Seafarers depend on a robust distress and safety system when life is in danger at sea. The fifth session of the IMO Sub-Committee on Navigation, Communications and Search and Rescue convened from 19-23 February and focused on core areas of IMO’s work relating to safety at sea.

**New shipping routes in Bering Sea and Bering Strait to be established**

New shipping routes in the Bering Sea and Bering Strait, aimed at reducing the risks of incidents and to protect the marine environment as well as local fishing activities, have been agreed by IMO’s Sub-Committee on Navigation, Communications and Search and Rescue (NCSR).

The Sub-Committee (19-23 February) agreed to establish two-way routes, precautionary areas and areas to be avoided in the Bering Sea and Bering Strait.

The six two-way routes and six precautionary areas, to be voluntary for or all ships of 400 gross tonnage and above, in the Bering Sea and Bering Strait off the coast of the Chukotskiy Peninsula and Alaska, were proposed by the Russian Federation and the United States. These waters are expected to see increased traffic due to rising economic activity in the Arctic.

In addition, the Sub-Committee agreed to establish three areas to be avoided in the Bering Sea, proposed by the United States, to improve safety of navigation and protect the fragile and unique environment.

The proposed measures will be forwarded to IMO’s Maritime Safety Committee (MSC) 99th session in May, for adoption.

These are the first ship routeing measures to be agreed in IMO for the Arctic region since IMO’s Polar Code entered into force on 1 January 2017.

Other ships routeing systems approved
The Sub-Committee also approved the following new and amended ships’ routeing measures, for submission to the MSC for adoption:

- Traffic separation scheme and other routeing measures *In Dangan Channel* (China);
- Traffic separation schemes and other routeing measures *In the vicinity of Kattegat* (Denmark and Sweden); and
- Area to be avoided *Off the coast of Ghana in the Atlantic Ocean* (an amendment) (Ghana).

GMDSS modernization progressed
The meeting continued its ongoing work to modernize the Global Maritime Distress and Safety system (GMDSS).

The first draft of relevant amendments to chapters III and IV of the International Convention for the Safety of Life at Sea (SOLAS) were prepared and a work plan for the development of related and consequential amendments to IMO instruments other than the SOLAS Convention was agreed.

The GMDSS was adopted in 1988 to ensure full integration of maritime radio and satellite communications so that distress alerts can be generated from anywhere on the world’s oceans. The modernization plan aims to update the provisions, including allowing for the incorporation of new satellite communication services.

A Correspondence Group was re-established to continue the work intersessionally.

Recognition of Inmarsat Fleet Safety service
The Sub-Committee agreed a draft MSC resolution on *Recognition of Maritime Satellite Services provided by Inmarsat Global Ltd.*, for adoption by the Committee.

The draft resolution recognizes maritime mobile satellite services provided by the Inmarsat Fleet Safety service, in the coverage area under the Inmarsat-4 Middle East and Asia (MEAS) region satellite, for use in the GMDSS.

E-navigation matters
The Sub-Committee continued its work on matters related to e-navigation.
Draft Interim Guidelines for the harmonized display of navigation information received via communications equipment were agreed for submission to the MSC for approval. These Interim guidelines aim to ensure that information received from communications equipment displayed on ECDIS, radar and INS is displayed in an efficient, reliable and consistent format to support decision-making. The interim status of the guidelines indicates that they are intended to be revisited once interrelated e-navigation items have been completed.

The Sub-Committee also agreed to the updated IMO e-navigation Strategy Implementation Plan (SIP), for approval by the Committee. The SIP was approved in 2014 and the update reflects the work that has been completed until now. Newly included in the updated SIP is a table with prioritized tasks.

The Sub-Committee also agreed to recommend to the MSC the holding of a second meeting of the IMO-IHO Harmonization Group on Data Modelling (HGDM) to continue and finalize the Guidance on definition and harmonization of the format and structure of Maritime Services within a Maritime Service Portfolio (MSP). The list of Maritime Services is set out in the SIP and the HGDM is tasked to provide solutions for the provision of harmonized digitalized maritime information services to ships.

**IAMSAR manual updated**

The Sub-Committee approved updates to *The International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual*, which contains detailed guidance for a common aviation and maritime approach to organizing and providing search and rescue services.

Draft amendments prepared by the International Civil Aviation Organization (ICAO) / IMO Joint Working Group on the Harmonization of Aeronautical and Maritime Search and Rescue include a new section related to search and rescue operations in areas remote from search and rescue facilities; and updates to the section on mass rescue operations.

The draft amendments will be forwarded to the MSC for approval for inclusion in the 2019 edition of the Manual.

**Performance standards for shipborne IRNSS receiver equipment agreed**

The Sub-Committee agreed, for submission to the MSC for adoption, draft performance standards for shipborne Indian Regional Navigation Satellite System (IRNSS) receiver equipment and invited India to submit further information to the next session, so that the IRNSS can be considered for recognition as a component of the World-Wide Radionavigation System.
Long-Range Identification and Tracking (LRIT) documentation updated
The Sub-Committee agreed updates to technical documentation relating to the functioning and operation of the Long-Range Identification and Tracking (LRIT).

Polar Code guidance progressed
The Sub-Committee re-established a correspondence group to develop general guidance for navigation and communication equipment intended for use on ships operating in polar waters.

Draft IMO position for WRC 19
The Sub-Committee further developed the draft IMO position on maritime radiocommunication matters for submission to the World Radiocommunication Conference 2019 (WRC19), to be held in late 2019. The WRC reviews, and, if necessary, revises, the Radio Regulations, the international treaty governing the use of the radio-frequency spectrum and the geostationary-satellite and non-geostationary-satellite orbits. This includes radio-frequency spectrum to be used for communication and navigation services.


Jointly published by IMO and the International Civil Aviation Organization (ICAO), the three-volume IAMSAR Manual provides guidelines for a common aviation and maritime approach to organizing and providing search and rescue (SAR) services. Each volume (available separately in loose-leaf form, binder included) can be used as a standalone document or, in conjunction with the other two volumes, as a means to attain a full view of the SAR system.

The IAMSAR Manual is divided into three volumes:
Volume I, Organization and Management, discusses the global SAR system concept, establishment and improvement of national and regional SAR systems and co-operation with neighbouring States to provide effective and economical SAR services.

Volume II, Mission Co-ordination, assists personnel who plan and co-ordinate SAR operations and exercises.

Volume III, Mobile Facilities, is intended to be carried aboard rescue units, aircraft and vessels to help with performance of a search, rescue or on-scene co-ordinator function, and with aspects of SAR that pertain to their own emergencies.

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