

## WMO SUBMISSION TO COP 18, DOHA, QATAR, 2012

### Outcome of the Extraordinary Session of the WMO Congress with respect to GFCS implementation, October 2012

#### Executive Summary

*The Global Framework for Climate Services aims to enable society to manage the risks and opportunities arising from climate variability and change, especially for those who are most vulnerable. A climate service is considered as the provision of climate information in such a way as to assist decision-making by individuals and/or organizations. Effective climate services will facilitate climate-smart decisions that will, for example, better reduce the impact of climate-related disasters, improve food security and health outcomes, and enhance water resources management. All countries will benefit, but priority shall go to building the capacity of developing countries which are vulnerable to the impacts of climate change and variability. The Framework will be built upon five components; namely, User Interface Platform, Climate Service Information System, Observations and Monitoring, Research, Modelling and Prediction, and Capacity Building. The Framework's priority areas are closely aligned to the needs and goals addressed by the Millennium Development Goals, the Hyogo Framework for Action and the United Nations Framework Convention on Climate Change.*

#### 1. Introduction

This document is prepared in response to conclusions of SBSTA 35 on Research and Systematic Observation at COP 17, Durban, South Africa, 2011 which requested WMO to report on the outcome of its extraordinary World Meteorological Congress (Cg-Ext. (2012)), hereunder called "Congress", which was held in Geneva from 29-31 October 2012. The Congress was preceded by a Dialogue for Climate Services Users and Providers from 26-27 October 2012, which stressed the need for partnerships in addressing all the elements required for effective provision and use of climate services.

Congress adopted the Implementation Plan of the Global Framework for Climate Services (also herein referred to as the Framework), for further consideration by the Intergovernmental Board on Climate Services. It also established the Intergovernmental Board on Climate Services (the Board) as a body accountable to the WMO Congress and the respective Terms of Reference and Rules of Procedure, and approved the specific functions of the Secretariat in support of the Framework.

The Board is the body with the responsibility to oversee implementation of priority activities as set out in the Implementation Plan. It will regularly review the Implementation Plan of the Framework as required, over time.

Congress called for an immediate move to action, so that the work undertaken can result in activities on the ground which will benefit, in particular, the developing countries and requested governments to (i) provide adequate resources for strengthening weather, climate, and water observation networks, their operation, maintenance, quality control and traceability, as well as to train requisite experts with the required technical skills; and (ii) support research in climate science, climate application science and interdisciplinary earth system and social science at national, regional and global levels to improve the understanding of climate systems and their ecological, social and economic impacts and to promote the delivery of better climate services including the provision of more reliable and accurate data, products and services for enhanced decision making.

Congress also called on all United Nations system organizations, as well as all relevant organizations and entities, whether governmental or non-governmental, to give strong support to the implementation of the Framework.

## **2. Establishment of the Global Framework for Climate Services (GFCS)**

Heads of States and government ministers in 2009 at the World Climate Conference-3, recognizing that there is a growing need to improve our understanding of climate, climate predictions and our use of climate information to better serve the needs of society set in motion the process for the development of the Framework. Many countries are attempting to address these challenges by developing climate service capabilities. A climate service is considered here to be the provision of climate information (data, products and services) in such a way as to assist decision-making by individuals and/or organizations. The service component involves appropriate engagement, an effective access mechanism and responsiveness to user-needs.

Effective climate services will facilitate climate-smart decisions that will reduce the impact of climate-related disasters, improve food security and health outcomes, and enhance water resource management, for example. Priority activities will be diverted at the following challenges:

- Access to climate services needs to be established and/or improved in all countries;
- The capacity to deal with climate-related risks is lacking in many countries;
- The availability and quality of climate data are inadequate in many parts of the globe;
- Users and providers need to interact better;
- The quality of climate services needs improvement to match user requirements better.

An Implementation Plan was developed through an extensive consultative and review process to address the above-mentioned areas. .

## **3. Vision and Goals of the Framework**

The Vision of the Framework is *'To enable society to manage better the risks and opportunities arising from climate variability and change, especially for those who are most vulnerable to climate-related hazards'*.

The goals for the Framework in support of this vision are:

- *Reducing the vulnerability of society to climate-related hazards through better use of climate information;*
- *Advancing the key global development goals through better use of climate information;*
- *Mainstreaming the use of climate information in decision-making;*
- *Strengthening the engagement of providers and users of climate services;*
- *Maximizing the utility of existing climate service infrastructure.*

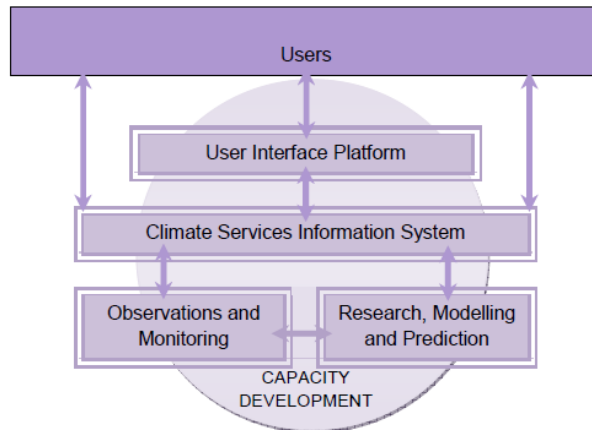
The Framework includes the following eight **Principles** for guiding successful achievement of its over-arching goals:

1. All countries will benefit, but priority shall go to building the capacity of developing countries vulnerable to the impacts of climate change and variability;
2. The primary goal will be to ensure greater availability of, access to and use of enhanced climate services for all countries;
3. Activities will address three geographic domains: global, regional and national;
4. Operational climate services will be the core element;
5. Climate information is primarily an international public good provided by governments, which will have a central role in its management;
6. Promote the free and open exchange of climate-relevant data, tools and scientifically based methods while respecting national and international policies;
7. The role of the Framework will be to facilitate and strengthen, not to duplicate;
8. The Framework will be built through user-provider partnerships that include all stakeholders.

#### 4. The Structure of the Global Framework for Climate Services

The Framework will be built upon the following **five components**, or **pillars**:

- **User Interface Platform:** a structured means for users, climate researchers and climate information providers to interact at all levels;
- **Climate Services Information System:** the mechanism through which information about climate (past, present and future) will be routinely collected, stored and processed to generate products and services that inform often complex decision-making across a wide range of climate-sensitive activities and enterprises;
- **Observations and Monitoring:** to ensure that climate observations and other data necessary to meet the needs of end users are collected, managed and disseminated and are supported by relevant metadata;
- **Research, Modelling and Prediction:** to foster research towards continually improving the scientific quality of climate information, providing an evidence base for the impacts of climate change and variability and for the cost-effectiveness of using climate information;
- **Capacity Development:** to address the particular capacity development requirements identified in the other pillars and, more broadly, the basic requirements for enabling any Framework-related activities to occur.



**Figure 1:** The structure for the GFCS and its five essential components

## 5. What is going to be done?

In the initial stages, the Framework will prioritize developing and delivering services in four priority areas that address issues basic to the human condition and which present the most immediate opportunities for bringing benefits to human safety and well-being. These priority areas are Agriculture and Food Security; Disaster Risk Reduction; Health; and Water Resources. As the Framework evolves, the needs of users in other sectors will be addressed. The Framework will also give priority to building the capacities of climate-vulnerable developing countries. This does not mean that the needs of developed countries will be ignored, since capacity development applies to all.

The Framework's priority areas are closely aligned to the needs and goals addressed by the Millennium Development Goals, the Hyogo Framework for Action and the United Nations Framework Convention on Climate Change and the Framework activities will contribute to achievements of the outcomes of Rio+20 including in the definition of the post-2015 set of global Sustainable Development Goals. Within the priority areas, particular benefits resulting from successful implementation of the Framework can be identified. For the Agriculture and Food Security sector these benefits include greater use of improved and better coordinated climate services, including seasonal forecasts, resulting in greater food production and reduced sensitivity to climate hazards. For Disaster Risk Reduction greater use of climate services will, among other benefits, lead to better asset protection and improved planning of responses to climate-related disasters. In the Health area greater understanding of the linkages of diseases to climate factors will result as well as better planning of disease control. Water resource management will benefit from improved infrastructure planning and better allocation of water resources.

Partnerships involving stakeholders at global, regional and national levels will be essential to the Framework's success.

Recognizing the principle that the Framework should build upon existing initiatives and not duplicate, there are significant opportunities for synergy with existing programmes. The Framework will be implemented by coordinating and promoting activities and projects that help to achieve its overall goals. Many of these activities will continue efforts already being made across the globe by many countries but will now fit these efforts into a coherent framework with common goals.

## **6. Activities and Projects**

The Implementation Plan identifies a series of high priority projects, formulated through a consultative process, that will address the priority areas and make significant progress toward the Framework's goals. Undertaking these projects will demonstrate the value of the Framework to providers, users and donors and ensure their sustained commitment, while delivering significant benefits to society.

Key deliverables over the initial two years are implementing the necessary governance, management and reporting frameworks; implementing the initial projects; developing regional and national capabilities; and engaging user communities.

Over the first six years the Framework aims to facilitate access to improved climate services worldwide in the initial priority areas and initiate activities in additional areas. After ten years the Framework aims to facilitate access to improved climate services worldwide and across all climate-sensitive sectors.

The first projects within the initial priority areas will be selected using guidelines aligned with the Principles and will address identified gaps. They will also contribute to developing one or more national or regional capacities, enhancing access to observations or building research capacity. The general approach will be to work with existing entities, build upon activities already underway, identify and engage with key organizations. An important outcome of these initial projects will be to learn lessons from them in order to move steadily towards sustainable and valued services.

To promote the Framework and to inform stakeholders of its activities, an effective communications strategy will be put in place. Publicising early success stories will be a particular focus of this strategy. For additional information please visit the following link: [http://www.wmo.int/pages/gfcs/index\\_en.php](http://www.wmo.int/pages/gfcs/index_en.php)

While investments in the various elements of climate services will be the largest component of the resources committed to the Framework by far, additional investment will be required to help countries, particularly developing and least developed countries develop necessary competencies and capacity to generate and use climate services, thus contributing to and benefiting from the Framework. Targeting sources of funding outside national budget processes will be required. Such sources include Development Banks, Climate Funds (such as the Adaptation Fund, Climate Investment Funds, Green Climate Fund and the Global Environment Facility), United Nations agencies, Overseas Development Assistance, regional economic groupings, national programmes and the private sector. Obtaining recognition from governments that climate services have considerable value and deserve support will be part of the challenge. In developed countries awareness of the value of climate services for economic development will need to be raised so as to encourage further investment in national facilities and also to demonstrate that investment in global services has value at the national level.

## **7. Governance: Establishment of the Intergovernmental Board on Climate Services**

The Congress decided to establish the Intergovernmental Board on Climate Services (hereunder referred as the "Board") as a body accountable to the WMO Congress under the Article 8 (h) of the Convention of the WMO.

The Congress called on other United Nations system organizations, as well as all relevant organizations and entities, whether governmental or non-governmental, to give strong support to the implementation of the Framework through appropriate engagement through the working mechanisms of the Board, contribution of expertise and resources to the Framework programmes, projects and activities and mainstreaming implementation of the Framework in their respective programmes.

### ***Mandate of the Board***

The Intergovernmental Board on Climate Services shall be accountable to, the World Meteorological Congress, which will decide on policies, principles, overall strategy and key budget parameters. The Board shall oversee and provide the overall management of the development and implementation of the Framework and coordination at the global and regional levels. The Congress defined specific functions of the Board.

### ***Membership***

Each Member of WMO is entitled to designate individual(s) to serve as member(s) of the Board and to appoint a principal member, who will normally come from the National Meteorological and Hydrological Service, who shall be regarded as a main focal point of a Member for the matters relating to the Board.

With the view to securing the widest possible knowledge and expertise pertaining to the Framework into the functioning and decision-making of the Board, governments should appropriately consider designation of member(s) for participation of individual(s) in all activities of the Intergovernmental Board.

## **8 Conclusion and recommendations**

The nature of the challenge posed by climate variability and climate change caused by human activity is unprecedented and requires a response in proportion to the scale of the problem. The Framework presents an opportunity to apply the benefits of our knowledge of the climate and existing climate infrastructure to help respond to this challenge and alleviate suffering while contributing to economic prosperity and sustainable development.

The Framework can enable society to better manage the risks and opportunities arising from climate variability and change, especially on behalf of those who are most vulnerable to such risks. This objective will be achieved through developing and incorporating science-based climate information and prediction into planning, policy and practice, accompanied by efforts to improve our understanding of climate, our predictions of climate, and, more importantly, our use of climate information to better serve the needs of society.

This Framework will build partnerships, mobilize resources, coordinate activities and facilitate the development of sustainable structures that are needed to serve society's needs effectively with regard to services based on climate information. The Framework is intended to be long-lived, and the Implementation Plan of the Framework is only a first step at achieving this long-term vision.

Development of knowledge and tools for making decisions related to adaptation to climate change can be best achieved through close collaboration among the climate service providers and users in the priority sectors; health, water, agriculture and food security and disaster risk reduction. This contribution needs to be extended to other sectors such as energy, transportation, etc. and should be done in close partnerships with various UN Agencies and Programmes.

While the provision of climate services is not new, the Framework represents a major, concerted and coordinated global effort to make accessible climate products, information and services to improve the well-being of all parts of society, vulnerable to climate variability and climate change.