INTERNATIONAL MARITIME ORGANIZATION

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RESPONSE TO MATTERS RELATED TO THE RADIOCOMMUNICATION ITU R STUDY GROUP AND ITU WORLD RADIOCOMMUNICATION CONFERENCE

Draft Liaison statement to CEPT ECC

Submitted by Germany, Marshall Islands, ICS, IMSO and CIRM

SUMMARY

Executive summary:	This document proposes a reply liaison statement to be sent to the Electronic Communications Committee (ECC) of the European Conference of Postal and Telecommunications Administrations (CEPT) regarding the publication of the ECC Report 299 on *Measures to address potential blocking of MES operating in bands adjacent to 1 518 MHz (including 1 525-1 559 MHz) at sea ports and airports*
Strategic direction, if applicable:	2
Output:	2.1
Action to be taken:	Paragraph 6
Related documents:	NCSR 5/14, NCSR 5/14/4; NCSR 6/12; IMO-ITU EG 14/5 and NCSR 7/12/3

Introduction

1 This document contains a draft liaison statement in the annex drafted by Germany, the Marshall Islands, the International Chamber of Shipping (ICS), the International Mobile Satellite Organization (IMSO) and Comité International Radio Maritime (CIRM) as a response to the publication of the ECC Report 299 on *Measures to address potential blocking of MES operating in bands adjacent to 1 518 MHz (including 1 525-1 559 MHz) at sea ports and airports*. The liaison statement sets out the severe adverse implications to the maritime community. It is proposed that the liaison statement be copied to IMSO, ICS, the International Civil Aviation Organization (ICAO) and International Telecommunication Union – Radiocommunication sector Working Parties (ITU-R WPs) 4C, 5B and 5D for information.

Background

2 NCSR 5 noted the potential interference caused to Inmarsat terminals from Mobile/Fixed communications networks Supplemental downlink (MFCN SDL) base stations deployed within Europe near ports and waterways (NCSR 5/14). NCSR 5 recognized the importance of the issue and had instructed the Joint IMO/ITU Experts Group (IMO/ITU EG) to prepare the necessary liaison statements on the possible interference with L-band maritime satellite communications and forward them directly to ITU-R WP 5B and the European Conference of postal and telecommunications administrations (CEPT) (NCSR 6/12, annex, appendix 3).

3 On the same subject, MSC 99 noted that the issue was of great concern to the maritime industry and therefore encouraged maritime administrations to liaise closely with their national authorities attending meetings of ITU-R and regional bodies concerned with spectrum management, with the aim to address this safety critical issue.

4 The consultation process regarding Report 299 has failed to act on the advice of concerned administrations and specialized organizations concerning the risk and consequences of interference to satellite communication services in the L-band used by ships and aircraft. In particular, the opinions expressed during the development of the Report regarding the Turkish and Italian Administrations' concerns and comments formally submitted during the public consultation by Italy, the United Kingdom, Turksat, Eurocontrol, IMSO, ICAO, European Space Agency (ESA), Inmarsat, International Air Transport Association (IATA), Airlines for Europe (A4E), European Organisation for Civil Aviation Equipment (EUROCAE), in addition to Lufthansa and ASRI, have not been taken onboard in the ECC Report 299.

5 Further action to support the maritime community in countering proposals to require unnecessary replacement of currently installed satellite terminal equipment operating in the frequency band 1 518-1 559 MHz is needed.

Action requested of the Sub-Committee

6 The Sub-Committee is invited to consider the information provided above and propose a reply to ECC as set out in the annex.

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ANNEX

**DRAFT LIAISON STATEMENT FROM IMO TO CEPT ECC
(COPY FOR INFORMATION TO ITU-R WORKING PARTIES 4C, 5B AND 5D,
ICS AND IMSO)**

1 IMO thanks the CEPT ECC for the liaison statement regarding ECC Report 299, the protection measures for maritime MESs and the introduction of next generation MESs (ECC(19)042, annex 29).

2 IMO recalls the liaison statement sent by IMO to CEPT ECC PT1 in September 2018 (document ECC PT1(18)200), which identified the following issues to be addressed prior to the deployment of IMT below 1 518 MHz:

.1 the protection of existing MSS terminals by retaining PFD limits on IMT base stations;

.2 the derivation of a Mobile earth station receiver mask as a minimum requirement at ITU-R level;

.3 the establishment of IMO regulations requiring MSS terminals to be replaced on fitted vessels, and the process and timeline for establishing such regulations;

.4 the timeline for establishing related test standards and availability of type-approved MSS terminals;

.5 the timeline for replacing MSS terminals on all vessels; and

.6 the continued protection of MSS terminals by establishing necessary PFD limits on IMT base stations.

3 IMO notes that ECC has developed PFD limits for the protection of existing and next generation maritime MSS terminals from IMT base stations. While IMO appreciates the development of example regulatory measures to protect the operation of MSS terminals, IMO notes that Report 299 contains two sets of example PFD limits. The example PFD limits in Section A2.2 of the Report are based on protection of Inmarsat-C terminals, which are commonly used to meet GMDSS requirements. The example PFD limits in Section A2.1 on the other hand are based on higher interference levels and therefore would not fully protect Inmarsat-C terminals or other Inmarsat maritime terminals. Therefore, the example PFD limits in Section A2.2 are strongly recommended for adoption by regulators when authorizing new mobile systems in the band 1 492-1 518 MHz.

4 Regarding the introduction of next generation terminals which may be able to meet the new blocking requirement of -30 dBm, it will be necessary to revise the IEC test standards that are applicable to Satcom terminals used in GMDSS, before compliant equipment can be placed on the market.

5 Regarding the timeline for replacing MSS terminals on all vessels, IMO considers that the example timescale of seven years is too short to be achievable. Given that the equipment presently installed matches the technical and operating requirements of the associated mobile-satellite networks and systems, the natural replacement cycle of equipment is likely to extend up to 25 years, based on the typical life cycle of ships.

6 A special regulatory measure would be required at IMO to enforce MSS terminal replacement, which would take considerable time and resources to implement on vessels. For new equipment fit, at the present time, no type-approved replacement equipment is available because there is no design specification or test standard based on current maritime regulations.

7 ECC and European spectrum regulators are invited to take account of the above information in any further considerations related to deployment of IMT systems in the frequency band 1 492-1 518 MHz and keep IMO informed of developments on this issue.