Long-range identification and tracking of ships (LRIT)

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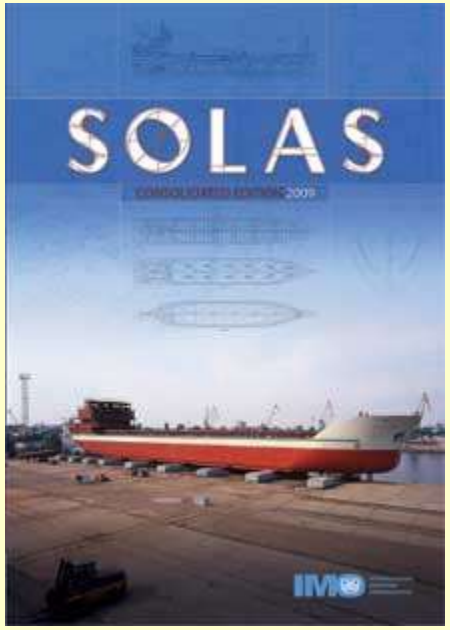
Long-range identification and tracking of ships
Introduction (1)

SOLAS Convention



The main objective: specify minimum standards for the construction, equipment and operation of ships, compatible with their safety.

Flag States are responsible for ensuring that ships under their flag comply with its requirements.

Control provisions also allow Contracting Governments to inspect ships of other Contracting States.

SOLAS regulation V/19-1
Long-range identification and tracking of ships

Establishes a multilateral agreement through which Contracting Governments have made arrangements for the collection of LRIT information transmitted by ships entitled to fly their flag and for sharing such information with other Contracting Governments for the purpose of enhancing the security of all States and other purposes as agreed by the Organization.

Application (1) (R§2.1)

The regulation shall apply to the following types of ships engaged on international voyages:

(1) passenger ships, including high-speed passenger craft;

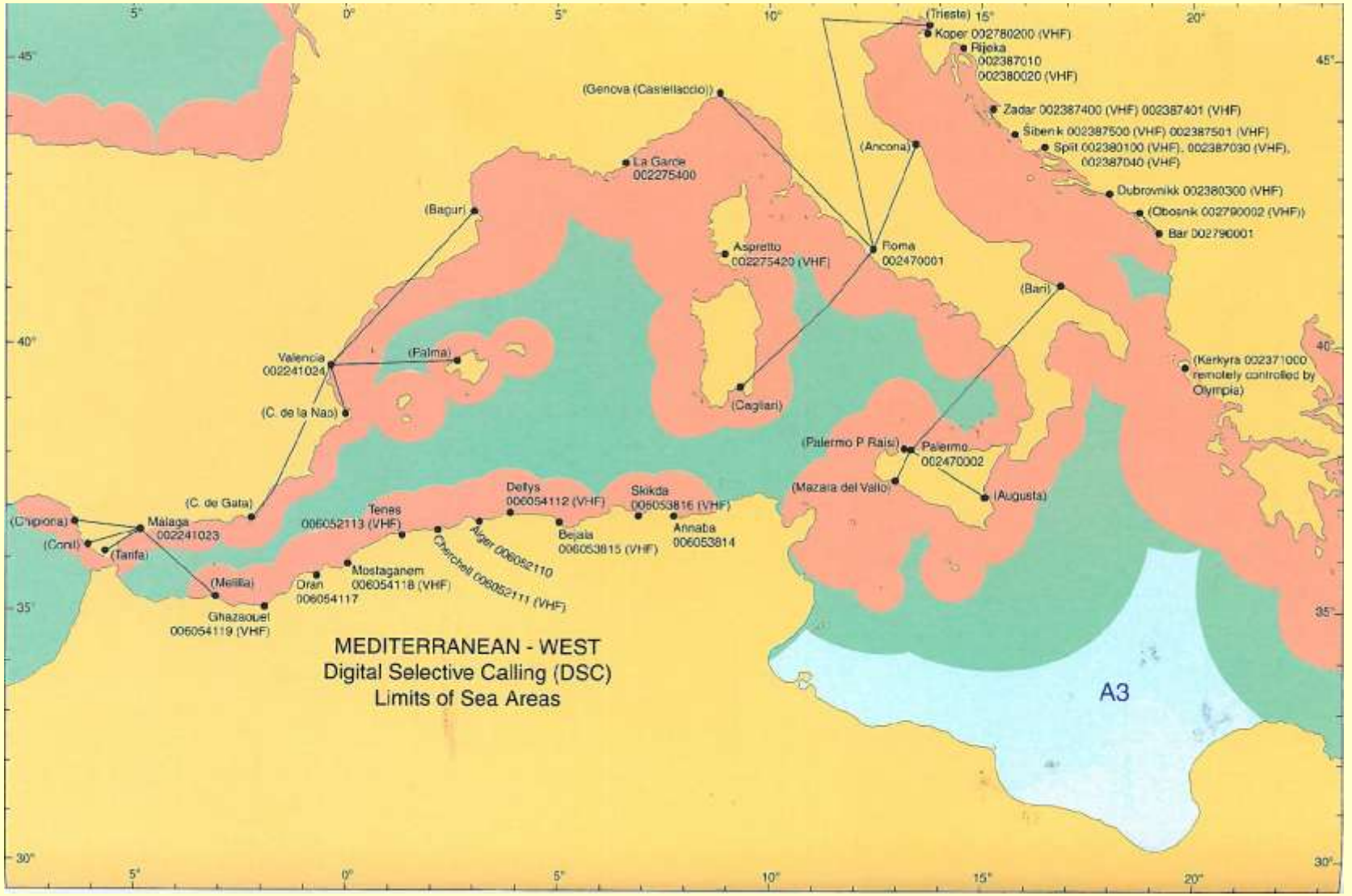
(2) cargo ships, including high-speed craft, of 300 gross tonnage and upwards; and

(3) mobile offshore drilling units.

Note:
Ships fitted with an automatic identification system (AIS) and operating exclusively within sea area A1* are not required to comply with the provisions of this regulation.

* Area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available.

GMDSS Sea Areas - example



Source: Admiralty List of Radio Signals

LRIT information (R§5)

Ships shall automatically transmit the following LRIT information:

(1) the identity of the ship;

(2) the position of the ship (latitude and longitude); and

(3) the date and time of the position provided.

Other related documents

RESOLUTION MSC.242(83) (adopted on 12 October 2007)

USE OF THE LONG-RANGE IDENTIFICATION AND TRACKING INFORMATION FOR MARITIME SAFETY AND MARINE ENVIRONMENT PROTECTION PURPOSES

RESOLUTION MSC.263(84) (adopted on 16 May 2008)

REVISED PERFORMANCE STANDARDS AND FUNCTIONAL REQUIREMENTS FOR THE LONG-RANGE IDENTIFICATION AND TRACKING OF SHIPS

RESOLUTION MSC.275(85) (adopted on 5 December 2008)

APPOINTMENT OF THE LRIT COORDINATOR

RESOLUTION MSC.276(85) (adopted on 5 December 2008)

OPERATION OF THE INTERNATIONAL LRIT DATA EXCHANGE ON AN INTERIM BASIS

RESOLUTION MSC.297(87) (adopted on 21 May 2010)

ESTABLISHMENT OF THE INTERNATIONAL LRIT DATA EXCHANGE

Other related documents

RESOLUTION MSC.298(87) (adopted on 21 May 2010)
ESTABLISHMENT OF A DISTRIBUTION FACILITY FOR THE PROVISION OF LRIT INFORMATION TO SECURITY FORCES OPERATING IN WATERS OF THE GULF OF ADEN AND THE WESTERN INDIAN OCEAN TO AID THEIR WORK IN THE REPRESSION OF PIRACY AND ARMED ROBBERY AGAINST SHIPS (THE DISTRIBUTION FACILITY)

MSC.1/Circ.1259/Rev.4
LONG-RANGE IDENTIFICATION AND TRACKING SYSTEM
TECHNICAL DOCUMENTATION (PART I)

MSC.1/Circ.1294/Rev.2
LONG-RANGE IDENTIFICATION AND TRACKING SYSTEM
TECHNICAL DOCUMENTATION (PART II)

Other related documents

MSC.1/Circ.1298

GUIDANCE ON THE IMPLEMENTATION OF THE LRIT SYSTEM

MSC.1/Circ.1307

GUIDANCE ON THE SURVEY AND CERTIFICATION OF COMPLIANCE OF SHIPS WITH THE REQUIREMENT TO TRANSMIT LRIT INFORMATION

MSC.1/Circ.1338

GUIDANCE TO SEARCH AND RESCUE SERVICES IN RELATION TO REQUESTING AND RECEIVING LRIT INFORMATION

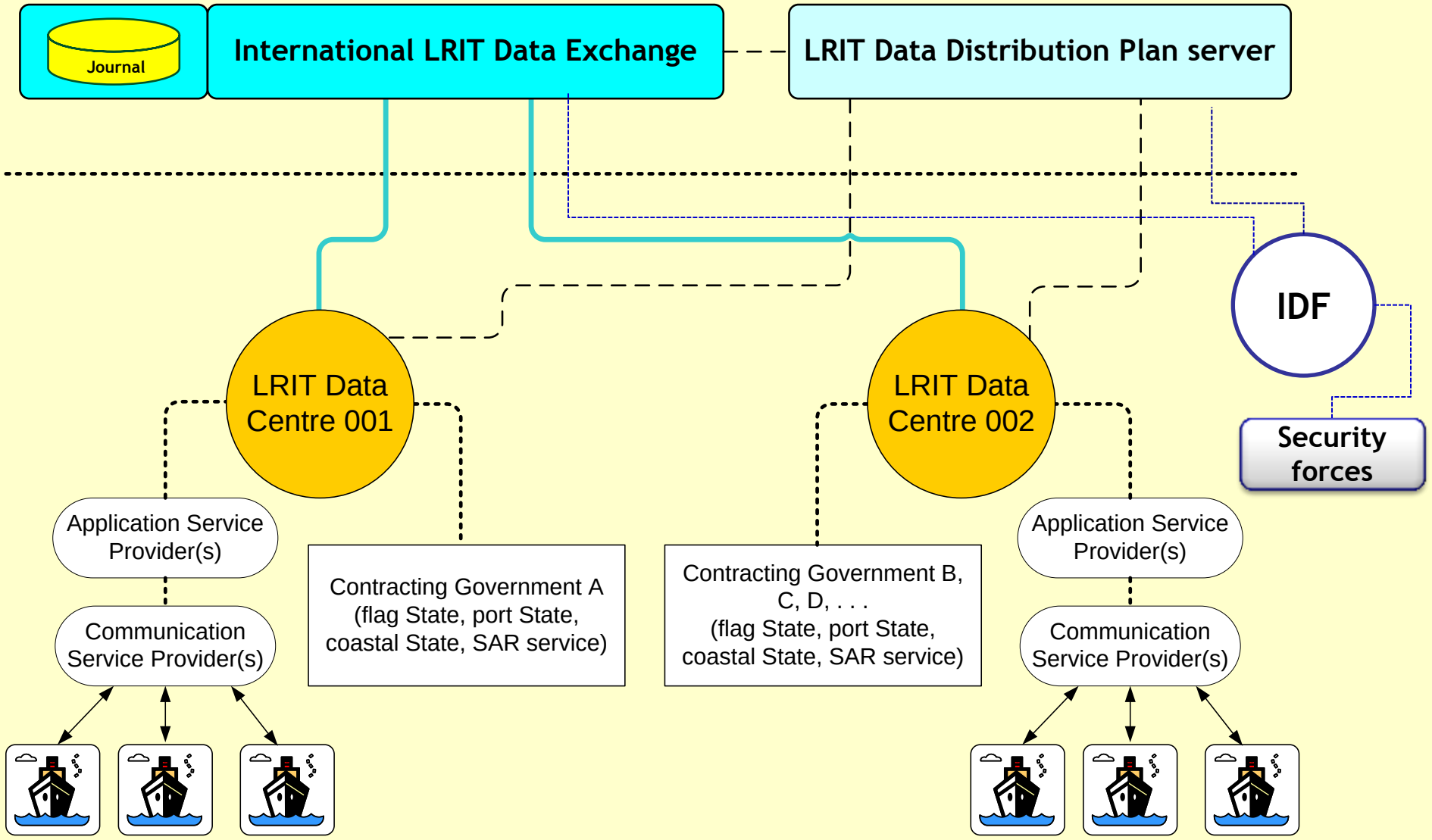
MSC.1/Circ.1376

CONTINUITY OF SERVICE PLAN FOR THE LRIT SYSTEM

MSC.1/Circ.1377/Rev.2

LIST OF APPLICATION SERVICE PROVIDERS AUTHORIZED TO CONDUCT CONFORMANCE TESTS AND ISSUE LRIT CONFORMANCE TEST REPORTS ON BEHALF OF THE ADMINISTRATIONS

LRIT system architecture



Requesting and receiving LRIT information (1) (R§8)

Contracting Governments shall be able to receive LRIT information about ships, under certain conditions and restrictions, as:

- **Flag State**
- **Port State**
- **Coastal State**

Provided that:

- The ship IS NOT located within the internal waters of another Contracting Government;

- The ships IS within a distance not exceeding 1,000 NM of its coast;

- The ships IS NOT located within the territorial sea of the Contracting Government whose flag the ship is entitled to fly.

The search and rescue (SAR) services of Contracting Governments are entitled to receive, free of any charges, LRIT information in relation to the search and rescue of persons in distress at sea or when an uncertainty or alert phase might need to be declared or has been declared in relation to the ship in question or those onboard.

Establishment of LRIT Data Centres

Situation	No. of DCs	No. of SOLAS Contracting Governments
DCs operating in the production environment of the LRIT system	64	93 SOLAS Contracting Governments, 10 non-metropolitan territories and 2 special administrative regions
DCs undergoing testing or pending to be tested	11	11 SOLAS Contracting Governments

Operation of the IDE

- The IDE operating in the production environment is currently being operated by the United States.
- The IDE operating in the testing environment is currently being operated by EMSA.
- The transfer of operations of the IDE operating in the testing environment has occurred on 2 March 2011 and, subject to the consideration of the results of developmental testing by MSC 89, EMSA will be authorized to operate the IDE operating in the production environment until 31 December 2013.
- It is expected that the transfer of operations of the IDE operating in the production environment will occur during October 2011.
- The current IDE operated by the United States will remain as a disaster recovery site of the IDE.
- MSC 90 (to be held tentatively during May 2012) will consider the continued operation of the IDE by EMSA and the disaster recovery site for the IDE by the United States after 2013.

Information Distribution Facility (1)

- Has been established by the Secretariat for the provision of flag State LRIT information to security forces operating in waters of the Gulf of Aden and the western Indian ocean to aid their work in the repression of piracy and armed robbery against ships.

- The IDF is not part of the LRIT system and is not covered by the LRIT regulation; however, it leverages the LRIT technical architecture in order to accomplish its goal, without any prejudicial impact on the LRIT architecture or the LRIT system.

- The flag State participation in the IDF is completely voluntary; each flag State has the ability to determine which security force, if any, will receive their information.

- SOLAS Contracting Governments have been invited to consider providing, if they so wish, flag State LRIT information to the security forces operating in the area.

Information Distribution Facility (2)

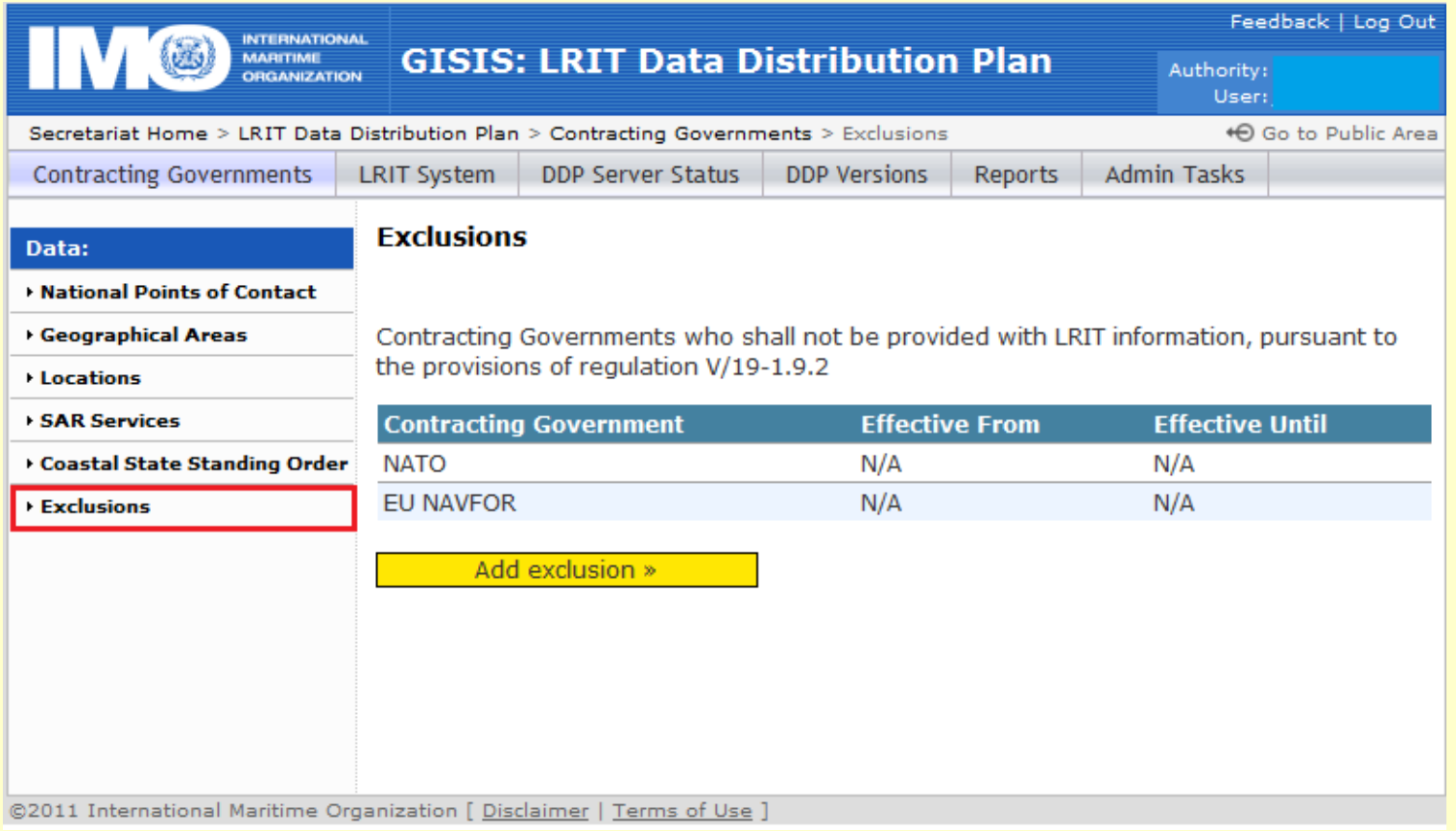
- There are currently two security forces associated to the IDF:
  - the North Atlantic Treaty Organization (NATO); and
  - the European Union Naval Force (EU NAVFOR).
- Flag State LRIT information received by security forces is being used to enhance the protection of all ships navigating in the area irrespective of the flag they might be flying or for delivering humanitarian aid to Somalia.

How to deactivate the exclusions (1)

- Log into GISIS (https://gisis.imo.org/Members) and select the DDP module.

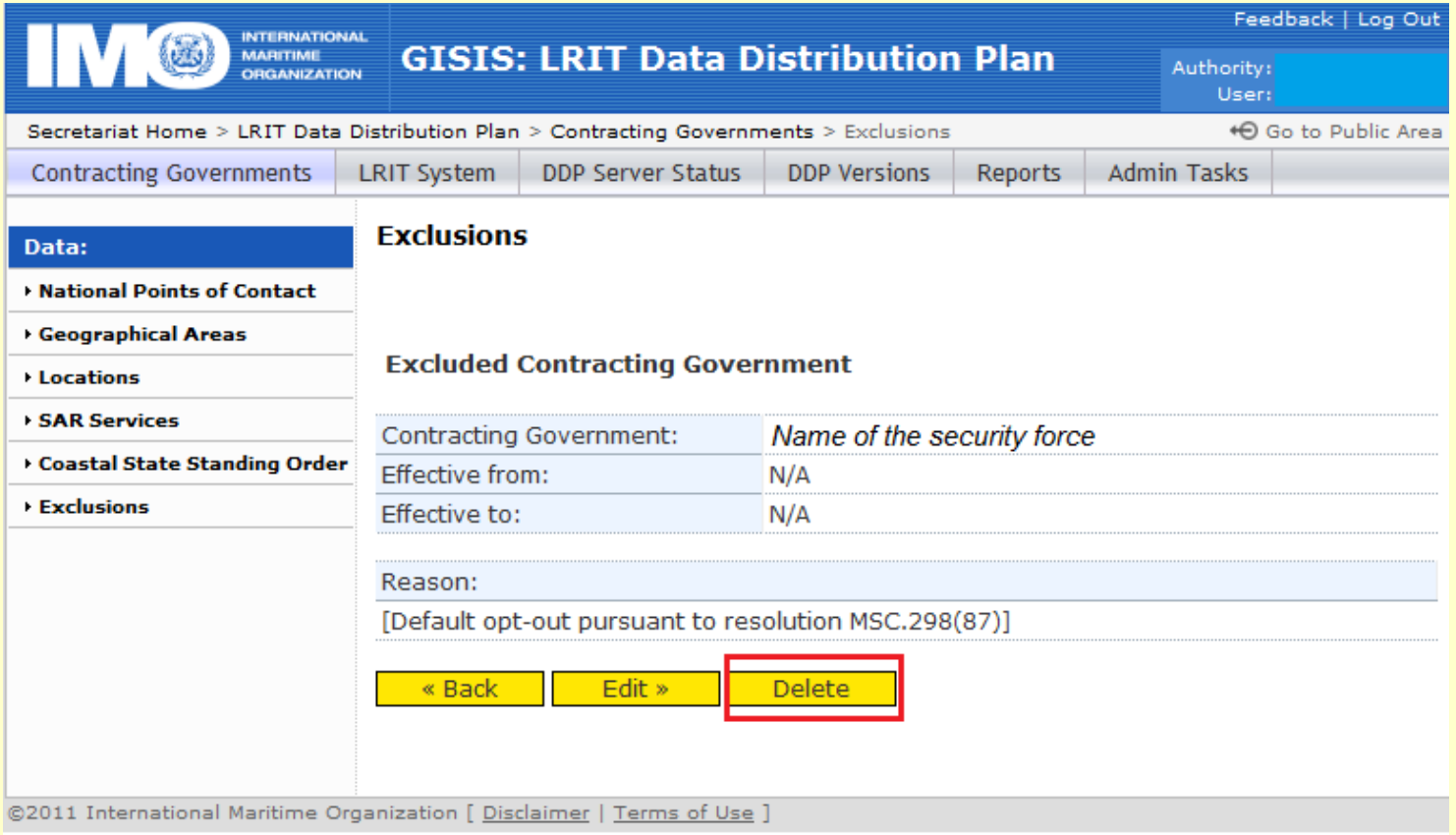
How to deactivate the exclusions (2)

- Under the tab named "Contracting Government", select the name of the SOLAS Contracting Government that you are representing and then select "Exclusions".



How to deactivate the exclusions (3)

- Select the security force to which your Administration wishes to provide flag State LRIT information and then delete the exclusion by clicking on the Yellow Delete button. Repeat the above action for each individual security force.



Main issues to be consider by MSC 89 (1)

- **Developments in relation to the establishment and testing of DCs and the operation and functioning of the LRIT system since MSC 88:**

  - Information communicated to the Organization;

  - Establishment and testing of DCs;

  - Results of the first modification testing phase of the LRIT system;

  - Transfer of operations of the IDE;

  - Operation of the IDF;

  - Issues concerning LRIT shipborne equipment.

Main issues to be consider by MSC 89 (2)

- Information concerning the use of the LRIT system and its long-term operational and financial viability, including handling further work of LRIT-related issues in the future
- Performance review and audit of DCs and of the IDE
- Other issues:

  - Guidance to port State control officers on LRIT-related matters

  - Renewal of PKI certificates

Questions and comments