Australian Government

Australian Maritime Safety Authority

Correspondence group on dissemination of MSI and SAR-related information

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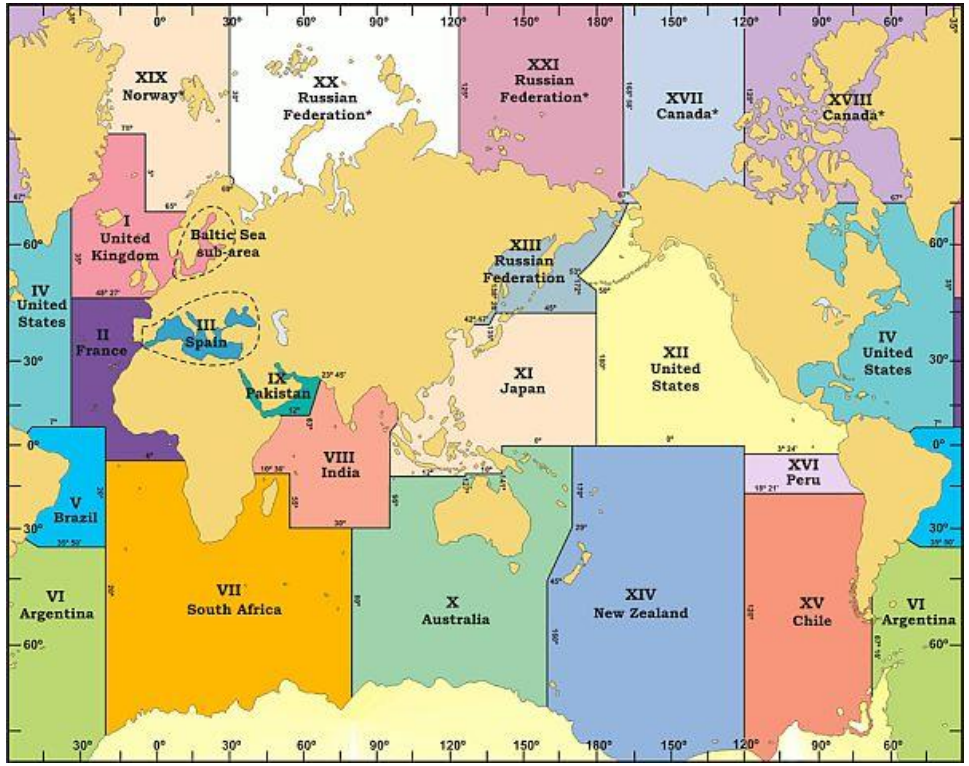
Global Maritime Distress and Safety System (GMDSS)

IMO ITU IHO WORLD METEOROLOGICAL ORGANIZATION

The GMDSS was adopted as part of the 1988 Amendments to the *Safety of Life at Sea Convention (SOLAS)*. It was fully implemented in 1999.

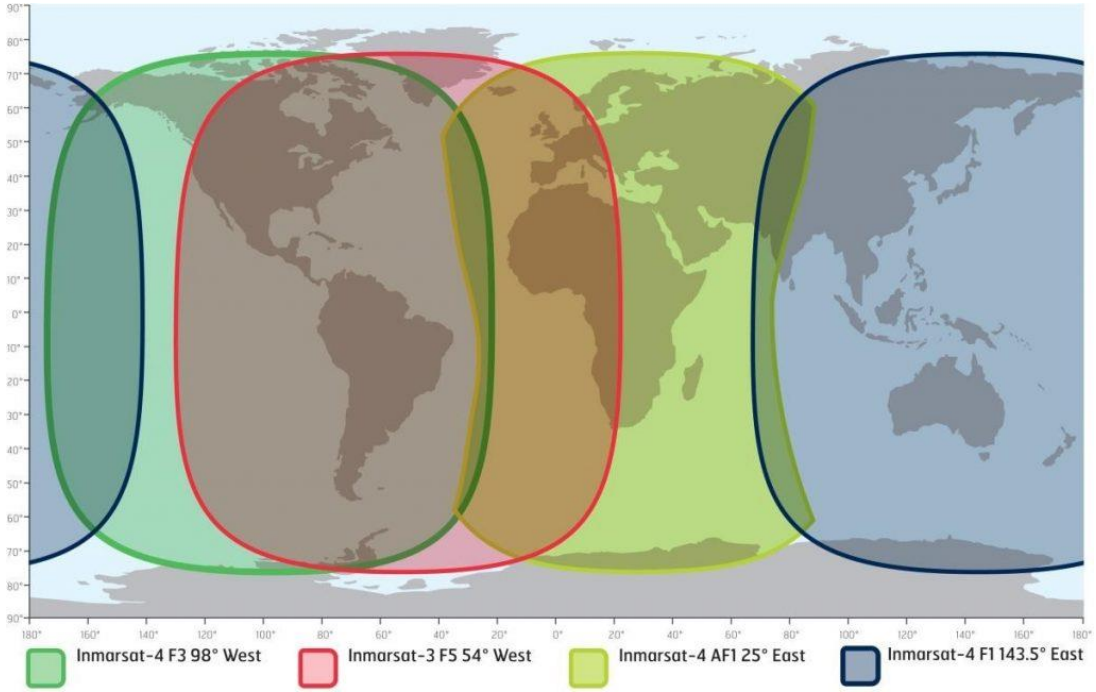
Functional requirements



- transmitting ship-to-shore distress alerts (by at least two separate and independent methods);
- receiving shore-to-ship distress alerts;
- transmitting and receiving ship-to-ship distress alerts;
- transmitting and receiving search and rescue co-ordinating communications;
- transmitting and receiving on-scene communications;
- transmitting and receiving signals for locating;
- **transmitting and receiving maritime safety information**;
- transmitting and receiving general communications; and
- transmitting and receiving bridge-to-bridge communications

Inmarsat GMDSS service

- Service provision since 1999
- L-band coverage from geostationary orbit
- Inmarsat C meets SOLAS carriage requirements
- May 2018, Fleet Safety receives GMDSS recognition
- SafetyNET, SafetyNET II and RescueNET services



Iridium GMDSS recognition

Evaluation of the Iridium GMDSS service commenced in 2013 and the 92nd session of the IMO Maritime Safety Committee (MSC).

In 2018, the 99th session of MSC adopted resolution MSC.451(99) on *Statement of recognition of the maritime mobile satellite services provided by Iridium Satellite LLC*, including Iridium's enhanced group calling service.

Resolution A.1001(25) - *Criteria for the provision of mobile satellite communication systems in the GMDSS*

Resolution A.1001(25) did not anticipate the issues that might arise with the introduction of additional satellite systems.

The fourth session (March 2017) of the *Navigation, Communication and Search and Rescue Sub-Committee* identified the following issues and concerns.

- **Interoperability**, referring to “the ability to conduct ship-to-ship, ship-to-shore, and shore-to-ship communications without regard to differing satellite systems in use by the communicating stations”
- **Cost implications for MSI providers**, with “the addition of one new satellite service provider could double their costs … to provide their broadcasts” and “would need to obtain and operate terminals for any new GMDSS satellite service provider … to monitor their broadcasts”
- Frequency coordination in accordance with the relevant procedures of the Radio Regulations
- Resolution A.887(21) should be revised to apply to all GMDSS satellite service providers. It is preferred that satellite service provider identities be included in databases such as List V in MARS
- **Implications for the Modernization Plan**, with identification of “possible ways for MSI providers to provide and monitor MSI broadcasts over multiple GMDSS satellite service providers should be identified, with a view to minimizing the costs, or at least the cost increases for MSI providers.”

The correspondence group

- Established by the Maritime Safety Committee (MSC)
- Coordinated by Australia
- Report to MSC 105 (due ~ 18 January 2022)

Critical questions

1. Should MSI and SAR-related information providers be mandated to use all recognized mobile satellite services providing services within the service area?

2. What are the cost implications for MSI and SAR-related information providers?

3. What are the options to resolve identified cost implications?

Use of recognized mobile satellite services

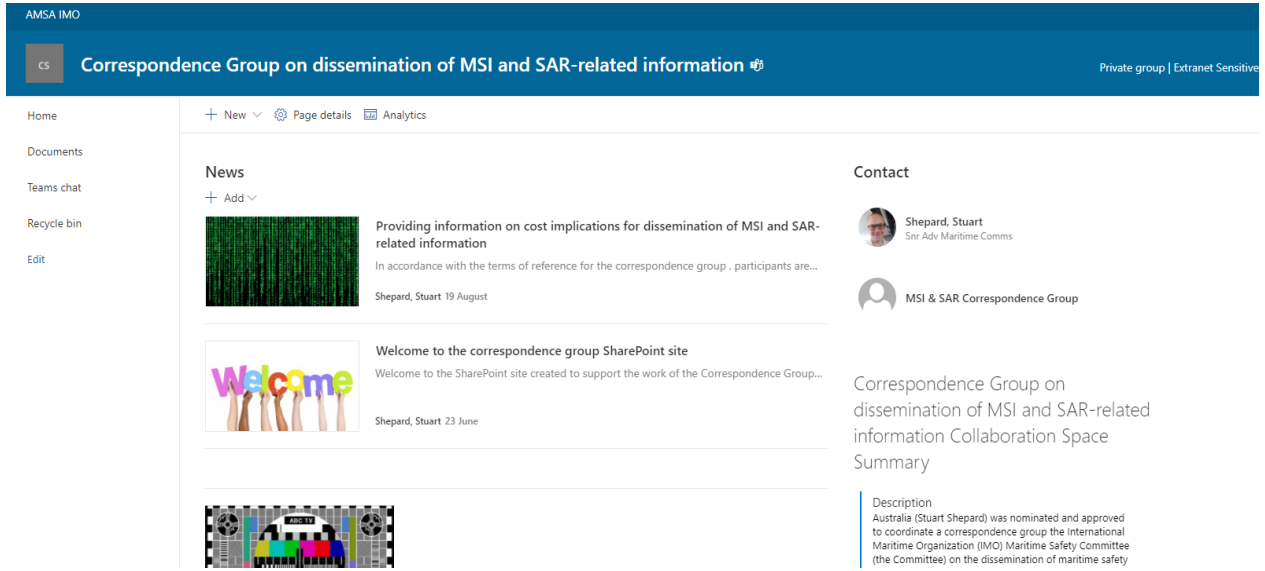
Cost implications

- Recruitment
- Staff training and education
- MSI service delivery
- Contractual arrangements
- Terminal & application testing
- Infrastructure (IT, terminals)
- Stakeholder engagement

Options on the table

- Option 1: the status quo (MSC 102/16/3 §8.1)
- Option 2: use existing funds (MSC 102/16/3 §8.2)
- Option 3: new and dedicated fund (MSC 102/16/3 §8.3 and MSC 103/14/2 §11)
- Option 4: Amend IMO resolution A.707(17) (MSC 102/16/4 §10.2)
- Option 5: establish a cost ceiling (MSC 102/16/4 §10.3)

AMSA established SharePoint site



The Coordinator has established a dedicated email address:

cgmsi-sar@amsa.gov.au

and SharePoint site:

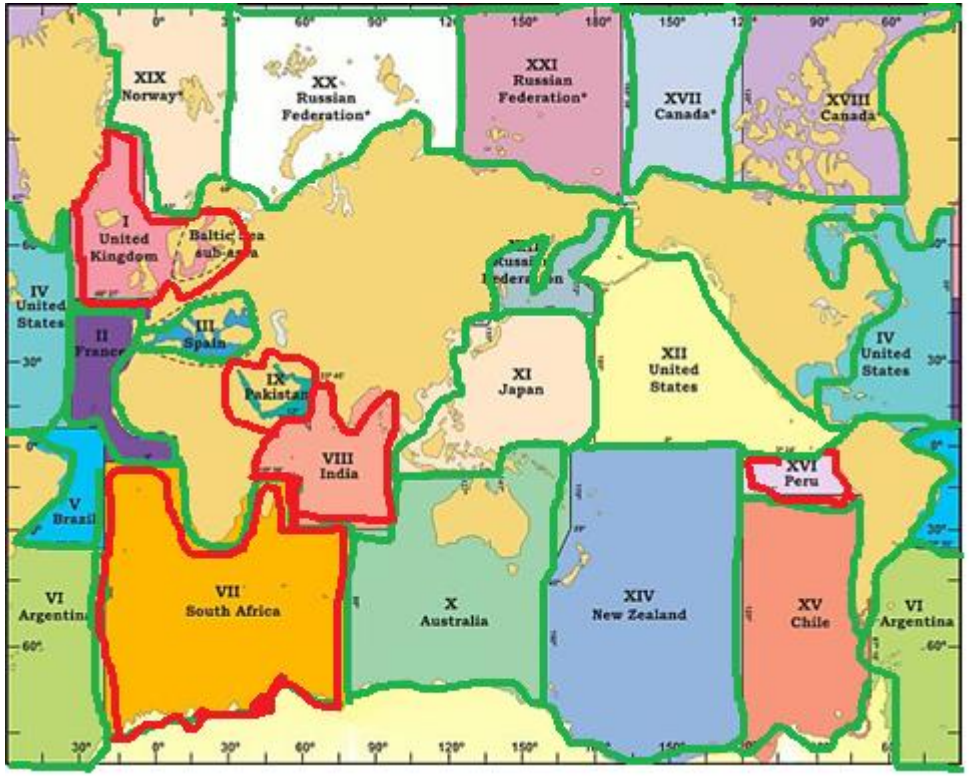
https://100255.sharepoint.com/teams/cgmsisar/

hosted by Australian Maritime Safety Authority (AMSA) for document distribution and discussion.

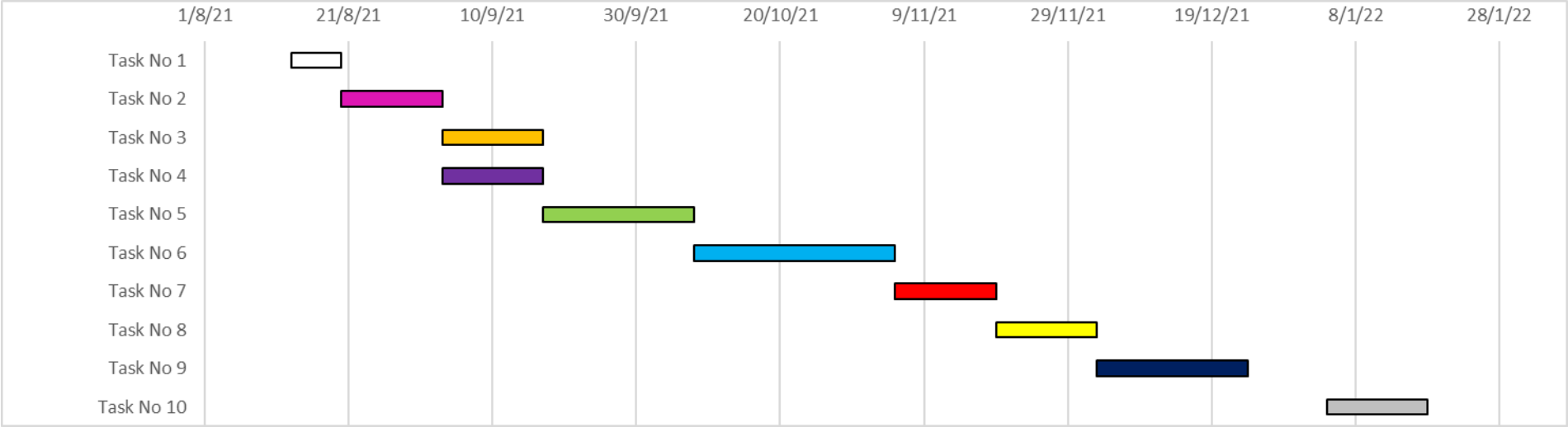
Membership

The Committee invited experts representing the … NAVAREA … Coordinators … and IHO, to actively participate in the deliberations of the Correspondence Group in order to ensure a satisfactory resolution of the issue for all parties concerned.

Requesting NAVAREA I (UK), VII (South Africa), VIII (India), IX (Pakistan) and XVI (Peru) join the correspondence group.



Work plan

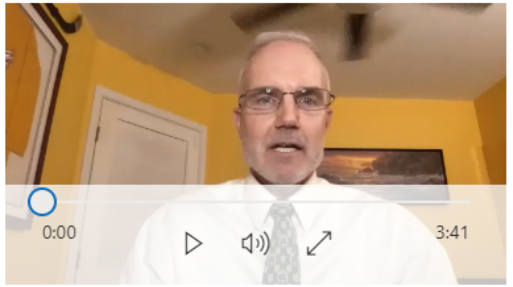


ToR	Title	Description
	Task No 1	Participants to review documentation submitted previously to IMO Committee and Sub-Committee
14.9.5	Task No 2	Participants are asked to complete the relevant questionnaire, including providing detailed information on cost implications for dissemination of MSI and SAR-related information over multiple recognized mobile satellite service for use in the GMDSS
14.9.7	Task No 3	Secretariat is invited to submit information on procedural aspects related to possible establishment of a fund.
14.9.6	Task No 4	United Kingdom and United States are invited to submit information on the feasibility to eliminate or reduce the shore-to-ship charge for navigational and meteorological warnings.
14.10.2	Task No 5	Participants are asked to submit alternatives to the options provided previously to IMO, taking into account information provided by IMO Secretariat (Task No. 3), the UK and US (Task No. 4)
14.9.5	Task No 6	If a fund or cost sharing model is a preferred option, participants are invited to submit an estimation of the actual cost for the dissemination of MSI and SAR-related information over multiple recognized mobile satellite services.
14.10.2	Task No 7	Participants are invited to provide analysis of the advantages and disadvantages of each option
14.10.1	Task No 8	Consider the mandatory use of all recognized mobile satellite services providing services within the service area for dissemination of information by MSI and SAR information providers.
14.10.2	Task No 9	Recommend a way forward for consideration by the Committee, including an implementation plan.
14.10.3	Task No 10	Submit a report for consideration by MSC 105.

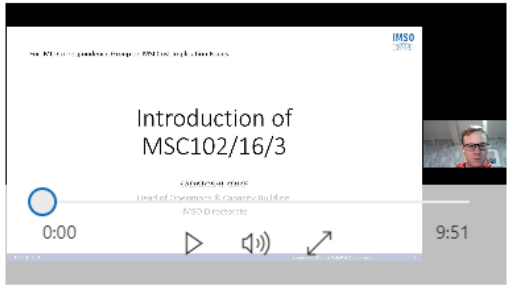
Presentations and information

To facilitate discussion, I will ask participants who submit documentation to the correspondence group to participate in a short video. These are an opportunity to provide background to the work, allow participants to put a face to the author(s), and hopefully create some engagement with the information.

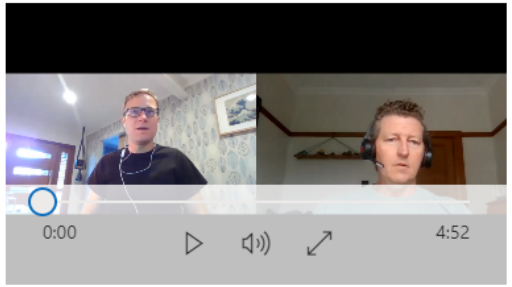
I can record these videos using Zoom, but happy for you to share a voice-over PowerPoint presentation.



Discussion with Chris Janus from the USA (and IHO WWNWS Chair), on documents MSC 102/16/4 and NCSR 8/9/14



Discussion with Sadatoshi Koike from IMSO, on document MSC 102/16/3



Discussion with David Wilson from New Zealand, on document MSC 102/16/5

Questions and discussion

Thank you for the invitation and opportunity to speak about the correspondence group.

Please actively participate in the correspondence group and discussions.