



SEVENTH MEETING OF THE PACIFIC METEOROLOGICAL COUNCIL (PMC-7)

AGENDA ITEM: 15.2

Update on the development of a Guidance for the delivery to the requirements of Regulation V/5 on meteorological services and warnings of the International Convention for the Safety of Life At Sea, 1974

*Thierry Nervale, Director Solomon Islands Maritime Authority
PIMOS Panel*



Purpose of the Paper

To seek endorsement of the *Guidance for the delivery to the requirements of Regulation V/5 on meteorological services and warnings of the International Convention for the Safety of Life At Sea, 1974.*



Background

1. Guidance for the delivery to the requirements of Regulation V/5 of the SOLAS Convention on **meteorological services and warnings contribute to Safety of Navigation**.
2. Chapter V Safety of Navigation of the SOLAS Convention adopted by IMO **applies to all ships and requires Contracting Governments to ensure safety of navigation**.
3. SOLAS Convention requires from Contracting States to:
 - **provide meteorological services and warnings** under Regulation V/5,
 - **use the provisions of the *IMO Instruments Implementation Code (III Code)*** (Resolution A.1070(28)) in the execution of their obligations and responsibilities:
 - ✓ III Code is made mandatory by Chapter XIII of the SOLAS Convention and requires IMO Member States to promulgate laws and regulations and take all other steps to give full and complete effect to IMO instruments
 - ✓ IMO adopted the *2021 non-exhaustive list of obligations under instruments relevant to the III Code* that includes obligations of contracting Governments/Parties and specific flag, port and coastal State obligations.
 - ✓ Coastal State obligations include meteorological services and warnings.
 - ✓ Obligations of Contracting Governments/Parties are subject to audits under the IMO Member State Audit Scheme (IMSAS).



Update

1 Guidance, 1 MOU template

1. The *Pacific Islands Meteorological Strategy (PIMS) 2017-2026* Key Outcome 2 improved marine meteorological services includes the **implementation of a Quality Management System (QMS)**.
2. **PMC-6 recommended the development of the SOLAS checklist** to identify gaps and monitor progress towards fulfilling international obligations under SOLAS.
3. The **Guidance for delivery of SOLAS Reg V/5 has been developed using the draft WMO guidance for implementing SOLAS** submitted to IMO MSC with some contextualisation through regional examples.
4. In 2023-2024, Solomon Islands used the opportunity of leading the Task Group to review its own implementation of SOLAS which led to the **signing of a Memorandum of Understanding (MOU) between the Solomon Islands Meteorological Services (SIMS) and the Solomon Islands Maritime Authority (SIMA)**.
5. **Delivery of meteorological services and warnings must be included in the strategy recommended in Part 1 section 3 of the III Code** to ensure effective implementation and monitor performance of coastal State responsibilities.
6. Meteorological services and warnings are issued within METAREAs under the IMO/WMO WWMIWS and is under a **long-term strategy of the Pacific Regional One Maritime Framework (POMF)** to be adopted in 2026; The POMF's strategies will contribute to the vision and key outcomes of the Pacific Islands Meteorological Strategy.



Member States scheduled to be audited in 2025

No.	Member State	Audit period	Remark
138	Panama	October	Audit confirmed
158	Iran (Islamic Republic of)	October	Audit confirmed
167	Slovenia	September	Audit confirmed
170	Belize	November	Audit confirmed
171	Tunisia	February	Audit confirmed
172	Saint Kitts and Nevis	February	Audit confirmed
173	Belgium	March	Audit confirmed
15	El Salvador ²	February	Audit confirmed
61	Colombia ²	March	Audit confirmed
84	Croatia ²	February	Audit confirmed
13	Angola ²	March	Audit confirmed
65	Indonesia ²	February	Audit confirmed
8	Georgia ²	May	Audit confirmed
60	Cook Islands ²	October	Audit confirmed
89	Saint Vincent and the Grenadines ²	May	Audit confirmed
174	Zambia	May	Audit confirmed
175	Belarus	September	Audit confirmed
476	Armenia		(Audit postponed based on decision of C 130)
177	Nauru	September	No response yet
1	Guinea-Bissau	September	No response yet
4	Bosnia and Herzegovina	October	No response yet
39	Iraq	November	Audit confirmed
74	San Marino	September	Audit confirmed
83	Uganda	October	Audit confirmed
112	Timor-Leste	October	No response yet
90	Libya	April	Audit confirmed
179	Kyrgyzstan		(Audit to be postponed pending decision of C 132)

2025 IMO Audit Schedule



Recommendations

The Meeting is invited to:

- a) **Endorse** the Guidance for the delivery to the requirements of Regulation V/5 on meteorological services and warnings of the International Convention for the Safety of Life At Sea, 1974.
- b) **Encourage** technical partners and donors to support NMHSs in the implementation of this guidance
- c) **Encourage** Technical partners and donors to help address gaps through b) such as the need to strengthen QMS.
- d) **Recommend** that NMHSs establish a Memorandum of Understanding (MOU) with the in-country maritime administration. The MOU should identify areas for collaboration to meet SOLAS requirements and include a clause for the sharing of audit findings.



GUIDANCE FOR THE DELIVERY TO THE REQUIREMENTS OF REGULATION V/5 ON METEOROLOGICAL SERVICES AND WARNINGS OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA (SOLAS) 1974 (NOTE: MAJORITY OF THIS GUIDANCE WAS BASED ON A DRAFT WMO GUIDANCE SUBMITTED TO IMO)

- **Part 1. Management of Met-Ocean Maritime Safety Information (MSI) service provision**
- **Part 2. Provision of met-ocean MSI.**
- **Part 3. General administration information for the IMO/WMO Worldwide Met-Ocean Information and Warning Service (WWMIWS)**
- **Part 4. Facilitating observations from ships**



Part1. Please complete the following relating to management of Met-Ocean Maritime Safety Information (MSI) service provision:

(a) Who is responsible for the implementation of International Convention for the Safety of Life At Sea (SOLAS), 1974 in your country?

NMHSs need to know which government agency or Ministry or administration that has been tasked by legislation/decreed/regulation to oversee the implementation of SOLAS in your country. For example, the Minister responsible for Port and Marine is responsible for SOLAS implementation in Tonga (Shipping Act 2016).

Notably, SOLAS involves multiple partners including NMHS, and these partners need to work alongside one another to ensure a successful implementation of SOLAS. For example, the issuing service (usually the coastal stations) must work with the preparation service (usually the NMHS) to ensure that weather information including weather charts are provided at least twice daily. Failing of NMHSs to deliver the weather information to coastal station, will result in non-compliance of the Contracting Government with its international maritime obligations as Party to SOLAS.

(b) Are quality management systems implemented? (WMO 558 and Vol D require all participants to have a Quality Management System (QMS))

If the answer to this question is "yes", do you have a manual for meteorological services you provided to mariners/users? Do you have procedures in places for control of document and records?

If the answer to this question is "Partial" or "No", why?

(c) Is the responsibility for providing marine meteorological services officially assigned by your government, by decree or any other legal text, to an organization within your country? If so, please specify.

If it is the NMHS, please provide the Act, regulations or MOU declaring that responsibility.

If no, perhaps it is best NMHSs should engaged with authority to ensure that the contracted company or agency complies with SOLAS.

(d) Are there regular meetings with relevant government agencies and marine users?

If the answer to this question is "yes", do you have evidence that meetings occurred regularly?

If the answer to this question is "Partial" or "No", why?

(e) Is there regular assessment of the quality of marine meteorological services? (Quality may be defined as performance of accuracy, or the extent to which user requirements are met.)

If the answer to this question is "yes", do you have mechanism in place (procedure) for customer satisfaction so that continual improvement is strengthening the partnership between you and users, do you have regular meetings/survey/workshops with users?

- If the answer to this question is "Partial" or "No", why?

(f) Is there a process for reviewing and updating the information pertaining to your national marine meteorological service in the documents: Weather Reporting (WMO-No. 9), Volume D – Information for Shipping, and the GMDSS Master Plan? (Auditor to record date of last review.)

- WMO-No 9 provides mode of transmission and transmission schedules for broadcasting weather information and warnings in the METAREA. It also gives names of the responsible preparation service and issuing service for the METAREA for High Seas. For the coastal forecast and warnings, for example, the issuing service for Fiji coastal waters is Suva radio coast station using VHF and HF radios and broadcast times are 0803, 1203, 1603 and 2003 Local time. NMHS needs check if the issuing service for your country is listed in the WMO-No 9.

(g) Do you require capacity-building support to help develop your marine meteorological services?



Part 2. Please complete the following relating to the provision of met-ocean MSI (answer as Yes, No or Partial, and comments should be added where appropriate).

a) Do you provide marine forecasts and warnings for ports and coastal waters within your national jurisdiction?

If the answer to this question is "No", who is providing marine forecasts and warnings for ports and coastal waters on your behalf? And do you have any MOU in place with the provider?

b) Do you provide marine forecasts and warnings for a METAREA, as part of your designated responsibility within the IMO/WMO Worldwide Met-Ocean Information and Warning Service (WWMIWS)?

Fiji Meteorological Services is the preparation service for High Seas Forecast and Warnings for countries bounded by the area, Equator to 25S between 160E and 120W and New Zealand is the issuing service.

If the answer is "no" to both of the above, please outline reasons for not providing marine forecasts and warnings for your national jurisdiction? [Proceed to Part 4 on observations from ships]

If the answer is "yes" to either of the above, proceed with the following questions:

a) Do met-ocean MSI forecast products include wind information?

-if the answer to this question is "yes", where it is documented?

-a regional office can, and should, produce and disseminate any MSI within their AOR unless requested from another agency (ideally with a MOU)

b) Do met-ocean MSI forecast products include sea state information?

-if the answer to this question is "yes", where it is documented?

c) Do met-ocean MSI forecast products include information about reduced visibility?

-if the answer to this question is "yes", where it is documented?

d) Are warnings for wind speeds greater than Beaufort 8 (34 knots) issued?

-if the answer to this question is "yes", where it is documented?

e) If you have seasonal occurrence of ships reporting on ice accretion hazards in your area, do you issue ice accretion warnings? *N/A for NMHS in the tropical Pacific*

f) If annual or seasonal sea-ice (including icebergs) occurs in your area, do the MSI forecast products include information about sea-ice? *N/A for NMHS in the tropical Pacific*

g) Do you provide specific assistance to authorities responsible for Search and Rescue?

- if the answer to this question is "yes", do you have any Act/legislation/decreed or MOU in place that gives you this responsibility?

h) Do you provide specific assistance to authorities responsible for Marine Environmental Emergency Response (e.g. oil spills, biological hazards)?

- if the answer to this question is "yes", do you have any Act/legislation/decreed or MOU in place that gives you this responsibility?

Continue to section 3 on general administration of the WWMIWS.



Part 3. General administration information for the IMO/WMO Worldwide Met-Ocean Information and Warning Service (WWMIWS)

(a) Who is the METAREA Coordinator for your METAREA?

e.g., New Zealand (Mr. Ramon Oosterkamp) is the METAREA coordinator for METAREA XIV and has responsibility for ensuring MSI (as per WMO 558 et al) within the area - which extends to the equator, between 160E and 120W.

(b) Who are the Issuing Services and/or Preparation Services within your METAREA for enhanced group call (EGC) broadcasts?

Issuing Services: New Zealand MetService for METAREA XIV, Australian Bureau of Meteorology for METAREA X

Preparation Services: New Zealand MetService and Fiji Meteorological Services for METAREA XIV, Australian Bureau of Meteorology, Fiji Meteorological Services and Papua New Guinea National Weather Service for METAREA X

(c) Are you an Issuing Service?

- if the answer to this question is “yes”, do you have any legislation or MOU in place that gives you this responsibility?

e.g. Tonga Met Service is the issuing service for Tonga and its function is not restricted to weather warnings only but it also includes navigational warnings.

(d) Are you a Preparation Service?

- if the answer to this question is “yes”, do you have any legislation or MOU in place that gives you this responsibility?

e.g., Tonga Meteorological Service is the preparation service for the Tonga coastal waters.

Continue to section 4 on facilitating observations from ships.





Part 4. Facilitating observations from ships

- (a) Do you have a process to encourage vessels under your national flag to make and record weather observations, and to share these observations with the relevant meteorological service providers

- if the answer to this question is “yes”, do you have any Act/legislation/decreed or MOU in place that gives you this responsibility? Any process or procedure in place to ensure accuracy of instruments in Ships, and data obtained are quality check, before dissemination and exchanging?

- if No, or partial, why?

- (b) Who make arrangements for a selection of ships to be equipped with tested marine meteorological instruments to take, record and transmit meteorological observations?

-NMHSs or Maritime authority or any other Agencies

-If NMHS,

- i) What procedures in place for choosing the ship?
- ii) If NMHS is partially responsible, what processes in place to support these arrangements?

- (c) Who issue (distribute) weather information including warnings (gale, storm and tropical cyclones) to departing ships and mariners? Regulation 5(b)(i)

- NMHSs or Maritime authority or any other Agencies

-If NMHS is the answer,

- i) What systems are used to issue the weather information?
e.g., radio HF, VHF, etc.
- ii) How frequently is weather information suitable for shipping issued?
- should be at least at least twice daily.
- iii) Are weather observations transmitted free of charge to the ships concerned? Regulation 5(b)(iv)
- should be free of charge [in contrast some NMHSs recovered their cost on providing civil aviation services by charging airlines and ICAO has no regulation to stop them]

- iv) What guidelines are provided for ships in the vicinity of tropical cyclones regarding observation frequency? Regulation 5(b)(iv)
- v) Do you encourage harbour masters to inform ships in the vicinity whenever they experience a wind speed of 50 knots or more.

- (d) Who maintain communication with the Navigational Warning Areas (NAVAREA X (Australia) or NAVAREA XIV (New Zealand)) coordinator under the World-Wide Navigational Warning Service (WWNWS)?

-NMHSs or Maritime authority or any other Agencies

-If NMHSs,

What mechanism in place for communication with NAVAREA X or XIV?

