

WGClimate terms of reference, priorities and governance

Mark Dowell

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Rationale

- Many Climate Initiatives undertaken by space agencies
 - SCOPE-CM
 - ESA Climate Change Initiative
 - NOAA Climate Services
 -
- Many relevant existing Scientific Groups
 - IOCCG
 - GHRSSST
 - Sea surface topography
 - ...etc...
- CEOS virtual Constellations contribute in specific ECV areas
 - Ocean Surface Topography
 - Precipitation
 - Ocean colour
 - Ocean Surface Vector Winds
 - Land Surface Imaging
 -
- Need to have overall coherent approach

Advance unedited version

Draft decision -/CP.15
Systematic climate observations

The Conference of the Parties,

Recalling Article 4, paragraph 1(g–h), and Article 5 of the Convention,

Further recalling decisions 8/CP.3, 14/CP.4, 5/CP.5, 11/CP.9, 5/CP.10 and 11/CP.13,

Having considered the conclusions of the Subsidiary Body for Scientific and Technological Advice at its thirtieth session,

Noting the important role of the Global Climate Observing System in meeting the need for climate observation under the Convention,

1. *Expresses its appreciation:*
 - (a) To the secretariat and sponsoring agencies of the Global Climate Observing System for preparing the report on progress with the *Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC* (hereinafter referred to as the Global Climate Observing System implementation plan);
 - (b) To the secretariat and sponsoring agencies of the Global Terrestrial Observing System for developing a framework for the preparation of guidance materials, standards and reporting guidelines for terrestrial observing systems for climate;
 - (c) To the Committee on Earth Observation Satellites for its coordinated response, on behalf of Parties that support space agencies involved in global observations, to the needs expressed in the Global Climate Observing System implementation plan;
2. *Recognizes* the significant progress made during 2004–2008 in improving the observing systems for climate relevant to the Convention;
3. *Notes* that, despite the progress made, only limited advances have been made in achieving long-term continuity for several in situ observing systems and that there are still large areas, in Africa for example, for which in situ observations and measurements are not available;
4. *Also notes* that not all climate information needs under the Convention are being met;
5. *Urges* Parties to work towards addressing the priorities and gaps identified in the report on progress with the Global Climate Observing System implementation plan, in particular the implementation of the regional action plans that were developed during 2001–2006, and ensuring sustained long-term operation of essential in situ networks, especially for the oceanic and terrestrial domains, including through provision of the necessary resources;
6. *Invites* relevant United Nations agencies and international organizations to do the same;
7. *Encourages* Parties in a position to do so to support activities aimed at sustaining climate observations over the long term in developing countries, especially the least developed countries and small island developing States;
8. *Invites* the Global Climate Observing System secretariat, under the guidance of the Global Climate Observing System Steering Committee, to update, by the thirty-third session of the

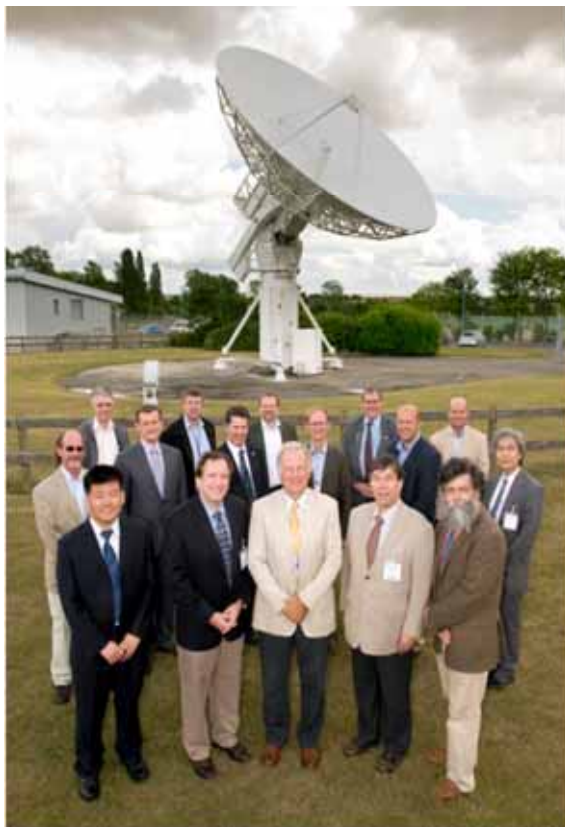
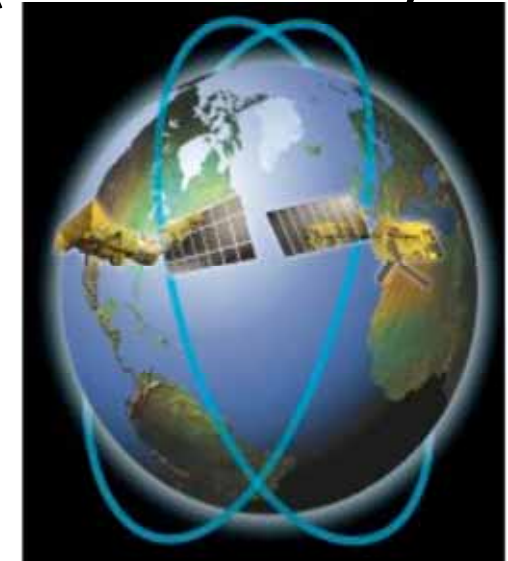
Encourages the **Committee on Earth Observation Satellites** to continue coordinating and supporting the implementation of the satellite component of the Global Climate Observing System;

Urges Parties that support space agencies involved in global observations to enable these agencies to continue to implement, in a coordinated manner through the **Committee on Earth Observation Satellites**, the actions identified in the updated report of the **Committee on Earth Observation Satellites**,¹ in order to meet the relevant needs of the Convention, in particular by ensuring long-term continuity of observations and data availability.

Committee on Earth Observing Satellites NEW - Working Group on Climate (WGClimate)



WGClimate was endorsed as a full CEOS WG (joining WGISS, WGCV and WGEdu) and will coordinate and encourage collaborative activities between the world's major space agencies in the area of climate monitoring



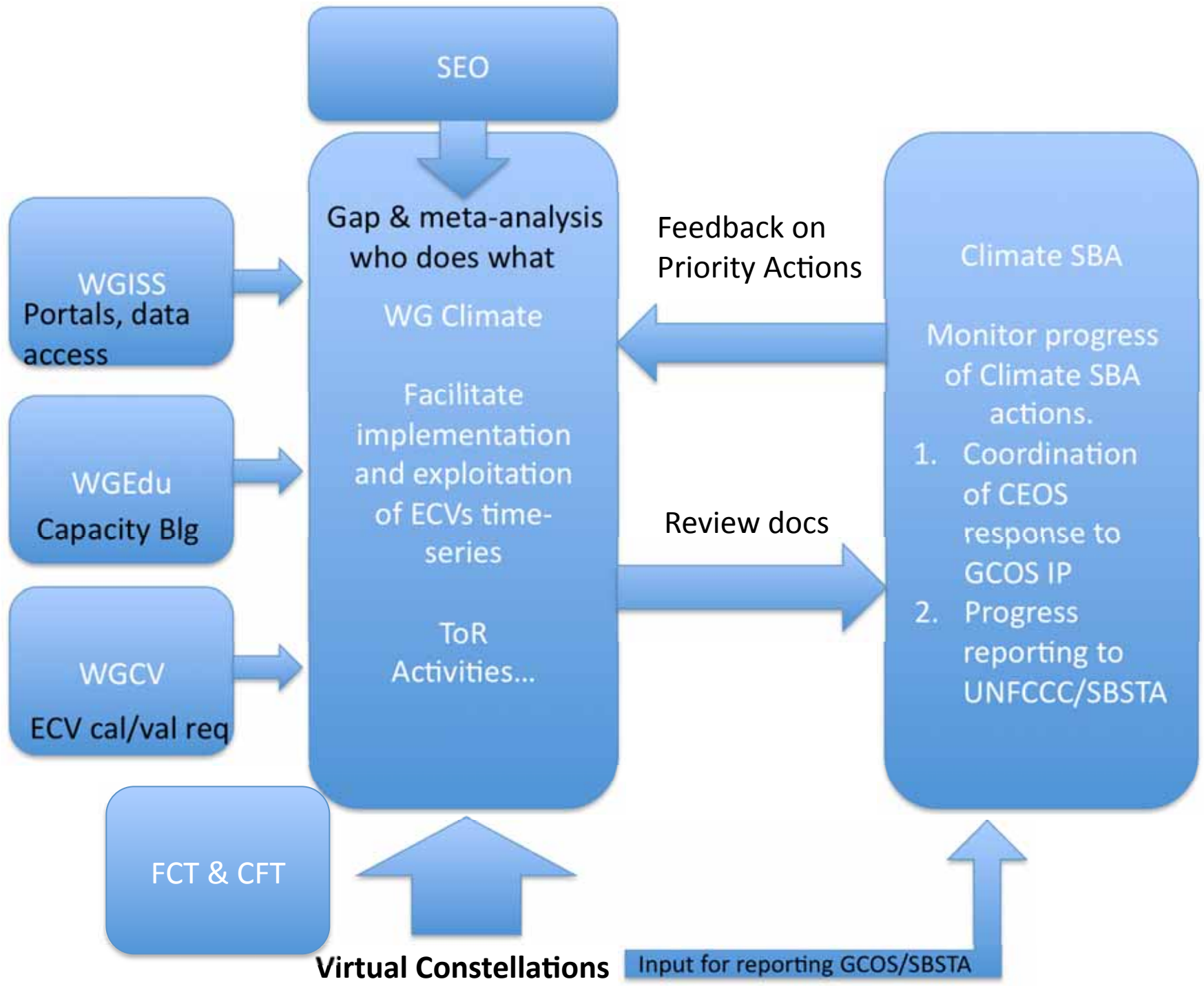
Mandate of this new Working Group is to **facilitate** the **implementation** and **exploitation** of Essential Climate Variable (**ECV**) time-series through coordination of the existing and substantial activities undertaking be CEOS member agencies.

Chair of CEOS WGClimate
Mark Dowell (EC/JRC)
Vice Chair John Bates (NOAA/NCDC)

Membership

- Mark Dowell - EC/JRC (Chair)
- John Bates – NOAA (Vice Chair)
- Tamotsu Igarashi - JAXA
- Joerg Schulz - EUMETSAT
- Yang Jun - CMA
- Andy Shaw - UKSA/NCEO
- Pascal Lecomte - ESA
- John Dwyer - USGS
- Eric Lindstrom - NASA
- Didier Renaut - CNES
- Daniel Alejandro Vila - INPE
- Stella Melo - CSA
- Albrecht von Bargaen - DLR
- Robert Husband - EUMETSAT
- Mitch Goldberg – NOAA (Climate SBA)
- Brian Killough – NASA (SEO)
- Shelley Stover – NASA (SEO)
- Kerry Sawyer – NOAA (DCEO)
- Carolin Ritcher - GCOS
- Barbara Ryan - WMO
- Jerome Lafeuille - WMO
- Seonkyun Baek - GEO

Membership of CEOS VCs and WGs (?)



Proposed Terms of Reference

- The CEOS Climate Working Group will:
 - Review and assess, on behalf of CEOS, the generation of Fundamental Climate Data Records (FCDRs) and derived Essential Climate Variable (ECV) climate products supported by Member space agencies, complementary with existing entities and roles;
 - Contribute to the review of compliance of satellite missions and products with the GCOS Climate Monitoring Principles and with the “Guideline for the Generation of Datasets and Products meeting GCOS Requirements” (GCOS-143);
 - Identify multi-agency implementation teams for each product and review their actions, and ensure that a coherent implementation plan exists for each and every product taking full account of other pertinent international initiatives such as SCOPE-CM and science programmes;
 - Make recommendations to the above teams and receive recommendations from them, for transmission to CEOS Agency Principals;
 - Ensure coherence of climate product generation supported by space agencies, including with other relevant international initiatives, in particular SCOPE-CM, and);
 - Undertake any other relevant activities as instructed by CEOS Chair.

Proposed Terms of Reference

- In addition, it will:
 - Provide guidance to CEOS regarding climate-related Tasks in the GEO Work Plan, and review relevant reports on behalf of CEOS Plenary, including:
 - The update of documents such as the CEOS Response to GCOS requirements, and
 - The update of reports to SBSTA/UNFCCC on CEOS climate actions, as requested;
 - Support generally the work of GCOS in defining and delivering the Essential Climate Variables required by the UNFCCC;
 - Support and advise on the overall relation of CEOS to the UNFCCC and its subsidiary bodies, and to the IPCC.

Proposed Terms of Reference

- In carrying out the tasks above, it will:
 - Undertake an analysis, **addressing each ECV in turn**, of the extent to which the current status of production of satellite climate records meets the GCOS requirements, including an analysis of the consistency of definitions of ECVs;
 - Work with the **CEOS Virtual Constellations** to ensure a coherent and consistent approach to the provision of climate records across their various topical areas;
 - Promote openness, traceability and access to climate data, codes and products;
 - Facilitate the **inter-comparison of model outputs** with data by identifying a subset of parameters key to the IPCC needs and encourage providers to deliver the necessary data in the required form;
 - **Interact with Science programs such as WCRP and IGBP** to assist them in enabling their analysis, assessment and feedback to space agencies on the production of climate records;
 - Build on the work of the **CEOS WGCV, GSICS, and the QA4EO** initiative to support the calibration and validation underpinning the production of climate data records;
 - Coordinate with **existing in situ networks** to integrate complementary measurements and observations.

Priorities to be discussed at first meeting

- CEOS ECV Inventory:
 - Discussion on maturity index
 - Discussion on climate information stewardship issues
- Climate Monitoring Architecture
- ECV by ECV analysis/assessment
- Outreach/Networking: both internal with other CEOS WGs and VCs & external SCOPE-CM/GSICS and WCRP CMIP

Representation at meetings

- Jan 2011: GCOS Satellite Supplement Update meeting
- Jan 2011: WMO-GCOS Continuity and Architecture Requirements for Climate Monitoring meeting
- Feb 2011: WGClimate technical meeting to discuss SEO support and Architecture (Dowell, Bates, Killough, Stover, Lecomte, Husband)
- Mar 2011: CEOS-CGMS Climate monitoring Architecture writing team meeting
- Apr 2011: WCRP-GCOS WOAP meeting

- John

CEOS WGClimate Governance

Outline

- Mission Statement TBD
- Membership
- Objectives
- Terms of Reference
- Governance
- Implementation

Mission Statement

Membership

- Membership in the WGClimate is open to all members of CEOS as defined in the [CEOS Terms of Reference](#), including observers and affiliates. Members may include in their delegations to WGClimate meetings any participants who have relevant expertise to contribute to the objectives of the WGClimate.

Objectives

- The objectives of the WGClim are to enhance coordination and complementarity, to promote international cooperation, and to focus activities climate for the benefit of the CEOS members and the international user community.
- Foster implementation and exploitation?

Terms of Reference

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- Contribute to the review of compliance of satellite missions and products with the GCOS Climate Monitoring Principles and with the “Guideline for the Generation of Datasets and Products meeting GCOS Requirements” (GCOS-143),
- Identify multi-agency implementation teams for each product and review their actions, and ensure that a coherent implementation plan exists for each and every product taking full account of other pertinent international initiatives such as SCOPE-CM and science programmes,
- Make recommendations to the above teams and receive recommendations from them, for transmission to CEOS Agency Principals,
- Ensure coherence of climate product generation supported by space agencies, including other relevant international activities, in particular SCOPE-CM, and
- Undertake any other relevant activities as instructed by CEOS Chair.

Terms of Reference (cont.)

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- The update of documents such as the CEOS Response to GCOS requirements, and
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- Support the work of GCOS in defining and delivering the Essential Climate Variables required by the UNFCCC;
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Terms of Reference (cont.)

- Undertake an analysis, addressing each ECV in turn, of the extent to which the current status of production of satellite climate records meets the GCOS requirements, including an analysis of the consistency of definitions of ECVs
- Work with the CEOS Virtual Constellations to ensure a coherent and consistent approach to the provision of climate records across their various topical areas
- Promote openness, traceability and access to climate data, codes and products
- Facilitate the inter-comparison of model outputs with data by identifying a subset of parameters key to the IPCC needs and encourage providers to deliver the necessary data in the required form.

Governance

- WGClimate shall operate under the procedures defined in a specific guidance document. This document is based on a similar document defined for WGCV.
- Meetings shall be run using Parliamentary (Robert's) Rules of Order.
 - In general, WGClimate meetings will be informal and guided by the 'sense of the Working Group' with all input valued and respected
 - Parliamentary Rules will only apply to clearly identified 'decisional' issues and the WGClimate will convene in Executive Session for consideration of such issues
 - When in Executive Session, only WGClimate Electors are allowed to address the issue, with exceptions allowed as the discretion of the Chairperson

Governance (cont.)

- The electors are (one vote each):
 - The WGClimate Chair
 - The WGClimate Vice-Chair
 - Each of the existing WGClimate Subgroups – one vote per subgroup representing the consensus of that subgroup.
 - Each participating delegation (representing the consensus within that delegation) who is a full member of CEOS.

Implementation

- WGClimate Chairperson serves a 2-yr term (exception for start for 3-yr term? Discuss)
 - Chairperson is responsible for providing Secretariat
- WGClimate Vice Chairperson serves a 2-yr term then serves as Chairperson for a 2-yr term

Implementation (cont.)

- Candidates
 - Candidates to be put forward for the election shall be declared before or at the beginning of the plenary meeting that is held immediately prior to the one at which the election is to be held.
 - The candidate shall be sponsored by a CEOS member. A letter written by the CEOS Principal or on his or her behalf, shall support the candidate for the four years mandate (two years as Vice-Chair followed by two years as Chair) as well as guaranteeing secretarial support throughout the two years chairmanship.
 - Each candidate shall be introduced by the Chair during the last plenary meeting immediately prior to the WGClimate plenary meeting at which the election is to be held. Each candidate shall have at least 15 minutes to present his or her objectives and programme.
- Elections
 - The elections are held at the end of the WGClimate plenary meeting.
 - The WGClimate secretary is responsible for collecting the votes and preparing the results.
 - The WGClimate Chair announces the results of the vote immediately after.
- CEOS Endorsement
 - The elections are confirmed after endorsement by the CEOS member during the CEOS plenary