

**TOWARDS THE ESTABLISHMENT OF A NATIONAL  
FRAMEWORK FOR CLIMATE SERVICES IN NIGER:**

**NATIONAL RETREAT:  
CLIMATE INFORMATION, AN INPUT TO DECISION  
MAKING**

***6 TO 9 AUGUST 2012,  
ICRISAT SADORÉ***

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**ROADMAP FOR THE IMPLEMENTATION OF THE  
NATIONAL FRAMEWORK FOR CLIMATE SERVICES IN  
NIGER**

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**DRAFT**

**WEDNESDAY 08 AOUT 2012, SADORÉ**

# **Building the Niger Met Service of the 21<sup>st</sup> century, Able to respond to the needs of the moment**

## **I. Context**

In Niger, observation data is available since 1905 (in Niamey and Zinder).

National services, with limited resources, are able to achieve a lot, and develop high-quality forecast products.

The problem is one of distribution of existing products.

## **II. Roadmap : Activities and Implementation Plan**

Priority Activity to Implement	Institution In Charge (Lead)  Institutions involved	Funding	Timeline
<b>1. <u>INSTITUTIONAL ANCHORAGE OF THE NATIONAL FRAMEWORK:</u></b>  <b>Coordination and facilitation by: the High Commissariat to the Initiative 3N- <i>Les Nigériens Nourrissent les Nigériens</i> (Office of the President of the Republic of Niger)</b>			
❖ Courtesy call on HC-3N and exploration of avenues for institutional anchor within the initiative 3N (Presidency)	National Weather Service - HC 3N - Ministries of Transport	No financing necessary	Thursday, August 9, 12: 00
❖ Prepare the launch Act of the National Framework for Climate Services in Niger, specifying the following terms: Framework governance, its implementation and monitoring, assessment of progress.	HC 3N - Ministry of Transport	No financing necessary	To be determined by the HC 3N.

<b>2. <u>Strategy Implementation</u></b>  <b><u>(See Appendix 1: Operational Mechanism)</u></b> <b><u>(See Appendix 2: Sector Working Groups)</u></b>			
Creation and implementation of a Interdisciplinary Climate Working Group (the <i>GIT-C</i> ), responsible for the production of climate services useful to decision making on the basis of forecasts, with the following sector declinations (see Appendix 2)	National Weather Service (DMN) - All technical services in the GTI-C (Health, Agriculture, Water Resources, Infrastructure, BTPs, Transport, Energy)	3N National Weather Service (DMN) Financial Support: - WMO	November 2012
Workshop for the Creation of the sectoral multidisciplinary Working Groups that compose the GTI-C, seats of the production of climate services:	<ul style="list-style-type: none"> <li>- National Meteo</li> <li>- 3N</li> <li>- All technical services in the GTI-C: (Health, Agriculture , Water Resources, Infrastructure, BTPs, Transport, Energy)</li> </ul>	3N Financial Support: - WMO	November 2012
❖ Creation of a Climate Disaster Risk Management WG ❖ Preliminary work	Coordination: DMN	WMO CNEDD	26-30 November 2012

for validating climate inputs required for production of climate services in the management of disasters related to weather and climate.			
<ul style="list-style-type: none"> <li>❖ Creation of Climate-Health WG (production of epidemiological alerts)</li> <li>❖ Preliminary work for validating climate inputs required for production of climate services in the Health sector</li> </ul>	Coordination: DMN	WMO	26-30 November 2012
<ul style="list-style-type: none"> <li>❖ Strengthening of the GTP (production of agro-weather advisories)</li> <li>❖ Preliminary work for validating climate inputs required for production of climate services in the Agriculture sector</li> </ul>	Coordination: DMN	3N WMO CNEDD	26-30 November 2012
<ul style="list-style-type: none"> <li>❖ Creation of a Climate-Water Resource Management WG</li> <li>❖ Preliminary work</li> </ul>	Coordination: DMN	WMO CNEDD	26-30 November 2012

for validating climate inputs required for production of climate services in the Water sector			
<ul style="list-style-type: none"> <li>❖ Creation of a Climate-Public Transport WG</li> <li>❖ Preliminary work for validating climate inputs required for production of climate services in the Transport sector</li> </ul>	Coordination: DMN	WMO CNEDD	26-30 November 2012
❖ Creation of a Climate-BTPs/infrastructure/Construction / Sanitation WG	Coordination: DMN	WMO CNEDD	26-30 November 2012
❖ Creation of an Climate & Energy WG (wind, solar, hydro)	Coordination: DMN	WMO CNEDD	26-30 November 2012
<p>Creation and Launch of the Operational Structure of the National Framework for Climate Services, anchored to the HC 3 N, that will interface between the GTI-C and the users (extension, media, cWMOunity intermediaries, end users):</p> <p>- Based on the multi-</p>	<p><b>3N</b></p> <p>- Designation of the operational structure in charge of animating, monitoring and evaluating the activities of the Framework</p>	- financial support needed?	<u>WHEN ?</u>

disciplinary sectoral WGs - Defining the strategic Framework - Establishment of the National Operational Structure in charge of animation, monitoring and evaluation of the National Framework for Climate Services, with : - Clear definition of roles and accountability of each of the structures involved in the dissemination / outreach services climate			
<b>3. <u>Communication Strategy</u></b>  <b>(See Appendix 3: Communication Strategy)</b>			
<b><u>Need 1: Distribution / Extension</u></b>			
<b>a) Specialization of communicators in climate services dissemination:</b>			
- Participation of two (02) of Niger's journalists in the Regional Workshop of ACMAD on communication of climate information, to be September 2012 in Brazzaville	<b>Journalists' Network Environment - National Weather Service (DMN)</b>	ACMAD (through the Met services of Niger)	<u>Immediately</u>

<ul style="list-style-type: none"> <li>- Networking journalists to create the National Network of journalists reporting on issues of Meteorology</li> <li>- Formulation of a project to develop a national network of capacity building for Communicators</li> <li>- National Workshop to launch the network (Workshops &amp; Study Tours)</li> <li>- Lunches Weather News - Press to improve relations between technicians and comments</li> <li>- Institutionalizing the Network?</li> </ul>	<p>Journalists' Network on Environment</p> <ul style="list-style-type: none"> <li>- CNEDD</li> <li>- HC 3N</li> </ul>	<p>Opportunities with:</p> <p>PDIC- Development Project of the Climate Information (PPCR)</p> <p>HC 3N</p>	
<p><b>b) Involvement of journalists in all extension activities of the Weather</b></p>			
<p><b>1- Protocol between DMN &amp; private media</b> (expectations, responsibilities, financial resources?)</p> <p>The Weather in finding ways to communicate to make known National Weather From Friday</p>	<p>National Met Service (DMN)</p>		<p>Immediately</p>
<p><b>2- Make the case for obtaining an official order for the National Television (ORTN) to broadcast the weather report before the</b></p>	<p>National Weather Advisor to the Ministry of Transport;</p>		<p>Immediately</p>



beginning of the news hour Rewrite letter to the Ministry of Transport, with copies to the PM's Cabinet and the Presidency	Advisors to the Presidency		
3- Request for opening a position of Communications Officer at the National Weather Service: in connivance with the national network of weather/journalists weather (to be created in Mid-Term) - Drafting of ToRs for this proposed position - Reporting to the Director of Communication of the Ministry of Transport	National Weather Service (DMN)	Department of Transport (budget allocation of the State)	2013-2015
- <b>Build the National Weather Service Web Portal:</b> One stop shop to know where to go for what information products and hydro-weather, with a : - a typology of users - invitation of users in the definition of Site Architecture - national competition for the logo of the Weather - database of multi-sector weather data	Obligation for the National Met Service	WMO support	By Friday
<b>Establishment of a Glossary of Terms on Weather in all</b>	DMN	3N CNEDD	September

<b>major National Languages: - Drafting of Terms of Reference for this activity</b>			
<b>c) Use of innovative channels to broadcast (aside from TV):</b>			
Extension of electronic mail (email) to a larger mailing list of users and administrations:  Enlist: - Farmers' organizations - Regional administrations - Technical Services, with their variations decentralized antennas	National Met Service (DMN) HC 3N	No financing needed	Immediately
Networking and use of Community Radio & Public radios - Partnership with all community radio stations across the country CPRP - Getting on the experience RANET	National Coordination of Community Radio HC 3N CNEDD	HC 3N CNEDD	2013
Use of extension agents as community relays: National Weather extension agents	National Met Service HC 3N CNEDD	HC 3N CNEDD	2013
Use of other intermediaries as community relays: NGOs	National Met Service HC 3N CNEDD	HC 3N CNEDD	2013
Use of mobile phones in innovative ways: - • SMS - • Weather alert and advisory voice recordings ('This is the president Nana speaking to you')	National Met Service HC 3N CNEDD	HC 3N CNEDD	2013

- Establishment of a fleet telephone: networking of voice telephone actors for Early Warning > Early Action			2013-2015
<b>d) Financing of extension:</b>			
- Advocacy in each department for the allocation of increased monies to fund extension	All Technical Services	State Budget	2013-2015
<b>NEED 2: Capacity Building</b>			
<b>Training of journalists on communicating climate and weather information:</b> Training modules on the weather at school journalists / Specialization offered in journalism schools in meteorology journalism	IFTIC DMN	National Framework for Climate Services CNEDD	Medium to Long term
<b>Capacity building of technical services to access, process and disseminate weather products</b> - Training, recruitment and attachment of extension agents in agriculture agro-broadcast weather	3N Ministries of Agriculture and Livestock	3N	End 2012
<b>End-user training on the uses of weather products:</b> - Strengthening capacities of producers to exploit seasonal forecasting (short-term) & agro-met advisories (mid-to-long term) - Other products available from the weather service	Peasant platform RECA AREN Facilitators of Community Radio	National Framework for Climate Services CNEDD FAO	Medium to Long term
- Training of community relays	CNEDD	CNEDD	In

for dissemination of weather products: NGOs			Process
<b>Inclusion of weather modules in school curricula</b> <ul style="list-style-type: none"> <li>- Working Session with Minister of Education</li> </ul>	CNEDD Ministry of Education	CNEDD	In Process
Modernization and densification of the weather observation network to allow data collection and forecasting over each of Niger's 267 municipalities:	National Weather Service (DMN)	World Bank/W MO: PPCR	2012-2015
Standard existing STATIONS: <ul style="list-style-type: none"> <li>- 15 synoptic stations</li> <li>- Move two stations (Tillaberi)</li> <li>- 7 climatological stations</li> <li>- Three agro meteorological stations</li> <li>- 801 rainfall stations</li> </ul>			
Creating new standardized stations : <ul style="list-style-type: none"> <li>- 19 synoptic stations</li> <li>- 30 climate stations</li> <li>- 30 stations</li> <li>- for an average of 3stations/commune</li> <li>- Taking into account differential sizes of communes, and different agro-climate zones (spatial variability) to target priority areas.</li> </ul>			
<ul style="list-style-type: none"> <li>- Construction of two equipped calculation centers</li> </ul>			
<ul style="list-style-type: none"> <li>- 2 Radars</li> </ul>			
<ul style="list-style-type: none"> <li>- Provision of a high speed internet connection to the Weather</li> <li>-</li> </ul>			
Purchase of 4 splits and a generator			

Four 4x4 all-terrain vehicles to ensure the field trips			
Short-term partnerships with existing institutions to access their stations, in order to standardize: <ul style="list-style-type: none"><li>o INERA</li><li>o ASECNA</li></ul>			
<b>Development of new products requested by users:</b> <ul style="list-style-type: none"><li>- Inclusion of locust parameters in forecasting models</li><li>- Continued forums to ask users their needs: Physical activity?</li></ul>			
Continuous training of forecasters: <ul style="list-style-type: none"><li>- Training of 6 months to a year of agents</li></ul>			
Improve science: <ul style="list-style-type: none"><li>- Improvement of agro meteorological forecasting models</li></ul>			
<b>4. <u>Monitoring and Evaluation (M&amp;E) Strategy</u></b>			
ANIMATION OF THE GTI-C: <ul style="list-style-type: none"><li>❖ Two (02) Annual Meetings of the GTPI-C, at the end and beginning of the season</li><li>❖ Regular meetings of the Working Groups created: for the production of climate services tailored to decision making in each sector</li></ul>	3N National Weather Service (DMN)	3N - Financial support needed?	TBD By January 2013

❖ Extraordinary meetings whenever needed			
ANIMATION OF THE COORDINATING STRUCTURE OF THE NATIONAL FRAMEWORK:	3N National Weather Service (DMN)	3N - Financial support needed?	TBD By January 2013
Brainstorming on ways to sustain funding Sources for the National Framework for Climate Services	3N National Meteo	3N	On the Duration
Developing a Monitoring Plan & Evaluation National Framework for Climate Services	Operational Structure Coordination designated by the 3N	3N	TBD By November 2012

**APPENDIX 1:**  
**MASTER PLAN FOR THE NATIONAL FRAMEWORK FOR CLIMATE SERVICES IN  
 NIGER**

	<b>FRAMEWORK DIAGRAM</b>	<b>INSTITUTIONAL ACHORAGE</b>
<div> <div>Communication Strategy</div> <div>Implementation Strategy</div> <div>M&amp;E Strategy</div> <div>Feedback mechanisms &amp; 2-way channels</div> </div>	<b>GTI-C</b> <b>Inter-disciplinary Working Group on Climate</b>	<b>INTERMINISTERIAL</b>
	<b>NATIONAL COORDINATION STRUCTURE FOR THE NATIONAL FRAMEWORK FOR CLIMATE SERVICES</b>	<b>High Commissariat to the Initiative 3N- <i>Les Nigériens Nourrissent les Nigériens</i> (Office of the President of the Republic of Niger)</b>
	<b>REGIONS</b>	<b>CONSEIL REGIONAL</b>
	<b>DEPARTEMENT</b>	<b>PREFECTURE</b>
	<b>COMMUNE</b>	<b>CONSEIL COMMUNAL</b>
	<b>FINAL END USERS</b>	

## **APPENDIX 2:**

### **I. Attributions and Composition of the *Groupe de Travail Inter disciplinaire- Climat (GTI-C)* : The Interdisciplinary Working Group on Climate**

**Mission:**

Produce and elaborate operational climate services, salient for the decision-making of farmers and communities vulnerable to climate changes and variability throughout Niger.

It has been proposed to implement an Interdisciplinary Working Group on Climate : the *Groupe de Travail Interdisciplinaire sur le Climat (GTI-C)*.

The GTI-C will have as its mission to  
aura pour mission to produce and elaborate operational climate services, useful for the decision-making of farmers and communities vulnerable to climate changes and variability throughout Niger.

### **II. Composition of the sector Working Groups of the GTI-C (*Groupe de Travail Inter-disciplinaire- Climat*)**

The following seven Working Groups (WGs) will have to be created, within the preparation of the Implementation of the National Framework for Climate Services :



1. **National Climate and Health Working Group**, gathering all the technical services and researchers of the Health sector composed of the following stakeholders :

Ministère de la santé publique :

- Direction des statistiques
- Direction de la Surveillance et Riposte
- CERMES
- Hôpital National de Niamey

Université Abdoumoumouni

- Dr doudou Maimouna et prof Eric Adehossi

Météorologie Nationale : Katiellou , Moussa

2. **Climate Disaster Risk Management WG**, gathering all the technical services and researchers active in the Management of disasters linked to climate and weather events, composed of the following stakeholders :

- a. Unité de Gestion des Risques de Catastrophes, SAP/CCA, Dispositif National
- b. Direction de la Protection Civile
- c. Bureau d'Etude sur les Impacts Environnementaux
- d. Représentant du Réseau National des Journalistes sur la diffusion des informations météorologiques (à mettre en place)
- e. Technicien de la DMN
- f. Communicateur du Ministère des Transports, délégué la Météo Nationale
- g. Représentants groupements de producteurs

3. **Climate – Transport/Construction/Energy WG**, gathering all the technical services and researchers in the sectors of Transport, Construction and Energy, composed of the following stakeholders :

### ***Transports***

- a. Direction des Grands Travaux
  - b. Représentant du Réseau National des Journalistes sur la diffusion des informations météorologiques (à mettre en place)
  - c. Technicien de la DMN
  - d. Communicateur du Ministère des Transports, délégué la Météo Nationale
  - e. Représentants des groupements de producteurs
- 

Furthermore, it has been noted that the following WG will be strengthened:

**4. The existing WG on agriculture (the *Groupe de Travail Pluridisciplinaire* created by the CILSS) will be replaced by a new « Pluridisciplinary WG on Rural Development », new iteration of the GTP, extended in membership to the following stakeholders :**

- a. 3 directions de la Direction Générale de l'Agriculture :
  - i. DSE
  - ii. DPP
  - iii. DSA
- b. Direction Générale de la Production Animale (DGPIA)
- c. INRAN
- d. Représentant du Réseau National des Journalistes sur la diffusion des informations météorologiques (à mettre en place)
- e. Technicien de la DMN
- f. CNESS
- g. Communicateur du Ministère des Transports, délégué la Météo Nationale
- h. Représentants des groupements de producteurs

The required preliminary work to validate the climate information inputs needed for the production of operational climate services in each sector will be the object of a Working day, during the Workshop for the Establishment of the seven sector Working Groups, scheduled for November 26-30 2012, to be organized with WMO funding support.

<b>CREATION OF THE WORKING GROUPS OF THE GTI-C</b>			
<b>Activity</b>	<b>Lead Institution</b>	<b>Financing tracks</b>	<b>Deadline</b>
❖ Creation of a Climate Disaster Risk Management WG (for the production of operational multi-hazard severe weather early warnings)	Coordination : DMN	WMO (secured)	26-30 November 2012
❖ Creation of Climate-Health WG (for the production of operational climate services in the Health sector)	Coordination : DMN	WMO	26-30 November 2012
❖ Strengthening of the GTP/ creation of the Rural Development WG (production of agro-weather advisories)	Coordination : DMN	3N WMO CCAFS	26-30 November 2012
❖ Creation of a Climate-Water Resource Management WG (for production of climate services in the Water sector)	Coordination : DMN	3N WMO	26-30 November 2012
❖ Creation of a Climate-Public Transport WG (for production of climate services in the Transport sector)	Coordination : DMN	3N WMO	26-30 November 2012
❖ Creation of a Climate-BTPs/infrastructure/Construction / Sanitation WG	Coordination : DMN	3N WMO	26-30 November 2012
❖ Creation of an Climate & Energy WG (wind, solar, hydro)	Coordination : DMN	3N WMO	26-30 November 2012

### APPENDIX 3:

#### **IDEAS TO DEVELOP THE COMMUNICATION STRATEGY OF THE NATIONAL FRAMEWORK FOR CLIMATE SERVICES**

**(TO BE FINALIZED BY THE RAPPORTEUR DMN)**

##### **- SANTE :**

###### **Canaux de transmission**

Courrier électronique

Canaux ordinaires du SNIS

Flotte

###### **Proposition de groupe Climat-Sante**

Ministère de la santé publique :

- Direction des statistiques
- Direction de la Surveillance et Riposte
- CERMES
- Hôpital National de Niamey

Université Abdoulmoumouni

- Dr doudou Maimouna et prof Eric Adehossi

Météorologie Nationale : Katiellou , Moussa

###### **Besoins :**

Prise en compte projet

Formation

Appui matériel

Renforcement des capacités

**Point Focal :** Direction de la Météorologie Nationale

##### **- Groupe BTP**

###### **Besoins :**

les hauteurs de pluies sur les dix dernières années, Prévisions de pluie et vents pour donner des messages d'alerte

Transport : Prévision hydraulique des hautes eaux, prévision sur les visibilités, tmax et min et vent dominant

L'armée : prévision des vents forts courte échéance, prévision des tmax, tmin, orages et pluie fortes

Energie : données sur les directions et forces de vent sur 30 ans, temp moyennes sur 30 ans, prévision des débits des fleuve, rayonnement solaire sur 30 ans, prévision journalière pour les mêmes données

BTP Exemple d'utilisation sur les infrastructures

Une piste aérienne, : prévalence des vents dominants, pluie, maxi et mini pression, prévision météorologique pour le transport terrestre et fluviale (forte pluie ne pas emprunter les routes .., vents et chasses sables, le temps à destination

Canaux de communication :

Communiqué radio télé ou message directes pour les transports terrestre et fluvial

Agriculture :

Quels conseils donner aux paysans et sur la base de quelles données météo

Agriculture : période de semis et le type de semence, prevision saisonnière

Infection parasitaire : Pluie de plus de 20 mm, t moyenne de 27,5 °C, pour le traitement : vitesse et direction des vents, orage 24H, plage de temp entre 6 h et 11h du matin

Conseils sur les apports en intrant : prevision 24h

Conseils sur les zones inondables prevision pluie, 24 h,

Elevage : dates probables de demarrage de plui, prevision à court et moyen terme, prevision hydrologique

Conseils sur la productivité des animaux : cumul pluviometrique

Canaux de communication :

Elev et agricul :

Radios communautaires et flottes et téléphonies mobiles et associations d'éleveurs

Mise en œuvre à travers GTP renforcé

Groupe : gestion et prévention des catastrophes.

Les produits ceux du SAP qui sont ventillés jusqu'au communes, un bulletin de decision au directeur de cabinet du premier ministre

Canaux de diffusion :

Radios communautaires, associations des producteurs, ONGs locales en plus du reseau du SAP

Schema directeur : mecanisme de dissemination des données (Meteo –gestion des catastrophes-communautés)

Suivi et evaluation :

Sensibilisation et formation à l'utilisation des produits meteo

Fiancement sources : ETAT, les 3N, dispositif national SAP

Dispositif

SAP ? METEO, Protection civile, DRE

Recommandations participants :

Proposer l'elaboration d'un glossaire sur les données climatologiques et météorologiques