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| WORLD METEOROLOGICAL ORGANIZATIONCOMMISSION FOR BASIC SYSTEMSOPAG on DPFSEXPERT TEAM ON EMERGENCY RESPONSE ACTIVITIES (ET-ERA) VIENNA, AUSTRIA, 1 – 5 OCTOBER 2018 |  | CBS-DPFS/ET-ERA/Doc. 5.1(1)(13.IX.2018)\_\_\_\_\_\_\_Agenda item : 5.1ENGLISH ONLY |

**REPORT ON NON-NUCLEAR ERA ACTIONS FROM THE**

**BUENOS AIRES, 30 NOVEMBER - 4 DECEMBER 2015 ET-ERA MEETING**

*(Submitted by the co-Chair)*

##### Summary and purpose of document

This paper reports on the work done on actions identified at the last meeting of the Expert Team

##### Action Proposed

The Meeting is invited to report on / discuss the status of each action; identify which ones should be pursued and in light of issues identified at the meeting, recommend new actions to be taken.

**1. INTRODUCTION AND NEXT STEPS**

1.1 At the Nov-Dec 2015 meeting, the ET-ERA defined actions for 2015 - 2018 (Annex III in report of the [Meeting of the CBS Expert Team on Emergency Response Activities (ET-ERA)](http://www.wmo.int/pages/prog/www/CBS-Reports/documents/Final-ReportET-ERABuenosAires2015.pdf), Buenos Aires, Argentina, 30 November – 4 December 2015).

1.2 This document presents a status report on these actions. Many have been addressed or are ongoing. Some have not been undertaken or completed due to the usual heavy workload of ET-ERA members within their respective organizations, and for other reasons.

1.3 The ET-ERA will use this review to decide if the actions not completed should be pursued; keeping in mind what can be reasonably achieved given the workload of everyone. Based on this analysis and the discussions at the meeting, a new list of actions for 2018 – 2020 will be produced.

1.4 The designation of RSMCs with activity specialization in non-nuclear ERA was not was not explicitly covered by an action in the Buenos Aires report but that has always been an ultimate goal. Congratulations to Offenbach and Toulouse who received the first two such designations at WMO EC-70 in June 2018.

In what follows, WMO, 2017 refers to the [*Manual on the Global Data-Processing and Forecasting System*](http://library.wmo.int/opac/index.php?lvl=notice_display&id=12793), 2017 edition (WMO-No.485).

**2. STATUS REPORT ON ACTIONS FROM THE BUENOS AIRES 2015 MEETING**

**Area of Requirement: Development and testing of operational procedures**

**ACTION 1: Co-Chairperson, NMHS Argentina, RSMC Montreal**

**Conduct further exercises comprising simulated requests from NMHS to RSMC for assistance covering full set of non-nuclear event scenarios**

**DUE DATE: 1st week January 2016**

Co-chairperson, the member from Argentina and RSMC Montreal to conduct a series of additional exercises covering requests for remaining non-nuclear scenarios and to report back to the Expert Team on the results of the full exercise and any further potential amendments required to the draft operational procedures, for review and comments.

**STATUS (SEPTEMBER 2018): COMPLETED. Tests for grass fire, chemical incident, industrial fire and backtracking were conducted between NMHS Argentina and RSMCs Exeter and Montreal on 6 and 7 January 2016. As a result some minor changes were made to the draft non-nuclear ERA procedures that were later included in WMO, 2017. A paper about the tests is presented by NMS Argentina under agenda item 5.**

**ACTION 2: Co-Chairperson, all interested RSMCs (Melbourne, Exeter, Offenbach) selected NMHSs**

**Conduct further exercises comprising simulated requests from NMHS to RSMC for assistance covering full set of non-nuclear event scenarios**

**DUE DATE: Mon 4 Jan – Thu 8 January 2016**

1. Co-chairperson to establish timetable for testing of scenarios with interested RSMCs

2. Co-chairperson, all interested RSMCs and selected NMHSs to conduct a series of exercises covering requests for all four non-nuclear scenarios and to report back to the Expert Team on the results of the full exercise and any further potential amendments required to the draft operational procedures, for review and comments.

**STATUS (SEPTEMBER 2018): COMPLETED. No additional tests were conducted but the results of action 1 were used by the Expert Team to review and adjust the non-nuclear ERA procedures and texts that are now in WMO, 2017.**

**ACTION 3: Chairperson, Co-Chairperson, all RSMCs**

5.3.3 Develop appropriate designation criteria for any organization seeking to nominate as an RSMC for non-nuclear ERA. Finalize all additions for non-nuclear ERA procedures for new Manual.

**DUE DATE: March 2016**

**STATUS (SEPTEMBER 2018): COMPLETED. See paragraph 2.2.2.8 in WMO, 2017.**

**ACTION 4: WMO Secretariat**

**Submission of non-nuclear ET-ERA modifications/additions to the Manual on the GDPFS (WMO-No.485) to CBS-16 (November 2016)**

**STATUS (SEPTEMBER 2018): COMPLETED.**

**Area of Requirement: Capacity building and ERA web pages**

**ACTION 5: RSMCs**

**Share information on improving mapping products**

**DUE DATE: Ongoing**

RSMCs to share information and techniques regarding generation of improved high-resolution mapping products for display of results.

**STATUS (SEPTEMBER 2018): Information from RSMC Washington: NOAA/ARL undergoing transition of graphics python to PYTHON. MONET package under development is available to interested RSMCs.**

**ACTION 6: WMO Secretariat**

**Assist NMHSs in the interpretation of ERA-related products and their application by publicizing aspects covered by the WMO-TD. 778**

**DUE DATE: As soon as the WMO-TD. 778 is updated**

WMO Secretariat to send out a circular letter to WMO Members and an e-mail to the ERA contact points informing/publicizing the aspects covered by the WMO-TD. 778.

**STATUS (SEPTEMBER 2018): Not done; WMO-TD. 778 has not been updated for non-nuclear ERA. NMS Argentina has offered to promote this information to NMSs in RA III once available and to assist them with making requests to RSMCs.**

**ACTION 7: TT members, RSMCs and WMO Secretariat**

**Advise the Secretariat on available non-nuclear ERA dispersion modelling capabilities from institutions in their RA area that can be ported to NMHSs**

**DUE DATE: Ongoing**

TT members, RSMCs to advise; Secretariat to post it on the WMO website for ERA

**STATUS (SEPTEMBER 2018): RSMC Washington provided some information. Website has not yet been developed for non-nuclear ERA.**

**ACTION 8: RSMC Offenbach**

Investigate and advise on possible availability of ICON-ART web-based training modules

**DUE DATE: February 2016**

**STATUS (SEPTEMBER 2018):**

**ACTION 9: WMO Secretariat**

**Enable access to web-based training modules**

**DUE DATE: Ongoing**

Publicize web-based training modules by inclusion of these links on the WMO-TD. 778.

**STATUS (SEPTEMBER 2018): Not done; WMO-TD. 778 has not been updated for non-nuclear ERA.**

**ACTION 10: Chairperson and Co-Chairperson, ET Members**

**Review and update the WMO website for non-nuclear ERA, including updating the glossary**

**DUE DATE: Dec 2015**

1. ET-ERA Chairperson and co-chairperson to coordinate and identify TT members that could contribute and establish timelines;

**DUE DATE: End Dec 2015**

1. TT members to check within their Services on the possibility of contributing to this task.

**DUE DATE: 2017**

1. TT members to review and update the WMO website for non-nuclear ERA, including updating the glossary

**STATUS (SEPTEMBER 2018): Due to restrictions on the availability of resources, this has not been undertaken.**

**ACTION 11: WMO Secretariat and ET members**

**Promote the non-Nuclear programme via the WMO Bulletin**

**DUE DATE: Once the operational procedures for non-nuclear ERA are in place (2017?)**

Update the WMO Bulletin article on ERA (January 2006) to further promote the programme

**STATUS (SEPTEMBER 2018): Not done**

**ACTION 13: Jeff McQueen and WMO Secretariat**

**Capacity building in NMHSs**

**DUE DATE: Ongoing**

Demonstrate transfer of the dispersion modelling capability to candidate NMHSs

**STATUS (SEPTEMBER 2018): Information provided by Jeff: NOAA/ARL has demonstrated the transfer of dispersion modeling capabilities to the Buenos Aires, Argentina NMHSs. Ariel Stein, NOAA/ARL, continues to support transfer for any NMHS interested in HYSPLIT capability. NOAA/ARL actively develops and maintains training materials on use of HYSPLIT for a variety of applications. See: https://www.arl.noaa.gov/hysplit/hysplit-workshop/**

**Area of Requirement: Work with International Organizations**

**ACTION 14: WMO Secretariat**

**Engage with relevant international organizations to determine requirements**

**DUE DATE: Ongoing**

Engage with relevant international organizations to promote the usefulness of ERA products and determine requirements

**STATUS (SEPTEMBER 2018): ICAO and WMO are members of the ET-ERA and are aware of the non-nuclear ERA products.**

**ACTION 15: WMO Secretariat**

**Make international organizations aware of non-nuclear ERA procedures**

**DUE DATE: Once the operational procedures have been established and services to Humanitarian Agencies have been developed.**

Make relevant international organizations aware of the operational procedures for non-nuclear ERA

 **STATUS (SEPTEMBER 2018): ICAO AND WHO informed. WMO Secretariat will provide information at the meeting about humanitarian assistance support activities.**

**ACTION 16: WMO Secretariat and Co-chairperson**

**Publicize outcomes of non-nuclear ERA exercise**

**DUE DATE: After the exercise**

Share the information of the outcomes / report of the exercise, which should include an item on potential implications to other relevant international organizations.

**STATUS (SEPTEMBER 2018): COMPLETED.**