



SHIP SAFETY BULLETIN

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Subject: Requirements for passenger evacuation and safety

Purpose

This bulletin explains the requirements of section 111 of the *Life Saving Equipment Regulations*, which deals with developing and putting in place an evacuation process for passenger vessels.

Scope

This bulletin applies to authorized representatives of any Canadian passenger vessel.

What you need to know

The *Life Saving Equipment Regulations* require every passenger vessel to have evacuation procedures.

The procedures must make sure that all passengers and crew evacuate the vessel within 30 minutes of the abandon-ship signal being given. The abandon-ship signal is given after everyone on board assembles in the emergency stations and are wearing life jackets.

Transport Canada requires that crew understand and are trained in passenger safety management, including how to:

- help passengers in emergencies, including people with impaired mobility
- direction and supervision of passengers and management in crisis situations, and
- help passengers embark or disembark

In order to help comply with this requirement, Transport Canada has developed guidance ([see Annex 1](#)) on what information should be included in the vessel's evacuation procedures. The procedures and format should be adjusted for the vessel's crew, passengers and equipment.

Keywords:

1. Evacuation
2. Procedure
3. Inspection

Questions concerning this Bulletin should be addressed to:

AMSD

Transport Canada
Marine Safety and Security
Tower C, Place de Ville
330 Sparks Street, 11th Floor
Ottawa, Ontario K1A 0N8

Contact us at: marinesafety-securitemaritime@tc.gc.ca or 1-855-859-3123 (Toll Free).

All crew must know the evacuation procedures, and a copy must be on board at all times. A document, signed by the crew members, must be available on board confirming this.

Annex 1- How to develop and evaluate evacuation procedures

Evacuation Procedure Contents:

For the purposes of the *Life Saving Equipment Regulations*, a passenger vessel's evacuation procedures should include:

1. Vessel information

- Vessel's name
- Official number
- IMO number, if applicable
- Port of registry
- Number of crew, taking into account the minimum safe manning
- Passenger capacity, taking into account the capacity stated on the inspection certificate and the minimum safe manning
- Passenger count (number of adults, children and infants on board) *Note: this info will vary at each departure*
- Number of passengers with reduced mobility
- Number of life jackets equivalent to the number of adults, children and infants on board

2. Muster Stations and Equipment

Although evacuation equipment is already listed in the vessels Lifesaving Equipment Plan, it is a good practice to also include equipment information and launching methods into the procedure so that this information is easily accessible during an evacuation (or a vessel inspection).

Information on the following equipment and requirements is recommended to be included:

- Assembly/muster stations
- Embarkation stations
- Lifeboats
- Life rafts
- Rescue platforms
- Marine evacuation systems
- Life jackets (adult, child and infant)
- Buoyant apparatus
 - If the vessel has permission to conduct wet evacuations, the procedures must include information on how to assign wet evacuation duties to the crew

3. Length of evacuation

- Estimated time (in minutes and seconds) it takes for life rafts or rescue platforms to be ready
 - A raft or platform is “ready” once it’s launched, inflated, and is in position at the embarkation station
- Estimated time (in minutes and seconds) for all passengers to move from the assembly/muster station to the embarkation station
- Estimated time (in minutes and seconds) to embark one person
- Estimated time (in minutes and seconds) to embark all passengers
 - If calculating this time for a vessel that uses a marine evacuation system (MES) with multiple life rafts or a system of rafts under a davit, it should include the time for the crew to remove a full life raft from the slide/chute, plus the time to inflate and secure a raft until all passengers have disembarked.
- Estimated time (in minutes and seconds) to embark all crew members

4. Wet evacuation (Class V, VI, and VII)

Additional information that should be included in the Evacuation Procedures for Class V, VI and VII vessels which have permission to conduct wet evacuations:

- Procedures on how to record the water temperature before each transit or cruise
- Procedures to help the crew determine which passenger will be given a place on the platform (dry evacuation) and which passenger sent into the water to hold on to the platform (wet evacuation)

Evaluating Evacuation Procedure Effectiveness:

If the vessel is a ro-ro passenger vessel built on or after July 1, 1999, or a passenger vessel built on or after January 1, 2020, and carries more than 36 passengers subject to the SOLAS Convention Chapter III requirements, it is required that the escape routes be evaluated early in the design process.

[Revised guidelines on evacuation analyses for new and existing passenger ships \(MSC.1/Circ.1533\)](#)¹

Total evacuation time

The entire evacuation process, from the initial notification (general alarm), mustering, embarkation, and complete launching of the life-rafts **should be completed within 60 minutes** for ro-ro passenger vessel or if the vessel has no more than three main vertical zones. If the

¹ The circular may be downloaded from the IMO document website at <https://docs.imo.org>

passenger vessel isn't a ro-ro and has more than three main vertical zones the total evacuation time **should be completed within 80 minutes**.

- *Time from initial notification to assembly/muster stations*

As a performance standard, **this step should be completed within 30 minutes** for ro-ro passenger vessel or if the passenger vessel has not more than three main vertical zones. If the passenger vessel isn't a ro-ro and has more than three main vertical zones **this step should be completed within 50 minutes**.

This period begins when initial notification (general alarm) is given and lasts until all passengers are wearing life jackets and assembled at the assembly/muster stations.

During this time, the crew should:

- prepare to launch or deploy survival craft, according to their assigned duties
- explain to passengers how the evacuation will proceed, and
- complete a passenger count at each assembly/muster station

Above is a prerequisite before the abandon-ship signal can be given and the evacuation procedure can begin as required by the Life Saving Equipment Regulations.

- *Time for embarking persons on board and launching of Lifesaving equipment*

Embarking and launching must be completed within 30 minutes. This period begins when the abandon-ship signal (Verbal Order of The Master) is given by the Master and lasts until everyone on board has been evacuated. This is required for the evacuation procedure of a passenger vessel.

Practice Evacuation²

Once the evacuation procedures have been developed, a run-through (trial) must be done to make sure they are effective. This should be repeated any time the evacuation procedures or lifesaving appliances change.

In order to get a realistic idea of how long the evacuation will take, there should be a large number of participants available to represent passengers. There is no need for participants to represent the maximum number of passengers, but there should be enough of them to allow for an estimate of how long the evacuation would take with the maximum number of passengers on board. The drill should be carried out in a location and conditions conducive to a safe evacuation and precautions should be taken to assist participants in case of emergency, during the evacuation drill.

² Please refer to [SSB No.: 13/2019](#): Schedules of deployment for marine evacuation systems (MES) and to the IMO circulars MSC.1/Circ.1578 and MSC.1/Circ.1326 available on the IMO website at <https://docs.imo.org> for more information.

It is advantageous for the crew to deploy the various rescue devices and equipment and even to descend into the slides in a controlled environment. However, if the MESs or life rafts are not due for deployment based on their schedule, please refer to the type approval certificate of the lifesaving devices for the time allowed for deployment and evacuation of the number of passengers.

Verification of vessel evacuation procedure

The evacuation procedure may be verified by our Marine Safety Inspectors (MSI) or a Recognized Organization (RO) during the vessel's Initial inspection or after any modification to the vessel affecting the procedures, and before an inspection certificate is issued. Keep in mind that the *Marine Personnel Regulations* include requirements for deploying and training crew on marine evacuation systems (MES).