



**WORLD METEOROLOGICAL ORGANIZATION**

**MARITIME SAFETY SERVICES ENHANCEMENT WORKSHOP**

3-6 May 2010

Australian Bureau of Meteorology, Melbourne, Australia

**FINAL REPORT**

JCOMM MEETING REPORT NO. 75

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## **1. Opening of the workshop**

### **1.1. Opening**

1.1.1. The first Maritime Safety Services Enhancement Workshop of the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) opened at 0900 hours on Monday, 3 May 2010, in the 6<sup>th</sup> floor conference room of the Australian Bureau of Meteorology, Melbourne, Australia. Mr Henri Savina, chairperson of the Expert Team on Maritime Safety Services (ETMSS), welcomed participants to the workshop, outlined its overall aim and priorities, and introduced Dr Ray Canterford, Deputy Director Services of the Bureau of Meteorology.

1.1.2. Dr Canterford welcomed participants to the Head office of the Bureau of Meteorology and to Melbourne. He noted the position of Australia within the oceanic hemisphere, as very much a maritime nation, and therefore very dependant on the oceans in many ways. This included the provision of high quality meteorological forecasts and warnings to marine users, in support of the safety of life and property at sea. In view of the importance with which the Bureau viewed its marine services, it was particularly happy to be able to host the present workshop, focussed on enhancements to such services worldwide. He concluded by wishing participants a successful meeting and an enjoyable stay in Melbourne.

1.1.3 On behalf of JCOMM and of its parent Organizations, WMO and IOC, the co-president Dr Peter Dexter also welcomed participants to the workshop. He recalled that the provision of high quality maritime safety services had been a primary focus for National Meteorological Services since the 19<sup>th</sup> century, and for the predecessor of JCOMM, the Commission for Maritime Meteorology, since it was established in 1907. This workshop formed a part of this long tradition of concern for the safety of seafarers, and at the same time addressed a major component of the JCOMM work programme for the current intersessional period. Dr Dexter then provided a brief overview of JCOMM to set the scene for the workshop.

1.1.4 The list of participants in the workshop is in *Annex I*.

### **1.2. Adoption of the agenda**

1.2.1 Participants adopted the agenda for the workshop on the basis of the provisional agenda prepared by the Chairperson. This agenda is in *Annex II*.

### **1.3. Working arrangements**

1.3.1 Participants agreed their hours of work and other practical arrangements. The Chairperson introduced the documentation.

## **2. Quality Management Training**

2.1 QM training, focussed on Internal Audit procedures, was provided by Mr Geoff Gray, a QM specialist supporting the Australian Bureau of Meteorology, in order for all the participants to have a common background on Quality Management Systems (QMS) and to acquire an insight into the practical implementation of a QMS within an NMHS. Participants were formally provided with an *"introduction to internal QM auditing processes"* certificate at the end of this item, which indicated they had had an introduction to internal QM auditing processes. All participants expressed their appreciation at having been able to participate in this training, which had indeed provide some excellent background to QMS and to the associated internal audit process, and in particular to Mr Gray, for his excellent and informative conduct of the training.

2.2 As an introduction to the ensuing discussion, Bryan Boase, Quality Manager for the Bureau of Meteorology, outlined the procedures currently underway in the Bureau to obtain certification for the

Bureau's marine weather and oceanographic services, including the National Tidal Centre. This process was expected to be completed by February 2011. He indicated that he was also involved with WMO in the preparation of a general guide to QMS, which was expected to be completed at least in draft form by the time of MAN 8 in November 2010.

2.3 Representatives from those NMHS that had already introduced QMS, either partially or across the organization, provided some information on their national processes, pitfalls and eventual advantages in having such procedures. It was recognized that QMS for aviation was being undertaken within a global regulatory environment, and that while such regulations did not presently exist for marine services, nevertheless IMO was moving in this general direction. The workshop therefore agreed that WMO, through JCOMM, should be actively engaged in this IMO process, to ensure that the needs and concerns of NMHS were met. (**Action:** Chair, ETMSS, co-president and Secretariat to maintain liaison with IMO on QMS issues).

2.4 The meeting further recognized that JCOMM should take the lead within WMO in the provision of support to developing countries in implementing QMS as they further developed their marine services. It agreed that this issue should be included on the agenda for MAN 8, with a view to determining a process for moving forward in this regard. It requested Bryan Boase, member of MAN with specific responsibility for QMS, to prepare appropriate documentation for the meeting (**Action:** Co-president and Bryan Boase to initiate discussions at MAN 8 on JCOMM support for QMS for marine services in developing countries; **Action:** Bryan Boase to draft guidelines for implementation of QMS by issuing services, for presentation to ETMSS 3 in October for review and then to MAN 8).

### 3. Reports

#### 3.1 Self assessments by METAREA Issuing Services

3.1.1 All Issuing Services of the WMO GMDSS Marine Broadcast System provided short self-assessment reports to the workshop, in both written form using the template provided by the Secretariat, and verbally. These reports included information on their experience, progress, success and difficulties in maintaining, updating or implementing the system within their respective METAREAs. These reports also covered, where possible, feedback from users and description of the existing Quality Management System, if any, as well as experience with regard to the coverage and implementation of meteorological broadcasts through the International NAVTEX Service. A compilation of these reports is in *Annex III* (available separately).

3.1.2 All the reports indicated generally satisfactory operations of the system. Nevertheless, a number of issues and concerns were identified, including:

- (i) Communication procedures for met information from Issuing Services to LES (which included secure ftp, telex, email) including back-up and contingencies, needed to be reviewed and updated in many cases;
- (ii) Several Issuing Services were already ISO certified, and others had plans to become so; all the Issuing Services were strongly encouraged to adopt the QMS practice and to obtain such certification as appropriate;
- (iii) A requirement was identified for easily accessible and updated information on met Safetynet and NAVTEX broadcasts to be available onboard ships, in addition to that available through the ALRS (**Action1:** Chair SOT to include need to communicate information on global Safetynet met broadcasts to ships masters, on the agenda for the proposed international PMO workshop in late 2010 (deadline late 2010); **Action 2:** ETMSS to develop a plan for WMO No 9, Vol. D, to be summarised as a concise, easily updated document on Safetynet and NAVTEX met broadcasts, for use by PMOs and possible presentation to IMO as a mandatory publication for shipping (deadline next ETMSS session));
- (iv) The inclusion of tsunami warning information in Safetynet broadcasts remains largely unresolved (**Action 3:** JCOMM through ETMSS needs to discuss again with IOC and IMO the issue of including tsunami warning information in GMDSS broadcasts (next ETMSS session));

- (v) Many Issuing Services still do not monitor their Safetynet and NAVTEX broadcasts, as required under the regulations (**Action 4:** ETMSS to address the general issue of systematic monitoring of Safetynet and NAVTEX broadcasts (next ETMSS session));
- (vi) Both Issuing and Preparation Services in developing countries have an ongoing need for enhanced training in marine meteorology (**Action 5:** JCOMM co-president to discuss with the Management Committee and Secretariat on how to enhance and extend specialized training in marine meteorology (end 2010));
- (vii) It was noted that IMO is coordinating the implementation of regionally oriented Rescue Coordination Centres in Africa, with possible capability to issue broadcasts through NAVTEX (**Action 6:** Ali Mafimbo to provide information to chair ETMSS on a possible future NAVTEX station in Kenya, within the context of an IMO regional RCC (c.f. the regional RCC in South Africa) (asap));
- (viii) The formal requirement to include sea state information in GMDSS broadcasts was reiterated, and all Issuing Services urged to implement this requirement;
- (ix) While the ongoing requirement of marine users for access to metocean information in graphical form was recognized, it was also recognized that it was no longer appropriate for JCOMM/NMHS to consider addressing this issue in isolation, in view of the many developments now underway in IHO and elsewhere; ETMSS was therefore requested to keep the issue under close review, in the light of the gradual demise of radiifax services, with the objective of participating in and making use, to the extent possible, of these external developments (**Action 7:** ETMSS to keep under close review the issue of graphical information transmission to marine users).

3.1.3 Also under this agenda item, Mr Chris Payne, representing the Australian Maritime Safety Authority, coordinator for NAVAREA X, made a presentation on current practices and procedures within his NAVAREA, including the status of a QMS. The workshop expressed its appreciation for this presentation, which provided much valuable information on the operations of a NAVAREA Coordinator, and on the NAVAREA system in general. A couple of points were noted in particular:

- (i) The NAVAREA X practice to include a clear “end of message” indicator in GMDSS messages (c.f. NNNN used in NAV warnings);
- (ii) The desirability of including information on national SAC codes (e.g. 1241 and 1242 in Australia) in ALRS and similar publications.

## 3.2 Status of Implementation of the GMDSS by Arctic METAREA Issuing Services

3.2.1 The IMO certified Issuing Services for the Arctic (Canada, Norway and the Russian Federation) presented the status of implementation of the system for their METAREAs, including any difficulties or major issues encountered. The workshop was pleased to note the progress being made by all three Issuing Services, covering the five new Metareas, with a July 2010 date for extended testing of GMDSS broadcasts, and a target July 2011 implementation date, both likely to be met.

3.2.2 A number of common issues across the five new Arctic Metareas were noted. While most of these were likely to be resolved internally to the Issuing services or through discussions with other Issuing and Preparation Services, three in particular were agreed as requiring wider discussion within the ETMSS:

- (i) Possible review and modification of Metarea boundaries, among Arctic and neighbouring non-Arctic Metareas;
- (ii) Possible protocols for ensuring consistency between GMDSS and national products;
- (iii) Coordination and consistency across Metarea boundaries
- (iv) Addressing the service gap over Hudson Bay by USA and Canada; WMO Secretariat should send a letter to the respective PRs relating to this issue.

**(Action:** Chair ETMSS to include identified issues on agenda for next ETMSS session in late

2010.)

3.2.3 The workshop recognized that the new Arctic Issuing Services, as with all other Issuing Services, had a primary responsibility to address the minimum information requirements for Metareas set out by IMO for the GMDSS. At the same time, it noted the possibility and value of preparing and offering, perhaps as on-demand services, additional information and graphical products, of considerable potential value to users. It therefore urged Issuing and Preparation Services to develop and deliver such products wherever feasible.

3.2.4 Under this item, the workshop also noted with interest and appreciation a report by the chair of the JCOMM ETSI on the work being undertaken by this team in support of the new Arctic METAREAs. Based on excellent coordination between ETSI and the Issuing Services, a number of projects were now underway in support of the GMDSS. In particular ETSI during its fourth session in March 2010 (JCOMM Meeting Report No.74) developed definition of the mandatory sea ice information and a set of rules for its description in the context of GMDSS as well as details of what may be available to users as part of additional services to GMDSS if transmission is not restricted to SafetyNET and NAVTEX transmissions. The ETSI was also working on procedures to ensure cross-area coordination and consistency of GMDSS information across the Arctic METAREAs. The workshop thanked and congratulated the ET on their excellent work and support. (**Action:** ETSI Chair and METAREA coordinators to provide updates to regulatory publications to ETMSS Chair before October 2010).

### **3.3 IMO, IHO & Inmarsat reports**

3.3.1 Under this agenda item, the participants were presented with a short report by the representative of IHO, Mr Chris Payne, on overall activities and actions in relation to the GMDSS. Focus was given to information relevant for the Issuing Services, including identification of non-appropriate practises for metocean MSI prepared for SafetyNET or NAVTEX broadcasts, suggested improvements, expected or planned evolutions or emerging technologies with potential consequences for the NMHS issuing GMDSS MSI. Particular emphasis was also placed on the implementation of the GMDSS in Arctic NAVAREAs, the IMO/IHO/WMO joint documentation process review, the e-navigation concept and the GMDSS modernization. The representative of IHO urged WMO, through JCOMM and the Issuing Services, to provide input and guidance to the draft IHO test message format for Arctic Met/Navareas. (**Action:** Chair ETMSS, Secretariat and Issuing Services to provide feedback to IHO on the test message format).

### **3.4 Progress/activity report from the chairperson and the WMO Secretariat**

3.4.1 The chairperson of the JCOMM Expert Team on Maritime Safety Services (ETMSS), Mr Henri Savina, reported to the workshop on WMO activities and actions taken since the second session of ETMSS (Angra dos Reis, Brazil, January 2007). The report also presented the overall results of the first session of the Task Team on MSI, the fourth session of the JCOMM Services Coordination Group (Geneva, Switzerland, March 2009) and the third plenary session of JCOMM (Marrakech, Morocco, November 2009), including the new terms of reference and membership of the ETMSS. Additionally, the report covered relevant actions within IMO which impacted on NMHS and their provision of MSS under the GMDSS.

3.4.2 The workshop recognized the value of the GMDSS website maintained by Meteo France on behalf of JCOMM, and noted with appreciation the plans by Meteo France to further expand and update the information delivered on the site. In this context, the workshop urged Issuing Services to collect and/or update metadata information on NAVTEX broadcasts, for inclusion on the website (**Action:** Issuing Services and chair ETMSS to make available NAVTEX bulletins on the GTS and to collect the related metadata for inclusion on the GMDSS website). The chair SOT reported that a link to the GMDSS website was now on the VOS website. This would give increased visibility on GMDSS to all PMOs and VOS focal points. The workshop also recognized the potential value in expanding coordination among Issuing Services on a regional basis, in addition to the proposed Annual Reports. It therefore proposed that consideration be given to organizing regular regional teleconferences of Issuing Services. (**Action:** Chair ETMSS and Secretariat to develop a plan for regional teleconferences of Issuing Services).

#### **4. Improvements of the provision of GMDSS MSI**

##### **4.1 WWMIWS and METAREA Coordinators**

4.1.1 The IMO/WMO World-Wide Met-ocean Information and Warning Service (WWMIWS) and the Terms of Reference of METAREA Coordinators, with the draft ad-hoc IMO resolution, were presented and discussed, in the context of the update of IMO and the joint IMO/IHO/WMO documentation (IMO SafetyNET and NAVTEX Manuals, IMO resolution A705(17) on promulgation of MSI, IMO/IHO/WMO Manual on MSI) and the implementation of Quality Management. The proposed IMO Resolution was expected to complement the existing IMO resolution A706(17) on the IMO/IHO World-Wide Navigational Warning Services (WWNWS). Details of the WWMIWS, and the Guidelines for Metarea Coordinators, had been adopted at JCOMM 3 and were expected to be approved by WMO EC-63 in June 2010. The workshop noted that, following this approval, the Secretariat was expected to write formally to all Issuing Services, inviting them to agree to assume the role of Metarea Coordinator, or to propose an alternative Coordinator (**Action:** Co-president and chair ETMSS to ensure that the appropriate letter is drafted and issued by July 2010.)

##### **4.2 Review of guidance documents**

4.2.1 The workshop noted that WMO guidance and regulation documents, especially the *Manual on Marine Meteorological Services* (WMO-No.558) and the *Guide to Marine Meteorological Services* (WMO-No.471), could be considered as ISO documents by NMHS. It was then of major importance to ensure that those documents were updated appropriately. Participants reviewed the documents, including the amendments agreed at JCOMM-III, focusing on the section of WMO n°558 related to the provision of GMDSS MSI.

4.2.2 The workshop noted that a number of revisions to both the Manual and Guide, relating to the GMDSS, had been adopted at JCOMM 3 and were expected to be approved by WMO EC 63 in June 2010. These would then be promulgated to Members following approval. At the same time, it was planned that a complete new edition of the Manual, to incorporate all amendments adopted over the past decade or more, but also to correct noted anomalies, errors and inconsistencies, was planned to be prepared over the coming 12 months. Issuing Services were urged to undertake their review of the Manual with this in mind, and to submit any suggestions for changes to the Secretariat and the chair ETMSS, before the end of 2010 (**Action:** Issuing Services to send proposed changes to the Manual to Secretariat and chair ETMSS by end August 2010.)

##### **4.3 ETMSS work plan**

4.3.1 The ETMSS work plan for the intersessional period, to be considered during the fifth SCG meeting, was presented and discussed. Some additions or extensions to the work plan developed during the current workshop were noted, together with additional features such as the inclusion of timelines. The chair ETMSS was requested to present these to the coming SCG meeting for further review and finalization. (**Action:** Chair ETMSS to present a revised ETMSS work plan to SCG 5 for finalization.)

##### **4.4 Proposed template for an Issuing Services' Annual Report**

4.4.1 The workshop reviewed the template prepared for the Issuing Services self-assessment reports, in the light of the training and discussions on QMS. The workshop agreed on a template for annual reports, which could be used in future by the WMO Secretariat and the ETMSS to review and update the regulation material more efficiently and be able to report to IMO or other organizations on the status of the contribution of WMO to the GMDSS. This revised template is given in *Annex IV*. Participants were requested to further review and revise the template within their national services, and to advise the chair ETMSS and the Secretariat of any additional changes, by end June 2010. (**Action:** Issuing Services to advise chair ETMSS and



Secretariat of additional proposed template format changes by end June 2010.)

4.4.2 The workshop recognized that this template represented a good basic start in providing information across the Metareas. At the same time, it should be considered a dynamic document, where additional information could be included in the future based on identified developments and needs. In this context, it was recognized that the report was intended to:

- (i) Ensure that all Issuing Services complied with requirements and regulations for the GMDSS;
- (ii) Ensure that all relevant regulations and documents are updated;
- (iii) Be a tool for ongoing improvements in the system, through sharing of information and issues.

4.4.3 The workshop recognized that system performance metrics constituted an important part of the management of the system (including for QMS), and hence of the reporting process. It noted that such metrics could consist of three categories:

- (i) timeliness;
- (ii) accuracy of products, for both coastal and offshore areas, by comparison with observations;
- (iii) impacts through surveys and user feedback.

While the first two categories of metrics could be relatively easily obtained, the third necessarily involved a complex and multi-faceted process, involving regular written questionnaires (as was now the case), future on-line surveys through the website, and direct feedback from ships masters, owners and agents, using the PMOs and other ship visitors. Part of this feedback should include basic information on who is actually using the MSI provided through the GMDSS; and if the information is not being regularly used, why not, what alternatives are used, and why. Such feedback represents essential information for both WMO and IMO in improving the value of their services to users. In this context, the workshop agreed that ETMSS should endeavour to work with IHO and the WWNWS in developing a complete survey methodology, to provide the feedback necessary for performance assessment of the system. (**Action:** ETMSS to work with IHO to develop a survey methodology for performance assessment, by end 2010.)

#### 4.5 **Use of satellite marine/ocean data and products for improved marine forecasts and warnings**

4.5.1 The first training workshop, *Use of Satellite Wind and Wave Products in Operational Marine Forecasting*, – co-organized by NOAA and EUMETSAT, hosted by the IOC Project Office for the IODE, and coordinated with the WMO and the Committee on Earth Observation Satellites – was held in December 2009 in Oostende, Belgium. “Students” from national centres with operational forecast responsibility for Southern Hemisphere GMDSS METAREAs came from Argentina, Brazil, Chile, South Africa, and Fiji. See <http://hosting1.iode.org/moodle/course/view.php?id=103> for full details. In order to address the present low usage of satellite-derived ocean vector winds (OVW) and significant wave height (SWH) observations – easily interpretable satellite products that have been available for over a decade – the results of this training workshop, including follow-up activities and potential pilot projects, were discussed at the current workshop. Proposed activities included: the development of a single-point-of-access for global OVW products and another for SWH from which subsets could be accessed corresponding to regions of interest and within sufficient time for operational use; investigation of low-bandwidth communication options to the GTS such as FTP and GeoNetCast; identification of issues associated with the incorporation of these products into a given analysis and display system; and training in their use.

4.5.2 The workshop agreed in particular on the need for:

- (i) A single access point (one-stop-shop), for SWH and OVW, with common format and procedures;

- (ii) A common analysis and display system, where practical, for use by NMHS.

The workshop noted with appreciation that NOAA and Eumetsat were working together to identify and implement the proposed single access point, and that this was expected to be resolved by the end of 2010. Related to this, the workshop requested the Secretariat to develop a summary document, explaining clearly how and where to access BUFR decoders for relevant and specific data types, including SWH and OVV. (**Action:** Secretariat to prepare summary document on accessing BUFR decoders, by end 2010.)

4.5.3 With regard to a common analysis and display system, which would necessarily include the acquisition of both hardware and software, together with training in their installation and use, the workshop noted with appreciation that a workshop was planned to take place in Brazil in late 2010, focussed on South American countries, including in particular the regional GMDSS Issuing Services (Argentina, Brazil and Chile). Support was being sought for this workshop from a number of sources, including the WMO Education and Training Programme. The workshop suggested that a regionally based approach to this issue might be most effective also for other areas such as Africa and Asia/Pacific, along the lines of the Brazil workshop. It therefore requested NOAA, and EUMETSAT, through Stan Wilson, to work the JCOMM Management Committee and the capacity building rapporteurs, to develop a plan of action and identify the funds required to implement it. (**Action:** NOAA, EUMETSAT, the capacity building rapporteurs and MAN to develop a plan of action for regional workshops on the use of SWH and OVV for marine services, by MAN 8).

#### 4.6 Emerging technologies

4.6.1 Under this agenda item and based on information provided in the reports of item 3.3, the participants considered and discussed relevant issues. The workshop recognized in particular that e-navigation was a significant development, which would impact the delivery of metocean forecasts and warnings to marine users, including under the GMDSS. It noted the recent IMO documentation on this subject, and requested that this documentation be made available on the JCOMM website, in association with the Workshop report (**Action:** Co-president and Secretariat to put IMO documents on e-navigation on the JCOMM website, by July 2010.). The workshop also urged that WMO, through the Secretariat and ETMSS, needed to be proactive in dealings with IHO and IMO on e-navigation development, to ensure compatibility between e-navigation and future metocean services by Members. (**Action:** Co-president and Secretariat, with chair ETMSS, to coordinate in developing an appropriate liaison with IHO and IMO on e-navigation, by MAN 8).

#### 5. Any Other Business (AOB)

5.1 Participants were provided with the current list of national contact points for the GMDSS, and requested to notify any changes to the Secretariat and the chair ETMSS, by July 2010. (**Action:** Issuing Services to notify chair ETMSS and Secretariat of changes to GMDSS contact points, by July 2010.)

5.2 Participants agreed that the workshop, with a focus on QMS training, had been of considerable value, in facilitating interaction among Issuing Services, in exchanging information and experiences, and in developing enhancements to the GMDSS marine broadcast system. It requested that such workshops should continue in the future, but that notification and planning for them should occur well in advance, wherever possible. (**Action:** Secretariat and Chair ETMSS conduct future workshops, with as much advance planning as possible.)

#### 6. Closure of the session

##### 6.1 Adoption of the report and list of actions

6.1.1 Participants reviewed, modified as necessary and approved the final report of the workshop, including the list of actions and recommendations. The action items are summarised in Annex V. The Chair and co-president were requested to arrange for the finalized report, annexes

and associated documents to be placed on the JCOMM web site as soon as possible. The Secretariat was also requested to make all the powerpoint presentations to the session available with the report on the website.

## **6.2 Closure**

6.2.1 In closing the workshop, the chair, Henri Savina, thanked all participants for their valuable input, which had greatly contributed to its success. Both Mr Savina and participants also expressed their considerable appreciation to the Australian Bureau of Meteorology for hosting the workshop, for providing such excellent facilities and support, for arranging for and conducting the QMS training, and for supporting the attendance of many of the participants. The co-president of JCOMM in turn expressed his thanks to the ETMSS chair, both for his excellent chairing of the workshop, and for his considerable effort in its preparation. He also thanked Ms Pat Calutas of the WMO Secretariat for her essential and very efficient work in maintaining the meeting website, for liaising with and supporting the ETMSS chair and co-president in workshop preparation, and in ensuring all the required travel arrangements for participants.

6.2.2 The workshop closed at 1650 on Thursday, 6 May 2010.

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## Agenda

### **1. Opening of the workshop**

- 1.4. Opening
- 1.5. Adoption of the agenda
- 1.6. Working arrangements

### **2. QMS training**

### **3. Reports**

- 3.1 Self assessments by METAREA Issuing Services
- 3.2 Status of Implementation of the GMDSS by Arctic METAREAs Issuing Services
- 3.3 IMO, IHO and Inmarsat reports
- 3.4 Progress/activity report from the chairperson and the WMO Secretariat

### **4. Improvements of the provision of GMDSS MSI**

- 4.1 WWMIWS and METAREA Coordinators
- 4.2 Review of guidance documents (especially *Manual on Marine Meteorological Services* (WMO-No.558))
- 4.3 ETMSS work plan
- 4.4 Proposed template for an Issuing Services' Annual Report
- 4.5 Enhanced use of satellite marine/ocean data and products for improved marine forecasts and warnings
- 4.6 Emerging technologies

### **5. Any Other Business (AOB)**

### **6. Closure of the session**

- 6.1 Adoption of the list of actions
- 6.2 Closure

**Self-Assessment Reports**

(available separately)



## MARINE METEOROLOGICAL SERVICES MONITORING PROGRAMME QUESTIONNAIRE

**MSI Self Assessment METAREA [Insert No]**

**Year [Insert No]**

Submitted by [Insert country / organization]

### SUMMARY

Executive Summary: [Insert summary]

Action to be taken: [Insert paragraph number]

Related documents: [Insert details if any]

**1. Background:**

*[describe METAREA including details of the geographic boundaries of the METAREA, include any Sub-Area for Preparation Services if any, SafetyNET Satellite broadcast used (ex. AOR –E), the GMDSS service provider, the schedule broadcasts per day, GTS headers and other information appropriate for the update of WMO n°9 volume D and the management of messages on the GMDSS website (<http://weather.gmdss.org>)]*

**2. Comments:**

*[specifics of MSI within METAREA, include how many SafetyNET messages were promulgated over 3yr period e.g. METAREA XXX 2006 - xx, 2007 - xx, 2008 – xx, ]*

**3. NAVTEX Coverage:**

*[diagram of NAVTEX stations and service areas within METAREA, the schedule broadcasts per day, GTS headers and other information appropriate for the management of messages on the GMDSS website (<http://weather.gmdss.org>)]*

**4. Operational Issues:**

*[new infrastructure in accordance with GMDSS Master Plan or implementation of new WMO regulation or guidance; problems encountered; contingency plans and testing of the plans]*

**5. Quality Management Survey**

*[Please complete the following table with Yes / No or provide a comment]*

| METAREA | ISO 9001 - 2008 | Warnings for 8 Beaufort and above | Promulgate at least two scheduled broadcasts per day | Include wind and sea state in scheduled | Visibility in descriptive terms | 24/7 watch | Monitor Broadcast in almost real time |
|---------|-----------------|-----------------------------------|------------------------------------------------------|-----------------------------------------|---------------------------------|------------|---------------------------------------|
|         |                 |                                   |                                                      |                                         |                                 |            |                                       |

*[statistics on punctuality,...] [In addition to the table : Provide information on sea state information provided in GMDSS products (parameters, formats, etc...)]*

6. Capacity Building:

*[Offer of and/or demand for Capacity Building, Training received, offered, status of national, bilateral, multilateral or regional development projects with MSI component]*

7. Other Activities:

*[Provision of specific assistance for authorities responsible for SAR, Participation in WMO, IHO or IMO Working Groups, regional conferences over past year]*

8. METAREA Website:

*[Address, statistics (If permitted by national legislation), frequency of update, etc]*

9. METAREA GMDSS focal point contact:

*[Provide updated contact details + state change / no change]*

10. Actions or suggestions proposed:

*[If any]*

11. Synopsis:

*[Provide a synopsis of your report, which could be included in a summary report if needed]*

## **Actions and recommendations**

### **2. Quality Management Training**

1. Chair, ETMSS, co-president and Secretariat to maintain liaison with IMO on QMS issues.
2. Co-president and Bryan Boase to initiate discussions at MAN 8 on JCOMM support for QMS for marine services in developing countries.
3. Bryan Boase to draft guidelines for implementation of QMS by issuing services, for presentation to ETMSS 3 in October for review and then to MAN 8.

### **3. Reports**

#### **3.1 Self assessments by METAREA Issuing Services**

1. Chair SOT to include need to communicate information on global SafetyNet met broadcasts to ships masters on the agenda for the proposed international PMO workshop in late 2010 (deadline late 2010).
2. ETMSS to develop a plan for WMO No 9, Vol. D, to be summarised as a concise, easily updated document on SafetyNet and NAVTEX met broadcasts, for use by PMOs and possible presentation to IMO as a mandatory publication for shipping (deadline next ETMSS session).
3. JCOMM through ETMSS needs to discuss again with IOC and IMO the issue of including tsunami warnings in GMDSS broadcasts (next ETMSS session).
4. ETMSS to address the general issue of systematic monitoring of SafetyNet and NAVTEX broadcasts (next ETMSS session).
5. JCOMM co-president to discuss with the Management Committee and Secretariat on how to enhance and extend specialized training in marine meteorology (end 2010).
6. Ali Mafimbo to provide information to chair ETMSS on a possible future NAVTEX station in Kenya, within the context of an IMO regional RCC (c.f. the regional RCC in South Africa) (asap).
7. ETMSS to keep under close review the issue of graphical information transmission to marine users

#### **3.2 Status of Implementation of the GMDSS by Arctic METAREA Issuing Services**

1. Chair ETMSS to include identified issues on agenda for next ETMSS session in late 2010.

#### **3.3 IMO, IHO & Inmarsat reports**

1. Chair ETMSS, Secretariat and Issuing Services to provide feedback to IHO on the test message format.

#### **3.4 Progress/activity report from the chairperson and the WMO Secretariat**

1. Issuing Services and chair ETMSS to make available NAVTEX bulletins on the GTS and to collect the related metadata for inclusion on the GMDSS website.
2. Chair ETMSS and Secretariat to develop a plan for regional teleconferences of

Issuing Services.

#### **4. Improvements of the provision of GMDSS MSI**

##### **4.1 WWMIWS and METAREA Coordinators**

1. Co-president and chair ETMSS to ensure that the appropriate letter is drafted and issued by July 2010.

##### **4.2 Review of guidance documents**

1. Issuing Services to send proposed changes to the Manual to Secretariat and chair ETMSS by August 2010

##### **4.3 ETMSS work plan**

1. Chair ETMSS to present a revised ETMSS work plan to SCG 5 for finalization

##### **4.4 Proposed template for an Issuing Services' Annual Report**

1. Issuing Services to advise chair ETMSS and Secretariat of additional proposed template format changes by end June 2010
2. ETMSS to work with IHO to develop a survey methodology for performance assessment, by end 2010.

##### **4.5 Enhanced use of satellite marine/ocean data and products for improved marine forecasts and warnings**

1. Secretariat to prepare summary document on accessing BUFR decoders, by end 2010.
2. NOAA, EUMETSAT, the capacity building rapporteurs and MAN to develop a plan of action for regional workshops on the use of SWH and OVV for marine services, by MAN 8.

##### **4.6 Emerging technologies**

1. Co-president and Secretariat to put IMO documents on e-navigation on the JCOMM website, by July 2010.
2. Co-president and Secretariat, with chair ETMSS, to coordinate in developing an appropriate liaison with IHO and IMO on e-navigation, by MAN 8.

#### **5. Any Other Business (AOB)**

1. Issuing Services to notify chair ETMSS and Secretariat of changes to GMDSS contact points, by July 2010.
2. Secretariat and Chair ETMSS to conduct future workshops, with as much advance planning as possible.

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## ST OF ACTIONS

| Item | Action                                                                                                                                                                                                                                                         | By whom                                           | When/target | Status |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------|--------|
| 2    | To maintain liaison with IMO on QMS issues.                                                                                                                                                                                                                    | ETMSS Chair<br>Co-president<br>WMO<br>Secretariat | Ongoing     |        |
| -    | To initiate discussions at MAN 8 on JCOMM support for QMS for marine services in developing countries.                                                                                                                                                         | Co-president<br>Bryan Boase                       | MAN 8       |        |
| -    | To draft guidelines for implementation of QMS by issuing services, for presentation to ETMSS 3 in October for review and then to MAN 8.                                                                                                                        | Bryan Boase                                       | ETMSS 3     |        |
| 3.1  | To include need to communicate information on global Safetynet met broadcasts to ships masters on the agenda for the proposed international PMO workshop in late 2010 (deadline late 2010).                                                                    | Chair SOT                                         | Late 2010   |        |
| -    | To develop a plan for WMO No 9, Vol. D, to be summarised as a concise, easily updated document on Safetynet and NAVTEX met broadcasts, for use by PMOs and possible presentation to IMO as a mandatory publication for shipping (deadline next ETMSS session). | ETMSS                                             | ETMSS 3     |        |
| -    | To discuss again with IOC and IMO the issue of including tsunami warnings in GMDSS broadcasts (next ETMSS session).                                                                                                                                            | JCOMM<br>through<br>ETMSS                         | ETMSS 3     |        |
| -    | ETMSS to address the general issue of systematic monitoring of Safetynet and NAVTEX broadcasts (next ETMSS session).                                                                                                                                           | ETMSS                                             | ETMSS 3     |        |

| Item  | Action                                                                                                                                                                | By whom                                      | When/target   | Status |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------|--------|
| -     | To discuss with the Management Committee and Secretariat on how to enhance and extend specialized training in marine meteorology (end 2010)                           | JCOMM co-president                           | end 2010      |        |
| -     | to provide information to chair ETMSS on a possible future NAVTEX station in Kenya, within the context of an IMO regional RCC (c.f. the regional RCC in South Africa) | Ali Mafimbo                                  | ASAP          |        |
| -     | To keep under close review the issue of graphical information transmission to marine users                                                                            | ETMSS                                        | ETMSS 3       |        |
| 3.4 - | To make available NAVTEX bulletins on the GTS and to collect the related metadata for inclusion on the GMDSS website.                                                 | Issuing Services and chair ETMSS             | ASAP          |        |
| -     | To develop a plan for regional teleconferences of Issuing Services.                                                                                                   | Chair ETMSS and Secretariat                  | ASAP          |        |
| 3.2   | To include identified issues on agenda for next ETMSS session in late 2010.                                                                                           | Chair ETMSS                                  | ETMSS 3       |        |
| 3.3   | To include identified issues on agenda for next ETMSS session in late 2010.                                                                                           | Chair ETMSS Secretariat and Issuing Services | ETMSS 3       |        |
| 4.1   | To ensure that the appropriate letter is drafted and issued by July 2010.                                                                                             | Co-president and chair-ETMSS                 | July 2010     |        |
| 4.2   | To send proposed changes to the Manual to Secretariat and chair ETMSS by August 2010                                                                                  | Issuing Services                             | August 2010   |        |
| 4.3   | To present a revised ETMSS work plan to SCG 5 for finalization                                                                                                        | Chair ETMSS                                  | SCG 5         | Done   |
| 4.4 - | To advise chair ETMSS and Secretariat of additional proposed template format changes by end June 2010                                                                 | Issuing Services                             | end June 2010 |        |
| -     | To work with IHO to develop a survey methodology for performance assessment, by end 2010                                                                              | ETMSS                                        | end 2010      |        |

| Item  | Action                                                                                                      | By whom                                                          | When/target | Status |
|-------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------|--------|
| 4.5 - | To prepare summary document on accessing BUFR decoders, by end 2010.                                        | Secretariat                                                      | end 2010    |        |
| -     | To develop a plan of action for regional workshops on the use of SWH and OVW for marine services, by MAN 8. | NOAA,<br>EUMETSAT,<br>capacity<br>building<br>rapporteurs<br>MAN | Man 8       |        |
| 4.6 - | To put IMO documents on e-navigation on the JCOMM website, by July 2010.                                    | Co-president<br>and<br>Secretariat                               | July 2010   |        |
| -     | To coordinate in developing an appropriate liaison with IHO and IMO on e-navigation, by MAN 8.              | Co-president<br>and<br>Secretariat,<br>with chair<br>ETMSS       | Man 8       |        |
| 5 -   | To notify chair ETMSS and Secretariat of changes to GMDSS contact points, by July 2010                      | Issuing<br>Services                                              | July 2010   |        |
| -     | To conduct future workshops, with as much advance planning as possible.                                     | Secretariat<br>and Chair<br>ETMSS                                | ongoing     |        |