#### **International Maritime Organisation**

Item: 3(a)(ii)

### INTERNATIONAL REGULATIONS REPORT ON SUB-COMMITTEE ON NAVIGATION, COMMUNICATIONS AND SEARCH AND RESCUE (NCSR) 5th SESSION

HELD AT IMO HEADQUARTERS FROM 19 to 23 February 2018

#### 1. GENERAL

NCSR held its fifth session from 19 to 23 February 2018 chaired by Mr. R. Lakeman (the Netherlands). The Vice-Chair, Mr. N. Clifford (New Zealand), was also present.

The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link: http://www.imo.org/en/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings

NCSR5 adopted the agenda (NCSR 5/1) and authorised the establishment of its working, experts and drafting groups

#### 2. DECISIONS OF OTHER IMO BODIES

No items of concern or interest for World Sailing

#### 3. ROUTEING MEASURES AND MANDATORY SHIP REPORTING SYSTEMS

NCSR5 approved the establishment of the following new TSSs and associated measures, effective 1 Dec 2018:

- Dangan Channel (Pearl River Estuary);
- · Vicinity of Kattegat.

NCSR5 approved the establishment of new and an amendment to the existing routeing measures other than TSS, effective 1 July 2020, as follows:

- Amended areas to be avoided "Off the coast of Ghana in the Atlantic Ocean":
- Precautionary area "Dangan Channel No.2" with the recommended directions of traffic flow;
- Deep-water routes, recommended routes and precautionary area "In the vicinity of Kattegat"; and
- Two-way routes, precautionary areas and areas to be avoided "In the Bering Sea and Bering Strait".

#### 4. UPDATES TO THE LRIT SYSTEM

NCSR 5 approved an amendment to the Continuity of service plan for the LRIT system. Otherwise there was nothing of concern for World Sailing in this agenda Item

# 5. APPLICATION OF THE "INDIAN REGIONAL NAVIGATION SATELLITE SYSTEM (IRNSS)" IN THE MARITIME FIELD AND DEVELOPMENT OF PERFORMANCE STANDARDS FOR SHIPBORNE IRNSS RECEIVER EQUIPMENT

IRNSS is a regional navigation satellite system compatible with other navigation satellite systems worldwide. IRNSS is an independent regional system developed and operated by India which covers an area closed by 55°E Longitude, 50°N Latitude and 110°E Longitude, 5°S Latitude.

The IRNSS Standard Positioning Service (SPS) provides positioning, navigation and timing services, free of direct user charges. The IRNSS receiver equipment will be capable of receiving and processing the standard service signal covering the basic requirements of position fixing, determination of course over ground (COG), speed over ground (SOG) and timing, either for navigation purposes or as input to other functions.

IRNSS is to be recognised as a future component of the World-Wide Radio Navigation System (WWRNS)

### 6. GUIDELINES FOR THE HARMONIZED DISPLAY OF NAVIGATION INFORMATION RECEIVED VIA COMMUNICATIONS EQUIPMENT

There was nothing of concern for World Sailing in this agenda Item.

#### 7. GUIDELINES ON STANDARDIZED MODES OF OPERATION, S-MODE

There was nothing of concern for World Sailing in this agenda Item.

### 8. DEVELOP GUIDANCE ON DEFINITION AND HARMONIZATION OF THE FORMAT AND STRUCTURE OF MARITIME SERVICE PORTFOLIOS (MSPs)

There was nothing of concern for World Sailing in this agenda Item.

### 9. UPDATING OF THE GMDSS MASTER PLAN AND GUIDELINES ON MSI (MARITIME SAFETY INFORMATION) PROVISIONS

NCSR5 received a number of reports under this item including the master plan for GMDSS which contains national data on the facilities of GMSSS. Member states were asked to check the accuracy of the data and to update it as necessary.

A summary of the current issues being addressed by the international NAVTEX coordinating panel was given, this outlined:

- changes to the NAVTEX infrastructure during the period, and notification of planned changes;
- Transmitted power during hours of darkness. The Panel continues to receive reports of interference to NAVTEX transmissions during hours of darkness on 518 kHz. Authorities are reminded that the IMO NAVTEX Manual recommends that transmitted power during these hours should be reduced by 60% in order to reduce the possibility of interference, whilst still providing reliable coverage of the nominated service area. Transmitter power levels should not exceed 400w during hours of darkness.

In summary, the Panel was again pleased to note further examples of mutual cooperation between neighbouring authorities for the exchange and transmission of MSI where a NAVTEX station becomes non-operational for any reason. The Panel congratulated the authorities of Malta and Tunisia for their continued cooperation in covering the transmissions of Kelibia, and also those of Italy and Greece in covering the transmissions of Sellia Marina. Such cooperation provides seamless coverage of MSI for the benefit of the mariner.

#### 10. CONSEQUENTIAL WORK RELATED TO THE NEW POLAR CODE

NCSR5 noted support for the development of general guidance for navigation and communication equipment intended for use on ships operating in polar waters and reestablished the Correspondence Group on consequential work related to the Polar Code under the coordination of Germany, with the following terms of reference:

• Prepared raft general guidance for navigation and communication equipment intended for use on ships operating in polar waters, taking into account the outcome of the discussions at NCSR 5, MSC 99 and MSC 100, as appropriate; and

Submit a report to NCSR 6 for consideration.

World sailing will review the report once published.

# 11. REVISION OF SOLAS CHAPTERS III AND IV FOR MODERNIZATION OF THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS), INCLUDING RELATED AND CONSEQUENTIAL AMENDMENTS TO OTHER EXISTING INSTRUMENTS

NCSR 4 had agreed on the need to progress this item in preparation for NCSR 5 and established a Correspondence Group on the Modernization of the GMDSS and to submit an interim report to the Joint IMO/ITU Experts Group for its consideration.

NCSR5 considered proposed amendments to SOLAS regulation IV/7 (Radio equipment), in particular the requirements for SART. In discussions on the requirements for SART, the following views were expressed:

- radar SART should be phased out and replaced by AIS-SART;
- AIS-SART was considered to be a good alternative to radar SART; however, further consideration, studies and testing were required before removing the requirements for radar SARTs;
- before phasing out radar SART, consideration should be given to the capabilities of conventional ships and rescue operation units when participating in SAR operations, as well as to the issue of false alerts;
- it was important that the current requirements were maintained and improved;
- to avoid restricting SAR operations, an alternative option could be a combined radar/AIS-SART;
- it was important to start considering new technologies and how to phase out old technologies in general;
- the Joint IMO/ITU Experts Group could be instructed to consider this matter further; and
- the outcome of discussion at the last meeting of the ICAO/IMO Joint Working Group should be taken into account when further considering this matter.

Having noted the above views, the Sub-Committee agreed to refer the issue to the Communications Working Group for further consideration and advice, as appropriate but time precluded this.

### 12. RESPONSE TO MATTERS RELATED TO THE RADIOCOMMUNICATION ITU-R STUDY GROUP AND ITU WORLD RADIOCOMMUNICATION CONFERENCE

The draft IMO position on WRC-19 agenda items relevant to World Sailing was considered:

Agenda item 1.3 to consider possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz, in accordance with Resolution 766 (WRC-15).

#### IMO position

Part of the frequency band 460-470 MHz is used by maritime mobile service for on-board communication stations in accordance with RR 5.287. The functions of this type of on-board communication include anchoring, berthing, damage control parties, security patrols, terrorism threats, fire-fighter communication etc. The use of this frequency band is considered very important for maritime community.

Protection of the existing maritime mobile service used for on-board communication stations to which the frequency band is already allocated on a primary basis should be ensured, and no additional constraints should be imposed.

Agenda item 1.5 to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution 158 (WRC15);

#### IMO position

Currently, there is a growing need for global broadband satellite communications by the maritime community for commercial, public and operational purposes. Some of this need can be met by allowing earth stations in motion to communicate with space stations of the FSS operating in the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space).

IMO supports the provision of maritime broad band services and invite ITU to take appropriate action to ensure availability of the frequency bands 17.7 to 19.7 GHz in the downlink and 27.5 to 29.5 GHz in the uplink to be used for the provisioning of maritime satellite broadband services.

Agenda item 1.8 to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution 359 (Rev.WRC-15);

IMO is in the process of GMDSS modernization. Some new technologies are introduced for consideration in the modernization plan of the GMDSS, such as MF/HF NAVDAT. IMO is also working to update the current regulatory framework to enable the recognition and operation of new mobile satellite service providers in the GMDSS, such as Iridium.

#### **IMO** position

#### IMO invites ITU to:

- conduct frequency studies, consider revisions to existing instruments and take regulatory actions, as appropriate, to facilitate the implementation of GMDSS modernization;
- take appropriate regulatory measures to ensure full protection and availability of the frequency bands to be used by new recognized GMDSS satellite service providers for the provision of GMDSS services; and
- resolve any issues in relation to the future operation of newly recognized GMDSS satellite service providers.

Agenda item 1.9.1 Regulatory actions within the frequency band 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS), in accordance with Resolution 362 (WRC-15)

There are some types of autonomous maritime radio devices using automatic identification system (AIS) technology or digital selective calling (DSC) technology, or transmitting synthetic voice messages, or with a combination of those technologies, which have been developed for, and are operating in, the maritime environment, and their number is expected to increase. Some of these devices do not enhance the safety of navigation or serve the purpose of communication between coast stations and ship stations, or between ship stations, or between associated on-board communication stations, or survival craft stations and emergency position-indicating radio beacon stations, but occupying the spectrum and identities of the maritime mobile service. There is a need to categorize and regulate the usage of autonomous maritime radio devices. ITU at its seventeenth WP 5B session adopted the preliminary draft definition of AMRD. The categorization of AMRD is under discussion now in ITU and relevant information are put into the working document towards preliminary

draft new report ITU-R M.[AMRD]. Inputs on frequencies usage and numbering scheme of AMRD are also received though the discussions have not been opened yet.

**IMO** position

- Integrity of AIS and the Global Maritime Distress and Safety System (GMDSS) should be protected:
- Autonomous maritime radio devices which enhance the safety of navigation should be regulated for the use of frequencies and identities of the maritime mobile service; and
- Autonomous maritime radio devices which do not enhance the safety of navigation, regulation of the use of frequencies, and technical and operational characteristics, should benefit both the user of devices as well as maritime safety. An additional spectrum allocation within the frequency band 156-162.05 MHz and a new numbering scheme which is different from those in the existing maritime mobile service should be considered.

#### 13. MEASURES TO PROTECT THE SAFETY OF PERSONS RESCUED AT SEA

After consideration, NCSR5 deferred further discussion to its next session.

#### 14. DEVELOPMENTS IN GMDSS SATELLITE SERVICES

NCSR5 considered the report of the SAR Working Group.

The Group considered the Status of the Cospas-Sarsat Programme. The discussion highlighted the good progress on the MEOSAR programme, information on distress beacon numbers and alerts, and the contribution made by the system to saving lives worldwide. The Cospas-Sarsat Programme continues to work on the issue of the possible distribution of GMDSS digital distress alerts.

The Group also noted that the Cospas-Sarsat Secretariat is upgrading the International 406-MHz Beacon Registration Database (IBRD, www.406registration.com) to meet the demands of second generation distress beacons and the Return Link Service (RLS) and is seeking input from national authorities in regard to the specification of the upgraded IBRD. The Group also noted that the individual national databases operated by the Administrations will need to be upgraded to meet these demands. In this context, the Group asked NCSR5 to invite Member States to upgrade their individual national beacon registration databases to accommodate the registration requirements for second generation beacons and the RLS, as appropriate.

The Group noted that Cospas-Sarsat has produced a series of short training videos that are publicly available for use by SAR professionals to improve their understanding of the MEOSAR system and next-generation beacon technology (www.youtube.com/user/CospasSarsatProgram/playlists).

Recognition of Iridium as a GMDSS mobile satellite service provider

Referring to IMSO's recommendation in the assessment report, the United States, supported by others, expressed the view that NCSR5 should advise MSC 99 to recognise Iridium as a GMDSS mobile satellite service provider.

Other views were expressed that Iridium, at this stage, should not be recognized as a GMDSS mobile satellite service provider as it had not been made clear which specific services provided by Iridium had to be recognised and that this information had to be specified in the statement of recognition.

In response the United States indicated that the services to be provided by Iridium were: safety voice for distress calling, short burst data for distress alerting, and MSI broadcast for MSI information.

NCSR5 considered the proposal by the Chair to develop a draft resolution recognising Iridium as a GMDSS mobile satellite service provider, including conditions which needed to be fulfilled before Iridium could become fully operational as new GMDSS satellite service provider. However, no consensus could be reached to develop such a resolution. Strong views were expressed that the recommendation of recognition should not be conditional.

In conclusion, the Chair put forward a proposal to instruct the Communications Working Group to review IMSO's assessment and to consider whether Iridium had demonstrated that it met all the criteria for the provision of mobile-satellite services in the GMDSS. While the proposal was supported by some delegations, others indicated that this would be a time-consuming process and that the result of the assessment had already been presented by IMSO. In this context, it was noted that most delegations accepted the conclusions of IMSO's report, that Iridium had met the requirements of the Organization.

Noting the absence of consensus on referring matters to the Communications Working Group, the Chair, in view of the many concerns raised, suggested inviting interested Member States and, in particular IMSO, to provide further information to NCSR 6 for consideration. There was insufficient support for this proposal, as there was no consensus on which issues required further consideration.

Having noted the concerns expressed at this session, NCSR5 invited MSC to note the discussion, summarised, and provide guidance to the NCSR5 on the way forward. In this context, NCSR5 invited Member States and international organisations to submit proposals on this matter to the Committee, as appropriate.

The delegations of the United States and Norway made statements, expressing concern about the lack of progress and due process. The delegation of the Marshall Islands expressed its disappointment at the lack of progress based on issues not covered by Res. A.1001(25) (CRITERIA FOR THE PROVISION OF MOBILE SATELLITE COMMUNICATION SYSTEMS IN THE GMDSS). The delegation of Spain also agreed with the concerns expressed by the United States, Norway and the Marshall Islands.

## 15. REVISED PERFORMANCE STANDARDS FOR EPIRBS OPERATING ON 406 MHZ (RESOLUTION A.810(19)) TO INCLUDE COSPAS-SARSAT MEOSAR AND SECOND GENERATION BEACONS

The target completion year for this output has been extended to 2019. There is little more to report from the work of the Working Group from this session under this agenda item.

### 16. FURTHER DEVELOPMENT OF THE PROVISION OF GLOBAL MARITIME SAR SERVICES

NCSR5 noted the status of the Global SAR Plan as available in the Global Integrated Shipping Information System (GISIS). NCSR5 also noted that the Global SAR Plan had been updated by several Member States during the time between NCSR 4 and NCSR5. As the status of the availability of SAR services changed day by day providing updated information directly into GISIS was of utmost importance. Having updated information available would enable Rescue Coordination Centres to act promptly without losing precious time when they were dealing with a distress situation.

In this context, all Member States were encouraged to check the available information in GISIS on a regular basis and update the information immediately when changes had been notified to them.

### 17. GUIDELINES ON HARMONIZED AERONAUTICAL AND MARITIME SEARCH AND RESCUE PROCEDURES. INCLUDING SAR TRAINING MATTERS

NCSR5 noted the information provided concerning the potential safety hazards for SAR assets arising from the fact that Light Emitting Diode (LED) obstruction and hazard lights are

potentially not detectable on Night Vision Devices (NVD). SAR operations (maritime and aviation) now make frequent use of NVD during training and operations. Australia highlighted also that some distress alerting devices are equipped with LED lights or strobes and, if these are not detectable by NVD, locating persons in distress will be more challenging.

This issue has been highlighted before but it remains a significant concern, NCSR5 agreed to remind Member States of the need to take regulatory action and to raise awareness, as appropriate, with respect to the safety hazard caused by LED obstacle lighting not being detectable by night vision devices.

#### 18. AMENDMENTS TO THE IAMSAR MANUAL

Nothing further to report to World Sailing under this item

### 19. UNIFIED INTERPRETATION OF PROVISIONS OF IMO SAFETY, SECURITY, AND ENVIRONMENT-RELATED CONVENTIONS

NCSR5 noted that no documents had been submitted under the agenda item to this session.

#### 20. BIENNIAL STATUS REPORT AND PROVISIONAL AGENDA FOR NCSR 6

The Chair, in consultation with the Secretariat, prepared the Sub-Committee's biennial status report, covering progress on the outputs assigned to NCSR.

Taking into account the progress made the Chair, in consultation with the Secretariat, prepared the draft provisional agenda for NCSR 6.

NCSR6 had been tentatively scheduled to take place from 21 to 25 January 2019.

#### 21. ELECTION OF CHAIR AND VICE-CHAIR FOR 2019

NCSR5 unanimously re-elected Mr. R. Lakeman (Netherlands) as Chair and Mr. N. Clifford (New Zealand) as Vice-Chair, both for 2019.

#### 22. ANY OTHER BUSINESS

NCSR5 noted information provided by FOEI, WWF, Pacific Environment and CSC on several new sources of information on polar marine mammal habitat, migration routes and a method of assisting mariner voyage planning through marine mammal areas to assist in the implementation of chapter 11 (Voyage planning) of the new Polar Code.

NCSR5 noted information provided by Argentina on the plan for installing AIS AtoN on the Antarctic Continent for the purpose of enhancing the safety of navigation and accordingly the safety of life at sea and the protection of the marine environment. NCSR5 invited Member States to:

- inform mariners and operators of tourist cruises in the Antarctic of the availability of the AIS AtoN installed, as well as of those aids that were planned to be installed this austral summer; and
- request mariners to inform the NAVAREA VI Coordinator snautica@hidro.gov.ar of any abnormalities they detect in the operation of those signals or of any other information they deem relevant for improving the service.

NCSR5 noted information provided by China on the development status and plan of the BeiDou Navigation Satellite System.

#### Item: 3(a)(ii)

#### 23. ACTION REQUESTED OF THE COMMITTEE

NCSR5 invited MSC to adopt its output and recommendations from this session.

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