UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Subsidiary Body for Scientific and Technological Advice Thirty-seventh session Doha, 26 November to 1 December 2012

Item 7 of the provisional agenda

Research and systematic observation

Report on progress in the development of methodologies, standards and protocols for climate-related terrestrial observations and related matters

Submission from the Global Terrestrial Observing System

- 1. The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its thirty-third session, welcomed the report by the Global Terrestrial Observing System (GTOS) on the framework for climate-related terrestrial observations, and the work plan on the development of standards and protocols for the terrestrial essential climate variables (ECVs) assessed. It encouraged the GTOS to continue coordinating the development of methodologies for climate-related terrestrial observations and to continue working with its sponsors and the International Organization for Standardization, and in broad consultation with relevant partners, towards implementation of that work plan, including through mobilization of the necessary resources. It also encouraged Parties, in close cooperation with the GTOS, to support and facilitate the development of terrestrial standards and to improve their terrestrial networks. Furthermore, it noted the increased usefulness of the terrestrial ECVs beyond observations of climate change, such as for biodiversity and desertification, and it encouraged the GTOS to increase synergy with ongoing relevant initiatives.¹
- 2. Also at its thirty-third session, the SBSTA invited the GTOS to report to the SBSTA, at its thirty-fifth session, on progress made on the matters referred to in paragraph 1 above.²
- 3. At SBSTA 35, the secretariat of the GTOS provided a summary of progress (FCCC/SBSTA/2011.MISC.14), indicating that the report it had been invited to prepare by the SBSTA at its thirty-third session for the thirty-fifth session of the SBSTA, would be submitted to the SBSTA at its thirty-sixth session. The SBSTA agreed to consider this

FCCC/SBSTA/2012/MISC.15

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¹ FCCC/SBSTA/2010/13, paragraphs 47–49.

² FCCC/SBSTA/2010/13, paragraph 50.

information at its thirty-sixth session in conjunction with any updates received from the GTOS on this matter.³ At SBSTA 36, however, the report by the GTOS was not available.

- 4. In response to the invitation referred to in paragraph 2 above, the secretariat of the Global Climate Observing System (GCOS) has submitted a report on progress on 19 October 2012 on behalf of the GTOS.
- 5. In accordance with the procedure for miscellaneous documents, this submission is attached and reproduced* in the language in which it was received and without formal editing.

³ FCCC/SBSTA/2011/5, paragraph 44.

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.

Submission from the secretariat of the Global Climate Observing System on behalf of the Global Terrestrial Observing System

SBSTA 37 Final as of 19 October 2012, GCOS Secretariat

Title:

Report on progress in the development of methodologies, standards and protocols for climate-related terrestrial observations and related matters. Submission invited from the Global Terrestrial Observing System

Submission from the secretariat of the Global Climate Observing System

At its thirty-third session, the SBSTA invited the Global Terrestrial Observing System (GTOS) to report to the SBSTA at its thirty-fifth session on the progress made on matters relating to the development of methodologies, standards and protocols for climate-related terrestrial observations, improvement of terrestrial networks and synergy with on-going relevant initiatives.

The climate-related component of GTOS provides the terrestrial component of the GCOS programme. Matters related to the climate component of the GTOS are addressed by the Terrestrial Observation Panel for Climate (TOPC), which is sponsored jointly by GCOS, the FAO-led GTOS and by the World Climate Research Programme (WCRP).

GTOS had already provided reports to SBSTA on issues related to developing a framework for the preparation of guidance materials, standards and reporting guidelines for terrestrial observing systems for climate.⁴

This issue and its impacts and consequences were analysed and further discussed in meetings of the TOPC and of the overarching GCOS Steering Committee. As a consequence, the GCOS Steering Committee, at its 19^{th} session in September 2011, expressed its concern "at the amount of work and expense required to establish standards for the terrestrial ECVs through a formal International Organization for Standardization(ISO) process and at the risk that emphasis on standardisation would divert effort from other tasks." After extensive further consultations by GCOS and its partners, it is suggested to maintain the focus on keeping the highest level of data quality and error estimates, as well as to guaranteeing data quality.

Therefore, GCOS and GTOS through their shared terrestrial expert panel TOPC and in cooperation with partner organisations responsible for global observing systems for land will continue to work on updating and upgrading existing ECV reports on standards aiming at establishing best practices (http://www.fao.org/gtos/topcECV.html). Establishing good practice guides is a significant way forward in standardizing terrestrial observations, globally while at the same time ensuring support from the organisations and people that perform the observations.

FCCC/SBSTA/2011/misc.14, FCCC/SBSTA/2010/misc.10, FCCC/SBSTA/2009/misc.8, FCCC/SBSTA/2008/misc.12.

In this regard the GCOS secretariat, as part of its reporting, will update SBSTA on progress made a
appropriate and looks forward to continuing its cooperation with the UNFCCC.