New Caledonia Wallis & Futuna Meteorological Service COUNTRY REPORT

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

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METEO-FRANCE
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Country Report Guideline (Text)

The report is structured to reflect the National Priority Actions of the 14 Pacific Key Outcomes (PKO's) of the Pacific Islands Meteorological Strategy (PIMS) 2012-2021. This report will contribute to :

i. the working papers of the PMC-3 meeting
ii. monitoring the progress of each NMSs against the implementation of the PIMS
iii. the baseline information that will be used to measure the progress of the Pacific Islands Meteorological Strategy (PIMS) 2012-2021 during its mid-term review in 2016.
iv. inform the Work Program of the Pacific Met Desk Partnership (PMDP)
v. identify gaps and needs some of which will be packaged for projects and presented to the Donor Partners

A draft text of the Country Report is expected to be submitted by Heads of each NMSs to the Pacific Met Desk Partnership by **19 June 2015** to assist in its planning as highlighted above. The Head of the NMS can delegate the compilation of this report to their staff. The final report can be submitted during the meeting on **Monday Morning, 20 July 2015.**

Provide diagrams, photos and other materials that will be useful for measuring or comparing the progress of the NMS from 2014/15 to 2016 and 2021.

Information in this report will be made available on request by donors and partners unless requested otherwise.

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

1.0 Summary

There haven't been big changes since 2013, but the staff and budget were down slightly.

Improvements have been made in observation (implementation of a lightning network for example) and telecommunication networks.

Large projects are underway and should be completed by 2017 (development of operational numerical weather prediction model at 2.5 km resolution (AROME) over New Caledonia, automation of the radiosounding, installation of a next generation AWS, upgrade of telecommunications, implementation of the next generation tool for forecasters (called Synopsis), etc.)

[you can also include the name of the head of the NMS and full details. This should also include the name and address of the alternate contact person.]

	Contact of the New Caledonia, Wallis & Futuna NMS	***Alternate Contact***
Contact	Name: FRAYSSINET Philippe Division Title: Director Address: 5 Rue Vincent Auriol BP 151, 98 845 NOUMEA E-mail: philippe.frayssinet@meteo.fr Work Tel: +687 27 93 00 Mobile: Fax: +687 27 39 81	Name: LECHANTEUR Patrice Division Title: Forecast Division Chief Address: 5 Rue Vincent Auriol BP 151, 98 845 NOUMEA E-mail: patrice. lechanteur@meteo.fr Work Tel: +687 27 93 00 Mobile: Fax: +687 27 39 81

2.0 Background Information

2.1 Institutional Setup

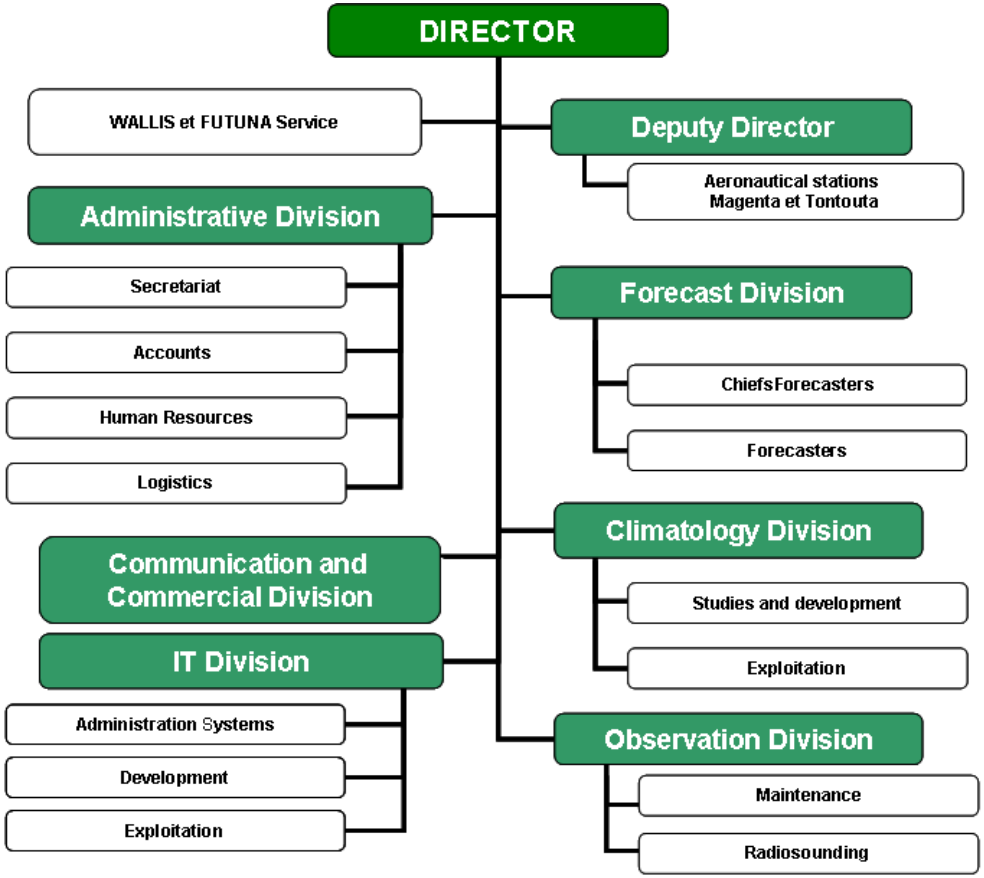
The Meteorological Service of New Caledonia is a service with a joint authority, since it is part of government services in New Caledonia, but it is also a part of Meteo-France, the French national weather service, through its Regional Direction for New Caledonia, Wallis and Futuna.

The best known duties that make up this public service in New Caledonia, are the observation of the atmosphere, weather forecasting and conservation of climate memory. These assignments have to meet priority needs of the safety of persons and property, assistance to aeronautical and Defence Ministry needs, and the information needs of public and different professional sectors.

To fulfill these missions, Meteo-France in New Caledonia has a staff of 70 people divided between forecasters, climatologists, computer programmers, technicians and administrative staff. In Wallis & Futuna the staff is 6 people.

The Meteorological Service of New Caledonia also relies heavily on the resources and skills of Meteo-France, for training, observation facilities, information systems, analysis and production tools and of course for the research and development.

Annual reports (in French) are available on web site : http://meteo.nc/aller-plus-loin/nous-connaitre/les-rapports-dactivite


DIRECTOR
WALLIS et FUTUNA Service
Deputy Director
Aeronautical stations
Magenta et Tontouta
Administrative Division
Secretariat
Accounts
Human Resources
Logistics
Forecast Division
ChiefsForecasters
Forecasters
Communication and
Commercial Division
Climatology Division
Studies and development
Exploitation
IT Division
Administration Systems
Development
Exploitation
Observation Division
Maintenance
Radiosounding

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

Governance	**Description**
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.	The Meteorological Service of New Caledonia is a service with a joint authority, since it is part of government services in New Caledonia, but it is also a part of Meteo-France, the French national weather service, through its Regional Direction for New Caledonia, Wallis and Futuna.
Is the Meteorology Act or equivalent includes disaster management or vice-versa? If the Meteorology Act or equivalent does not include disaster management, provide information on your country Disaster Management Act or equivalent(s).	Meteo-France provides meteorological information to Civil Defense authorities who are responsible for disaster management.
Is the Meteorology Act or equivalent includes climatatology/climate variability/climate change. If the Meteorology Act or equivalent does not include it provide information on your country legislation or legal instruments related to climatology/climate variability/climate change.	Climatologists from Meteo-France New Caledonia create and update the climatological databases of New Caledonia (and Wallis & Futuna), conduct studies and developments from these databases and produce various publications from these data and studies.
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.	A 2012-2016 Objectives and Performance Plan has been signed between the government and Meteo-France. This Plan sets the five-year strategic direction and goals of the organization to better meet the expectations of the citizens, of the government and of the economic world, each of them at their level, facing the challenges of climate change. This new contract reaffirms the importance of Meteo-France security missions (weather vigilance, support for disaster risk management) with continued progress in the detection of severe weather as well as in the relevance of warnings. It reinforces the role of Meteo-France in the field of climate services, and as a technical support to national adaptation policies to climate change. This Plan contains quality indicators to measure and assess the activity of Meteo-France.
Describe how disaster management and early warning systems are featured in the current national development plan, government ministries corporate and implementation/operational plans.	Early warning systems are based on Vigilance System in New Caledonia (colour-coded map of meteorological risks) upgraded in 2011 (especially its interaction with the cyclone warning system) and Cyclones Alerts in New Caledonia and Wallis and Futuna. New risk index for forest fires in New Caledonia in 2013.
Does your NMHS have a strategic plan, implementation/operational plan or equivalent(s)?	Yes, 2012-2016 Objectives and Performance 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).	2012-2016 Objectives and Performance Plan is available (in French) at : http://www.meteofrance.fr/nous-connaitre/strategie-et-gouvernance/contrat-dobjectifs-et-de-performance

2.2 Staffing

2.2.1 Staff Qualification

(a) UPDATE whether or not your NMHS have its own human resources development strategy or is part of the Ministry's or the overall government human resources development strategy.

Meteo-France has its own strategy of human resources, but this strategy is conducted in accordance with the rules imposed by the government (fewer and fewer civil servants).

(b) Provide an updated list of personnel of NMHS, including their level of academic qualification in the matrix below

Staff	Qualification	Division/Section	No. Professional Staff		Total
Staff Name	*(Description the qualification under each division) Example; WMO Class 1-4 or other qualification or professional training)*	*Responsibility of Staff (Forecast, Climate, Observation, Administration, etc)*	*Male*	*Female*	*Total Number of Staff*
Director	**Meteorologists (2)**	Director	2		2
Administrative Division		Administration	3	7	10
Communication and Commercial Division	**Meteorologist (1)** **Meteorological Technicians (4)**	Communication and Commercial activities		5	5
IT Division	**Meteorologist (1)** **Meteorological Technicians (10)**	IT	8	3	11
Forecast Division	**Meteorologists (5)** **Meteorological Technicians (8)**	Forecast	12		12
Climatology Division	**Meteorologist (1)** **Meteorological Technicians (7)**	Climatology	5	2	7
Observation Division	**Meteorologist (1)** **Meteorological Technicians (8)**	Observation	6	2	8
Aeronautical Stations	**Meteorological Technicians (10)**	Aeronautical Forecast	10	1	11
Wallis & Futuna Service	**Meteorological Technicians (6)**	Observation, Climatology	5	1	6
TOTAL			**51**	**21**	**72**

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

2.3 Finance

[This section can be kept confidential should the NMS request. It should describe an UPDATE on the financial status of the NMSs and also highlighting other external financial support. They can be summarized in the table below;]

Description	2012	2013	2014 Funds Euros		Total 2014 Euros
	Total Budget	Total Budget	Administration	Operation	
Government Support (French State + New Caledonia government)	6,92 M euros	6,75 M euros	5,23 M euros (human resources)	0,62 M euros (operating budget) 0,52 M euros (investment budget)	6,37 M euros
[Insert Project Title 1 here]					
[Insert Project Title 2 here]					
.....					
Total (Euros)	6,92 M euros	6,75 M euros	5,23 M euros	1,14 M euros	6,37 M euros

M euros = 1 000 000 euros

Important remark : This budget is delegated and directly spent in New Caledonia (salary, operating, ..). Other operations that are directly taken in charge by central departments of Meteo-France (large facilities investment, telecommunications, etc.) should be added

[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]

2.4 Development

[Highlight development since 2013 and also anticipated development in the near future. Pictures would assist in this section. Highlight gaps and needs.]

2.4.1 Buildings Infrastructure

- [Infrastructure development of the NMSs since 2013]

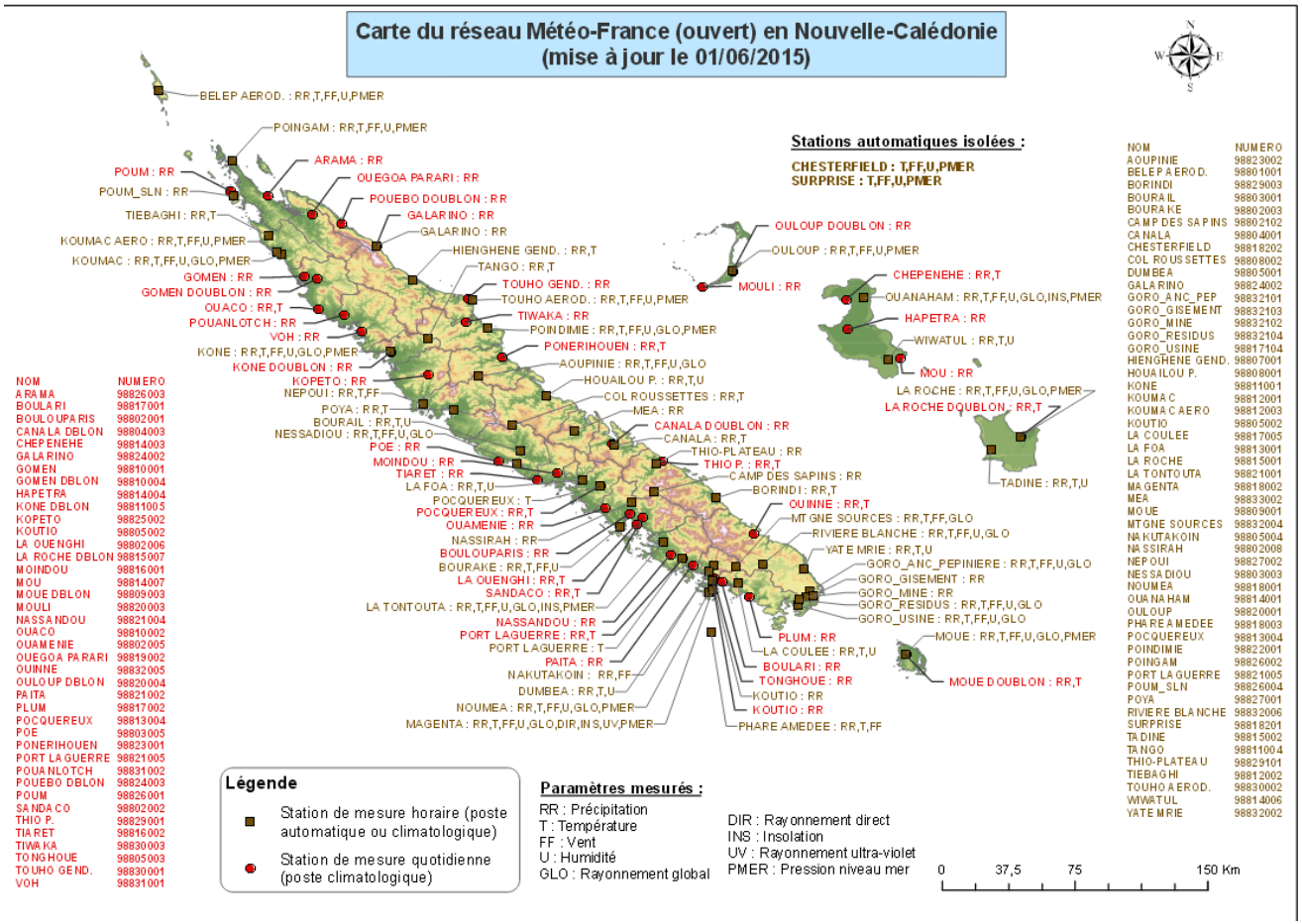
Raising the elevation of Tiebaghi meteorological radar
(from 11 m to 41 m at the top)

Building renovation of New Caledonia NMS

2.4.2 Monitoring Stations and Equipments

[A summary of the number of stations, types of equipment in that station]

In New Caledonia, forecasters and climatologists can rely on technology to the forefront of progress including three meteorological radars, fifty automatic weather stations supplemented by forty climatological stations, and by a real-time lightning network . The observations network is indeed very dense and it even includes stations on relatively remote islands (Chesterfield station, in the Coral Sea, and Surprise station, around 200 km from the North of New Caledonia).



WMO No.	Station Name	Operational Status	Equipments available in the station	Manual/Automatic (if manual, indicate the number of staff manning the station)	Gaps and Needs
91570	SURPRISE	operational		automatic	Difficult to maintain operational because the station is located on an remote island
91571	TIEBAGHI	operational		automatic	
91573	BELEP AEROD.	operational		automatic	
91574	CHESTERFIELD	operational		automatic	Difficult to maintain operational because the station is located on an remote island
91577	KOUMAC	operational		automatic	
91579	OULOUP	operational		automatic	
91582	OUANAHAM	operational		automatic	
91583	POINDIMIE	operational		automatic	
91587	LA ROCHE	operational		automatic	
91590	LA TONTOUTA	operational		automatic	
91592	NOUMEA	operational	Upper air station also	automatic	
91596	MOUE	operational		automatic	
91598	MATTHEW	operational		automatic	Difficult to maintain operational because the station is located on an remote island
91753	HIHIFO	operational		automatic	
91754	MAOPOOPO	operational		automatic	

(a) Describe the current status of and future plans for lightning detection systems and networks in your country? Who is operating and managing the systems and network.

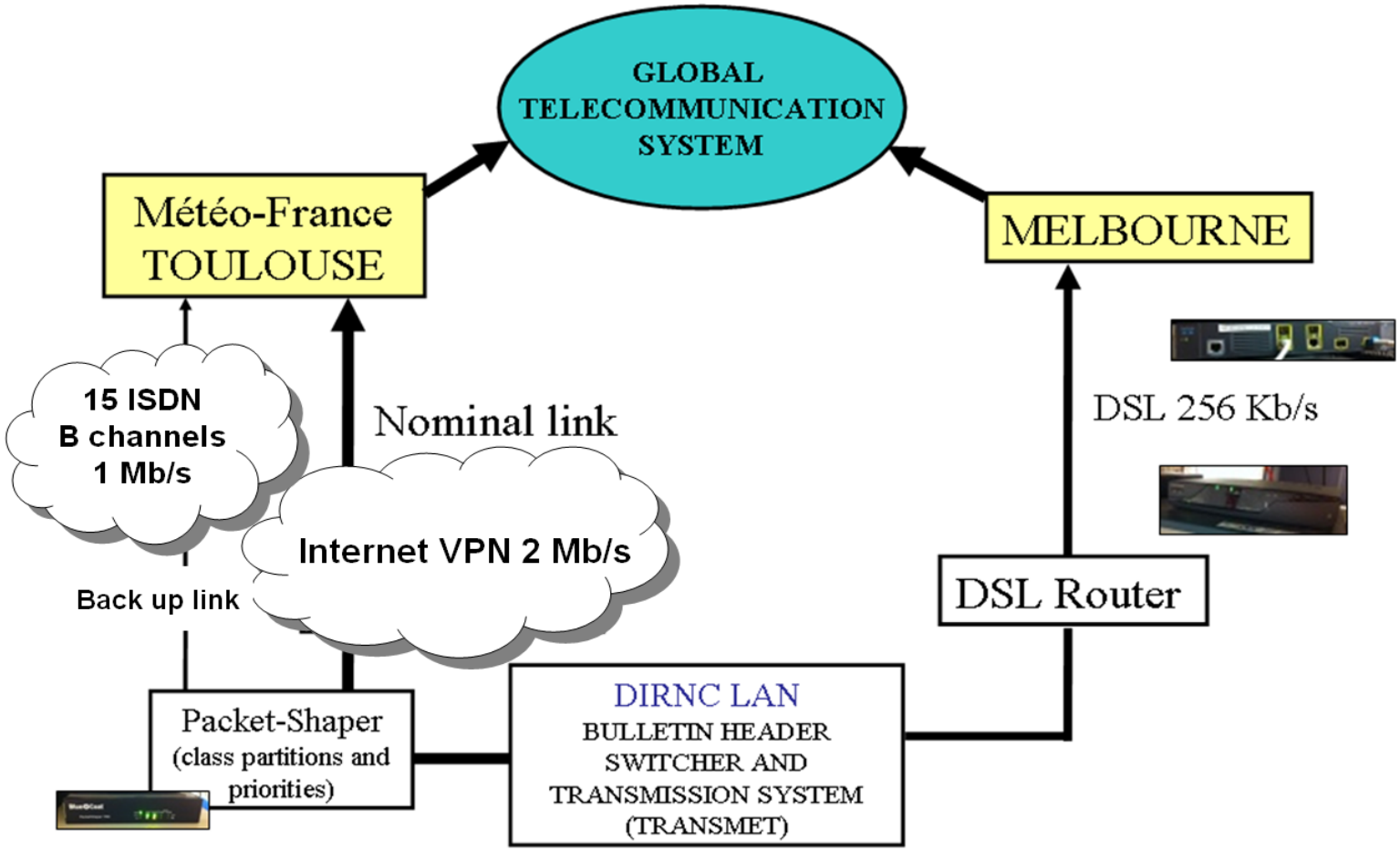
The government of New Caledonia bought a lightning detection network in 2013 and Meteo-France has operated this system since 2014.

(b) Describe the current arrangement of and future plans for maintaining and calibrating the meteorological (weather) and climatological (climate variability and climate change) observing equipment in your NMHS.

The observing equipments are maintained and calibrated following the Meteo-France quality procedures.

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

	Details
What is the mode of communication for transmitting data from remote stations	Satellite (DCP) for remote stations on Chesterfield and Surprise Telephone for other stations
What is the Mode of transmitting data to the Global Data Network	Cf scheme below
What is your Current Internet Speed (inbound and outbound)	2 Mb/s but evolution to 4 (or 6) Mb/s is planned by the end of 2015
Does your NMS have access to SATAID information	Yes, SATAID information will be used in Wallis & Futuna
Which satellite product do you most rely on and how do you obtain it?	MTSAT Imagery via a Medium-scale Data Utilization Station (MDUS) for HRIT up to now By the end of this year 2015 : Himawari Imagery by a local receiving station (New Caledonia, Wallis & Futuna)
How many Upper Air Station does your NMSs operate and what is their status	1 (Noumea) Operational (twice a day)
What is the scope and extent of marine weather services provided by your NMSs and describe your NMSs interaction with your national marine/port authorities and the marine user communities	Meteo-France contributes to the safety of persons and goods at sea and on the coast, through actions of monitoring, data processing and dissemination of information, including warnings and alerts.
What type of marine weather products, warnings, advisories do you provide	Meteo-France produces : Coastal bulletins (3 / day) Marine bulletin (2 / day) Warning marine bulletin (if observed or forecasted wind speed > 34 knots) Assistance for accidental marine pollution with drift model MOTHY
Does your NMS have a Port Meteorological Officer and are they involved in the WMO VOS Programme.	No



Mode of transmitting data to the Global Data Network

2.4.4 Training

List any international, regional or national training events or workshops in which the NMS has participated in the last 2 years (2013-2014) by using the table below;

Training or Workshop Title attended by NMS staff from 2011-2013	*Start and End dates*	*Donor*	*Number of Participants from the NMS*

The staff attends meteorological trainings (in french) organized by Meteo-France in Toulouse or Noumea, that cover all meteorological and useful topics and levels.

It's not possible to list all the national training or workshop attended by staff, but all training days represents 6.6 days of training per employee in 2013 and 6.1 days in 2014.

3.0 Progress of the NMS

3.1. UPDATE on Achievements of the NMS from 2013-2014

[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 of the NMS (2013-2015)	PKO
1	Operational QMS (renewed in 2015), automatic METAR in all airports, mention of convective activity in automatic METAR, agreements with aviation authorities in all airports	PKO 1
2	Improved web site www.meteo.nc (new products, new presentation)	PKO 3
3	First tests of future operational numerical weather prediction model at 2.5 km resolution (AROME) over New Caledonia (which will be operational in 2016)	PKO 3
4	Implementation of a model to forecast the dispersion of atmospheric pollutants at local scale for emergency air pollution forecast	PKO 3
5	Calibration of rainfall accumulation produced from meteorological radars	PKO 5
6	UV index forecast	PKO 6
7	Improvement of forecasts of forest fires risks	PKO 6
8	Implementation of a lightning network (operational in 2014)	PKO 7
9	Digitizing paper records of climate data (New Caledonia, Wallis & Futuna + Luganville)	PKO 8
10	Implementation of UV radiation measurement	PKO 9

3.2. Proposed Activities to be Carried out in the Future (2015-2016)

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

No	Proposed Activities to be carried out between 2015-2016	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Installation of local reception station Himawari (2015)	X													
2	Installation of a next generation AWS (including on ships operating in NC coastal waters) (2015 and next years)	X													
3	Automation of the radiosounding (2016)	X													
4	Upgrade of Internet Speed (from 2 Mb/s to 4 Mb/s or 6 Mb/s) is planned by the end of 2015	X													
5	Implementation of the next generation tool for forecasters (Synopsis) (2015)	X													
6	Availability of a dedicated operational numerical weather prediction model at 2.5 km resolution (AROME) over New Caledonia (tests in 2014 & 2015, operational in 2016)	X													
7	Contribution to SWFDDP project (2015)		X												
8	Improvement of marine observations (buoys) - Implementation of a wave buoy (2016 …if funds are found)			X											
9	Implementation of a marine model for the dispersion of marine pollutants in the NC lagoon (2016)		X												
10	Improvement of EWS for floods in New Caledonia (2016 and next years)			X											