

Decision -/CP.9

Global observing systems for climate

The Conference of the Parties,

Recalling Article 4.1(g)–(h) and Article 5 of the Convention,

Further recalling its decisions 14/CP.4 and 5/CP.5,

Having considered conclusions of the Subsidiary Body for Scientific and Technological Advice at its fifteenth, sixteenth, seventeenth and eighteenth sessions,

Having considered and noted with appreciation *The Second Report on the Adequacy of the Global Observing Systems for Climate in Support of the UNFCCC* (second adequacy report),

Recognizing the importance of collaboration among the sponsoring agencies of the Global Climate Observing System,

Recognizing further the need for a clear definition of the long-term needs of the Convention and of the short-term priorities concerning the support of systematic observation and networks, in particular taking into account the needs of developing countries,

Recognizing also the value of indigenous knowledge in supplementing regional and national climate monitoring systems,

Welcoming the efforts of the ad hoc Group on Earth Observations to develop a 10-year implementation plan for a comprehensive, coordinated and sustained Earth observing system or systems,

Welcoming further the establishment of the Global Climate Observing System Cooperation Mechanism by Members of the sponsoring agencies of the Global Climate Observing System, under the guidance of the Global Climate Observing System steering committee, as well as the flexible approach that has been adopted to participation in the mechanism,

Noting that the Global Climate Observing System Cooperation Mechanism will address priority needs for improvements in global observing systems for climate in developing countries,

1. *Requests* Parties to review the second adequacy report within the context of their national capabilities and to consider what actions they can take individually, bilaterally, multilaterally and through coordinated international programmes to address the findings, noting, in particular:

- (a) The importance of maintaining the operation of baseline stations in the long term;
- (b) That homogeneous long-term climate records represent a national heritage and are necessary, inter alia, to improve the basis for climate assessment and adaptation measures;
- (c) The wealth of information that can be provided through the digitization, analysis and exchange of historical information;
- (d) The importance of adhering to applicable adopted principles of free and unrestricted exchange of data and products, especially with respect to the set of Essential Climate Variables as defined in the second adequacy report;
- (e) The value of reporting on such actions in national communications;

2. *Requests* the Global Climate Observing System secretariat, under the guidance of the Global Climate Observing System steering committee, taking into account international and intergovernmental mechanisms, to coordinate the development of a phased 5- to 10-year implementation plan for the integrated global observing systems for climate, using a mix of high-quality satellite and in situ measurements, dedicated infrastructure and targeted capacity-building, such a plan:

(a) To draw on the second adequacy report and the views of Parties;

(b) To take into consideration existing global, regional and national plans, programmes and initiatives, such as the Global Monitoring for Environment and Security programme and the Integrated Global Observing Strategy partnership;

(c) To be based on extensive consultations with a broad and representative range of scientists and data users;

(d) To include indicators for measuring its implementation;

(e) To identify implementation priorities, resource requirements and funding options;

3. *Invites* the Global Climate Observing System secretariat and the ad hoc Group on Earth Observations to collaborate closely in developing their respective implementation plans;

4. *Invites* the ad hoc Group on Earth Observations to treat global climate monitoring as a priority and to adopt a balanced approach to the application of in situ and remote-sensing systems for climate monitoring;

5. *Invites* the Global Climate Observing System secretariat to provide a progress report on the development of the implementation plan to the Subsidiary Body for Scientific and Technological Advice, at its twentieth session;

6. *Requests* the Global Climate Observing System secretariat to conduct an open review of the implementation plan before its completion and to submit the final implementation plan to the Subsidiary Body for Scientific and Technological Advice, at its twenty-first session;

7. *Invites* Parties to participate actively in the above-mentioned review process;

8. *Invites* 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;

9. *Invites* the relevant national entities, in cooperation with the sponsoring agencies of the Global Climate Observing System and other international and intergovernmental agencies, to make available on a sustained basis a range of integrated climate products relevant to the needs of the Convention, as identified in the second adequacy report;

10. *Invites* the Global Climate Observing System secretariat, in conjunction with the Global Ocean Observing System secretariat, to provide information to the Subsidiary Body for Scientific and Technological Advice, at its twenty-second session, on progress made towards implementing the initial ocean climate observing system;

11. *Requests* the Subsidiary Body for Implementation, when next reviewing the guidelines for the preparation of national communications:

(a) To incorporate into the guidelines the supplementary reporting format developed by a group of Parties and made available to the Subsidiary Body for Scientific and Technological Advice at its thirteenth session;

(b) To replace the “GCOS/GOOS/GTOS Climate Monitoring Principles”, annexed to decision 4/CP.5, with the modified set agreed by the World Meteorological Organization at its Fourteenth Congress and approved by the Committee on Earth Observation Satellites at its seventeenth plenary, to better reflect the needs and capabilities of the in situ and satellite monitoring communities;

12. *Encourages* all Parties to provide reports on systematic observation in accordance with the agreed reporting guidelines, in recognition of the importance of accurate, credible and comprehensive information on global observing systems for climate as a basis for planning and implementing priority improvements;

13. *Urges* Parties in a position to do so, in particular Parties included in Annex I to the Convention, to support, including by contributing to relevant funding mechanisms such as the Global Climate Observing System Cooperation Mechanism, the priority needs, identified in the second adequacy report and regional action plans, in developing countries, especially the least developed countries and small island developing States, noting that filling the gaps in baseline atmospheric networks is an urgent need that should be met during the next two years;

14. *Requests* the Global Climate Observing System secretariat to include information on the operation of the Global Climate Observing System Cooperation Mechanism in its regular reports to the Conference of the Parties.
