



IMO News Brief

The 13th session of Navigation, Communications and Search and Rescue
Korean Register



Executive Summary

The thirteenth session of the Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 13) was held from 22 to 26 June 2026 at IMO Headquarters in London, United Kingdom. The session covered a wide range of maritime safety issues related to navigation safety, communications, search and rescue, and relevant performance standards.

The NCSR Sub-Committee is a subsidiary body of the IMO Maritime Safety Committee (MSC). It is responsible for considering technical matters related to navigation, communications and search and rescue, including ships' routing, navigational equipment and communication systems, radionavigation systems, search and rescue, and the GMDSS, as well as developing and revising relevant standards.

The main outcomes of this session are summarized below.

- Amendments to ship reporting systems to require ships navigating in European waters to additionally report insurance certificate information
- Revision of the performance standards for EPIRB equipment to enable the optional use of two-way communication functionality
- Development of framework guidance for data distribution and global IP-based connectivity for ECDIS S-100 products between shore-based infrastructure and ships, as well as operational guidance for digital route information exchange between shore and ship
- Development of performance standards for shipborne R-Mode (Ranging Mode) receiver equipment

Finally, we sincerely hope that this Brief will help a wide range of readers better understand the key outcomes of NCSR 13 and support the timely and effective implementation of appropriate follow-up actions.

Mandatory Reporting of Insurance Certificate Information in European Waters

Summary

Outcome	Requests adoption of the draft resolutions amending the BONIFREP, WETREP and CALDOVREP ship reporting systems at MSC 112 in December 2026.
Concerned Parties	<input checked="" type="checkbox"/> Ship Owners <input type="checkbox"/> Shipyards <input type="checkbox"/> Equip. Makers <input checked="" type="checkbox"/> Others (Governments)
Application Date	Expected in May 2027 (six months after adoption at MSC 112 in December 2026)
Implication	<input type="checkbox"/> Designs <input checked="" type="checkbox"/> Operation <input type="checkbox"/> Negligible
Source	NCSR 13/WP.4, Annex 2, 3 and 4

Background

Administrations may establish ship reporting systems under SOLAS regulation V/11 in order to contribute to safety of life at sea, the safety and efficiency of navigation, and the protection of the marine environment.

Ship information is exchanged among EU Member States through SafeSeaNet. Meanwhile, most European States support the inclusion of insurance-related documentation requirements in ship reporting systems in order to protect the marine environment in European coastal waters and ensure ship safety.

Key Outcomes

When navigating through BONIFREP (Strait of Bonifacio), WETREP (Western European Particularly Sensitive Sea Area) and CALDOVREP (Dover Strait), ships will be required to additionally report information on one or more of the following insurance certificates under the relevant ship reporting systems.

Such insurance certificate information shall be submitted electronically, primarily through SafeSeaNet, and may be submitted either by the ship or by the company as defined in SOLAS chapter IX, regulation 1.2.

- the International Convention on Civil Liability for Oil Pollution Damage, 1992, as amended (1992 Civil Liability Convention);
- the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (2001 Bunkers Convention); and
- the Nairobi International Convention on the Removal of Wrecks, 2007 (2007 Nairobi WRC),

Meanwhile, some States raised concerns that the proposed amendments introducing insurance certificate reporting requirements in European ship reporting systems did not comply with the six-month advance submission deadline under MSC.1/Circ.1608, and could adversely affect safe navigation in high-traffic waters.

Some States also noted that the amendments could be used as a means of unilateral sanctions for political or economic purposes. However, many flag States supported the view that submitting insurance certificate information would contribute to ship safety and marine environmental protection. Accordingly, the draft resolutions amending BONIFREP, WETREP and CALDOVREP were requested to be adopted at MSC 112 in December 2026.

The proposed amendments to TRANSREP, off the south and southwest coast of Iceland, were withdrawn by the proponent following the preliminary assessment and are expected to be resubmitted to NCSR 14 in April 2027 after further revision.

Implications

Ships and shipowners navigating in European waters should verify the ship's intended route and operating areas in advance to ensure compliance with the insurance certificate reporting requirements under the relevant ship reporting systems.



Amendments to traffic separation schemes (TSSs) in waters off the United States.

Summary

Outcome	Requests adoption of the draft resolution amending the traffic separation schemes in Off Delaware Bay, Off New York, in the approaches to the Cape Fear River and in the approaches to Chesapeake Bay at MSC 112 in December 2026.
Concerned Parties	<input checked="" type="checkbox"/> Ship Owners <input type="checkbox"/> Shipyards <input type="checkbox"/> Equip. Makers <input checked="" type="checkbox"/> Others (Governments)
Application Date	Expected in May 2027 (six months after adoption at MSC 112 in December 2026)
Implication	<input type="checkbox"/> Designs <input checked="" type="checkbox"/> Operation <input type="checkbox"/> Negligible
Source	NCSR 13/WP.4, Annex 1

Background

Based on an analysis of traffic conditions in waters off the United States, and in view of the increasing risk of collision between ships and offshore structures due to the full-scale development of offshore energy, including offshore wind power, the United States proposed proactive amendments to the traffic separation schemes.

Key Outcomes

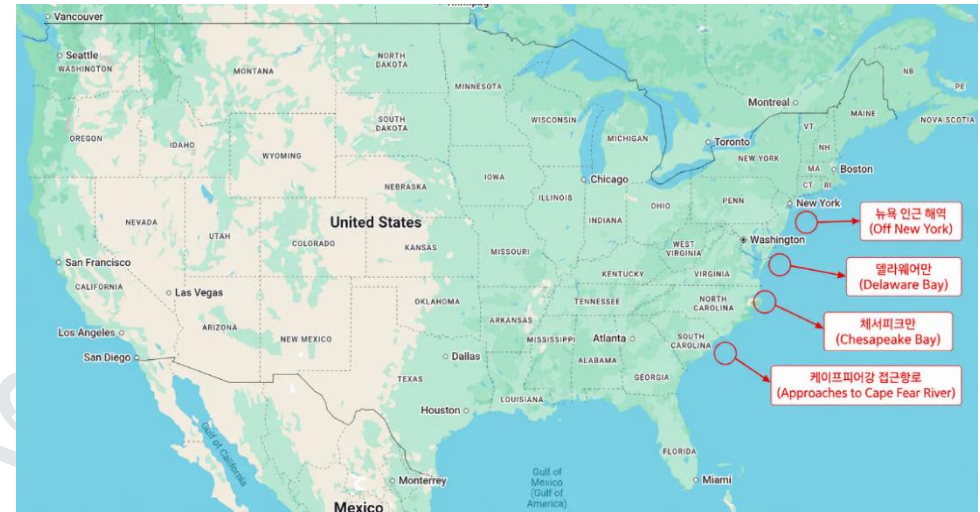
The amendments extend the approaches to the traffic separation schemes in Off Delaware Bay, Off New York, in the approaches to the Cape Fear River and in the approaches to Chesapeake Bay, and introduce new precautionary areas.

In addition, by designating fairways and prohibiting the installation of fixed structures within those areas, the amendments are intended to preserve unobstructed navigation and ensure priority for navigational use.

The draft resolution amending the traffic separation schemes is expected to be requested for adoption at MSC 112 in December 2026.

Implications

Ships and shipowners navigating in waters off the United States should carefully verify the ship's intended route and operating areas in advance to ensure compliance with the amended traffic separation schemes and related routing measures.



Revision of the performance standards for EPIRB equipment.

Outcome	Request for adoption of Rev.1 to the EPIRB performance standards (Res. MSC.471(101)) at MSC 112 (December 2026) to allow the optional introduction of two-way communication functionality.
Concerned Parties	<input checked="" type="checkbox"/> Ship Owners <input type="checkbox"/> Shipyards <input checked="" type="checkbox"/> Equip. Makers <input checked="" type="checkbox"/> Others (Governments)
Application Date	Equipment installed on or after 1 July 2022 (The application date of Rev.1 remains unchanged.)
Implication	<input type="checkbox"/> Designs <input checked="" type="checkbox"/> Operation <input type="checkbox"/> Negligible
Source	NCSR 13/WP.6, Annex 2

Background

The Galileo satellites provide search and rescue (SAR) services, in addition to positioning, navigation and timing (PNT) services. The Galileo SAR service has been integrated into the global Cospas-Sarsat network since 2016.

Since 2020, Galileo has also provided the Return Link Service (RLS) for Cospas-Sarsat distress beacons, which generally confirms signal detection and position determination to the beacon within one minute.

Key Outcomes

The performance standards for EPIRB equipment used by seafarers in distress were amended to allow the optional introduction of two-way communication (TWC) functionality. This functionality is not mandatory but optional, and the existing performance standards in resolution MSC.471(101) will be revised as Rev.1 and are expected to be adopted at MSC 112.

Through this functionality, persons in distress may receive a confirmation message indicating that their distress alert has been received by rescue authorities. This is expected to reduce uncertainty as to whether rescue operations are in progress and provide psychological reassurance in distress situations.

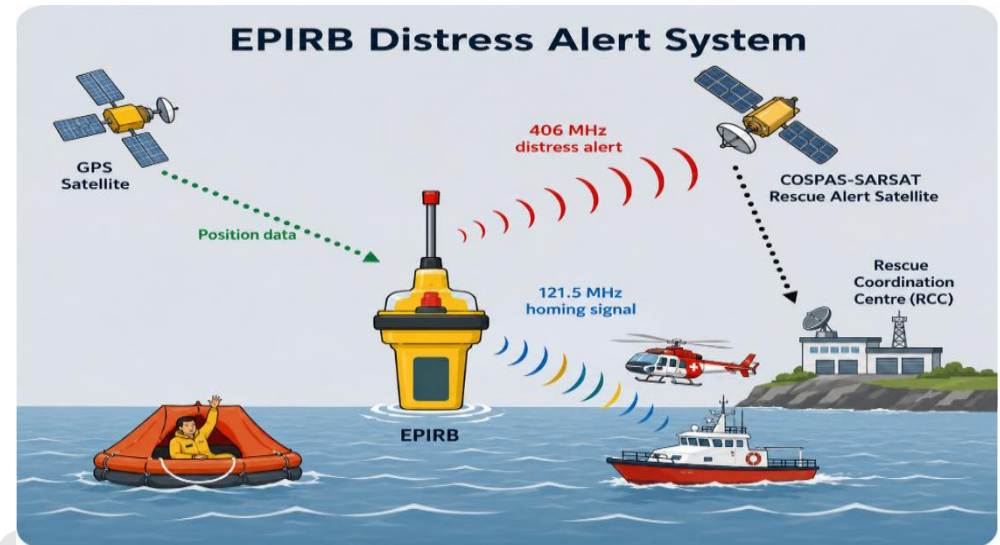
The need to develop operational and user guidance for EPIRBs implementing two-way communication (TWC) services was also considered. As this matter requires input from both aeronautical and maritime experts, it is expected to be further discussed by the ICAO/IMO Joint Working Group (JWG)

Implications

The existing EPIRB performance standards, Res. MSC.471(101), are expected to be revoked, and the newly issued Res. MSC.471(101)/Rev.1 is expected to apply to equipment installed on or after 1 July 2022, which is the same application date as the existing performance standards.

Considering that the amendments requirements are optional, even if they apply to EPIRBs installed on or after 1 July 2022, equipment installed in accordance with Res. MSC.471(101) does not need to be replaced with equipment type-approved in accordance with Res. MSC.471(101)/Rev.1.

Source : NCSR 13/WP.6, Annex 2



Development of framework guidance for shore-to-ship ECDIS S-100 data distribution and global IP-based connectivity using the Maritime Connectivity Platform (MCP) and the secure communication protocol SECOM

Background

ECDIS installed on or after 1 January 2029 will be required to comply with the new performance standards, resolution MSC.530(106)/Rev.1, and relevant guidance was discussed to support their operation.

Key Outcomes

Various maritime information, such as weather and incident-related information, is required to be provided in an integrated manner on ECDIS in accordance with the S-100 framework. To support the use of products complying with the new per-

formance standards, the framework guidance for shore-to-ship data distribution and global IP-based connectivity using the Maritime Connectivity Platform (MCP) and the secure communication protocol SECOM is expected to be approved at MSC 112.

The guidance clarifies that MSI and SAR-related information received by ECDIS through IP-based connectivity is not recognized as a means of receiving GMDSS information, and that weather information, navigational warnings and other similar information should be used only as reference information.

The guidance also states that sufficient demonstration and risk assessment using SECOM and MCP are essential. In addition, taking into account the need for capacity-building to address the digital divide among Member States, a new output is expected to be submitted to MSC 112. This new output will include the establishment of an S-100 demonstration and trial operation framework, performance standards for shipborne IP connectivity equipment, and an MSC-FAL joint coordination mechanism, with a view to enabling continued verification and reporting before the mandatory implementation date of the equipment.

In addition, operational guidance for digital route information exchange between shore and ship is also expected to be approved at MSC 112. The main purpose of this guidance is to support navigational safety, situational awareness and decision-making. By digitally sharing planned routes and schedules, ships and shore-based authorities can maintain a common understanding of voyage plans, thereby improving operational efficiency, reducing reliance on voice communications and easing the workload.

Implications

The guidance for the installation and operation of S-100 ECDIS is expected to be approved. However, as further verification is planned for onboard testing and implementation and performance standards for ship-side IP connectivity, relevant developments need to be continuously monitored in relation to the future mandatory implementation date of the equipment.

Source: NCSR 13/WP.5, Annex 4, 5, 6 and 7

Development of performance standards for R-Mode receiver equipment

Background

In response to the increasing risk of interference with GNSS, the need was raised to include R-mode (Ranging Mode), a terrestrial backup system, in the Worldwide Radionavigation System (WWRNS) framework.

Key Outcomes

Ranging Mode (R-Mode) is a terrestrial backup PNT system that can be used in the event of GNSS failure or radio interference. It is a radionavigation system that calculates range information using signals transmitted from fixed shore-based stations and provides positioning, navigation and timing (PNT) information. R-Mode is designed to provide PNT services independent of GNSS and is being considered using existing maritime radio infrastructure, such as VDES (VHF Data Exchange System) and DGNSS coastal stations.

In response to the increasing threats of interference with shipborne GNSS equipment and GPS jamming, performance standards for shipborne R-Mode receiver equipment have been developed to support the reliability of ship position information through R-Mode. These performance standards are expected to be adopted at MSC 112.

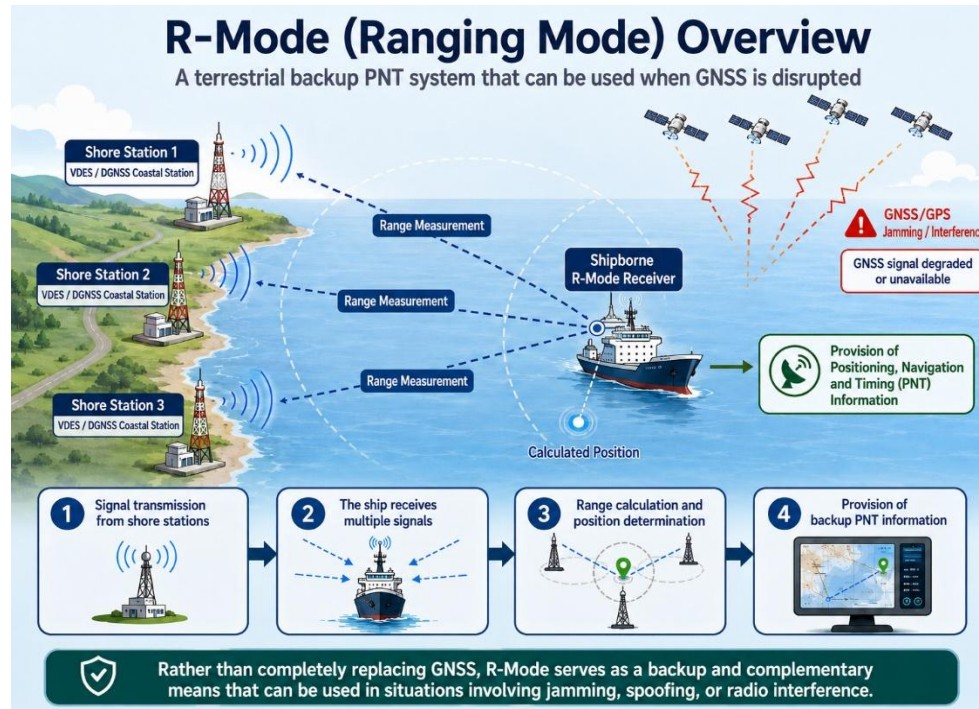
In addition, many Member States considered R-Mode as a backup and complementary means to satellite navigation systems and expressed the view that formal recognition at IMO level, as in the case of previous terrestrial radionavigation systems, would not be necessary.

However, while the need to amend resolution A.1046(27) on the Worldwide Radionavigation System was recognized in order to reflect R-Mode as a terrestrial radionavigation system, many Member States expressed the view that the scope of the amendment should not be limited to R-Mode, but should also cover other terrestrial backup or alternative systems, such as eLoran. Accordingly, the amendment of the resolution was considered premature at this stage, and the matter is expected to be further discussed through the submission of a new output proposal.

Therefore, future discussions at IMO are expected to cover other terrestrial-based PNT systems, including eLoran, as well as performance standards for related shipborne receiver equipment.

Implications

The performance standards may apply to ships fitted with R-Mode receivers; however, R-Mode receivers are not mandatory equipment required for all ships. In addition, considering the current deployment status and coverage of R-Mode shore-based stations, R-Mode is not considered, at this stage, to be a complete replacement for GNSS receivers, such as GPS. Rather, it may be used as a backup and complementary means of navigation, providing PNT information in parallel with GNSS.



Source: NCSR 13/WP.6, Annex

Discussion on Unified interpretation of compass carriage requirements.

Background



At NCSR 13 (June 2026), differences were identified among flag Administrations in interpreting the total number of compasses required when gyrocompasses are fitted as an equivalent means to a magnetic compass. Accordingly, the development of a unified interpretation (NCSR 13/14) was requested to ensure the consistent application of the relevant requirements.

Key Outcomes

The unified interpretation (NCSR 13/14) was not approved by the Sub-Committee due to limited time for discussion and the reasons outlined below.

- SOLAS regulation V/19.2.1.1 requires that a magnetic compass, or an alternative means, be independent of any power supply. However, due to its nature, a gyrocompass cannot be independent of a power supply.
- MSC.1/Circ.1224 provides that a spare magnetic compass may be replaced by an additional gyrocompass. However, it does not explicitly state that the main magnetic compass itself may be replaced by a gyrocompass.
- Since a unified interpretation cannot exceed or modify the requirements of the Convention, it was considered difficult to approve a unified interpretation recognizing a gyrocompass as an alternative means to a magnetic compass.

As no agreement was reached at this session on the development of a unified interpretation (UI), there is no change in the implementation of the Convention requirements.

Source: NCSR 13/WP.6

Revision of the roadmap on considerations for the introduction of NAVDAT services.

Background

NAVDAT is a digital information transmission and reception system capable of providing maritime safety information (MSI) and search and rescue-related information. It is intended to efficiently provide ships with navigational warnings, meteorological information and other relevant information in an enhanced manner compared to the existing NAVTEX service.

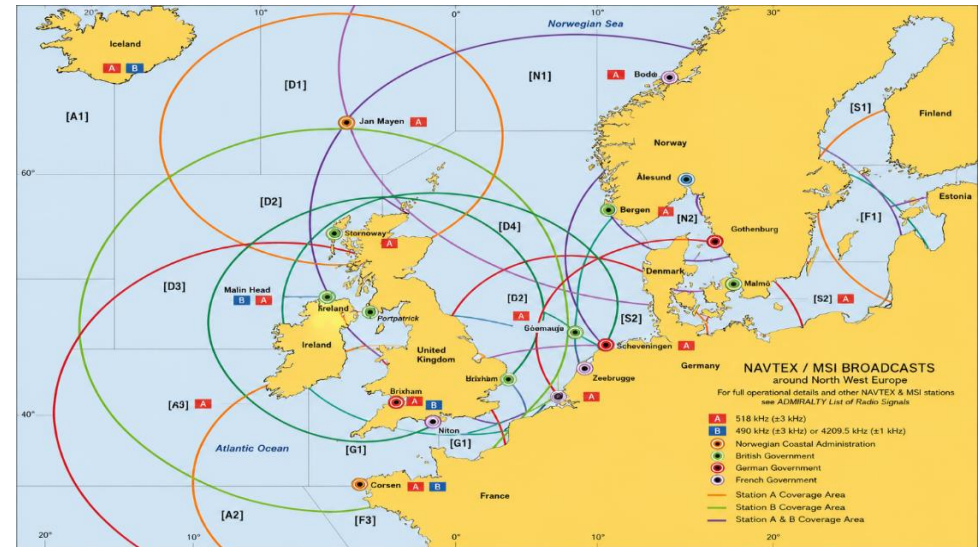
The performance standards for NAVDAT equipment were adopted at MSC 109 in December 2024, and detailed discussions on the introduction of NAVDAT services are currently under way in connection with the modernization of the GMDSS.

Key Outcomes

The roadmap for the introduction of NAVDAT services was revised. Key actions required for the implementation of NAVDAT services were identified, including the development of IEC test standards for shipborne equipment, the accumulation of operational experience through sea trials, the establishment of shore-based stations, and the revision of MSC.1/Circ.1645, which is referenced in SOLAS regulation IV/7.1.4 and provides guidance for the reception of maritime safety information and search and rescue-related information required under the GMDSS.

Detailed matters related to the introduction of NAVDAT services will continue to be discussed in cooperation with relevant international organizations.

At this stage, there are no immediate actions required for ships in relation to the introduction of NAVDAT services. However, if NAVDAT services are introduced in the future, installation requirements, test standards and operational procedures for shipborne receiving equipment may be further developed. Therefore, relevant developments in international standards should be continuously monitored.



Source: NCSR 13/WP.5

Discussion on solutions to radar SART detection issues.

Background



The United States raised concerns regarding the effectiveness of current radar SARTs, based on the 2021 SEACOR POWER capsizing incident, through documents NCSR 11/18/5 and MSC 109/13/3.

In that incident, the radar SART functioned properly; however, it was difficult to identify the survivors' location on the rescue vessel's radar display. This was explained as being due to the degradation of radar performance when navigational radar is switched to SART mode for SART detection.

It was also noted that this issue would be difficult to resolve through operator training alone.

Key Outcomes

Although no discussion took place on this matter at this session of NCSR, as no relevant agenda item had been established, Member States that have experienced similar issues were invited to share relevant information.

If issues related to radar SARTs continue to be reported in the future, the matter may be proposed as a new output and further discussed.

Source: NCSR 13/WP.1

Decisions on the transition to VHF digital voice communications.

Background



VHF voice communication is an essential means of communication for distress, urgency and safety communications, as well as for ship operations. However, the current analogue system has limitations in terms of spectrum efficiency and integration with future digital maritime communication systems. Accordingly, MSC 109 included the development of a transition plan for the introduction of digital technologies in VHF voice communication in the 2026–2027 agenda of NCSR, and NCSR 12 instructed the IMO/ITU Experts Group to carry out an initial review.

The main issues under consideration include the introduction of digital voice communication within the existing VHF maritime frequency bands, interoperability between analogue and digital equipment, maintenance of priority for distress, urgency and safety communications, use of existing shipborne and shore-based infrastructure, and a phased transition schedule.

The main issues under consideration include the introduction of digital voice communication within the existing VHF maritime frequency bands, interoperability between analogue and digital equipment, maintenance of priority for distress, urgency and safety communications, use of existing shipborne and shore-based infrastructure, and a phased transition schedule.

Key Outcomes

A transition plan for the introduction of digital technology in VHF voice communications was agreed and is expected to be submitted to MSC 112 for approval.

As key decisions, it was agreed that, even after the introduction of digital VHF voice communications, the existing assignments of analogue VHF channels 06, 13, 16, 75 and 76, as well as channel 70 for DSC and AIS 1 and AIS 2 for AIS-SART, would be maintained in order to ensure the continuity of GMDSS distress, urgency and safety communications. It was also agreed to identify additional digital VHF channels in accordance with RR Appendix 18 within the existing maritime mobile frequency bands, and to proceed in a manner that minimizes the financial burden on ships and shore-based authorities during the transition.

The completion of work under this agenda item was also recommended. However, it was recognized that further work on VHF digitalization may be required depending on the progress of discussions at ITU relating to WRC-27 and WRC-31.

In addition, detailed technical matters related to the transition plan for VHF digital voice communications, such as TDMA and FDMA technologies, channel allocation methods and measures to prevent frequency interference, were not discussed in detail at this session. It was therefore agreed to send a liaison statement to ITU-R WP 5B, the working party under the ITU Radiocommunication Sector responsible for maritime and aeronautical radiocommunication, so that relevant technical consideration could be undertaken.

If the transition plan for VHF digital voice communications is further developed in the future, changes or upgrades to shore-based VTS facilities and shipborne VHF equipment may be required. Therefore, relevant discussions should be continuously monitored.

Source: NCSR 13/ WP.5

Revision of the performance standards for gyrocompasses for navigation in high-latitude and polar waters

Background

The existing performance standards for gyrocompasses, resolution A.424(XI), have not been revised since their adoption in 1979, and were developed based on performance requirements applicable up to latitude 60°. Accordingly, the need for performance standards for equipment intended for navigation in high-latitude and polar waters was discussed.

Key Outcomes

Based on the report of the correspondence group on the need to revise the performance standards for gyrocompasses, the need for such revision was discussed. The discussion focused mainly on two approaches supported by many Member States: revising the existing resolution A.424(XI) into a modular structure (Option 2), and developing new performance standards (Option 3).

However, some States located in high-latitude areas and polar regions indicated that mechanical gyrocompasses manufactured in accordance with the existing performance standards for gyrocompasses have not caused any problems for the safe navigation of ships, and that there is no need to proceed with this work.

Some States referred to the need for separate gyrocompasses, such as fibre-optic gyrocompasses, for operation in high-latitude waters. However, no further discussion took place at this session. If further consideration of this matter is required in the future, it is considered that a separate new output proposal would be necessary.

As it was decided not to revise the performance standards for gyrocompasses, there is no practical impact on the implementation of the Convention.

Source: NCSR 13/ WP.6





General Manager
Convention & Legislation Service Team
Korean Register

Written by: Mr Kim Seongcheol

Tel +82 70 8799 8324
E-mail convention@krs.co.kr / kimsc@krs.co.kr

Disclaimer

While every possible effort has been made to ensure accuracy and completeness of the contents contained in this technical information, the Korean Register assumes no responsibility for any errors or omissions contained herein, nor shall it be held liable for any actions taken by any party as a result of information retrieved from this technical information.