

# IAATO Emergency Contingency Plan

## Background

All IAATO vessels operating in Antarctica are required to operate under the ISM Code and consequently they must have a well-established Safety Management System (SMS) in place. Yachts under (the prescribed tonnage threshold) and carrying 12 passengers and less are excluded from the ISM Codes, but are nevertheless encouraged to have a company and vessel Safety Management System in place.

Since it entered into force on 1 July 1998, the ISM Code for Safe Operation of Ships and for Pollution Prevention, which is adopted today by all Flag States, has had a huge impact to drastically improve the safe operation of ships and pollution prevention. The ISM Code describes in broad terms what a ship operating company's safety management system needs to include. A summary of the points describing the ISM code framework are listed in Appendix B.

In 2004 COMNAP published a paper on Emergency Guidelines (see ATCM XXVII, IP012). The COMNAP Guidelines, similar to the ISM code and IAATO Emergency Contingency Plan, only give a description of how to produce an Emergency Contingency Plan which can be used for operations in Antarctica: in effect all are a framework, on which to hang a specifically tailored emergency contingency plan peculiar to each vessel/operation.

In addition to these plans, IAATO has launched an IAATO vessel database in March 2006 which provides a single database of critical information for every IAATO member and vessel.

## The IAATO Emergency Contingency Plan

### 1. The cornerstones for an IAATO Emergency Contingency and Search and Rescue Plans for Antarctic cruise vessels are:

- Adequate emergency equipment being available onboard all IAATO ships
- Frequent updates to ships' schedules and positions;
- Effective communication between vessels including reporting schema for a possible event
- Medical evacuation support

### 2. Emergency situations to consider are:

- Ice damage to the hull, propeller and rudder
- Heavy weather damage
- Medical emergencies
- Man overboard from the ship, Zodiacs, kayaks, etc.
- Grounding and stranding
- General oil spill from deck equipment, Zodiacs, boats, helicopters, etc.
- Waste oil spill
- Mechanical and/or steering failure
- Power outage/blackout
- Fire
- Collision
- Security threat
- Explosion

### 3. Some of the plans to deal with the above emergencies are as follows:

- Damage control plan
- Medical contingency plan
- Search and Rescue plan
- Fire plan
- Oil spill and pollution plan (SOPEP)
- Propulsion and steering failure plan
- Security and threat plan
- Evacuation and abandon ship plan
- Plan for evacuation of passengers and crew from large cruise vessels



#### 4. The following should currently be in place:

- A well-established spreadsheet of vessel itineraries in the Antarctic and Sub-Antarctic
- Proven and effective communication between vessels
- An established medical evacuation plan
- A database detailing emergency equipment available on board all IAATO ships
- All ships are to be in compliance with ISM, MARPOL, SOLAS, as applicable (note some vessels are exempt).
- Efforts to assist each vessel in any emergency
- Adequate insurance coverage
- Engagement of only experienced and properly trained officers and crew, Ice Masters in compliance with Standards for Training, Certification and Watchkeeping (STCW)

#### 5. Recommended Preventive Measures:

- Encourage the use of very light Marine Gas Oil (MGO) fuel during the Antarctic season. Light MGO is a non-persistent fuel oil that will evaporate more quickly in the event of a spill.
- Lubricating oil is persistent. In such case lubricating oil should be kept in low quantities, which will minimize the environmental impact from an accident.
- Use of appropriate ships based on ice conditions
- Naval Structure as referenced in the Arctic Shipping Guidelines
- Oil spill contingency training
- All collected Hydrographical data to be deposited with appropriate governmental offices
- Participation in the Automated Mutual-Assistance Vessel Rescue (AMVER) system

#### 6. Future Work

- Regular updates of the IAATO emergency equipment database
- Compliance with the International Ship and Port Security Code, Voyage Data Recording systems, and Advanced Information Systems.
- Enhancing training and certification requirements for Zodiac drivers.
- Increased medical emergency response capabilities in remote areas.

## IAATO Emergency Contingency Plan Flow Chart

Vessels are required to operate under the ISM Code and consequently they must have a well-established Safety Management System (SMS) in place. The command centre for any emergencies in Antarctica will likely be the ship that is experiencing the emergency. The Master of the distressed ship will likely be the commander for emergency response activities. The Master of the ship experiencing the emergency can appoint a Master of another ship as the incident commander and the command centre. However,

the incident commander can only act on behalf of the distressed ship and will not have any legal obligations other than what is accepted under normal international shipping practice.

The Master/Ship Operator shall have the authority to contract with emergency providers for all assistance required in compliance with their Safety Management System (SMS).

No	Responsibility	Task	Time	Initial
1	Master	Activate appropriate IMO and SAR plans with regard to communication and checklists from the individual company Safety Management System including SOPEP if an oil spill is expected.		
2	Master	Contact all the other IAATO ships in the area as appropriate via the GMDSS. Use the established radio log for proper contacts and documentation.		
3	Master/Ship Operator	Contact IAATO		
4	Master/Ship Operator	Contact the nearest Antarctic stations		
5	Master/Ship Operator	Contact national government The governments to whom the tour operator has given the advanced notification and/or environmental impact assessment regarding Antarctic visit.		
6	Master/Ship Operator	Contact COMNAP		
7	Master	Establish a list of ships that have arrived on site to assist in compliance with Safety Management System (SMS).		
8	Master	Keep notes about when the contacts are established with specific parties involved in the emergency procedures.		