

MARITIME SAFETY COMMITTEE
92nd session
Agenda item 9

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RADIOCOMMUNICATIONS AND SEARCH AND RESCUE

Recognition of the Iridium mobile-satellite system

Submitted by the United States

SUMMARY

Executive summary: This document notifies the Organization of the application of the "Iridium" mobile-satellite system for recognition and use in the GMDSS

Strategic direction: 5.2

High-level action: 5.2.5

Planned output: 5.2.5.5

Action to be taken: Paragraph 7

Related documents: Resolution A.1001(25); MSC.1/Circ.1414 and MSC 92/22

Introduction

1 The United States notifies the Committee that it intends to provide the proposed Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) with the necessary information to enable the Sub-Committee to verify that the "Iridium" mobile-satellite system meets the criteria of resolution A.1001(25), and enable the Sub-Committee to recommend that the Committee recognizes that system for use in the GMDSS.

Background

2 The Assembly, at its twenty-fifth session, adopted resolution A.1001(25), *Criteria for the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System* (GMDSS). This requests the Committee to apply the criteria set out in the annex to the resolution, through the procedure set out in section 2 of the annex, to evaluate satellite systems notified by Governments for possible recognition for use in the GMDSS.

3 The procedure set out in section 2 of the annex to the resolution states that satellite system providers wishing to participate in the GMDSS should apply to the Organization, through a Member State, for recognition as a radio system providing maritime distress and

safety communication capabilities for use in the GMDSS. Such applications should be notified to the Organization by Governments, either individually or in cooperation with other Governments. The application will be reviewed by the Maritime Safety Committee (MSC) in relation to its policy for the expansion of satellite services in the GMDSS. If the MSC decides that there are no objections in principle to the application, it will forward the application to the COMSAR Sub-Committee for evaluation. The COMSAR Sub-Committee should verify and evaluate the information, seeking clarification as required from the service provider concerned, and decide whether the satellite system meets the criteria established by the resolution. Recognition of the satellite provider to operate in the GMDSS will be undertaken by the Committee on the basis of the evaluation report.

4 The Secretary-General has proposed to merge the COMSAR Sub-Committee into the Sub-Committee on Navigation, Communications, Search and Rescue.

The Iridium Mobile-Satellite Communication System

5 The Iridium mobile-satellite system is the only truly global provider of voice and data services, including oceans, airways and the Polar Regions. The Iridium constellation consists of 66 low earth orbiting (LEO) cross-linked satellites and multiples in-orbit spaces. The current constellation has been in service since 1998, and the company has embarked upon a replenishment programme, which will retain the proven features of the current system as well as offering substantial enhancements.

Information to be provided to the Sub-Committee

6 On behalf of Iridium Communications, Inc., the United States will provide the Sub-Committee with the necessary information to show that the Iridium mobile-satellite communication system conforms to the criteria set out in the annex to resolution A.1001(25). In summary, that information will show, amongst others, that:

- .1 the system provides capabilities for at least the following:
 - .1 ship-to-shore distress alerts/calls;
 - .2 shore-to-ship distress-relay alerts/calls;
 - .3 ship-to-shore, shore-to-ship and ship-to-ship search and rescue coordinating communications;
 - .4 ship-to-shore transmissions of Maritime Safety Information;
 - .5 shore-to-ship broadcasting of Maritime Safety Information (including broadcasting at both fixed and unscheduled times, and to specified geographic areas); and
 - .6 ship-to-shore, shore-to-ship and ship-to-ship general communications;
- .2 the system is capable of processing maritime distress, urgency, safety and routine communications, and prioritizing them in that order;
- .3 when used for providing other mobile satellite communications in addition to maritime communications, the system is capable of automatically recognizing requests for maritime communications from maritime mobile terminals and from recognized entities such as RCCs, medical centres and

hydrographic or meteorological offices, and processing distress, urgency and safety communications with priority over other communications, by pre-emption or similar;

- .4 the satellite system provides continuous availability for maritime distress and safety communications in the ship-to-shore and shore-to-ship directions. The complete mobile satellite service communication network, including earth stations for the recognized services, achieves at least 99 per cent availability; and
- .5 spare satellite capacity and arrangements prepared in advance is provided to ensure that, in the event of a partial or total satellite failure, the recognized services in the area concerned can be restored to their normal availability not more than one hour after the failure occurs.

Action requested of the Committee

7 The Committee is invited to:

- .1 review this information in relation to the Committee's policy for the expansion of satellite services in the GMDSS; and agree that, in principle, there are no objections;
- .2 refer the matter to the NCSR Sub-Committee for evaluation of the detailed information which will be provided to it in due course;
- .3 instruct the NCSR Sub-Committee to consider the issue under its agenda item "Developments in maritime radiocommunication systems and technologies"; and
- .4 instruct the Secretariat that, on receipt of the information, it requests IMSO to undertake the technical and operational assessment at an early date and submit its report for consideration by the NCSR Sub-Committee.