INTERNATIONAL MARITIME ORGANIZATION

E

ASSEMBLY
34th session
Agenda item 12

A 34/Res.1203
5 December 2025
Original: ENGLISH

Resolution A.1203(34)

Adopted on 3 December 2025
(Agenda item 12)

CRITERIA FOR THE PROVISION OF MOBILE SATELLITE COMMUNICATION SYSTEMS IN THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECALLING ALSO that regulation IV/5 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, requires each Contracting Government to undertake to make available, as it deems practicable and necessary, either individually or in cooperation with other Contracting Governments, appropriate shore-based facilities for the mobile satellite service and maritime mobile service, having due regard to the recommendations of the Organization,

TAKING INTO ACCOUNT resolution MSC.509(105)/Rev.1 on *Provision of radio services for the Global Maritime Distress and Safety System (GMDSS)*,

NOTING that mobile satellite communication systems have the capability to offer maritime distress and safety communications,

NOTING ALSO the decision of the Maritime Safety Committee, at its eighty-second session, that the oversight of future mobile satellite service providers in the GMDSS should be undertaken by the International Mobile Satellite Organization (IMSO),

RECOGNIZING that mobile satellite communication systems for use in the GMDSS should fulfil performance criteria adopted by the Organization,

RECOGNIZING ALSO the need for the Organization to have in place criteria against which the capabilities and performance of mobile satellite communication systems for use in the GMDSS may be verified and evaluated,

1 ADOPTS the revised *Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)*, set out in the annex to the present resolution;

2 INVITES Governments, when permitting ships entitled to fly the flag of their State to carry maritime mobile satellite equipment for use in the GMDSS, to require those ships to carry equipment which can utilize only those satellite systems that have been recognized by the Organization and conform to the performance standards adopted by the Organization for use in the GMDSS, in accordance with the criteria set out in the annex;

3 INVITES international organizations, such as IEC, IHO, ITU and WMO, to notify the Organization regarding changes to relevant instruments and standards that may affect the provision of recognized mobile satellite services;

4 REQUESTS the Maritime Safety Committee to:

(a) apply the criteria set out in the annex to the present 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, within the context of the relevant regulations of SOLAS chapter IV; and

(b) ensure that mobile satellite communication systems recognized by the Organization for use in the GMDSS are compatible with all appropriate SOLAS requirements, and also that such recognition takes into account existing operational procedures and equipment performance standards;

5 ALSO REQUESTS the Maritime Safety Committee to keep this resolution under review and take appropriate action as necessary to secure the long-term integrity of the GMDSS;

6 REVOKES resolution A.1001(25) and MSC.1/Circ.1414.

ANNEX

CRITERIA FOR THE PROVISION OF MOBILE SATELLITE COMMUNICATION SYSTEMS IN THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

1 DEFINITION

1.1 Mobile satellite communication system

1.1.1 The mobile satellite communication system (or satellite system), as defined in ITU Radio Regulations article No.1.111, means a space system using one or more artificial earth satellites.

1.1.2 A mobile satellite communication system includes the space segment, the arrangements for controlling the space segment, the network control facilities controlling the access to the space segment, the earth stations and maritime mobile terminals operating in the system. In the context of this resolution, the satellite system will include, or interface with, the following elements:

.1 **Earth station** – any fixed satellite communication station acting as a gateway between the space segment and the terrestrial networks.

.2 **Ship earth station (SES)** – any radiocommunication equipment on board a ship, working through a satellite communication system.

.3 **Space segment** – satellites and the radiocommunication facilities they carry both for control and to provide GMDSS services, including the forward and return communication links with the earth.

.4 **Terrestrial networks** – the communication networks providing land-based subscriber communication facilities such as telephone, facsimile or data communications.

.5 **Rescue coordination centre (RCC)** – A unit responsible for promoting the efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region. This includes maritime, aeronautical and other search and rescue authorities or entities that conduct or coordinate search and rescue operations.

1.2 Recognized mobile satellite service

Recognized mobile satellite service (RMSS) means any service which operates through a satellite system and is recognized by the Organization for use in the GMDSS.

1.3 GMDSS call formats

The information transmitted by an RMSS fall into the following categories:

.1 **Distress alerting / calling** – The transmission of a distress alert or a distress call indicates that a mobile unit or person is threatened by grave and imminent danger and requires immediate assistance;

.2 **Urgency** – Urgency transmissions indicate that the calling station has urgent communications such as meteorological warnings, navigational warnings, messages of a medical nature or other urgent communications; and

.3 **Safety** – The safety call format or the safety signal indicates that the calling station has important navigational or meteorological information to transmit.

1.4 System-critical component

A system-critical component is a component of the satellite system for which contingency is required to ensure continued provision of the RMSS(s).

1.5 Coverage area

1.5.1 The coverage area of the satellite system is the geographical area within which the satellite system provides availability in accordance with the criteria stated in section 3.5 in the ship-to-shore and shore-to-ship directions, and within which continuous alerting is available.

1.5.2 The coverage area is the entire footprint of the satellite system on the surface of the earth which provides the availability of recognized GMDSS services in accordance with section 3.5.

1.6 Availability

1.6.1 The recognized satellite system should provide continuous availability for distress, urgency and safety communication services included in paragraph 3.1, calculated in accordance with the following formula:

$$A = \frac{\text{(scheduled operating time) - (downtime)}}{\text{(scheduled operating time)}} \times 100\%$$

where:

Scheduled operating time = 100% of the time period being reported on; and

Downtime = the total time during the period for which the recognized GMDSS system was not operationally available.

1.6.2 Definitions and calculations of availabilities of communications circuits in the maritime mobile satellite service are given in the most recent version of Recommendation ITU-R M.828.

2 RECOGNITION OF MOBILE SATELLITE COMMUNICATION SYSTEMS FOR USE IN THE GMDSS

The evaluation and recognition of satellite systems participating, or wishing to participate, in the GMDSS are undertaken by the Organization. Guidance on the information required for application of recognition is provided in appendix 1.

2.1 Application for recognition

2.1.1 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, urgency and safety satellite 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 Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) for evaluation. Recognition of the satellite provider to operate in the GMDSS will be undertaken by the Committee on the basis of the evaluation report.

2.1.2 The Governments concerned should make available to the Organization all necessary information to enable it to evaluate the satellite system in relation to the criteria indicated below.

2.1.3 In particular, Governments proposing such satellite systems for possible recognition and use in the GMDSS should provide evidence to show that:

.1 the satellite system conforms with all the criteria specified in this annex;

.2 the charging policies of ITU and provisions of relevant instruments adopted by the Organization are complied with;

.3 there is a well-founded confidence that the company concerned will remain viable for the foreseeable future and will remain in a position to deliver the required services over an extended period, in keeping with the expectations of the Organization and the maritime industry as to the continuity, durability and reliability of the service; and

.4 the provider of the satellite system is ready to submit any recognized services to oversight by IMSO and sign the required public services agreement (PSA) with that organization.

2.2 Verification and evaluation

2.2.1 The NCSR Sub-Committee should verify and evaluate the information, seeking clarification as required directly from the service provider concerned, and decide whether the satellite system meets the criteria established by this resolution. In reaching its decision, the NCSR Sub-Committee should take into account the provisions of the relevant regulations of chapter IV of the 1974 SOLAS Convention and the criteria established by this resolution.

2.2.2 Recognition by the Organization should be recorded in an MSC resolution entitled *Statement of Recognition of Maritime Mobile Satellite Services provided by [Company Name]*, detailing the specific services provided by the company which have been recognized by the Organization. A copy of the statement of recognition should be provided to IMSO.

2.2.3 If, following evaluation, the Organization is unable to recognize the company or the service(s) offered for the GMDSS, the Organization should communicate this decision to the company and IMSO in writing, setting out the reasons for the decision and any actions the company may take to achieve recognition in the future.

2.3 Public services agreement

2.3.1 Recognized services are subject to oversight by IMSO according to the rules and arrangements set out in the PSA concluded between the service provider and IMSO. No maritime satellite system should be used in the GMDSS unless it has first been recognized by the Organization in accordance with the above procedure and the service provider has signed a PSA with IMSO.

2.3.2 IMSO should conduct its oversight of the recognized services on a continuing basis.

2.3.3 Responsibility for ensuring compliance with the standards established by this annex, other relevant mandatory international instruments and, to the extent necessary, those recommendations, resolutions and procedures of IMO and ITU which are of a recommendatory nature insofar as they relate to the provision of GMDSS services rests with IMSO under the terms of the PSA.

2.4 Commencement of service

All outstanding implementation actions identified by the Organization during the recognition process, which include, but are not limited to, those provided in appendix 2, are required to be completed before the commencement of service.

2.5 Reports

At least once a year, IMSO should make available to the Organization a report on availability, performance and other relevant information in respect of each recognized service, for the period since the preceding report, in accordance with paragraph 3.5.3 of the criteria indicated below.

3 CRITERIA AND REQUIREMENTS FOR THE RECOGNIZED MOBILE SATELLITE COMMUNICATION SYSTEM

3.1 Functional requirements[1]

Satellite systems forming part of the GMDSS radio systems specified in regulation IV/5 of the 1974 SOLAS Convention should provide capabilities for at least the following maritime distress, urgency and safety communications:

.1 ship-to-shore distress alerts/calls;

.2 shore-to-ship distress alert relays;

.3 ship-to-shore, and shore-to-ship search and rescue coordinating communications;

[1] – Resolution A.887(21) on *Establishment, updating and retrieval of the information contained in the registration databases for the Global Maritime Distress and Safety System (GMDSS)*;

– Resolution A.694(17) on *General requirements for shipborne radio equipment forming part of the Global Maritime Distress and Safety System (GMDSS) and for electronic navigational aids*;

– System-specific EGC manuals;

– Resolution A.664(16) on *Performance standards for enhanced group call equipment*; and

– Appropriate IEC Standards and ITU Recommendations.

.4 ship-to-shore and shore-to-ship distress, urgency and safety communications; and

.5 shore-to-ship broadcasting of maritime safety information (MSI) and search and rescue (SAR) related information.

3.2 Capacity

The satellite system should be designed to provide sufficient channel and power capacity to process effectively, with the availability stated in section 3.5, the maritime distress, urgency and safety traffic estimated to be required by the ships using the system.

3.3 Priority access

3.3.1 Satellite systems in the GMDSS should be capable of processing maritime distress, urgency, safety and routine communications in accordance with the message priority as defined by the ITU Radio Regulations. The order of processing these communications should be:

.1 distress

.2 urgency

.3 safety

.4 routine (general communications).

3.3.2 In implementing these four levels of priority:

.1 Distress alerts and distress calls (level 1) should be given priority treatment by providing immediate access to satellite channels. For store and forward systems, distress alerts and calls should be placed ahead of all other traffic.

.2 Satellite systems used for providing other mobile satellite communications in addition to maritime communications should be capable of automatically recognizing requests for maritime communications from:

.1 SESs; and

.2 recognized entities of critical importance for safety at sea, i.e. RCCs, hydrographic and meteorological offices, telemedical assistance services (TMASs) and maritime assistance services (MASs) registered with the recognized satellite system.

The system should process such maritime communications in the ship-to-shore and shore-to-ship directions for levels 1 to 3 with priority over other communications.

.3 In processing maritime distress, urgency and safety communications, the satellite system and the earth station should be capable of:

.1 automatically recognizing the message or access priority for ship-to-shore communications;

.2 automatically recognizing the message or access priority for shore-to-ship communications, if any are provided, from, as a minimum, recognized entities of importance for safety at sea, registered by the earth station;

.3 preserving and transferring the priority;

.4 giving distress alerts and distress calls immediate access, if necessary by pre-empting ongoing communications of routine priority;

.5 automatically recognizing maritime distress communications and automatically routeing maritime distress alerts and distress calls directly to an associated RCC, or a responsible RCC if this capability exists; and

.6 processing maritime urgency and safety communications in the ship-to-shore and shore-to-ship directions with the required priority, for example by allocating the first vacant channel, if no channel is immediately available.

.4 Selection and use of message or access priority for urgency and safety transmissions by SESs should preferably be automatic and should be restricted to calls to special, recognized entities such as TMASs, MASs, hydrographic and meteorological offices, registered with the satellite system. The earth station should automatically route such calls directly to the relevant entity.

3.4 Coverage area

3.4.1 The definition of the coverage area is given in section 15.

3.4.2 The coverage area is to be delineated on a map and also described in relation to the sea areas defined in regulation IV/2 of the 1974 SOLAS Convention. Documentation on the coverage area of the satellite system, as defined in section 1.5, should be forwarded to the Organization.

3.4.3 Information on coverage areas for satellite systems forming part of the GMDSS should be published by the Organization in the *Master Plan of shore-based facilities for the GMDSS* through the Global Integrated Shipping Information System (GISIS).

3.5 Availability

3.5.1 The satellite system should provide continuous availability for maritime distress, urgency and safety communications in the ship-to-shore and shore-to-ship directions.

3.5.2 Where a recognized satellite system is unavailable in a part of the coverage area, the RMSS provider should consult with IMSO on a formula to be used to calculate the service availability within the coverage area as a whole. IMSO should include in the annual report the outcome of such an outage or degradation of the recognized satellite system.

3.5.3 The availability of the recognized satellite system, provision of spare satellite(s) and the network control function (i.e. the network availability), as defined in section 1.6 above, should be monitored by IMSO, which should report on the recorded availability of the system to the Organization at least once every year.

3.5.4 Service providers should advise their associated RCCs and IMSO of planned outages of recognized services and advise ships of scheduled downtime and known interruptions in service, and supply any other relevant network information. Service providers should also advise IMSO of unscheduled interruptions in any recognized services, as soon after the commencement of the interruption as possible, and when the recognized services have been restored.

3.5.5 The complete mobile satellite communication network, including earth stations for the recognized services, is expected to achieve at least 99.9% availability (equivalent to a total of 8 hours and 48 minutes downtime per year).

3.6 Restoration and spare satellites

3.6.1 The recognized satellite system should have the means and arrangements to ensure continuity of service during planned work or in case of an unplanned outage. All identified system-critical components of the recognized satellite system should have adequate redundancy for the uninterrupted provision of the RMSS, or for its restoration within one hour after a confirmed outage. This includes the space segment, which should have spare satellite(s) and arrangements in place to ensure that, in the event of a partial or total satellite failure, the RMSS in the geographical area concerned can be restored to their normal availability.

3.6.2 Full information on the means and arrangements prepared for restoration of the RMSS in the event of a system-critical component failure should be notified to IMSO. In agreement, IMSO and the RMSS provider should conduct contingency exercises regularly (no more than four times per calendar year) to prove and practice the efficiency and effectiveness of such arrangements.

3.7 Identification

The satellite system should be capable of automatically recognizing and preserving the identification of SESs.

3.8 Information to be made available to SAR authorities

For all distress urgency and safety communications, the maritime mobile terminal identification number or Maritime Mobile Service Identity (MMSI) should be an integral part of the distress alert and be provided to the RCC with the alert. When available, all additional registration, commissioning or other data relevant to the SAR or prosecution of a false alert should be referenced to this number and made available to the proper SAR authority or RCC upon request.

3.9 Reception of distress alerts

The satellite system should allow for addressing a maritime distress alert to a specific RCC chosen by the ship's operator and covering the area concerned, but should also provide for automatic routeing of manually initiated maritime distress alerts. Means should be provided to allow the RCC to easily identify the system and specific SES from which an alert or other priority message has been received, to enable the RCC to establish shore-to-ship communications with the ship concerned.

3.10 Control of SESs

Access control arrangements for controlling and giving, or temporarily denying, access by SESs to the satellite system should at all times allow SESs access for transmission of maritime distress alerts/calls and distress messages.

3.11 Test facilities

The satellite system should provide facilities making it possible for SESs to test the distress capability of their stations without initiating a distress alert/call.

4 CRITERIA AND REQUIREMENTS FOR EARTH STATIONS

4.1 Functional requirements

4.1.1 Earth stations serving the GMDSS should:

.1 be in continuous operation;

.2 be connected to an associated RCC;

.3 keep continuous watch on all appropriate satellite communication channels; and

.4 be capable of transmission and reception of at least the maritime distress, urgency and safety communications included in paragraph 3.1.

4.2 Priority

4.2.1 The earth station should be capable of automatically recognizing the priority of ship-to-shore and shore-to-ship communications, and should process maritime mobile communications while preserving the four levels of priority specified in paragraph 3.3.1.

4.2.2 Priority access should be given for distress alerts and calls in real time. In any case, distress alerts and calls should be given priority treatment by providing immediate access to satellite channels, and distress alerts and calls for store and forward systems should be placed ahead of all routine traffic. Any satellite system designed for use in the GMDSS should be able to recognize the four levels of priority and give appropriate access for communications in the ship-to-shore direction and in the shore-to-ship direction for distress, urgency and safety traffic originating from RCCs.

4.2.3 Limitations in existing public switched networks concerning facilities for indication and use of priority access codes might necessitate special arrangements such as the use of leased lines between, for example, MSI providers and the earth station, until such facilities become available in the public switched network.

4.3 Pre-emption

Satellite systems participating in the GMDSS should make arrangements to ensure that it will always be possible for an RCC to obtain an immediate connection to an SES and that the RCC could use the systems for SAR alerting and communication without any delay. This may be achieved by a process of pre-emption or by other suitable means approved by IMSO.

4.4 Routeing of maritime distress alerts

4.4.1 The satellite system should have reliable communication links to one or more associated RCCs. These links may be implemented directly between the RCC and an earth station, or some other suitable point in the system's network. The arrangements between the system and the RCC are subject to approval by the national administration.

4.4.2 The satellite system network should be capable of automatically recognizing maritime distress, urgency and safety communications and of routeing, as far as possible automatically, maritime distress alerts/calls directly to the associated RCC, via a highly reliable communication link. In cases where the capability exists, the system may route alerts directly to the responsible RCC as defined under an international common procedure as agreed by the Organization.[2]

4.4.3 The earth station or other relevant part of the satellite system network should be provided with an aural and visual alarm to alert a designated responsible person in the event that automatic connection to the RCC cannot be achieved within 60 seconds. In this case, all necessary action should be taken to immediately inform the RCC of the details of the distress alert or call. Personnel should always be available to react to such an alarm so as to ensure that the distress alert or call can be forwarded to an RCC within 5 minutes of the alarm being triggered. All messages with distress or urgency priority should sound an alarm at the earth station or other relevant part of the satellite system network, which should require manual cancellation.

4.4.4 The RCC should be provided with reliable communication links to the satellite system network for efficient handling of shore-to-ship distress alert relays and distress traffic, preferably via dedicated communication links.

4.5 Identification

The system should be capable of automatically identifying SESs. If identification other than the MMSI is used in the system, the means should be provided 24 hours per day to easily identify the ship and to provide the RCC with all the appropriate additional information necessary for effecting the rescue, including the MMSI where available.

4.6 Voice communication systems

4.6.1 The communication links for mobile satellite voice communication systems should be connectable to the terrestrial network in accordance with relevant ITU-T Recommendations.

4.6.2 Satellite systems using the terrestrial network for routeing maritime distress calls and distress traffic to and from RCCs should, upon receipt of ship-to-shore or shore-to-ship distress alerts/calls or distress traffic, immediately attempt to establish the connection necessary for the transfer of the distress alert or distress message.

4.7 Data communication systems

4.7.1 The communication links for mobile satellite data communication systems should be connectable to the terrestrial network in accordance with relevant ITU-T Recommendations. The system should provide the capability to transfer the identity of the calling subscriber to the called subscriber. Maritime distress alerts/calls and distress messages should include the ship identity and the earth station identity, or other means of identifying the point of access to the satellite network.

[2] Refer to COMSAR/Circ.60 on *Procedure for routeing distress alerts*.

4.7.2 Satellite systems using the terrestrial network for routeing distress alerts/calls and distress traffic to and from RCCs should, on receipt of ship-to-shore or shore-to-ship distress alerts/calls or distress traffic, immediately attempt to establish the connection necessary for the transfer of the distress alert or distress message.

4.8 Network communication protocol or store and forward systems

Satellite systems using a network communication protocol (e.g. Internet protocol (IP)) or store and forward communication system should:

.1 make an initial attempt to deliver a ship-to-shore or shore-to-ship message within 60 seconds for any maritime distress alert or distress traffic, and within 10 minutes for all other maritime messages, from the time the receiving station receives the message (the message should include the ship identity and the earth station or system identity); and

.2 generate notification of non-delivery immediately once the message is considered non-deliverable, for maritime distress alerts and distress messages not later than four minutes after reception of the alert or message.

4.9 Facilities for broadcasting MSI and SAR-related information

4.9.1 Satellite systems forming part of the GMDSS should technically be capable of offering facilities for broadcasting MSI and SAR-related information from RCCs and authorized MSI providers to ships.

4.9.2 Such facilities for the broadcast of MSI should provide for automatic, continuous and reliable reception on board ships and should, as a minimum, fulfil the requirements specified in paragraphs 4.9.3 to 4.9.8 below.

4.9.3 The facilities should provide for recognition and processing of distress, urgency and safety priority levels.

4.9.4 It should be possible to address the broadcast of MSI and SAR-related information to all properly equipped ships within a specified area, for at least the following types of areas:

.1 the coverage area of the satellite system over which the transmission is made;

.2 the NAVAREAs/METAREAs as established by the International Maritime Organization (IMO), the International Hydrographic Organization (IHO) and the World Meteorological Organization (WMO) respectively; and

.3 a temporary area chosen and specified by the originator of the MSI or SAR-related information, including circular or rectangular user-specified areas.

4.9.5 The facilities should provide for transmission of at least the types of MSI and SAR-related information required by SOLAS, as follows:

.1 SAR coordination information, including distress alert relays;

.2 navigational warnings; and

.3 meteorological warnings and forecasts.

4.9.6 The facilities for the broadcast of navigational and meteorological warnings should include possibilities for:

.1 scheduling the broadcast at fixed times or transmitting messages as unscheduled broadcast transmissions; and

.2 automatic repetition of the broadcast with time intervals and number of broadcast transmissions as specified by the MSI provider, or until cancelled by the MSI provider.

4.9.7 The facilities should provide for marking MSI and SAR-related information messages with a unique identity, enabling the SES that receives these broadcasts to automatically ignore messages already received.

4.9.8 The broadcasting service should in addition provide facilities for broadcasts similar to NAVTEX to coastal areas not covered by the International NAVTEX Service, in accordance with the identification system (i.e. the identification characters B1, B2, B3, B4) used in the International NAVTEX Service.

5 ADDITIONAL RECOMMENDED CAPABILITIES

RMSS providers are encouraged to:

.1 include Automatic Location Identification (ALI) and Automatic Number Identification (ANI) associated with voice and data calls originating from SESs;

.2 automatically route information contained in registration databases in accordance with resolution A.887(21), in a recognizable format and including the distress call to the responsible RCC, once means are established for doing so;

.3 be capable of retrieving MSI in a timely manner from NAVAREA, METAREA, other relevant coordinators, and the International Ice Patrol Service, in a standard format and process established by those coordinators; and

.4 directly notify international organizations maintaining a registry of GMDSS identities such as the ITU Maritime Mobile Access and Retrieval System (MARS) of satellite identification number information for ships registered under the administrations which are responsible for such notifications and which have authorized the RMSS providers to do so on their behalf.

6 NOVEL TECHNIQUES

Satellite systems may be permitted to use novel techniques to provide any of the capabilities required by this resolution. Approval to use such novel techniques for a period of up to 12 months may be given provisionally by the Organization in order to allow early introduction and proper evaluation of the technique. Final recognition of a novel technique may be given by the Organization, only after receiving a report allowing full technical and operational evaluation of the technique.

7 LEGACY SERVICES

7.1 All satellite-based systems and services for the GMDSS which were already recognized before the entry into force of this resolution are exempt from the requirements of paragraphs 2.1 to 2.3. These services are:

.1 Inmarsat-C

.2 International SafetyNET Services

.3 Inmarsat Fleet Safety

.4 Iridium SafetyCast

.5 Iridium Safety Messaging

.6 Iridium Safety Voice

.7 BDMSS Safety Messaging

.8 BDMSS SafetyLink.

7.2 The services specified in paragraph 7.1 are subject to the requirements of paragraphs 2.4 and 2.5, as appropriate.

APPENDIX 1

INFORMATION REQUIRED FOR APPLICATION OF RECOGNITION

The Governments concerned should provide a complete description of the proposed satellite system. The information and evidence that will be necessary for a full and comprehensive evaluation of any submission to be carried out are very wide-ranging and quite detailed. Experience in designing, implementing and operating the present satellite-based elements of the GMDSS, and evaluating their initial and continuing operational and other capabilities, has shown that it will not be sufficient, for example, to accept a plain statement such as "the system can deliver a distress alert to an RCC within 60 seconds of it being originated". In such a case, in order to provide an assurance to the Committee that the candidate system will meet this target reliably on a high percentage of occasions, Governments proposing such mobile satellite services for possible recognition and use in the GMDSS should provide evidence concerning the following:

.1 The satellite system and the mobile satellite services conform with all the criteria and requirements of the Organization.

.2 Frequency spectrum: the MSS provider has considered any coordination requirements necessary to make use of the orbits and associated frequencies defining the candidate satellite constellation, in accordance with the applicable procedures and provisions of the ITU Radio Regulations. Such public information should include any technical and operational constraints resulting from the application of the ITU procedures on frequency coordination, and any potential impact on the system's performance resulting from such frequency coordination.

.3 Constellation: number and arrangement of satellites; link budget; number of on-orbit spares required and provided; inter-satellite hand-offs; lifespan of current satellites; plan for replacement, identification of satellites; etc.

.4 Ground segment: number and geographical disposition of ground stations; satellite and communication network control arrangements; contingency arrangements in the event of satellite or network failures; availability; time of contingency service restoration; communication links to RCCs; distress alert distribution arrangements; message prioritization; personnel availability, shift patterns, training, etc.

.5 SES: design, manufacture and market availability; test procedures, IEC compliance; capabilities; signalling modes and protocols; ship installation guidelines and arrangements, etc.

.6 Live end-to-end system and contingency tests.

.7 The MSS provider has interim arrangements with MSI providers for NAVAREA and METAREA and two or more providers of SAR-related information under its coverage area.

.8 The method used in the calculation of availability, including cases in which downtime affects individual regions or functions rather than the whole system.

.9 Measures taken to protect the satellite system against cybersecurity threats.

.10 The charging policies of ITU and provisions of the relevant instruments adopted by the Organization are complied with.

.11 There is a well-founded confidence that the MSS provider concerned will remain viable for the foreseeable future and will remain in a position to deliver the required services over an extended period, in keeping with the continuity, durability and reliability of the service.

.12 The MSS provider is ready to submit the recognized services for oversight by IMSO and sign the required PSA with that organization.

.13 Operational procedures are in place.

APPENDIX 2

IMPLEMENTATION ACTIONS REQUIRED TO BE COMPLETED BEFORE THE COMMENCEMENT OF SERVICE

Implementation actions required to be completed before the commencement of service:

.1 the MSC should adopt a resolution recognizing the MSS provider;

.2 the MSS provider should sign a PSA with IMSO for oversight of the RMSS;

.3 a manual should be available for the new EGC service;

.4 the MSS provider should have internal operational procedures ready to support RMSSs;

.5 a type-approved SES should be made available for the operation of the new mobile satellite services;

.6 ITU-related requirements necessary to make use of the satellite orbits, associated frequencies defining the candidate satellite constellation, necessary coordination and spectrum identification in RR Appendix 15 should be successfully completed;

.7 any other issues indicated by the MSC should be resolved;

.8 formal association with two RCCs should be demonstrated; and

.9 the MSS provider should be contracted with all NAVAREA and METAREA coordinators, and have the capability to broadcast MSI to all NAVAREA/METAREAS within the coverage area or the coverage area in the statement of recognition of the RMSS.