

17 October 2005

ENGLISH ONLY

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

Twenty-third session

Montreal, 28 November to 6 December 2005

Item 9 of the provisional agenda

Research and systematic observation

Progress report on developing a framework for the preparation of guidance materials, standards and reporting guidelines for terrestrial observing systems for climate

Submission from the Global Terrestrial Observing System secretariat

1. The Conference of the Parties (COP), by its decision 11/CP.9, invited the sponsoring agencies of the Global Climate Observing System, and in particular those of the Global Terrestrial Observing System (GTOS), in consultation with other international or intergovernmental agencies, to develop a framework for the preparation of guidance materials, standards and reporting guidelines for terrestrial observing systems for climate and to submit a progress report on this issue to the COP at its eleventh session. This document contains the above-mentioned progress report from the GTOS secretariat.
2. In accordance with the procedure for miscellaneous documents, this submission is reproduced* in the language in which it was received and without formal editing.

* This submission has been electronically imported in order to make it available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the text as submitted.

FCCC/SBSTA/2005/MISC.16

GE.05-63848

DEVELOPMENT OF A FRAMEWORK FOR THE PREPARATION OF GUIDANCE MATERIALS, STANDARDS, REPORTING GUIDELINES, AND ASSOCIATED DATA AND PRODUCTS FOR TERRESTRIAL OBSERVING SYSTEMS

*Submitted to the
Subsidiary Body for Scientific and Technological Advice (SBSTA) Twenty-Third Session
Montréal, 28 November to 6 December 2005*

October 2005

1. The GCOS Implementation Plan was endorsed by the Conference of the Parties (COP) on its Tenth Session (Decision 5/CP.10, Buenos Aires, 6-18 December 2004). The Plan stated (p. 9) that “the climate observing system in the Terrestrial Domain remains the least well-developed component of the global system, whilst at the same time there is increasing significance being placed on terrestrial data for climate forcing and understanding, as well as for impact and mitigation assessment”; and it identified the establishment of an international body for standards, regulatory material and guidelines for terrestrial climate-related observations to be “**a key requirement for successful implementation of this Plan**”.
2. At its Ninth Session held in Milan, 1-12 December 2003, the Conference of Parties (Decision 11/CP.9, point 8.) **invited** “the sponsoring agencies of the Global Climate Observing System, and in particular those of the Global Terrestrial Observing System, in consultation with other international or intergovernmental agencies, as appropriate, to develop **a framework for the preparation of guidance materials, standards and reporting guidelines for terrestrial observing systems for climate, and associated data and products**, taking into consideration possible models, such as those of the World Meteorological Organization/Intergovernmental Oceanographic Commission Joint Commission for Oceanographic and Marine Meteorology, and to submit a progress report on this issue to the Conference of the Parties at its eleventh session”.
3. The purpose of this note is to inform COP of the UNFCCC, through its SBSTA, of the progress made. This note was prepared by the GTOS secretariat and Food and Agriculture Organization of the United Nations (FAO).
4. The reliable assessment of global and regional environmental changes (both natural and human-induced) requires systematic, consistent and well-documented observations. Since much of the data for the terrestrial environment is obtained by national agencies and given that many national observing systems have developed independently from a common international framework, the fulfilment of this requirement presents a special challenge.
5. Through the Global Terrestrial Observing System (GTOS), the Food and Agriculture Organization of the United Nations (FAO) commissioned a report on the subject of establishing a framework for terrestrial climate-related observations. The report examined existing mechanisms employed by intergovernmental or international organizations for similar purposes, including those of FAO, the International Council for Science (ICSU), the International Organization for Standardization (ISO), the United Nations Environment Programme (UNEP), the United Nations Educational, Scientific and

Cultural Organization (UNESCO) and the World Meteorological Organization (WMO). Desirable characteristics and needed elements of an effective framework are discussed and a number of approaches that could meet the requirements are suggested. The report also identified the sectoral requirements for terrestrial climate-related observations and the corresponding key intergovernmental and national agencies responsible for the various sectors. The report is intended as background material for future discussions and is currently being reviewed by key stakeholders including ICSU, UNEP, UNESCO and WMO.

6. Due to the global character of the issue, an effective system will require the collective and continuing involvement of governments in the observing, processing and archiving activities at the national level, through progressive steps that lead to intergovernmental consensus and concerted action. However, there is a need for interim arrangements so that guidance on terrestrial observations is considered by currently existing bodies. The final mechanism adopted should not only be able to support the climate related variables but also the broader “internationally relevant” terrestrial variables.

7. Since insufficient capacity exists in the international terrestrial science community to sustain such a process, financial support may be of decisive importance. Some support could come from co-sponsoring UN agencies; however, additional sources of funds will be needed and should be considered in an implementation plan.

8. A high-level Inter-Agency Coordination and Planning Committee (ICPC, composed of FAO, UNESCO, UNEP and WMO, with participation by ICSU) has undertaken, as part of its agenda and high priority, activities towards the establishment of a joint mechanism for terrestrial observations as requested in Decision 11/CP.9, point 8. ICPC will further consider the FAO report and other options. The interests, roles and requirements of potential stakeholders (including national agencies, intergovernmental organizations, the scientific community and its programmes) will also be assessed. It is anticipated that the Sponsors of GCOS and GTOS, represented through ICPC, will develop a recommendation that when implemented would satisfy the requirement for the preparation of guidance materials, standards and reporting guidelines for terrestrial observing systems for climate, and associated data and products.

Please send correspondence to: GTOS Secretariat, Environment and Natural Resources Service (SDRN) Food and Agriculture Organization of the United Nations (FAO), Viale delle Terme di Caracalla, 00100 Rome, Italy, tel.: (+39) 06 57052565, fax: (+39) 06 57053369, e-mail: gtos@fao.org
