



**THE
IMPLEMENTATION
OF THE GLOBAL
CLIMATE OBSERVING
SYSTEM AT THE
NATIONAL LEVEL**

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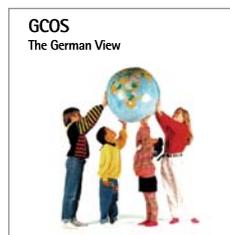
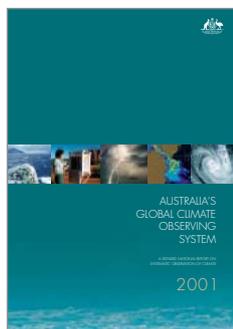
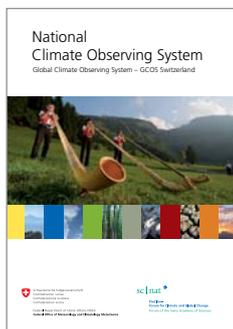
GCOS provides the international framework through which the various global observing systems and programmes operate under the auspices of WMO, IOC/UNESCO, UNEP, and ICSU. It facilitates the strengthening and coordination to meet the full range of user needs for climate and climate-related observations. These include needs for climate system monitoring, climate change detection and attribution, and assessment of the impacts of, and adaptation to, natural climate variability and human-induced climate change.

To date, 23 countries have formally appointed a GCOS National Coordinator. These include: Australia, Belize, Bosnia and Herzegovina, Canada, China, Denmark, Ethiopia, Finland, France, Germany, Japan, Mali, Moldova, Mozambique, the Netherlands, New Zealand, Portugal, the Russian Federation, Senegal, Switzerland, Thailand, the United Kingdom, and the USA.

In addition, more than 130 countries have identified GCOS National Focal Points for a range of atmospheric observations which are within the responsibility of National Meteorological and Hydrological Services. These Focal Points are responsible for data management and monitoring at the technical level.

However, GCOS National Coordinators and/or National Committees that are able to cross-manage the observation requirements of the atmospheric, ocean and terrestrial domains still need to be established in the majority of countries worldwide.

The ultimate success of GCOS depends on effective coordination at the national level of the contributions of Member countries to the WMO Integrated Global Observing Systems (WIGOS), the IOC-led and co-sponsored Global Ocean Observing System (GOOS), the FAO-led and co-sponsored Global Terrestrial Observing System (GTOS), and the many other in situ and space-based observing systems providing climate-related observation data. The need for an effectively operating GCOS



*Examples of effective coordination with Member countries:
Switzerland, Australia, Germany and the United States of America.*

has recently assumed even greater importance with the COP 15 Decision on Systematic Climate Observations in December 2009, in Copenhagen, in which the Conference of the Parties observed that not all the climate information needs of the Convention are being met and that there are still large areas in which in-situ observations are not available.

GCOS has published an *'Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC'* (GCOS-92) in 2004, and reported on the progress of its implementation tasks in 2009 (GCOS-129). An up-date of the Implementation Plan will be submitted to the 33rd Session of the UNFCCC Subsidiary Body on Scientific and Technological Advice (SBSTA) at COP 16, in Mexico, December 2010.

The strong interest in GCOS implementation by the Parties to the UNFCCC will ultimately benefit the observation networks of all countries and also assist them in meeting the objectives of the Global Earth Observing System of Systems (GEOSS), in which GCOS is designated as the climate observation component.

To assist the GCOS National Coordinators in their coordinating role, the GCOS Secretariat has developed the following Terms of Reference.

GCOS NATIONAL COORDINATORS - TERMS OF REFERENCE

The responsibility for GCOS implementation and operation at the national level in individual WMO, IOC, UNEP, and ICSU Member countries is thus usually distributed across many departments and agencies rather than being focused solely in a single agency, such as the National Meteorological Service (NMS). It is therefore useful, in order to ensure effective coordination across the GCOS-contributing organizations at the national level and to maintain a coordinated overall channel of communication with the GCOS Secretariat in Geneva, that there be a jointly designated 'GCOS National Coordinator' in each country with responsibility for as many as possible of the following functions:

- Provide a national focus to coordinate communication with the GCOS Secretariat, including updates on national GCOS activities, and, where appropriate, to participate in international GCOS-related meetings and conferences;
- Act as a national advocate for sustainable climate observation networks and systems, and for climate data generally;
- Promote adherence to the GCOS Climate Monitoring Principles and 'best practices' for climate observations;
- Understand the priorities of potential donor agencies and help to identify sources of funding for both national and international GCOS activities, including support for the implementation of agreed GCOS Regional Action Plans;

- Facilitate the identification and provision of GCOS data in a full and open environment to GCOS Data Centers;
- Assist where possible in the exchange of information on the composition and performance of national components of GCOS networks with a view to enhancing the overall performance of the networks;
- Promote the use of the ‘Revised UNFCCC reporting guidelines on global climate change observing systems’ (FCCC/CP/2007/6/Add.2) for facilitated reporting on the status of national components of GCOS;
- Work within an informal network of GCOS National Coordinators on priority GCOS issues common to all nations (e.g., funding, communications, training, data exchange, etc.);
- Participate in formal and ad hoc GCOS-related activities in the context of the United Nations Framework Convention on Climate Change, including those of the national delegations to its Conference of the Parties (COP) and Subsidiary Body on Scientific and Technological Advice (SBSTA), as well as those of GCOS itself (e.g., national reporting on systematic observation);
- Contribute to effective national coordination, through a GCOS National Committee or other appropriate mechanism, amongst those responsible for the component systems of GCOS, including especially the WMO Integrated Global Observing Systems (WIGOS), the IOC-led Global Ocean Observing System (GOOS), and the Food and Agriculture Organization (FAO)-led Global Terrestrial Observing System (GTOS).
- Liaise with national users of climate observations and information, including especially the climate research community and those concerned with the application of climate information for adaptation to climate change, to ensure that the ongoing national implementation of GCOS is responsive to the full range of national and international user needs; and
- Liaise with the Regional GCOS Coordinator, where one has been designated.

It is intended that the GCOS National Coordinators will cooperate collectively in an informal network and that groups of National Coordinators will endeavor to meet from time to time, e.g., at SBSTA sessions, to discuss issues related to GCOS and provide advice to the GCOS Steering Committee and GCOS Secretariat, as appropriate.

GLOBAL CLIMATE OBSERVING SYSTEM

GCOS Secretariat | c/o World Meteorological Organization | 7 bis, avenue de la Paix

P.O. Box 2300 | CH-1211 Geneva 2 | Switzerland

Tel.: +41 (22) 730 8275/8067 | Fax: +41 (22) 730 8052

<http://gcos.wmo.int>

