NAURU METEOROLOGICAL SERVICE COUNTRY REPORT

Reporting on National Priority Actions of the Pacific Islands Meteorological Strategy (PIMS) 2012-2021

This Report is presented to the Fourth Pacific Meteorological Council (PMC-4) Meeting held in Honiara from 14-18 August 2017

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[This subsection will cover an UPDATE of the brief on the institutional arrangement of the NMHS as well as its linkages to the Ministry. Ma mention of the legislation or any Acts to support the NMS.]	
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Country Report Guideline (Text)

The report is structured to allow the secretariat to capture the Progress of each NMHSs against the National Priority Actions of the 14 Pacific Key Outcomes (PKO's) of the Pacific Islands Meteorological Strategy (PIMS) 2012-2021 which will be reviewed at this meeting. This report will contribute to;

- i. monitoring the progress of each NMSHs against the implementation of the PIMS
- ii. inform the Work Program of the Pacific Met Desk Partnership (PMDP)
- iii. identify gaps and needs some of which will be packaged for projects and presented to the Donors and Partners

The draft of the Country Report is expected to be submitted by Heads of each NMHSs to the Pacific Met Desk Partnership by **03 August 2017** to assist in its planning as highlighted above. The Head of the NMHS can delegate the compilation of this report to their staff.

Provide diagrams, photos and other materials that will be useful for measuring or comparing the progress of the NMHS from 2014/15 to 2017 and 2021.

Information in this report will be made available on request by donors and partners unless indicated otherwise by the NMHSs directors.

The Pacific Key Outcomes (PKO's) which are priority activities of the Pacific Islands Meteorological Service (PIMS) are outlined below:

1.0 Summary

[summary of the report]

[you can also include the name of the head of the NMHS and full details. This should also include the name and address of the alternate contact person.] to assist us in future communications.

	Contact of the [country] NMS	Alternate Contact
Contact	Name: Roy Harris	Name: Graymea Ika
	Division Title: Secretary for National	Division Title: Meteorology Officer
	Emergency Services	Address: Republic of Nauru
	Address: Republic of Nauru	
		E-mail: graymeaika1510@gmail.com
	E-mail: royharris111@gmail.com	Work Tel:
	Work Tel:	Mobile:
	Mobile: +674 5573101	Fax: NIL
	Fax: NIL	

2.0 Background Information

2.1 Institutional Setup

The National Meteorology Service was established back in May 2015, under the Ministry of National Emergency Services (NES). Since the establishment we still have one substantive officer responsible for the NMHS. The one man officer is due to the fact that the NMHS centre is still not built. There is no sense to increase employment under NMHS at this time.

The Nauru NMHS have neither Legislation nor Act at this time. However, the NMHS was mentioned briefly under the NDRM Act 2016 as an established structure under the National Emergency Services. The main role of the NMHS is to be a fully fledge and dedicated NMHS that will provide weather forecasting for Nauru and equally important, the NMHS will also play a role as an Early Warning Centre, in regards to monitoring and observing Server and Cyclonic Weather, monitoring of Tsunami Warning Messages and many more that are required under NMHS.

The established officer has under gone some training with Nadi Meteorology Services. Under our capacity building program the department have added another officer within the NES department (position not established yet) to assist the substantive NMHS officer. The Added officer also has taken recent BIT-MT training with Nadi. The training was funded by JICA.

We are still in the process to build of the NMHS centre, however this will take a fare bit of time due to the process of 1), bidding of the construction to bidders (this process will eventuate before November of this year) and secondly, the completion of the site where the construction will take place to build the NMHS and the NEOC centre.

This project to build NEOC and NMHS centre is a funded by the ED-EF10 (BSRP project) and Co-funded by the Government of Nauru.

[You can insert your Structure]

[The Matrix below asks questions related to Governance and Planning's of the NMHS]

Governance	Description
MET LEGISLATION: Update on whether or not your country have a stand- alone Meteorology Act or equivalent or is it part of other government's legislations to guide the NMHS to perform its role and responsibility? Briefly describe it.	 No legislation for NMHS as stand alone The structure of Nauru NMHS is mentioned brief under NDRM Act 2016
Do you require for your Act to be reviewed? If it is already reviewed, what is the current status of your Act	 Would need to be reviewed to accommodate the more specific requirement for NMHS
Strategic Planning	
Describe how meteorology (weather) and climatology (climate variability and climate change) are featured in the current national development plan, government ministries corporate and implementation/operational plans.	 The specific under government is that the NMHS is to be a fully fledge and dedicated services that Nauru can rely on in regards to sharing of weather information to the general public and also to assist in the Aviation sector
Describe the process if your NMHSs is reporting against the SDG or its national equivalent	 Due to the lack of equipment and centralize centre it is difficult for us to operate fully. However, the government is very keen to implement any requirement that stipulated under SDG and National plans and goals
Does your NMHS have a strategic plan, implementation/operational plan or equivalent(s)?	 Would establish soon. However, would require specialized assistance from SPREP/WMO etc to assist to establish such plan
Describe how meteorology (weather), climatology (climate variability and climate change), disaster management and early warning systems are feature in your NMHS strategic plan, implementation/operational plan or equivalent(s).	 No weather and climatology plans in place as yet Tsunami plan is in place and at final draft yet to be submitted to cabinet to endorse

2.2 Staffing

2.2.1 Staff Qualification

- (a) The National Emergency Services department have training programs for all sections which, include the Meteorology Services for training. The NES department will continue to ensure that Meteorology Officers are trained to meet the required NMHS standard qualification. This is part of the departmental and government National Sustainable Development Strategic Plan or better known as the NSDS Plan.
- (b) Matrix list below an updated of personnel of Nauru NMHS, including their level of academic qualification.

(c) [You can highlight gaps and needs related to Capacity building issues under Section 4.0 of this report]

Staff	Qualification	Division/Section	No. Profe	ssional Staff	Total
Staff Name	(Description the qualification under each division) Example; WMO Class 1-4 or other qualification or professional training, education and research)	Responsibility of Staff (Forecast, Climate, Observation, Administration, etc)	Male	Female	Total Number of Staff
Graymea Ika	BIP MT TRAINING,MENTENAINCE AND CLIBRATION ON INSTRUMENT,HIMAWARI 8, QUALITY MANAGEMENT SYSTEM (QMS)	NMHS	M		1
Sebastian Detenamo	BIP MT TRAINING	NMHS	M		1

2.3 Finance

[In the PMC-3 in 2015, we have been able to show that the total investment in the region on meteorology per annum is around USD20 million with 80% supporting staff personal. The secretariat would like continue monitoring these investment. This section can be kept confidential. It should describe an UPDATE on the financial status of the NMHSs and also highlighting other external financial support. They can be summarized in the table below;]

Description	2016	2017 Fund	s [Own currency]	Total [Own Currency]
	Total Budget (USD)	Administration (USD)	Operation (USD)	
Government Support	Aust\$15K	Aust\$20K	Aust\$5K	Aust\$40
•••••				
Total (USD)				

[You can also highlight some of the key issues in finance that needs to be addressed to contribute to the improvement of your operations under section 4 of the report]

2.3.1 Projects supporting the NMHSs

Name of Project	Total Project Budget	Percentage of how much is provided to the NMHSs	Summary of NMHSs activities covered by the project
Project 1: Construction of NMHS centre	Aust\$6850K	-	BSRP
Project 2: NMHS equipment	Aust\$20K	-	SPREP/FINPAC
Total (USD)			

2.3.1 Potential Collaboration on project proposals

FINPAC: Anticipating of FINPAC support towards Meteorology equipment

JICA: Will need more training funding from JICA

NADI: Will wish support training from Nadi Met Services

2.4 Development

There has been little development within the Meteorology section, apart from training, due to no building centre and equipment for Meteorology.

2.4.1 Buildings Infrastructure

• Building NMHS centre have not yet started. Process to build NMHS is still underway to tender construction bid and completion of the NEOC and NMHS proposed site

2.4.3 Update on Communications Infrastructure (to support current and future development)

	Datella
	Details
What is the mode of communication	- EMWIN (unserviceable)
for transmitting oceanographic and	- Telephone (mobile: +674 557 3101)
hydro-meteorological data from	- Internet
remote stations?	- The rest none e.g. Satellite DCP/ HF/VHF/RANET (Chatty Beetle) and or fax, and add
	descriptions]
What is the Mode of transmitting data	- CLIDE
to the Global Data Network?	
What is your Current Internet Speed,	 Yes connected to government internet (reliable speed)
and is your main office connected to a	
secure national Government provided	
IT network (inbound and outbound)?	
Does your NMHS have access to	- NIL

SATAID information?	
Which geostationary satellite(s) do you utilize, and which product(s) do you rely upon and how do you obtain it?	- NIL
How many Upper Air Station does your NMHSs operate and what is their status? Do you have access to Lightning data, and do you use in in your forecasts?	- NIL
What is the scope and extent of marine weather services provided by your NMHSs and describe your NMHSs interaction with your national marine/port authorities and the marine user communities?	 BoM Australia TIDE GUAGE provided high tide, low tide, Air pressure, Air temperature, water temperature, current speed, current maximum speed and Wind Direction AWS provided wind speed, wind direction, temperature, and pressure
What type of marine weather products, warnings, advisories do you provide?	 BoM Australia High tide Wind speed and direction
Does your NMHS have a Port Meteorological Officer and are they involved in the WMO VOS Programme?	 NIL But currently Marine Authority depending on BOM Australia to provide weather information Nauru MET is planning to install a Met Station at the Port Authority and will be a synoptic station and will monitoring by our Met Officers every 3 hours observation or Arrival of ship. Yes they will involve in the WMO VOS programmed once the Met station is up and running

2.4.4 Training

List any international, regional or national training, educational or research related events or workshops in which the NMHS has participated in the last 2 years (2015-2017) by using the table below;

Training or Workshop Title attended by NMHS staff from 2011-2013	Start and End	Donor	Number of Participants
	dates		from the NMS
Third Country Training Course on Maintenance and Calibration of	2 nd Nov to 13 th	JICA	1
Meteorological Instrument	Nov 2015 (Nadi)		
QMS (Quality Management System)	16^{TH} May to 27^{TH}	JICA	1
	May 2016(Nadi)		
Analysis and Application of Himawari 8	12^{TH} SEPT to 16^{TH}	JICA	1
	Sept 2016 (Nadi)		
FIJI/WMO Course Training on Maintenance and Calibration of	21 Nov to 2 nd Dec	JICA	1
Meteorological Instrument	2016 (Nadi)		
Basic Instruction Package For Meteorological Instrument Technicians	24 [™] APRIL to 29 th	JICA	2
(BIP-MT)	June 2017 (Nadi)		
		_	

2.4.5 Update on Climate Services (to support current and future development)

Questions	Details
What level is your climate services according to WMO standard? (Class 1-4)	- Probably low. Due to lack of equipment and station
Do you have an update climate science publication for your country? If not, when is the last one and how often do you want to have climate science published?	- NONE. Due to lack of equipment and station
List the qualification obtained by climate officers (do not specify names)	- Meteorological Observer
List the types of training needed by you to enhance the generation and production of climate services	- Would require the standard training
What tools do you use to provide seasonal forecast? (please select from SCOPIC, POAMA, METPI, CLIKP, PEAC)	- NONE mentioned
What model(s) do your use to provide seasonal forecasts on monthly basis?	- NONE. Due to lack of equipment and station
What are the climate variables you are forecasting?	- NONE.
What are some variables you would like to forecast in the future to meet needs of your client?	- The required standard of info that the general public would need
How many AWS do you have that feed into the database you are using?	- NONE
List in order of importance some sectors you engage with? List what products you issue for these sectors?	- NONE
List 5 most important mode of communication of seasonal forecasts in your country.	- NONE. Would require assistance to establish
Do you have any early warning system	- EMWIN but unserviceable

(EWS) for climate extreme events?	- PTWC – we are subscribe
What are some climate extreme events	- Cyclonic weather
that you want to be included in your	- Drought
EWS?	
What are some challenges that you	- More training
have in climate division that you want	- Require equipment
to address with climate science and	- Need to establish NMHS centre
climate change mitigation and	
adaptation issues	
What are some priority needs for your	- As above
services that you want to achieve in	
the next 5 years?	

3.0 Progress of the NMHS

3.1. UPDATE on Achievements of the NMHS from 2015-2017

[This can reflect new activities, programs, services implemented by the NMHSs. Under each of the activities, indicate which PKO(s) this activity has achieved. One Activity can contribute to more than 1 PKO]

No.	Achievements (Activities) of the NMHS (2015-2017)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Example activity - aviation training and forecasting	Х			Х			Х							
2	BIT-MT???														
3	???														

3.2. Proposed Activities to be Carried out in the Future (2017-2019)

[Proposed Activities indicated in the Matrix will give an indication on the prioities

No	Proposed Activities to be carried out between 2017-2019	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Standard training														
2	Standard equipment														
3															
4															
5															

4.0. Identify Gaps and Future Needs that would Improve the National Meteorological and Hydrological Services

The most priority ones would be:

- 1. Complete building for NES which will house Met, Climate and Tsunami operations
- 2. Complete Meteorological Instrument Enclosure
- 3. Procure and install meteorological instruments SPREP and Fiji Met. to support
- 4. Continue deployment and training of staff for 24/7 meteorology and tsunami monitoring, forecast and warning
- 5. Commence 24/7 operations and services by 1 July 2018??