

**Resolution A.863(20)**

*Adopted on 27 November 1997  
(Agenda item 9)*

**CODE OF SAFE PRACTICE FOR THE CARRIAGE OF CARGOES AND PERSONS BY  
OFFSHORE SUPPLY VESSELS (OSV CODE)**

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECALLING ALSO resolution A.741(18) on the International Management Code for the Safe Operation of Ships and Pollution Prevention (International Safety Management (ISM) Code),

RECALLING FURTHER that the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, adopted, on 24 May 1994, a new SOLAS chapter IX (Management for the safe operation of ships), by virtue of which the ISM Code is due to become mandatory for certain classes of ship as from 1 July 1998,

BEING AWARE that the specialized operations of offshore supply vessels may expose personnel and cargoes on board to additional hazards,

BEARING IN MIND that a number of serious accidents have occurred on offshore supply vessels, during cargo and person carriage operations,

RECOGNIZING that proper practice in the operation and management of offshore supply vessels when interfacing with offshore installations, could avoid such accidents in the future,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its sixty-sixth session,

1. ADOPTS the Code of Safe Practice for the Carriage of Cargoes and Persons by Offshore Supply Vessels (OSV Code) set out in the annex to the present resolution;
2. INVITES Governments to apply the OSV Code;
3. REQUESTS the Maritime Safety Committee to keep the OSV Code under review and to amend it, as necessary.

## CODE OF SAFE PRACTICE FOR THE CARRIAGE OF CARGOES AND PERSONS BY OFFSHORE SUPPLY VESSELS (OSV CODE)

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### FOREWORD

The purpose of this Code of Safe Practice is to provide, for both operator and contractor, an international standard to avoid or reduce to a minimum the hazards which affect offshore supply vessels in their daily operation of carrying cargoes and persons to, from and between offshore installations. It is not intended to address contractual matters or the financial implications that occur in the operator/contractor relationship.

This standard should be considered when implementing a Safety Management System (SMS) within the meaning of 1.4 of the IMO International Safety Management (ISM) Code.

## 1 GENERAL

### 1.1 Definitions

**1.1.1** *Contractor* means the organization that has the responsibility for the operation of the ship as laid down in 1.1.2 of the International Safety Management (ISM) Code.

**1.1.2** *Operator\** means the party who contracts an offshore supply vessel.

**1.1.3** *Offshore supply vessel (OSV)* means a vessel which is used for the transportation of stores, materials, equipment or personnel to, from and between offshore installations.

**1.1.4** *Offshore installation manager (OIM)* means the person responsible for all activities on the offshore installation.

**1.1.5** *Offshore installation* means a structure which is, or is to be, or has been used, while standing or stationed in water, or on the foreshore or other land intermittently covered with water (see appendix 1).

**1.1.6** *Logistics co-ordinator* means a person or persons based on shore or offshore, specifically designated by the operator as a focal point and having responsibility for:

- .1 the proper preparation of cargo for transport offshore;
- .2 loading/unloading/backloading plans;
- .3 sailing schedules;

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\* A mobile offshore unit (MOU) owner/contractor is the operator in cases where he contracts an offshore supply vessel.

- .4 contingencies; and
- .5 other matters, as required by the situation, including dangerous goods.

**1.1.7** *Cargo handler* means a member of ship or offshore installation handling the cargo on board the OSV at the offshore installation.

**1.2 Information and documentation**

**1.2.1** OSVs should be supplied with all relevant information to undertake the intended voyage(s). In deciding upon the relevancy of the information provided, a distinction should be made between:

- .1 vessels chartered for a stated period or for consecutive voyages; and
- .2 vessels chartered for one voyage or a short period of time.

**1.2.2** The operator and the contractor should have documents containing procedures and instructions, preferably used to describe and implement the Safety Management System (SMS), that address the relevant items of Table 1 and Table 2 below:

**Table 1**

<b>Operator and contractor</b>
Detailed communication procedures
Procedures for reporting accidents and non-conformities, and follow-up action
Vessel sailing schedule, taking into account assessment of weather and sea conditions
Routeing/re-routeing instructions
Arrival/departure procedures vessel–shore base
Arrival/departure procedures vessel–offshore installation
Detailed loading/unloading/backloading procedures with checklist, including those related to dangerous goods, heavy lifts and unusual loads
Responsibilities and authorities
Emergency procedures
Special operations
Critical operations

**Table 2**

<b>Operator</b>	<b>Contractor</b>
Incoming materials on the shore base with an offshore destination	Arrival of vessel in 'safety zone' at offshore installation
Mooring and anchoring procedures at the offshore installation	Cargo procedure
Operations regarding sea-transport	Bulk cargo procedure
Cargo-handling	Check on checklist for securing cargo
Cargo-handling equipment	Passenger transport
Offshore (waste) skips, toolboxes	Checklist on seaworthiness and cargo-worthiness
Portable tanks	Checking stability conditions
Installation layout and plans with respect to vessel's interest	
Weather/field operation	
Marine control onshore/offshore	
Update field information	

**1.2.3** Further to 1.2.2, it is recommended that all interfacing activities, such as those set out in appendix 3, are addressed.

### **1.3 Communication**

There should be effective communications between all responsible persons involved in all OSV operations. When radio communications are used, dedicated channels should be maintained throughout an operation.

### **1.4 Cargo handling and stability**

#### **1.4.1 General**

**1.4.1.1** Both during sea-transport and operations at the offshore installation, OSVs with an open stern, under certain conditions (e.g. certain weather and sea conditions, deeply laden), are troubled with incoming water on the exposed cargo deck. This can lead to dangerous situations, especially if cargoes with a tendency to float and/or with low friction coefficients are stowed on the exposed deck of the vessel. It is recommended that these vessels be provided with instructions to counter these dangers.

**1.4.1.2** The number of cargo handlers should be sufficient for safe and effective cargo operations.

**1.4.1.3** The crew of OSVs should be adequately trained.

**1.4.1.4** During deck cargo-handling operations other activities on the cargo deck of the vessel should be avoided.

**1.4.1.5** "Safe havens" and escape routes for personnel from the cargo deck should be properly marked and kept clear at all times. A crash barrier, fitted along each side of the deck, could be one method of achieving a safe haven.

#### **1.4.2 Pre-planning**

**1.4.2.1** A passage plan and sailing schedule should be made and taken into consideration when a loading plan is made. After departure the passage plan may only be changed by the responsible logistics co-ordinator in co-operation with the master. It is essential therefore that liaison, preferably by the logistics co-ordinator, is established between the OIM and the master prior to unloading or backloading of cargo.

**1.4.2.2** The master should be advised of expected delays to operations. Excessive stand-by times in close proximity to offshore installations should be avoided.

### 1.4.3 Cargo

**1.4.3.1** The master should ensure co-ordination of all parties involved in the loading or discharging of cargoes or persons before transfer operations begin, to ensure that all those involved recognize their responsibilities and reach agreement on the equipment, communications and safety procedures to be used.

**1.4.3.2** Before loading, the master should be provided with details on dangerous cargoes, non-standardized cargoes and cargoes which are heavy or difficult to stow, secure, or unload.

**1.4.3.3** The master should not accept the loading of any cargo which is not safe for cargo handling, not adequately packed, not properly marked or not properly documented. The responsibility for ensuring that cargoes are properly prepared for carriage on board OSVs rests with the operator, shipper and/or owner of the items concerned.

**1.4.3.4** All cargo operations should be supervised by the officer in charge.

**1.4.3.5** Operators should ensure that as much cargo as possible is containerized to allow safer stowage and securing on deck. Where different container sizes are used, the need for safe securing should be considered when planning the stowage. For constructional requirements for containers, reference should be made to the Guidelines for the approval of containers handled in open seas (MSC/Circ.613).

### 1.4.4 Stowage and securing of cargo

**1.4.4.1** The master should ensure that the vessel has a sufficient quantity and types of lashing and securing materials for the safe operation of the vessel. The lashing and securing materials should be:

- .1 suitable for their intended purpose;
- .2 of adequate strength;
- .3 easy to use;
- .4 well maintained; and
- .5 periodically inspected,

and a record should be kept of the inspections.

### 1.4.5 Bulk cargo\*

**1.4.5.1** Hoses used for the transfer of bulk substances should be colour-coded at the hose terminations to identify the product for which the hose is to be used. A recommended colour code is shown in appendix 2 to this Code.

**1.4.5.2** Before bulk cargo transfer operations take place the following should be established:

- .1 starting and stopping procedures;
- .2 quantities and categories of product to be transferred;
- .3 permitted pumping rate and pressure; and
- .4 emergency stopping procedures.

**1.4.5.3** During bulk cargo transfer a responsible crew member should be in attendance to monitor, direct and control the transfer operation.

### 1.4.6 Stability

Reference should be made to the Guidelines for the design and construction of offshore supply vessels (IMO resolution A.469(XII), as amended).

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\* For hazardous and noxious liquid substances in bulk see IMO resolution A.673(16) "Guidelines for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk in offshore support vessels".

## **1.4.7 Personal protective equipment**

**1.4.7.1** Each crew member and/or cargo handler should, during cargo operations, be provided with personal protective equipment (PPE) in a high-visibility colour, appropriate to the geographical area of operation and the work to be done. Sufficient spare equipment should be available.

**1.4.7.2** Crew members and/or cargo handlers working on deck should wear buoyancy aids and relevant PPE to protect head, feet and hands.

**1.4.7.3** Examples of PPE which may be required are:

- .1 working lifejackets;
- .2 working exposure suits (for operations in extreme areas); and
- .3 hard hats, protective boots, safety glasses.

## **2 PORT OPERATIONS**

### **2.1 Communication**

**2.1.1** Prior to departure of the OSV the logistics co-ordinator should communicate information concerning sailing-schedule, cargo manifest and other relevant items to the operator and the contractor (e.g. OIM and master).

**2.1.2** Prior to the arrival of an OSV at a port, the master should communicate to the port information regarding the vessel's ETA, cargo requirements and any special circumstances of the OSV.

### **2.2 Cargo**

**2.2.1** The operator should ensure that cargoes within containers are adequately stowed and secured for sea-transport. The master has the authority to carry out random inspections. If inspection of any container reveals inadequate stowing, lashing or securing arrangements, inadequate marking or labelling of dangerous goods, or if he is in doubt as to the safety status of the container, he should refuse this container for sea-transport.

**2.2.2** Reference should be made to the Code of Safe Practice for Cargo Stowage and Securing (CSS Code (IMO resolution A.714(17))) and the IMO/ILO/UN ECE Guidelines for packing of cargo transport units (CTUs) (MSC/Circ.787).

## **3 SEA-TRANSPORT**

### **3.1 General**

**3.1.1** Cargoes should be properly stowed and secured during sea-transport. Regular visual checks of the securing arrangements should be carried out.

**3.1.2** Closed containers should not normally be opened while the vessel is at sea unless an emergency situation (e.g. fire or spillage) occurs. All necessary precautions should be taken to prevent injury to personnel.

### **3.2 Communication**

During sea-transport the master, OIM and logistics co-ordinator should inform each other about changes in relevant schedules and conditions.

## **4 OPERATIONS AT THE OFFSHORE INSTALLATION**

### **4.1 General**

**4.1.1** Prior to commencing cargo operations, the master and the OIM should confirm the loading/unloading plan.

**4.1.2** Any circumstance limiting cargo operations between the OSV and offshore installation (e.g. the visibility of the deck from the crane control cab, blinding lighting or overboard discharges from the installation) should be immediately communicated between the master and the OIM.

**4.1.3** The OIM should ensure that a sling of sufficient length is attached between the crane block and the hook to minimize danger to cargo handlers and vessel imposed by the block. The crane block should be marked in such a way that it is visible under all circumstances of operation.

### **4.2 Mooring requirements**

**4.2.1** Taking into account such factors as those listed below, the master decides whether and how he will moor and confirms this with the OIM:

- .1 wind, sea and swell;
- .2 current;
- .3 manoeuvring characteristics of the vessel;
- .4 mooring area of the offshore installation and crane specifications;
- .5 specifications of the cargo (weight, location, nature); and
- .6 effectiveness of anchor(s) in seabed.

**4.2.2** The decision on when it is unsafe for the vessel to remain moored or in close proximity to the offshore installation can be taken by the master or the OIM.

**4.2.3** "Snatching" of cargo is allowed when the master considers it safe to do so under the prevailing conditions.

### **4.3 Communication**

**4.3.1** Prior to arrival at the offshore installation the master should obtain permission from the OIM to enter the installation's exclusive zone.

**4.3.2** During cargo operations and personnel transfer at the offshore installation, effective communication should be maintained between officer in charge, cargo handlers, crane operator and deck foreman of the offshore installation.

**4.3.3** The master should inform the OIM and logistics co-ordinator about the vessel's time of departure and ETA at next location.

### **4.4 Information and documentation**

Cargo information should be available to the receiving parties before cargo operations commence.

### **4.5 Personnel transfer**

**4.5.1** When transfers of personnel are performed, the normal methods are by personnel basket or by boat. The safety of personnel should never be compromised and the highest level of control and communication should be followed throughout these operations.

**4.5.2** No personnel transfer should take place on location unless the consent of the OIM has been obtained and procedures have been agreed upon by all responsible parties concerned, taking into account actual and forecast weather conditions, wind speed, sea state and visibility.

**4.5.3** The OIM should ensure that personnel baskets and all associated rigging are designed and maintained to achieve a 10:1 load factor of safety. Baskets should be inspected daily and prior to use.

**4.5.4** The OIM should ensure that only certified cranes and crane operators are involved in personnel transfers. Direct communications should be established, and maintained throughout the transfer, between vessel deck crew, crane operators and vessel bridge.

**4.5.5** Persons being transferred should wear lifejackets, safety helmets and boots. In addition, suitable protective and exposure suits should be worn as required.

## **4.6 Cargo handling**

To minimize the potential for injury to deck crew and/or cargo handlers, they should not attempt to assist the crane operator to position hooked cargo on deck. The cargo should be landed, unhooked, and then if need be, moved into stowage position with tugger winches or rams.



## Appendix 1

### Examples and types of offshore installations

The table below gives examples of the types of structures and vessels which, for the purposes of determining the applicability of this Code, are and are not offshore installations:

Offshore installations	Not offshore installations (or parts of installations)
Fixed production platforms Floating production platforms Floating storage units Mobile offshore drilling units (MODUs) Flotels Floating production, storage and operations units (FPSO)	Heavy lift vessels Diving support vessels Shuttle tankers Well service vessels Stacked MODUs Subsea installations Dredgers Wells not connected to an installation Survey vessels Pipelaying barges Pipelines which are more than 500 m from the main structure to which they are attached Structures which are permanently attached to dry land or bridges or walkways

## Appendix 2

### Colour code for hoses transferring bulk substances

To avoid misunderstanding about the hoses to be used for transferring bulk substances to connection points on board the vessel and offshore installation, colour coding should be used. For the purpose of identification the hose terminations and connection points should be colour coded by use of a coloured band to mark the substance, and all offshore supply vessels and offshore installations should adopt a colour code as follows:

Substance	Coloured band
Potable water	Blue
Drill water	Green
Fuel	Brown
Dry bulk	Yellow: cement Orange: barite/bentonite
Dedicated base oil/oil-based mud	Black
Brine	<i>Optional</i>
Methanol	<i>Optional</i>

## Appendix 3

### **Interfacing activities of operators and contractors**

- 1** The purpose of this appendix is to assist operators and contractors in addressing interfacing activities that follow from the carriage of cargoes and persons by offshore supply vessels, preferably through a Safety Management System or operating procedure, whichever is in place.
- 2** The operator and the contractor should establish common procedures and operating criteria and resolve conflicts on areas where both plans and instructions interface. Examples of such areas are:
  - .1** safety and environmental protection policies;
  - .2** periodical drills; and
  - .3** the authority and responsibilities of respective personnel representing the operator and the contractor, which include:
    - .3.1** the master and OIM's authority and responsibility to advise each other and to interrupt operations when they consider that safety and environmental matters make it necessary; and
    - .3.2** the responsibility of designated person of the contractor (reference is made to paragraph 4 of the ISM Code), and of the person of appropriate authority for the operator, to communicate directly with each other with respect to safety and environmental matters.
- 3** The operator and the contractor should make relevant parts of their Safety Management Systems, or operating procedures, mutually available.
- 4** The operator and the contractor should establish procedures for the mutual exchange of information with regard to relevant non-conformities, accidents and hazardous occurrences, with the objective of improving safety and environmental conditions. Meetings between key personnel, including crane operators, can assist this exchange.