIFY, in respect of the above named vessel, that:

- i. The safety equipment has been checked in accordance with this checklist;
- ii. The safety equipment has been properly maintained and serviced in accordance with the manufacturers’ recommendations;
- iii. Crew under 18 years of age work aboard the vessel in accordance with the Shipping (Employment of Young People) (Jersey) Order 2007;
- iv. The skipper and crew are trained in accordance with the Shipping (Fishing Vessel – Safety Training) (Jersey) Order 2004.

Year	Signature	Date
1		
2		
3		
4		
5	<b><i>Inspection and Registration renewal are now due!</i></b>	

# GUIDANCE ON REQUIREMENTS CONTAINED IN THIS CODE FOR SURVEYORS, INSPECTORS AND FISHERMEN

### Anchors & Cables

For new vessels these should be in accordance with SEAFISH construction standards, as amended from time to time by the issue of Seafish Information Notes. An existing vessel should carry a suitable means of anchoring and chain cable or warp of a length suitable for the intended area of operation.

### Bilge level alarm

This should provide warning when working inside or outside the wheel house. When a watertight bulkhead is fitted sensors should be fitted in the fish hold and engine room.

### Flares and smoke signals

Should be of an acceptable type and within their expiry date.

### Fire buckets

Should be heavy duty with a Lanyard.

### Fire Extinguishers (Portable)

Fire onboard a vessel, if it is not controlled, can lead to the loss of the vessel and/or serious injuries. The checklists in this Code of Practice give a minimum requirement for the extinguishers to be carried on Fishing Vessels. When extinguishers are replaced, new extinguishers should comply with BS EN 3, 1996, or the Marine Equipment Directive (96/98/EC as amended from time to time).

There are two sizes quoted in the checklists:

Designation	Equivalent Dry Powder	Equivalent Foam
5A/34B	1 Kg ABC Dry powder	1.75 Litre. AFFF
13A/113B	4 Kg ABC Dry powder	2 Gallon or 6 Litres. AFFF

The designation gives a measure of the ability of the extinguisher.

'A' indicates a wood based fire; the number indicates fire size which has been used to test the extinguisher. 'B' indicates a liquid based fire; the number indicates the size of fire, which has been used to test the extinguisher.

Where it is not practicable to carry or store a large fire extinguisher, an alternative is to carry a combination of others to make up the required capacity. Add the numbers before the 'A' and the 'B' together, and if these exceed the total required the extinguishers will provide an equivalent capacity, e.g. two 8A/70B extinguishers would give a capacity of 16A/140B, which is greater than the required 13A/113B.

In any case the minimum acceptable size of extinguisher would be 5A/34B. A fire may require more than one smaller extinguisher to put it out.

Fire extinguishers should be serviced and maintained at the manufacturer's recommended service intervals by a service station approved by the manufacturer. In the case of sealed units, these should be replaced when they reach their expiry date.

Since 31 December 2003, Halon, in any form, is not authorized for use.

### Fire extinguishers (Fixed)

For fixed systems in machinery spaces where the space is never occupied an automatic discharge system is acceptable, providing that an indication of discharge is given.

For machinery spaces that can be occupied, the system should be designed and installed in accordance with its manufacturers' instructions. These spaces should incorporate an advance warning alarm system, within the space, (audible and visual). The space should be able to be made gastight to contain the extinguishing agent, and to starve the oxygen supply. Systems fitted should be based on the class of fire risk.

### Fire blankets

For the galley or cooking appliance fire blankets should be of light duty to BS EN 7944 (this standard has superseded 6575) or a recognised equivalent BS EN 1869.

### Fire pumps

Can be a hand pump or any other pump that supplies water from the sea onto the deck with a hose suitable for fire fighting purposes.

### Gas Detector

Suitable means for detecting the leakage of gas (i.e. Liquefied Petroleum Gas, Butane, Propane or other flammable gases) should be provided in a compartment containing a gas-consuming appliance or in any adjoining space or compartment into which the gas, of greater density than air, may seep.

Gas detectors heads should be securely fixed in the lower part of the compartment in the vicinity of the gas-consuming appliance and other space(s) into which gas may seep. In areas where the detector head is susceptible to damage in the lowest part of the

compartment (e.g. engine space bilge) the detector head should at least be fitted below the lowest point of ignition.

The detection system should incorporate a visible and audible alarm, which can be heard and seen in the space concerned and the control position with the vessel in operation.

The detection system should be capable of being tested and be tested on a regular basis whilst the vessel is in service and should include a test of the detector head operation as well as the alarm circuit, in accordance with the manufacturer's instructions.

The detection equipment should be maintained in accordance with the manufacturer's requirements.

A suitable notice, detailing the action to be taken when an alarm is given by the gas detection system, should be displayed prominently in the vessel.

### Lifejackets

Should be of the solid-filled type, or should comply with BS EN 396 or BS EN 399, with automatic gas inflation and at least 150 Newtons buoyancy. One lifejacket per person should be carried, fitted with light, whistle and reflective tape. Lifejackets should be serviced and maintained at the manufacturer's recommended service intervals by a service station approved by the manufacturer.

### Liferafts

Should be float free, or fitted with a hydrostatic release unit (HRU) and suitable weak link either green or yellow in accordance with manufacturers' instructions. This should be stowed in a position unobstructed by rigging or fishing gear and preferably in a position which will allow it to float free in the event of the vessel sinking stern first, or stowed in a position where it is accessible for manual deployment in an emergency. It/they should have a capacity sufficient for the total number of persons on board the vessel. Liferafts must be serviced and maintained at the manufacturer's recommended service intervals by a service station approved by the manufacturer.

### Lifebuoys

Should be marked with the vessel name and port of registry or fishing vessel number and fitted with reflective tape and may be circular or horseshoe in shape.

### Medical Kit

A first aid kit should be of Category 'C' standard for vessels staying up to 60 nautical miles from shore and Category 'B' for vessels operating between 60 and 175 Nautical miles from the nearest port. Merchant Shipping Notice MSN 1768 (M+F) provides guidance on the contents which should be included.

## Navigation lights and sound signals:

Every vessel must exhibit the navigation and fishing lights and shapes, and sound signals, as prescribed in the Shipping (Distress Signals and Prevention of Collisions) (Jersey) Order 2004

## Radio

When operating offshore up to 30 nm from the coast, a VHF radio should be adequate to contact a coastal radio station in good conditions. For vessels operating more than 30nm from the coast it is strongly recommended that additional means of communication with greater range such as a Medium Frequency radio are carried.

Coastguard Maritime Rescue Co-ordination Centres maintain a listening watch on VHF Channel 16 via loudspeaker. The primary means of distress and urgency alerting should be via VHF DSC. On medium frequency (MF), the only means of distress and urgency alerting available is via MF DSC.

The Coastguard Maritime Rescue Co-ordination Centres provide the UK's Radio Medical Advice Service for vessels at sea. To seek medical advice or medical evacuation, call the Coastguard on VHF Radio whereupon you will be placed in direct contact with the appropriate medical expertise. This service is free.

## Smoke Alarm

A smoke alarm should be fitted in machinery and accommodation spaces. Either battery powered domestic types or vessel powered types are suitable.

## Stability Information - Vessels of between 12m registered length (L) and less than 15 metres length overall (LOA)

These vessels should comply with the requirements contained in Annex 3 of this code and Marine Guidance Note MGN 281 (F) (Fishing Vessels Freeboard and Stability Information Booklet – Recommended Format). Advice may be sought from an approved surveyor.

Stability information will be checked and the continuing validity certified at intervals not exceeding five years by an approved surveyor. When changing, repositioning or adding equipment, e.g. fishing gear, winches or shelters, advice may be sought from an approved surveyor on the effect this could have on the stability of the vessel. When a vessel changes its mode of fishing, in addition to having a stability check, an approved surveyor will review any exemptions that may have previously been applied and which were associated with the original fishing method(s).

**INFORMATION AS TO STABILITY OF FISHING VESSELS****Stability Information - Vessels between 12m registered length (L) and less than 15 metres length overall (LOA)**

A stability book is required for these vessels. It is to be kept on board the vessel and contain the following information:

- 1.** A statement of the vessel's name, port of registry, official number, registration letters, principal dimensions, date and place of build, gross and net tonnage displacement and minimum freeboard in the deepest foreseeable operating condition.
- 2.** A profile plan of the vessel drawn to scale showing the names of all compartments, tanks, storerooms, crew accommodation spaces and the position of the mid-point of the length between perpendiculars (LBP).
- 3.** A tabular statement of the capacities and position of the centres of gravity, longitudinally and vertically for every compartment available for the carriage of cargo, fuel, stores, feed water, domestic water, water ballast, crew and effects. The free surface function defined in paragraph 9 below should also be included for each tank designed to carry liquid. Details of the centroid of the total internal volume of the fish-hold(s) should be included in such information. The calculation may take into account the effect of assuming a void space between the top of the catch and the underside of the deckhead provided that under normal operating conditions, control of loading in the hold is such that the actual void space above the catch will always be equal to or greater than that assumed in such a calculation.
- 4.** Where deck cargo is carried by a vessel the estimated maximum weight and disposition of such deck cargo should be included in the information in the appropriate operating conditions, and show compliance with the stability criteria set out in this code.
- 5.** A diagram or tabular statement should be provided showing for a suitable range of mean draughts and at the trim stated, the following hydrostatic particulars of the vessel:
  - (i) the heights of the transverse metacentres;
  - (ii) moments to change trim one centimetre;
  - (iii) tonnes per centimetre immersion;
  - (iv) longitudinal position of the centre of flotation;
  - (v) vertical and longitudinal positions of the centre of buoyancy;
  - (vi) displacement in tonnes.

Where a vessel has a raked keel, the same datum (a horizontal line through the intersection of the hull moulded line with the vessel centreline, amidships) should be used for the hydrostatics as employed in determining the information required in paragraph 3 above. In such cases full information should be included in respect of the rake and dimensions of the keel and may be given in the form of a diagram. The positioning of the draft marks relative to this datum should be included on such a diagram.

**6.** A diagram or table should be provided showing cross curves of stability indicating the assumed position of the axis from which the righting levers are measured and the trim which has been assumed. Where a vessel has a raked keel a horizontal datum through the intersection of the hull moulded line with the vessel centreline, amidships, should be used. **On existing vessels, any datum other than a horizontal line through the intersection of the hull moulded line with the vessel centreline, amidships, should be clearly defined.**

**7.** The information provided under paragraphs 5 and 6 above should be at such a nominal trim that represents accurately the vessel in all normal operating trims. Where calculations show that there are significant numerical variations in these operating trims the information provided under paragraphs 5 and 6 above should be repeated over such a range of trims to allow an accurate interpolation of such information at any normal operating trim.

**8.** Superstructure deckhouses, companionways located on the freeboard deck, including hatchway structures may be taken into account in deriving such cross-curves of stability provided that their location, integrity and means of closure will effectively contribute to the buoyancy.

**9.** An example should be included in such information to show the corrections applied to the transverse metacentric height and righting levers (GZ) for the effects of the free surfaces of liquids in tanks and should be calculated and taken into account as follows:

(i) the metacentric height in metres should be reduced by an amount equal to the total of the free surface functions for each tank divided by the vessel's displacement in tonnes. For each tank the free surface function is given by:

$1.025 \times \sum p_i$  where  $p$  = specific gravity of the liquid;

$i$  = transverse moment of inertia of the surface

( $i = \frac{LB^3}{12}$  where  $L$ =length and  $B$ =breadth of the free surface in metres)

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i.e. correction =  $\frac{\text{Sum of } p_i}{\text{Displacement}}$

(ii) the righting lever (GZ) curves should be corrected by either:

(a) adding the free surface correction calculated under (i) above to the value in metres of the calculated height of centre of gravity of the vessel above datum; or



(b) making direct calculations of the heeling moment due to the liquid surface being inclined at the selected angle of heel where such calculations take proper account of the position of liquid surface in relation to the geometric configuration of the tank. The correction to the righting lever (GZ) at any selected angle of heel should then be the summation of the individual heeling moments of the tanks considered, divided by the vessels displacement.

**10.** A stability statement and diagram should be provided for the usual condition of the vessel:

(a) in the lightship condition:

the vessel should be assumed to be empty except for liquids in machinery and in piping systems including header tanks. The weight and position of the centre of gravity of any permanent ballast or fishing gear should be indicated;

(b) in each of the following circumstances so far as they may be applicable to the vessel in its foreseeable operating conditions:

(i) on departure from port:

the vessel should be assumed to be loaded with the necessary equipment, materials and supplies including ice, fuel, stores and water;

(ii) on arrival at fishing grounds:

as sub-paragraph (i) above but account taken of the consumption of fuel and stores;

(iii) on arrival at fishing grounds:

as sub-paragraph (ii) above but the appropriate icing-up allowance as set out in paragraph 14 below should be taken into account;

(iv) on departure from fishing grounds:

the vessel should be assumed to be loaded with its maximum catch but account taken of the consumption of fuel and stores;

(v) on departure from fishing grounds:

as sub-paragraph (iv) above but the appropriate icing-up allowance as set out in paragraph 14 below should be taken into account;

(vi) on departure from fishing grounds:

the vessel should be assumed to be loaded with 20% of its maximum catch but account taken of the consumption of fuel and stores;

(vii) on departure from fishing grounds:

as sub-paragraph (vi) above but the appropriate icing-up allowance as set out in paragraph 14 below should be taken into account;

(viii) on arrival at port with maximum catch:  
account should be taken of the consumption of fuel and stores;

(ix) on arrival at port with 20% maximum catch:  
account should be taken of the consumption of fuel and stores;

(x) if any part of the catch normally remains on deck, further statements and diagrams appertaining to that condition in all the appropriate circumstances set out in sub-paragraphs (iv) to (ix) inclusive should be provided;

The total free surface correction for the effect of liquid in tanks should be applied to each loading condition set out in the foregoing provisions of this paragraph. The free surface correction should take into account the amounts of fuel, lubricating oil, feed and fresh water in the vessel in each such loading condition.

(c) Working instructions, specifying in detail the manner in which the vessel is to be loaded and ballasted, should be included within the Stability Information Booklet. The instructions should generally be based upon the conditions that are specified in paragraph (b) above. For vessels in which no provision has been made for the carriage of deck cargo, the working instructions should also contain the following statement:

"Provision has not been made within the vessel's stability for deck stowage of catch. Catch landed on deck should be stowed below as soon as is possible and prior to landing further catch"

**11.** Where provision is made in a particular area of the vessel for the washing and cleaning of the catch which could lead to an accumulation of loose water a further statement and diagram should be provided appropriate to that condition which takes into account the adverse effects of such loose water, it being assumed that:

i) the amount of loose water on deck is determined by the size and disposition of the retaining devices; and

ii) in all other respects the vessel is loaded in accordance with (iv) or (vi) of paragraph 10 above, whichever is the less favourable with regard to the vessels stability.

**12.** Each stability statement should consist of:

(i) a profile drawn to a suitable scale showing the disposition of the deadweight components;

(ii) a tabular statement of all the components of the displacement including weights, positions of centres of gravity, transverse metacentric height corrected for free surface effects, trim and draughts;

(iii) a diagram showing a curve of righting levers (GZ), corrected for free surface effects and derived from the cross-curves of stability, showing, if appropriate, the angle at which

the lower edges of any opening which cannot be closed watertight will be immersed. The diagram should also show the corresponding numerical values of the stability parameters defined in section 3.1.2 of this code.

**13.** The information provided under sub-paragraph (iii) of paragraph 12 above should be supplemented by a graph or tabular statement showing the maximum permissible deadweight moment over a range of draughts which should cover foreseeable operating conditions. At any given draught this maximum permissible deadweight moment value is the total vertical moment about a convenient base line, of all the component weights of the total deadweight which, at that draught, will ensure compliance with the minimum stability criteria requirements of this code. If an allowance for the weight due to icing-up is required, this should be taken into account by a suitable reduction in the permissible moment. Where the stability information is supplied in accordance with the requirements of this paragraph the tabular statement required in accordance with sub-paragraph 12(ii) above should include the deadweight moment appropriate to each condition and an example should be added to the stability information to demonstrate the assessment of the stability.

**14.** The icing-up allowance which represents the added weight due to ice accretion on the exposed surfaces of the hull, superstructure, deck, deckhouses and companionways should be calculated as follows:

(i) full icing allowance:

all exposed horizontal surfaces (decks, house tops, etc.) should be assumed to carry an ice weight of 30 kilogrammes per square metre. The projected lateral area of the vessel above the waterline (a silhouette) should be assumed to carry an ice weight of 15 kilogrammes per square metre. The height of the centre of gravity should be calculated according to the heights of the respective areas and in the case of the projected lateral area the effect of sundry booms, rails, wires, etc., which will not have been included in the area calculated should be taken into account by increasing by 5% the weight due to the lateral area and the moment of this weight by 10%.

This allowance should apply in winter (1st November to 30th April inclusive in the northern hemisphere) to vessels which operate in the following areas:

(a) the area north of latitude 66°30'N. between longitude 10°W. and the Norwegian Coast;

(b) the area north of latitude 63°N. between longitude 28°W. and 10°W.;

(c) the area north of latitude 45°N. between the North American continent and longitude 28°W.;

(d) all sea areas north of the European, Asian and North American continents east and west of the areas defined in (a), (b) and (c) above;

(e) Bering and Okhotsk seas and Tatar Strait;

(f) South of latitude 60°S.

(ii) Half of the full icing allowance:

this should be taken as one half of that calculated under sub-paragraph (i) of this paragraph and should apply in winter to vessels which operate in all areas north of latitude 61°N. between longitude 28°W. and the Norwegian Coast and south of the areas defined as the lower limit for the full icing allowance between longitude 28°W and the Norwegian Coast.

**15.** Information should be provided in respect of the assumptions made in calculating the condition of the vessel in each of the circumstances set out in paragraph 10 above for the following:

(i) duration of the voyage in terms of days spent in reaching the fishing grounds, on the grounds and returning to port;

(ii) the weight and disposition of the ice in the hold at departure from port including the heights of stowage;

(iii) consumption rates during the voyage for fuel, water, stores and other consumables;

(iv) ratio by weight of the ice packed with the catch in the fish hold;

(v) melting rates for each part of the voyage of the ice packed with the catch and the ice remaining unused in the hold.

**16.** A copy of a report of an inclining test of the vessel and the derivation therefrom of the lightship particulars should be provided.

**17.** A statement should be given by or on behalf of the owner of the vessel that the statements and diagrams supplied with respect to the operating conditions set out in paragraph 10 above are based on the worst foreseeable service conditions in respect of the weights and disposition of fish carried in the hold or on deck, ice in the hold, fuel, water and other consumables.

End