

**REPORT OF THE COMMISSION FOR CLIMATOLOGY
MANAGEMENT CORE GROUP MEETING**

(Toulouse, France, 9 - 11 September 2003)

**WORLD METEOROLOGICAL ORGANIZATION
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Report of the Commission for Climatology Management Core Group Meeting

1. OPENING OF THE MEETING

Mr. Olivier Moch, Deputy Director of Météo-France opened the Commission for Climatology (CCI) Management Core Group (MCG) Meeting at 09h00 on 9 September 2003, and welcomed the participants to Toulouse and to the Météo-France facility. He noted the recent flooding and heat waves in Europe and stressed the importance of all aspects of climatology.

Mr Y. Boodhoo, CCI President, thanked Météo-France for hosting the meeting and welcomed all participants (see Annex 1). The working arrangements for the session were established and with several revisions, the agenda was adopted (see Annex 2).

2. REPORTS OF THE PRESIDENT AND VICE-PRESIDENT OF THE COMMISSION

Mr Boodhoo and Mr Vent-Schmidt, CCI Vice President, reviewed their activities, recent meetings and progress in the work of the CCI since the First Meeting of the CCI Management Group (MG) in Berlin, Germany (5-8 March 2002). Participants were urged to raise awareness of the work of the Commission through brochures and at meetings, and to increase interactions with WMO's Regional Associations (RAs), with other agencies and organizations (e.g. WHO, WTO (tourism), DMC, ACMAD, IRI) and with end users. A current 'hot topic' is human well-being, a theme consistent with the Millennium Development Goals.

The need to develop CCI guidance on regional and national issues related to applications of climate data, and to finalize CCI input on climate requirements for in situ and remotely sensed data was stressed. Several new CLIPS showcase projects (African and Mediterranean countries) are being considered. It was noted that RBCNs have a potential role in support of Climate Monitoring activities, but that many developing countries do not have sufficient digital data for use in climate prediction systems.

Key meetings for the period leading up to CCI XIV (2005) were discussed (see Annex 3).

Actions:

- Finalize development of satellite & in situ requirements for climate (Mr. Vent-Schmidt, asap)
- Finalize and publish pamphlets, brochures on various socio-economic sectors, e.g.:
 - Human well-being (Mr Boodhoo, underway);
 - El Niño (WCP, updates as required);
 - Food Production (WCP with CAgM, underway)
- Establish the Climate Alert System (details discussed under agenda item 9)
- Develop guidance materials for Climate and Health (ETs on Climate and Health and Health Indices)
- Define CCI strategy for coordination with WCP-water
- Advise that the CCI will be providing input to the WCRP for climate requirements for satellites (Mr Boodhoo).

3. REPORTS BY THE CHAIRS OF THE OPAGS

The Chairs of the three CCI Open Programme Area Groups (OPAGs) provided status

reports on progress made in establishing their Implementation/Coordination Teams (ICTs) and Expert Teams (ETs) and in carrying out the work assigned in their various Terms of Reference.

OPAG 1 (Climate Data and Data Management) has an ICT, four ETs and several rapporteurs. Work on data and data management issues is proceeding but with uneven participation across the various teams. A Guidance document on Climate Observation Networks and Systems and data rescue has been prepared. Input is being gathered on climate-related Statements of Guidance (SoGs). An article on Climate Data and Data Management was published in the WMO Bulletin. Guidance material has been prepared for the Rescue, Preservation and Digitization of Climate records. A brochure on the importance of Climate Data Rescue has been prepared. An OPAG 1 web page has also been developed. Key priorities for OPAG 1 are to enhance participation in the work of the OPAG and its ETs; to further the development of guidance material; to develop training and education opportunities to extend guidance; to contribute to the Guide; to initiate more inter- and intra-commission activities (e.g. with CBS and CIMO) and to assist development of Climate Alert Systems.

It was noted that North Korea has a written record of climate extending back to 1065, and that China has offered to facilitate discussions with N. Korea on a possible ARCHISS/DARE project to access and digitize these data. One of the Expert Teams should take on a role in this effort. The President of the Commission has had correspondence with the Chinese Meteorological Agency on this issue.

Actions:

- Neil Plummer will explore the requirements for a project to digitize the long, North Korean written climate record through the relevant Expert Team.
- Mr Boodhoo will forward correspondence and background information on this to Neil Plummer.

OPAG 2 (Monitoring and Analysis of Climate Variability and Change) has an ICT, 2 Expert Teams and several Rapporteurs. Progress has been made on World Weather Records, Regional Climate Change Workshops and in development of Statements of Guidance on Metadata and Homogeneity, and on Data rescue.

The latest Biennial Review (#7 in the series) is nearing completion. The CCI Core Management Group agreed that it is time for the Global Climate System Reviews (GCSRs) to evolve. The Bulletin of the American Meteorological Society publishes a global climate review annually, in a timely fashion. WMO should consider co-publishing this article, however, it was felt that more comprehensive international input might be required for this article to meet the WMO requirements.

Action:

D/WCP will discuss, with NCDC and AMS, possible coordination with WMO on their global review, published annually in BAMS.

OPAG 3 (Climate Applications and CLIPS Programmes) has an ICT, nine Expert Teams and a number of Rapporteurs. Unlike OPAGS 1 and 2 that deal with more traditional WMO/WCP programmes and initiatives, this OPAG has many 'new' activities such as seasonal prediction. Some of the applications ETs are built on pre-existing activities (for practical purposes) and do not best represent the full suite of what needs to be accomplished. There is mixed responsiveness from the various Teams. Issues raised include the concurrence process (and selection of the best experts for the teams), and communications on activities and progress. A web site for OPAG 3 is under development.

4. REVIEW OF THE OPAG MEMBERSHIP

In general, membership of the various ETs in OPAGs 1 and 2 is in good shape (mainly Met. Service people). However, OPAG 3 still needs work to find the right experts. This is complicated by the fact that more of the expertise required resides outside the met services. Ken Davidson noted that it was important to consider regional balance across the OPAGS, when considering new members and leaders for the Expert Teams, and that it is necessary to maintain regional balance in the ICTs. Also, in accordance with Resolution 4 of CCI XIII (to keep in force Resolution 18 of CCI XII), where feasible, women should be strongly considered candidates to carry out the work of the Commission. The Core Group agreed upon a number of specific changes to be made across the three OPAGS, and that formal letters were required to thank the departing members for their contributions. Details of the decisions on team changes are below.

Action:

- Mr Boodhoo will write letters to ET and OPAG leads that will be stepping down at the end of the first 2-year phase from their respective teams, thanking them for their participation.

4.1 Climate Data and Data Management (OPAG 1)

Actions:

- Mr Masika is stepping down as Chair of OPAG 1 and Neil Plummer will now chair the OPAG and head up the ICT. Mr Boodhoo will invite Peter Ambenji, Kenya, to be Co-Chair of OPAG 1.
- Tom Peterson will discuss progress with Jeff Arnfield (Chair of the ET on Metadata for Climate Applications) and his NCDG Supervisor.
- Additional experts for this ET could include Tsoi Yip (MSC, Canada) and one from Australia (preliminary contact by Neil Plummer).

4.2 Monitoring and Analysis of Climate Variability and Change (OPAG 2)

Actions:

- Tim Owen will be stepping down as chair of the ET on Data Set Catalogues (DSC). Volker Vent-Schmidt will contact Jose Antonio Lopez Diaz (Spain) to request that he be the new Lead.
- The Secretariat will write to the PR USA to request that Larry Nicodemus be approved to become a member of the ET on DSC.

4.3 Climate Applications and CLIPS Programmes (OPAG 3)

Actions:

- Mark Plantico wishes to step down as Chair of the ET on Training in Urban Climatology. Dr Nyenzi will contact Sue Grimmond to invite her to become the new ET Chair. The name of ET 3.9 will be revised as the ET on Urban Climatology including Training.
- Mr Boodhoo will contact Bob Bornstein to invite him to join the ET on Urban Climatology.
- Margo Guda will likely step down as Chair of the ET on Energy. Mr Boodhoo will write to Sandra Robles-Gil (Mexico) to invite her to become the chair of the ET.
- Mike Harrison is stepping down as OPAG 3 Chair and Pierre Bessemoulin will now serve as chair and as lead for the ICT. Mr Boodhoo will write to Mohammed Kadi (Algeria) to invite him to become co-chair.

5. GUIDE TO CLIMATOLOGICAL PRACTICES

Considerable support for development of Part II exists in the training materials of the various Met. Services, such as Météo-France, but the Guide needs to reflect a CCI consensus. Written Guidelines being developed by the ETs will be useful, although the revised Guide will be much smaller than the collected sum of all the Guidelines being prepared. Once the preliminary materials have been gathered, a meeting would serve to synthesize and assure consensus. It was recommended that a consultant be hired to ensure high-quality graphics, and a common look and feel to the text. The core group agreed that the deadline for preliminary contributions would be March 2004.

There is little in the outline for Part II of the Guide on uses of climate data, but Chapter 5 of Part I does discuss applications and services. Part I will soon be finished, as the deadline for finalization of Chapter 5 is mid-October 2003.

The revised Guide is to be presented to CCI XIV (2005), so the work should be finished by spring 2005.

Actions:

- Pierre Bessemoulin will contact Francis Zwiers (Canada) to request his training materials used in a Barbados workshop on statistical methods. These may help prepare the Guide text for Ch. 2.2.
- The Guide will include a segment on calculation of mean temperatures, in Section 2.3 on Data Handling Methods (2.3.7).
- Neil Plummer will prepare content for Guide sections 2.1.1-2.1.5 with OPAG 1 and WCDMP materials.
- Tom Peterson will use the Guideline on metadata and homogeneity to help develop section 2.3.6.
- Pierre Bessemoulin will inform Guide contributors of a proposed deadline of 6 months for delivery of materials for Part II (i.e. mid March 2004).
- The Guide will include a segment (2.4.7) on subjective analysis (Tom Peterson will provide the content).

6. WMO MANDATORY PUBLICATIONS BY CCI

A number of technical documents, mainly out of print, have been identified as candidates for revision or replacement. In several cases the original author may still be working in the field and may be interested in providing the update. The Core Group agreed that the appropriate ETs should consider whether any action is required, and if so, if it should be revision or replacement.

Actions:

- There are four outdated Technical Notes on urban climatology: No.s 134, 149, 150 and 187. Pierre Bessemoulin will contact the new Chair for ET 3.9 (tentatively Sue Grimmond) for an analysis and proposals, including verification that TN 187 belongs under this ET for revision.
- Pierre Bessemoulin will ask ET 3.13 (Climate Services for Energy) to review TN 172 and 175 Volker Vent-Schmidt will ask Hartwig Dobesch (Austria) to review these as well.
- Pierre Bessemoulin will set up a group (drawn from ET 3.6, End User Liaison) to scope a replacement document for TN 145, on Economic Benefits of Climatological Services, and to consider whether socio- as well as economic benefits should be considered.
- Tom Peterson will contact Blair Trewin (ET 2.2 on Data Set Catalogues) to draft an update to WCDMP Publication No. 10 on the Calculation of Standard Normals.
- Neil Plummer will contact the Australian expert interested in updating the WMO

publication on the Number of Thunderstorm days, to scope a project.

7. WMO QUALITY MANAGEMENT FRAMEWORK

Attaining ISO9000 certification is unlikely, in the short term, for many smaller meteorological services, so WMO is investigating its own Quality Management Framework.

The Guide to Climatological Practices must provide guidance in accordance with this framework. The Commissions (e.g. the CCI) should provide guidance that would help Members ensure that they deliver appropriate levels of performance (e.g. with respect to practices and procedures for climate data, control mechanisms for education and training, etc.).

8. PAPER ON WMO CLIMATE ACTIVITIES

EC LV requested the SG WMO to work closely with the EC-AGCE to develop a discussion paper on WMO's climate activities, to be presented to EX LVI. It is to include an assessment of why IACCA was not effective, and a strategy for ensuring WMO leadership in climate. The WCP is taking a lead role in preparation of this 25-50-page paper. Two consultants will be hired. One will document the past, the second will provide future directions. The IPCC, WCRP, GCOS, HWR, PWS all have a stake, as do other agencies (UNEP, FAO etc.).

It is proposed that two meetings be held, the first, internal, the second will include outside agencies. The draft will have to be available by February 2004, for the next meeting of the EC-AGCE.

The Core Group agreed that the CCI should play a strong role, and position itself and the WCP for stronger future leadership in those climate activities where WMO has expertise. The CCI should give careful consideration to issues, gaps and topics not being met by current structures.

Action:

- Volker Vent-Schmidt will seek participation of Mike Coughlan, and jointly they will provide CCI input to the discussion paper on WMO climate activities – including a clear statement of where the CCI should be in 10 years time. Deadline is January 2004. Mr Boodhoo will approve the input.

9. OTHER MATTERS

ENSO

The USA has proposed a new 'Continuous Scale' ENSO index and seeks international recognition of it for North American operations. It was noted that the CLIVAR Working Group on Seasonal to Interannual Prediction (WGSIP) had proposed that a three-month sliding average based on Niño3.4 SSTs, i.e. an 'oceanic ENSO scale', not prescriptive on impacts, was best for global purposes. This concept would eliminate many misunderstandings over timing on events, as there would be no hard definitions of El Niño and La Niña. Ref: CLIVAR WGSIP, 7th Session (19-22 November 2002, Cape Town, South Africa) <http://www.wmo.ch/web/wcrp/documents/wgsip7rpt.pdf>

The WGSIP (CLIVAR), therefore, would not support the US proposal for definitions of thresholds for regional or global use but would have no objection if the US chose to use the scale for its own activities. There would be no need for CCI endorsement of a scale used by one country. Any global scale or definitions would have to be carefully discussed and vetted amongst all interested Members and organizations, and is at least a moderate

priority for the CCI.

Actions:

- Tom Peterson will find out from NOAA if Canada, Mexico and other countries in RA4 were compliant in institution of the proposed North American Nino3.4 Index.
- Mr Boodhoo will scope interest in developing a global consensus on a standard ENSO index and possibly definition of ENSO events, and will contact other commissions, the JSC of WCRP, JCOMM, etc. and other organizations (IRI, etc.) to initiate a dialogue.

GCOS Statements of Guidance on Climate Applications

OPAG 3 noted that the GCOS 'Statements of Guidance on Climate Applications' covers the needs of modellers (there are SoGs for Seasonal to Interannual Forecasts; Monitoring Climate Change; and Monitoring Climate Variability), but has had little input from experts who provide applications to user groups such as farmers, water managers, etc. Further, there is an issue as to whether data specific to the applications (i.e. health or agricultural data) should be covered under the SoG (these are not presently a WMO responsibility). The AOPC and GCOS (through the Second Adequacy report as well) have both assumed some responsibility in this issue, as should the CCI. The Climate Change Detection ET has developed tables of the climate data required for climate change studies. GCOS will present the revised Statements document to the CBS ET on Observational Data Requirements and Redesign of the GOS (ET-ODRRGOS), 3-7 November 2003.

Action:

- Volker Vent-Schmidt will co-ordinate a CCI response to GCOS on their draft Statements of Guidance (SOG) for Climate Applications and will provide this to the President of the Commission for approval. This input will provide clear guidance from a broad CCI perspective on regional and national data and network issues (including requirements for data quality, spatial and temporal resolution, variables, monitoring accuracy, etc.). A thorough assessment may take many months to complete.
- Volker Vent-Schmidt will discuss with Raino Heino the possibility of CCI representation at the next session of the CBS ET-ODRRGOS (3-7 November 2003).
- Neil Plummer will progress this through the new OPAG 1 ET on national networks.

EC AGCE

The Core group recommended that the CCI should be represented at the next session of the EC- AGCE. The discussion paper on WMO climate activities will be tabled, and there will be discussion on the internal coordination for climate. The Third World Climate Conference will be on the agenda at the 2005 EC.

CCI XIV

Korea has formally offered to host and China has informally offered to host the CCI XIV (2005). The Core Group agreed that fundraising, to support the attendance of experts from developing countries at the preceding technical conference (or series of workshops), should be initiated. The target is 75 to 100K USD.

Actions:

- Mr Boodhoo will write to China to confirm their commitment to host the 2005 CCI in Beijing.
- CCI management group will contribute to ideas for the workshops on Climate as

Resource, to be held prior to the next CCI meeting. Suggested themes include data rescue, CDMS, climate change detection indices, climate applications/CLIPS, etc. The goal of these activities would be a significant increase in datasets.

Climate Alert/Watch System

The CCI Core Group agreed that WMO cannot assume responsibility for an operational function, and that responsibility for provision of any climate watches or alerts resides with Members and organizations (IRI, BOM, CPC, etc.) However, WMO can and will provide guidance to Members on how to initiate and conduct such alerts, and also will work with the RCCs and RAs to build global or regional consensus on large-scale issues such as ENSO.

Actions:

- An ET will be established to develop the concept of climate 'Alerts', to scope out what is already being done by various Member countries and Organizations through a survey or questionnaire, to assess what needs to be monitored in order to optimize effectiveness of any alerts and to develop guidance on climate watches. The title will be ET to develop guidance for 'Climate Watches'.
- Tom Peterson will ask Panmao Zhai to chair the new ET, which will report to OPAG 2. Other potential experts for this ET are Vern Kousky (CPC), Chet Ropelewski (IRI), and Scott Power (BOM).
- Tom Peterson will contact the Chair of the ET on End User Liaison to nominate someone from his group for the new ET (e.g. Macol Stewart).
- Mr Boodhoo will nominate someone from his region for the new ET.
- After the ET has scoped the issues, Mr Boodhoo will ask the Presidents of the RAs (and heads of RCCs) to consider the role of the regions in any Alert/Watch system.

WMO Conference on Decision Processes

WMO Congress has endorsed holding a conference on decision processes early in 2005. A proposal to change the theme to climate risk and risk management was tabled, and it was noted that risk management can provide an important link between issues of variability and change. The CCI Core Management Group discussed refocusing towards decision processes related to adaptation to climate variability and change, covering adaptation to beneficial as well as detrimental aspects of change in climate. The phrase 'risk assessment for climate' was preferred over 'climate risk'. It was recommended that the theme for the conference remains as originally proposed with one theme being oriented toward "risk assessment for climate".

Actions:

- CCI OPAG Chairs will ask their ETs to develop themes for the Conference.
- The Expert Team on End User Liaison will be asked to set the final title of the conference, to scope the requirements and choose the themes, to identify the organizations that need to participate (IPCC, UNEP, UNDP, Red Cross, FAO, EHO, UNESCO and IOC/UNESCO, ISDR, IRI, APN, GEF, World Bank, NGOs, etc.). This work needs to be completed by December 2003.
- The Chair of the ET on End User Liaison will invite additional experts to join his team to participate in this (e.g. Roberto Lenton (IRI), Holger Meinke (AU) and Mike Coughlan (AU)).

Earth Observation Summit, 31 July 2003

Volker Vent-Schmidt provided an update on decisions from the July EOS and reviewed the GEO structure and tentative membership of the sub-groups. WMO is represented on each

group. There is concern that this initiative could undermine and/or delay WMO activities, and possibly divert funds that otherwise would be applied to WMO initiatives.

Action:

- Volker Vent-Schmidt will keep the CCI Core Group informed of any pertinent developments in the Earth Observation System process.

10. CLOSURE OF THE MEETING

Mr Boodhoo closed the meeting at 17h00 on Thursday, 11 September 2003.

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FINAL AGENDA

1. OPENING OF THE MEETING
 - Organization of the meeting
 - Adoption of the agenda
 - Working arrangements
2. REPORTS OF THE PRESIDENT AND VICE-PRESIDENT OF THE COMMISSION
3. REPORT BY THE CHAIRS OF THE OPAGS
 - OPAG 1: Climate Data and Data Management
 - OPAG 2: Monitoring and Analysis of Climate Variability and Change
 - OPAG 3: Climate Applications, Information and Prediction Services
4. REVIEW OF OPAG MEMBERSHIP
5. GUIDE TO CLIMATOLOGICAL PRACTICES
6. WMO MANDATORY PUBLICATIONS BY CCI
7. WMO QUALITY MANAGEMENT FRAMEWORK
8. PAPER ON WMO CLIMATE ACTIVITIES
9. OTHER BUSINESS
10. CLOSURE OF THE MEETING

Key Meetings, 09/2003 – 09/2005**High priority:**

- Global meeting (2 members from each region and 2 WCP staff) to establish requirements for Regional Climate Centres: Geneva, February 2004.
- Joint meeting of ET on Climate and Health with ET on Health Indices: Date TBD.
- Meeting to organize the work to develop Part II of the Guide to Climatological Practices: September 2004.
- CCI Core Group coordination meeting for CCI XIV: March 2005.
- WMO conference on decision processes and risk assessment for climate, early 2005 (exact conference title and date TBD).
- Joint meeting for urban climate/economic benefits/renewable energy to develop guidance materials and pamphlets: Date TBD.

Medium priority:

- Joint AgM-CCI meeting on climate prediction and food production (role for CLIPS Focal Points).
 - WMO/UNESCO –WCP Water meeting: an Expert Meeting on ‘Hydrologic Sensitivity to Climate Conditions’, December 2003.
 - WCP-HRW meetings on flood prediction.
 - CCI meeting to provide a broad review of the draft requirements for climate as developed/assembled by CCI/Volker Vent-Schmidt.
 - Meeting with RAs to discuss establishment of a globally acceptable standard to measure the state of ENSO.
 - A ‘Malaga-style’ meeting to further address guidance and related issues for OPAG 1.
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