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| WORLD METEOROLOGICAL ORGANIZATION COMMISSION FOR BASIC SYSTEMS OPAGs on DPFS and PWS  **Severe Weather Forecasting Disaster Risk Reduction Demonstration Project**  **SWFDdP – South Pacific Project**  **Meeting of the Regional Subproject**  **Management Team**  Honiara, Solomon Islands, 25-27 August 2016 |  | DPFS-PWS/RAV-SWFDDP-RSMT/Doc. 3.1(1)  (19.VIII.2016)  \_\_\_\_\_\_\_  Agenda items : 3.1 and 3.2  ENGLISH ONLY |

**SUMMARY FROM THE PROGRESS REPORTS**

1. **OVERVIEW**

The RSMT will review and discuss the Progress Reports of the SWFDDP, spanning the period from 1 October 2013 to 30 September 2015 (Progress Reports No. 8, 9, 10 and 11). Progress Report No. 12 (1 October 2015 to 31 March 2016) remains in a draft state and will not be included in the review.

The five main goals of the SWFDDP are:

* to improve the ability of NMHSs to forecast severe weather events;
* to improve the lead-time of alerting these events;
* to improve the interaction of NMHSs with Disaster Management and Civil Protection Authorities (DMCPAs) before, during and after severe weather events
* to identify gaps and areas for improvements; and
* to improve the skill of products from Global Centres and RSMCs through feedback from NMHSs.

The previous meeting of the RSMT (Nadi, Fiji, 26 – 29 August 2013) noted there were no hard criteria for the transition of the Project from Demonstration to the subsequent Phase IV, known as the “operational” or “continuing development phase”. The RSMT in Nadi (Aug 2013) agreed to the following set of criteria to be implemented by each participating NMHS:

* an appropriate non-TC warning system is implemented and operating smoothly;
* severe weather and wave forecasts & warnings are verified using the spreadsheet provided;
* all participating countries produce at least one case study per year;
* all participating countries to complete all SWFDDP progress reports in full before the deadlines prescribed (six monthly); and
* demonstrate on a continual basis that the relationships between NMHSs and Disaster

Management and Civil Protection Authorities (DMCPAs), the media and the public are strong and healthy, with regular communications before, during and after severe weather events.

The RSMT will discuss and identify strengths and weaknesses in the progress made by the participating NMHSs in relation to the criteria, as well as the five main goals of the SWFDDP.

1. **SWFDDP achievements and gaps against the criteria for SWFDDP progressing to phase 4**

**2.1 Appropriate non-TC warning system is implemented and operating smoothly**

This first criterion requires NMHSs to demonstrate that their non-TC warning system is functioning smoothly. One aspect of quality management is to: ‘say what you do and do what you say’. With this in mind, it was deemed beneficial if each NMHS described their non-TC warning system and a few of them did this. NMHSs should also provide evidence of their warning program by forwarding the alerts, warnings or advisories to RSMC Wellington. The second aspect of this criterion is to show that the system is working smoothly. What is required here is evidence of the interactions with their DMCPAs. In a smoothly functioning system the DMCPA should acknowledge receipt and respond to warnings. Evidence of that response is required.

In summary, the first aspect of this criterion is to inform RSMC Wellington of all non-TC warnings; the second aspect requires the NMHS to provide evidence of the interactions with the DMCPA. These aspects were achieved to varying degrees.

Fiji issues warnings for: Niue; Kiribati; Cook Islands; and Tuvalu, so all were considered compliant when NMHS Fiji forwarded warnings to RSMC Wellington (see Figures 1 and 2).

*Figure 1: Summary of compliance from participating NMHSs with regard ‘All NMHSs include RSMC Wellington on the distribution list for all alerts, warnings and advisories’ for Progress Reports No. 8 to 11.*

*Figure 2: Summary of compliance from participating NMHSs with regard ‘All NMHSs in collaboration with DMCPAs provide feedback on the performance of the warning system in the country’s progress reports’ for Progress Reports No. 8 to 11.*

**2.2 Severe weather and wave forecasts & warnings are verified**

In reporting prior to Progress Report No. 8 the NMHSs were required to fill out an events table as part of Annex I. In the Regional Subproject Implementation Plan (RSIP), this was changed to a separate verification spreadsheet that allowed the NMHSs to verify their forecasts and confirm what South Pacific Guidance (SPG) charts were issued one to four days in advance.

The four partially compliant NMHSs for Progress Report No. 8 (Figure 3) was a result of omission of correct negatives in the verification spreadsheet. This was rectified somewhat for Progress Report No. 9, where Solomon Islands, Tonga and Niue were fully compliant, and all but one NMHS submitted their verifications.

At times the verification spreadsheet has been filled out on a monthly basis. For ease, this would be better done as one spreadsheet to cover the 6-monthly reporting timeframe.

Overall, each participating NMHS submitted at least one verification spreadsheet over the four Progress Reports.

*Figure 3: Summary of compliance from participating NMHSs with regard ‘All NMHSs submit verifications to RSMC Wellington with each progress report’ for Progress Reports No. 8 to 11.*

**2.3 All participating countries produce at least one case study per year**

All participating countries are required to submit at least one case study per year. After the previous RSMT in Nadi, August 2013, a case study guide and template were distributed to the participants. Over this evaluation period, four countries have produced and submitted seven case studies (Kiribati x 4; Samoa x 1; Solomon Islands x 1; and Tonga x 1), and none have been submitted since April 2015 (see Figure 4). The case studies submitted were:

* Tonga – Cold Front (Oct 2013);
* Samoa – Heavy Rain (Jan 2014);
* Kiribati – Large Waves (Mar 2014);
* Solomon Islands – TC Ita (Mar/Apr 2014);
* Kiribati – Large Waves (Jan 2015);
* Kiribati – Strong Winds & Large Waves (Feb 2015); and
* Kiribati – TS Bavi and TC Pam (Mar 2015).

Samoa’s case study was for heavy rain and flooding during January 2014; resulting from a slow moving tropical depression (TD07F) that was the pre-cursor to TC Ian. This was an excellent case study and is consistent with the case study format for the SWFDP. Along with the others, these are in the process of being put on MetConnect Pacific.

On one occasion there was confusion over whether case studies had replaced the Annex Hs; Annex Hs should be completed in addition to producing case studies.

*Figure 4: Summary of compliance from participating NMHSs with regard ‘All participating countries produce at least one case study per year, using the SWFDDP template or an equivalent template’ for Progress Reports No. 8 to 11.*

**2.4 All participating countries to complete all SWFDDP progress reports in full before the deadlines prescribed (six monthly; in April and October)**

Strict deadlines have been assigned for the submitting of the 6-monthly progress reports. At times this has been difficult to achieve due to recent severe weather within a country. For example, Progress Report No. 8 was late from the Solomon Islands, but this was understandable giving the deadline (15 April 2014) was a few weeks after the heavy rain, land slips and flooding caused by the precursor depression to TC Ita.

Progress Report No. 11 only saw the Solomon Islands, Kiribati and Niue submitting their reports on time (see Figure 5) [further note: only Kiribati submitted their Progress Report No. 12 on time].

*Figure 5: Summary of compliance from participating NMHSs with regard ‘All participating NMHSs to complete all SWFDDP progress reports in full before the deadlines prescribed’ for Progress Reports No. 8 to 11.*

**2.5 Demonstrate on a continual basis that the relationships between NMHSs and Disaster**

**Management and Civil Protection Authorities (DMCPAs), the media and the public are strong and healthy, with regular communications before, during and after severe weather events**

NMHSs were encouraged to provide evidence of their interactions with DMCPAs, the media and the public. This may be emails, newspaper clippings, telephone conversations, relevant workshops, disaster reports or other evidence. If multiple events take place over the reporting period, then as much evidence as possible should be submitted; on occasion, one event would be covered, but not the other two, or three, or more.

Of note: Tonga provided a copy of the National Emergency Operations Management procedures which clearly indicates the relationship of the meteorological office with the DMCPA. Tonga also provided a screen shot of an email from the local Red Cross to a number of Tongan leaders regarding TD07F, the precursor to TC Ian; this was evidence of strong communication with the public.

On several occasions, strong interactions were claimed between meteorological offices and their respective disaster management offices, but no evidence was presented.

Lack of evidence was evident for Progress Report No. 11 (see Figures 6, 7 and 8).

Discussions at the previous RSMT in Nadi (August 2013) suggested the interactions between NMHSs with DMCPAs, the media and the public were strong, but, in general, Progress Reports No. 8 – 11 provided a lack of evidence to support these interactions.

Not part of the SWFDDP, but of note, was the FINPAC funded media in-country training provided to 14 different Pacific island countries during 2015 entitled, ‘The Role of the National Meteorological Services and the Media in Providing Correct, Timely and Meaningful Weather and Climate Information to the Community and all Users’. The three day training brought together members of the community, NGOs, NMHSs and other government ministries, with members of the media to help forge a way forward to ensure the meteorological information shared is understood by all communities. (FINPAC is the Finland-Pacific project on ‘reduced vulnerability of Pacific Island communities’ livelihoods to the effects of climate change’ that is being implemented by the Secretariat of the Pacific Regional Environment Programme (SPREP) and funded by the Government of Finland).

*Figure 6: Summary of compliance from participating NMHSs with regard ‘Demonstrate on a continuing basis that the relationships between NMHSs and other* ***DMCPAs*** *are strong and healthy, with regular communications before, during and after severe weather events’ for Progress Reports No. 8 to 11.*

*Figure 7: Summary of compliance from participating NMHSs with regard ‘Demonstrate on a continuing basis that the relationships between NMHSs and the* ***media*** *are strong and healthy, with regular communications before, during and after severe weather events’ for Progress Reports No. 8 to 11.*

*Figure 8: Summary of compliance from participating NMHSs with regard ‘Demonstrate on a continuing basis that the relationships between NMHSs and the* ***public*** *are strong and healthy, with regular communications before, during and after severe weather events’ for Progress Reports No. 8 to 11.*

1. **SUMMARY**

Figure 9 illustrates the number of fully compliant NMHSs for each of the criteria set at the previous RSMT in August 2013, and for each Progress Report 8 – 11. This figure illustrates the decrease in compliance from Progress Report 10 to Progress Report 11.

*Figure 9: Summary of full compliance from participating NMHSs with regard all criteria set at the previous meeting of the RSMT (Nadi, August 2013), for Progress Reports 8 to 11.*

**[END]**