

**WORLD METEOROLOGICAL ORGANIZATION
COMMISSION FOR BASIC SYSTEMS**

MANAGEMENT GROUP

NINTH SESSION

GENEVA, 13–15 NOVEMBER 2008



FINAL REPORT

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Executive Summary

The ninth session of the CBS Management Group (MG) was held in Geneva, Switzerland from 13 to 15 November 2008. The MG reviewed the activities, which had taken place since its last session, and addressed the evolving needs of each of its programmes and their alignment with the WMO Strategic and Operating plans, including preparation of the CBS Operating Plan 2008 to 2011. It reviewed the CBS working structure, including proposed OPAG's structure and Expert Teams and considered improved working methods for CBS, including mechanisms for recognition of significant experts' contribution. It reviewed progress of the planning for the fourteenth session of CBS to be held from 25 March to 2 April 2009 in Dubrovnik and agreed upon the provisional agenda. It also reviewed preparatory activities for the WIGOS Technical Conference to be held 23-24 March 2009.

General Summary of the work of the meeting

1. ORGANIZATION OF THE SESSION

1.1 Opening remarks

1.1.1 The ninth session of the CBS Management Group (MG-9) was held in Geneva, Switzerland from 13 to 15 November 2008. The meeting was chaired by the CBS president, Mr A. Gusev. The list of participants is given at the end of this report.

1.1.2 The president of the Commission, Mr Gusev, welcomed all participants. He noted this is the last meeting of the Management Group before the fourteenth session of CBS (CBS XIV). He recalled that MG-8 had set out on a path to align CBS with the new WMO strategic plan. An important part of MG-9 is to review the work done so far in light of the future perspective of CBS with respect to new working arrangements, principles, structure and related issues in preparation for the next session of CBS.

1.1.3 The Director of the Observing and Information Systems Department (D/OBS), Dr W. Zhang, welcomed all participants and restated the meeting objectives re the pending CBS-XIV and work targets for MG-9. He emphasised that the current WMO Strategic Plan provided clear goals and that he expected a CBS operating plan to guide CBS through the next financial period noting Congress XV decisions:

- Relating CBS to WIGOS where CBS has a major role, including Pilot and Demonstration Projects and associated liaison with all Technical Commissions and Regional Associations activities;
- Coordination with GEO, noting WMO systems should be a WMO contribution to GEOSS;
- Reduced costs of constitutional bodies sessions.

He noted that the timing of CBS sessions aligned well for providing input into the next WMO Strategic Plan being developed for consideration by EC-LXII with a view to Cg-XVI.

1.2 Adoption of the agenda

1.2 The agenda was adopted by the participants. It is reproduced at the beginning of this report.

1.3 Working arrangements

The meeting agreed upon its working hours.

2. IMPACT ON CBS ACTIVITIES AND PRIORITIES OF DECISIONS, GUIDANCE AND REQUIREMENTS FROM CONGRESS, EXECUTIVE COUNCIL, REGIONAL ASSOCIATIONS AND PRESIDENTS OF TECHNICAL COMMISSIONS SESSIONS

2.1 The session reviewed relevant extracts from the abridged final report of EC-LX, noting EC expected each technical commission to prepare a note on lessons learnt, experiences gained and prospective challenges in the course of implementation of the current WMO Strategic Plan. It also noted the requirements to reduce costs, the need for alignment with strategic thrusts, the need for establishing performance monitoring and self assessment. EC also emphasized the importance of CBS guiding the use of cost-effective modern technologies, especially Information and Communication Technologies for assisting developing and least-developed countries, and working with WMOs LDC Programme. The MG also noted EC had agreed in principle with the CBS and CHy proposal for a scheme recognising volunteerism in support of the commissions' activities, and agreed upon recommended procedures as per nominations, performance monitoring and recognition of experts.

3. CBS PROGRAMME ALIGNMENT WITH THE WMO STRATEGIC PLAN AND WMO OPERATING PLAN

3.1 Mr Dieter Schiessl, Director of the WMO Strategic Planning Office (D/SPO) briefed the MG on the progress of WMO strategic planning processes including implementation of the present 2007 to 2011 Strategic Plan, Operating Plan and Results Based Budgeting. He also addressed the work being undertaken towards the next strategic plan for beyond 2011. D/SPO highlighted the importance of Operating Plans in linking the many deliverables to the 13 Expected Results (ER). D/SPO noted that the feedback from the Presidents of Technical Commissions (PTC) has been incorporated into the next planning regime with the introduction of the Key Outcomes (KO) which will be measured against Key Performance Indicators (KPI) rather than being tied directly to the ER. He emphasised that the KO and KPI will be the key focus of the Technical Commissions and WMO Departments while EC, Cg and the Regional Associations will be focussing on the Top Level Objectives, the Strategic Thrusts and the ER. The meeting noted the positive timing of the strategic process with respect to the timing of scheduled CBS sessions and that it is the first time commissions have been able to contribute to the future plans in a timely and effective manner.

3.2 D/SPO noted that EC-LX made the PTC a formal meeting of WMO so outcomes and recommendations can be used by constituent bodies and their subgroups and expert teams. He stated that the PTC along with various inter-commission coordination and task groups will be important elements in achieving cross-commission coordination in the strategic planning process.

3.3 The session reviewed the draft new CBS Operating Plan 2008 to 2011 prepared by the Vice President of CBS based on the CBS plan as approved at CBS XIII and CBS Extraordinary Session (2006), and mapped to the structure of the 2008 to 2011 WMO Operating Plan. The MG agreed to support the draft CBS Operating Plan, agreeing also to support the continued improvement of this document before CBS. The vice-president and OPAG Chairs held a working meeting on 15 November AM to further develop the document. It was agreed to inform CBS of the main ideas presented by the D/SPO and to discuss a draft CBS Operating Plan at CBS XIV. To further this goal, the OPAG chairs agreed to refine the deliverables and performance indicators prior to the December deadline for submission of papers for the upcoming session of CBS. The session also considered the monitoring and evaluation system and noted it desired some guidance or process for assisting CBS to implement the required monitoring. Furthermore, it was agreed that the Secretariat will provide a brief update to CBS XIV on the strategic processes, incorporating advice and decisions from relevant planning meetings scheduled to take place in the first quarter of 2009.

4. CBS ACTION ON SPECIFIC WMO AND INTERNATIONAL PROGRAMMES AND PROJECTS

4.1 WMO Integrated Observing System (WIGOS)

4.1.1 The MG considered the progress of the development of WIGOS including an overview of the first meeting of the EC/WG/WIGOS-WIS Sub-Group on WIGOS (SG-WIGOS) that immediately preceded the current MG-9 meeting. It noted that the SG-WIGOS had reviewed the WIGOS Concept of Operations (CONOPS) and sought to clarify the concept of WIGOS. The MG noted that the WIGOS pilot projects were moving forward and that CBS had been represented in all pilot projects so far, although this had been mostly related to the WIS component of WIGOS. The meeting noted that six of the eight Demonstration Projects have moved forward or at least proposed projects. The MG agreed it should continue to support WIGOS pilot and demonstration projects and noted it is difficult to expect the Secretariat to fund such participation before discussion at CBS XIV. It recommended the WIGOS team should follow up on getting additional resources by providing better information on WIGOS. In particular, that for the WIGOS trust fund to grow they need to make the WIGOS concepts clear so that Members can understand the potential benefits in order to encourage the contribution of additional funding.

4.2 WMO Information System (WIS)

4.2.1 The MG noted and supported the report from Prof. G.-H. Hoffmann, Chairperson of the Inter-commission Coordination Group on WIS (ICG-WIS), including the outcome of the fifth session of the ICG-WIS (Brasilia, July 2008). In particular it noted the need to produce guidance material for Members to implement WIS, and the role of Mr Fred Branski (USA) in leading the creation of a Manual on WIS. The president highlighted the EC-LX requirement for early identification of WIS centres; the designation procedures for WIS centres will be a very important component of CBS activity up to and at the next CBS session. In this regard, the meeting approved the ICG_WIS recommendation to establish an ad-hoc WIS expert team within CBS to guide and manage the CBS assessment of demonstrated capabilities of candidate GISC and DCPC centres. The meeting noted that the list of names proposed for the WIS team included technical expertise of a very high calibre; this presented an opportunity to make the most of the willingness of these experts to work for WIS.

4.3 World Weather Watch Programme (general considerations)

4.3.1 The CBS president highlighted that one general issue for MG is the importance of keeping a clear image of programmes roles, especially for continuity. This is particularly so for the World Weather Watch (WWW). Noting that D/SPOs presentation highlighted the desire of the Strategic Planning Working Group to reconnect the role of the Programmes, the MG recommended making a strong link from the Programmes to the key outcomes. The MG fully concurred with the president in stressing the importance of the WWW continuing to appear as a major WMO Programme. The MG noted that the WWW is far broader than WIGOS and looked at the end to end activities of the traditional weather services. It is pretty clear that NMHS have broadened the scope of the services delivered to users including climate and hydrology. The challenge for this commission is that the WWW is actually much broader than just weather services. The MG also emphasized that the complementary role of PWS to WWW is fully appreciated by all Members, especially in developing and least developed countries, an aspect that supports the importance of maintaining the visibility of these programmes.

4.3.2 The chair of the OPAG on PWS concurred that WWW is a brand of high value, giving the example that in the media world and elsewhere, people find comfort in the concept that NMHS experts are watching over the weather. The meeting agreed and noted that the benefit of the WWW brand has been demonstrated over and over and that it did not want to lose that brand. The MG recalled that WWW was an outcome of a UN decision in 1963.

4.3.3 The president thanked the group for supporting his belief and noted that the end to end system of the WWW is a principle to be maintained.

4.4 WMO Space Programme (general considerations)

4.4.1 The session noted that the ongoing development of the Space Programme continues to progress and has not been seriously impacted by the current world financial crisis; however, this issue will need to be monitored over coming years. Given these concerns, the meeting appreciated the commitment of the space components of the GOS to actively identify the necessity of more efficient integration of different satellite systems such as between GEO/LEO, as well as between Operational/R&D satellites. It also noted the proposal that the Global Space-Based Inter-Calibration System (GSICS) be a new pilot project for WIGOS

4.4.2 The MG was pleased to hear of the increasing participation of agencies as centres of excellence (CoE) including Russia and Argentina. CoEs provide an important contribution to training. The meeting noted that training and capacity building remain as key tasks for the Space Programme, especially for developing and least developed countries.

4.4.3 Recent highlights of the Space Programme included the development a new working group on radio occultation and the continued advances in IGDDS and RARS with the sharing of satellite data. The session noted there is more work to do on how to continue improvements in the service and utilisation of data.

4.5 Other international programmes and projects: GEO, DRR, QMF, THORPEX)

GEO

4.5.1 The session reviewed GEO activities relating to CBS in the light of Congress's requirements to ensure WMO Members benefit from WMO's contribution to GEO. A key activity is the move within GEO to take a more strategic view, with the GEO Work Plan to be reviewed at GEO-V in Bucharest in the week beginning 17th November. Initial reviews focus on the 2 year targets for the 2009-2011 workplan, with the 6 to 10 year plan expected to be developed soon. WMO participants in GEO have been working to refine relevant sections of the draft revised plan, in particular the references where WMO's role is clearly understated.

4.5.2 The meeting noted that from a systems perspective, there are some concerns that GEOSS is starting to focus on developing technologies rather than sticking to established stable standards. It is important for operational systems such as WIS, that the need for stability and reliability remain a priority. Also, it is important to keep clear that WIS is an information system that contributes to GEOSS, and that GEOSS is a system of systems offered on a voluntary basis with no requirement for ongoing commitment.

4.5.3 The MG considered the above aspects and highlighted that there are some fundamental issues that have been present all along with GEO. One has been that WMO observing and collecting systems are the unique weather, water and climate related systems and that the free exchange of this data has been the basis for what and how we know about climate change. It is important that we continue to try and get this recognized and incorporated into the GEO workplan and documentation.

DRR

4.5.4 The session reviewed the report from the DRR Rapporteur concerning CBS activities in support of disaster risk reduction (DRR). It noted the great success of the Severe Weather Forecast Demonstration Project in Africa (SWFDP) and that it has now become a joint project between PWS and GDPFS. It was pleased to see the SWFDP being expanded across all of Africa and the strong support for the project being shown by Members. The MG supported the idea of expanding these projects into places like the southwest Pacific and recognised that there will be new challenges, especially with respect to communications issues.

4.5.5 The meeting noted other DRR initiatives, including the CHy flash flood guidance system and the Shanghai early warning system. It noted that the Shanghai project was now investigating incorporation of now-casting systems and techniques as demonstrated at the 2008 Beijing Olympics under the WWRP Forecast Demonstration Project.

4.5.6 The session looked at the need for WMO to be able to show how Members services impact on the mitigation of disasters, and concluded that WMO needs to start a systematic way of collecting such data. The **Director, Weather and Disaster Risk Reduction Services Department (D/WDS)**, **Dr Geoffrey LOVE**, commented that the idea of building a secretariat database would probably not be effective due to a lack of potential buy-in or commitment by Members and would very possibly be under-funded. He identified a need for CBS to establish a framework for the collection and exchange of disaster information and seek Member support for sustaining the operation of relevant databases..

4.5.7 The MG considered other issues relating to the future work of DRR within the secretariat including:

- building capacity to contribute to disaster mitigation (eg. SWFDP);
- cooperation and collaboration with UN agencies; and

- opportunities for utilising aid agencies.

These are fundamental questions on the utilisation of DRR staff. Do we work with UN, aid agencies or other activities? It was noted in particular that many aid agencies tend to want to put a fixed amount of money to address issues leading to a fixed outcome, but want to leverage WMO staff rather than pay for additional staff. The cost is that WMO staff would be taken away from the normal secretariat work. The MG expressed the view that the focus is to continue to facilitate Members' activities. It highlighted the need for collaboration between observation networks, nowcasting systems, information systems and disaster areas. The key point is the need for coordination and adequacy of both observation systems and real-time information systems so that when a potential disaster is approaching, Members can immediately deliver appropriate advices. WMO should be able to provide strong guidance on the setting up of disaster early warning systems.

4.5.8 The president concluded that CBS has a key role in these matters and that these projects demonstrate the benefits. CBS should show its support for these and similar ideas in the future. We need time to prepare what part of our activities should be amplified, or provide some additional resources for understanding what disasters do and their impact in different countries. He noted this is very similar to the comments from the President of WMO that WMO needs tools to statistically understand disasters, impacts and mitigation. The meeting agreed on the need for the Secretariat and rapporteur to provide a CBS XIV working document, noting how CBS should and could be more involved in DRR, including emerging issues.

QMF

4.5.9 The session noted that the agreement between WMO and ISO, the scope of which largely extends beyond QMF matters, has been signed, and we now have a process to interact with the standards organisation. It was noted that D/WDS is the secretariat focal point for the Quality Management Framework (QMF) relating to the ISO9000 and D/OBS is the secretariat focal point for QMF with respect to CIMO and other World Weather Watch related standards.

4.5.10 The session was briefed on the aviation requirement for ISO9000 QMF and highlighted that use of ISO9000 series was not necessary for all functions and elements of WMO, as there are additional costs in maintaining ISO9000 compliance. It was also noted that the disaster information collection has been particularly difficult because there is no DRR QMF framework or appropriate metadata. The MG noted any such QMF will come under pressure in disaster events as it comes into sharp focus. The WMO QMF will be a combination of ISO9000, best practices and recommended procedures.

4.5.11 The meeting requested that the Rapporteur for QMF prepare a paper for CBS XIV describing the status and progress of the QMF.

THORPEX

4.5.12 Prof. Hoffman reported on THORPEX highlighting that THORPEX has requested the ET-ADRS look at the use of NetCDF, XML and other aspects of data representation systems. The meeting noted the role of GIFS and the new requirements coming out of this work that will have an impact on WMOs observations and information systems.

Other international projects

4.5.13 The meeting noted there were other international projects, including the International Polar Year (IPY), and that IPY in particular had a real issue of data legacy that will be of interest to CBS. It also noted that consideration of IPY is included on the proposed agenda for CBS XIV

5. CBS WORK PROGRAMME

5.1 OPAG on Integrated Observing Systems

5.1.1 The MG was informed of the activities carried out by the OPAG-IOs since MG-8, the contributions of the expert teams in achieving progress in so many areas of their work and the

plans for the future. This included the development and review of a Vision for the GOS in 2025, noting technological advances and pressures facing NMHSs. The document is being used to review the Implementation Plan for the Evolution of the GOS (EGOS-IP) and was presented at recent CGMS by D/OBS and Dr James Purdom (Chair OPAG-IOS). In their meeting report, CGMS requested the satellite agencies to use the Vision as a guide for developing their own forward plans. It will now go forward to CBS-XIV for adoption.

5.1.2 The MG appreciated the efforts of the ICT-IOS in undertaking a detailed study of the WIGOS Development and Implementation Plan (WDIP) noting there were a number of issues raised on a variety of points, especially the need to clarify some areas of the WDIP, particularly in relation to the process that would follow the completion of the Pilot Projects and Demonstration Projects. It noted the suggestion that CBS should play the leading role in WIGOS development and implementation and the recommendation that the GCOS Reference Upper Air Network (GRUAN) be included as a WIGOS pilot project. Similarly, the meeting noted the desire for the Satellite Programme to be more evident in the pilot projects, especially in the hydrological and marine areas, to foster more effective integration in satellite and in-situ observations.

5.1.3 The session noted the proposed revisions of the Terms of Reference (TOR) of the ICT-IOS, its Expert Teams and Rapporteurs, and the future Work Plans for all the Expert Teams and recommended the addition of specific TORs highlighting the role of ICT-IOS in WIGOS. The meeting supported the proposal of two new expert teams: ET-AIR which will deal with integration of AMDAR into WIGOS and ET-SBRSO which will deal with the area of surface-based remote sensing.

5.2 OPAG on Information Systems and Services

5.2.1 The meeting reviewed the report of the OPAG-ISS. In addition to issues addressed in the report of the fifth session of the ICG-WIS the MG noted the successful progress of the ISS expert teams and the proposed restructuring and TORs of future ISS expert teams, with a focus on cross cutting activities and an increase in inter-commission representation on the ETs. It noted the ICT-IOS already includes TORs related to WIGOS but recognised the president's desire to have a standard TOR for all ICTs.

5.2.2 The session noted the data management reports and the progress on data representation systems, and the reported findings that there is a significant increase in the number of Members now having migration plans in place for the move to table-driven code forms (TDCF). The meeting was pleased to see the progress now evident in the development of a WMO profile for the ISO19115 metadata standard including the refinement of the initial version and a plan for key activities for the next CBS inter-sessional period. It noted the progress of the integrated WWW monitoring process and the invitation for Members to participate in the monitoring of observations presented in TDCF in addition to traditional alphanumeric codes. The MG highlighted the ICT-IOS requirement to include in monitoring a more accurate assessment of active stations, including a need to identify stations that have been listed as active but are yet to report, as distinct from active stations that have gone silent.

5.2.3 The MG noted the progress on the WIS implementation with the development of WIS technical documentation, including WIS GISC and DCPC interoperability Technical Specifications, the WIS Functional architecture, user guidelines, etc.; that these documents provide a critical contribution to the early WIS centres implementation, and that having been reviewed by the ET-WISC and the ICT-ISS they will be submitted to CBS-XIV as early contributions to the Manual on WIS. The meeting also noted the work of the ET-CTS and the progress on the infrastructure supporting part A of WIS; their plans for the development of recommended practices for data communication and data access procedures, and a conceptual design for data-communication services for WIS-GTS implementation.

5.2.4 The MG noted the work on radio-frequencies for meteorology, in particular the favourable outcome of World Radiocommunication Conference 2007, preparations for WRC-011,

and the update of the joint ITU-WMO publication "Use of Radio Spectrum for Meteorology: Weather, Water and Climate Monitoring and Prediction" which was finalized and is soon to be published. It noted the planned Workshop on "Radio-frequencies for Weather, Water and Climate Monitoring and Prediction", which would likely be a joint WMO/ITU event co-sponsored by the two Organizations and held in the fourth quarter of 2009.

5.2.5 The MG also reviewed the proposed work structure of OPAG-ISS and noted with appreciation that several ETs have an inter-programme scope, fully consistent with the leading role of WIS entrusted to CBS. It discussed the issues of bringing in invited experts to participate in ETs; this had been very successful in the progress of the ET-ADRS and has been a regular practice of the SG-RFC. The MG also discussed where and how to fit in the proposed new ET on WIS centre assessment. The president noted the key issues which would be revisited under agenda item 6 on the CBS Working Structure.

5.3 OPAG on Data Processing and Forecasting System

5.3.1 The MG was informed of the activities of the WWW Global Data-Processing and Forecasting System, including Emergency Response Activities, since MG-8. Much progress has been achieved by the OPAG on DPFS through 2008, including: the success of the Severe Weather Forecasting Demonstration Project (SWFDP) in Southeast Africa as reported under DRR in item 4.5; standards for Global Producing Centres for Long-range Forecasts including developments on the Multi-Model Ensemble aspects; cooperation with the CCI regarding Regional Climate Centres; cooperation with CAS in relation to probabilistic forecasting and Ensemble Prediction Systems (e.g. THORPEX and in particular TIGGE), and in relation to NWP verification standards and forecast/warnings verification methods; and some initial review work on Very Short-range Forecasting. On the ERA front, operational arrangements for nuclear emergency response have been maintained through regular exercises and review, and the operational implementation of the new joint response system with the Comprehensive Nuclear-Test-Ban Treaty Organization became effective on 1 September 2008.

5.3.2 The meeting noted the continued success of the OPAG with respect to organizing and collaborating with partners in providing training and capacity building efforts in weather forecasting and NWP systems. It noted the report of the OPAG Chair that he felt there was a lot more the group could have achieved if it had access to more resources, and supported the president who stated that the group does achieve a lot and that the proposals presented suggest the group will continue to do very well.

5.3.3 The report included a list of the proposed OPAG structure to be recommended to CBS and a list of the main activities and achievements expected over the next two to three years.

5.4 OPAG on Public Weather Services

5.4.1 The meeting reviewed the report of the OPAG-PWS, which provided an update on the extensive report provided to MG-8 in June 2008; this June report included information from the latest ICT-PWS meeting also held in June 2008, prior to MG-8. It was noted that active experts within the OPAG-PWS will continue to work with the OPAG-DPFS in the development of sub-projects of the SWFDP. The meeting was also informed of the successful utilisation of papers from the Symposium on Public Weather Services (Dec 2007) in the creation of a series of articles in WMO Bulletin Vol.57(4) – October 2008. The MG commented that the edition was very well done and it was recommended that the editors should be congratulated on the recent quality of WMO Bulletins.

5.4.2 The MG also took note and endorsed the proposed OPAG-PWS structure and ETs to be recommended to CBS-XIV for the next period.

6. CBS WORKING STRUCTURE

6.1 The meeting reviewed the reports of the OPAG chairs with the proposed structures of expert teams. The secretariat will put together a list of ET and TORs prior to CBS and send a request to Members to nominate experts for membership of Expert Teams, these to be considered at CBS.

6.2 The president returned to the topic of inviting associate experts, in complement to designated ET members, to contribute to CBS ETs' activities. After further discussion it was agreed that the Chairs of the OPAGs, after the OPAG ETs membership had been decided upon and consolidated soon after CBS-XIV, should send a letter or email to the nominees with information as to who was selected, and offering those not selected an opportunity to maintain involvement. The president asked the secretariat to emphasise in the letter, inviting nominations for ETs, in preparation for CBS-XIV, the relevant decisions and guidelines of EC-LX. These are especially that the work of the ET must correspond to the daily activities of the nominee, that the agreement of the PR to allocate the necessary time for WMO work has been obtained, and requests the inclusion of the professional profile, through a brief CV, with the nominations. He also asked the secretariat to include in the letter the proposal that the OPAG is willing to offer those not selected the opportunity to participate in an associate capacity.

6.3 The session reviewed document 6.2 on the CBS Working Structure as submitted by the president of CBS. The document was a first pass for discussion outlining possible future working arrangements of CBS, in line with the requirement expressed by EC to improve the cost efficiency and cost effectiveness of sessions of WMO constituent bodies. The key to the suggested working structure is for OPAGs to perform an executive role in organizing and carrying out the work assigned by the Commission, and the respective deliverables to be submitted for adoption by correspondence. They establish Expert Teams to study questions and develop documents, including draft Recommendations and guidance material. ETs are requested to use electronic means to the largest extent possible to carry out their work, including the use of Web "wikis" for developing documents; actual meetings are focused on organizing the activities, sharing responsibilities and addressing difficult issues. When adopted by OPAGs (by the respective ICT or possibly by correspondence, in case of urgent requirements), draft Recommendations and proposed guidance material are normally adopted by direct consultation with the CBS members. The process includes the request to CBS members to indicate within three months whether they agree. Simultaneous adoption (by CBS members) and approval (by WMO Members) by correspondence may be used for Recommendations addressing regulatory documents (e.g. amendments to WMO Technical Regulations). This leaves the CBS sessions free to focus on the programme of work, priorities, and the organisation of the Commission (OPAGs) to carry out the work during the next inter-sessional period. Furthermore, the technical conference prior to a CBS session will be used to process some of the routine activities that are not under the direct TC control, such as the status of system implementation, presently carried out in CBS sessions. In this regard, noting the importance of a correct assessment of system implementation for determining the Commission's work programme and priorities, adequate mechanisms should ensure the proper feedback of information to the TC session. The expected outcome of this general approach will be to shorten CBS sessions, while increasing the effectiveness and responsiveness of the TC.

6.4 The meeting generally agreed with the proposal and it supported the president in providing this paper, updated with feedback from this meeting, to next PTC meeting and then as a final document to the next CBS session. He noted that reducing the length of sessions is not a trivial issue and that further reducing a session from 9 to a few days could only be achieved after considerable discussion.

7. ARRANGEMENTS FOR THE FOURTEENTH SESSION OF THE COMMISSION FOR BASIC SYSTEMS

7.1 The MG reviewed progress on the arrangements for CBS-XIV. The tentative Provisional Agenda of CBS-XIV was revised and is included in Annex 1. With respect to the WMO Strategic Plan, the MG agreed to maintain the current structure of the Agenda, which facilitates the technical

discussions, and to include reference to the respective Expected Results (ER) to which the programmes are contributing.

7.2 The MG noted that preparations for the session as well as for the Technical Conference were on schedule, although the Technical Conference was on a critical path and required dedicated effort. A table containing the status of preparation is included in Annex 2.

8. TECHNICAL CONFERENCE ON WIGOS IN CONJUNCTION WITH CBS-XIV

8.1 The session reviewed the progress of the arrangements for TECO WIGOS. The Provisional Agenda was revised by the MG to include the addition of a poster session; this is included in Annex 3. A table detailing the status of preparation is included in Annex 2 along with the corresponding table for the full CBS Session.

8.2 The MG noted that there are still questions concerning the availability of finance to support travel and allowances for participants needing assistance. It agreed on the need to get some funds for the conference and asked the Secretariat to consider possible allocation from special funds and to send a note to Members and potential donor Organizations reminding them of the need to put money into the WIGOS trust fund. It is expected that around CHF 50-100 K will be required.

9. OTHER BUSINESS

9.1 As agreed at its eighth session, the MG discussed possible CBS president certificates, to be used as recognition of significant contributions by experts to CBS activities between two CBS sessions (four years), based on draft guidelines proposed by the OPAG Chairpersons, under the coordination of the PWS OPAG Chair, with the assistance of the Secretariat.

9.2 The MG reviewed two main options. The first option suggested that two levels of certificate be offered. One awarded to those who have made substantial personal contributions to the work of CBS. The second level would be for those few individuals who are recognised as having made a particularly valuable contribution to CBS. The second option was a single level certificate for those individuals who have made an active and effective contribution to the work of an OPAG across one or more Expert Teams over an extended period.

9.3 After considerable discussion, the president concluded the meeting was in a difficult position. He would compile ideas from the meeting and present them to the next PTC meeting, with a view to a possible common position for all TCs. He noted that the MG should try to encourage teams and individual experts to be active within CBS, and emphasized the need to organise some sort of process for ensuring recognition of effective experts' contribution to the work of the Commission. He decided that it would be best to use very simple rules for selecting nominees, as in the option of a single level certificate, who would receive a letter of appreciation from the president of CBS. To this end he requested each OPAG Chair to provide him with a list of nominees (2-6 persons, taking into account the actual OPAG size). The president also indicated that he will consider whether it would be appropriate to include reference to the nominees in his president's report to CBS.

10. CLOSURE OF THE SESSION

10.1 The president thanked participants for their contributions and noted that he looked forward to the CBS session in March. He closed the meeting at 5:40pm

LIST OF PARTICIPANTS

CBS president Mr Alexander GUSEV Federal Service for Hydrometeorology and Environmental Monitoring Novovagankovsky Street 12 123242 MOSCOW Russian Federation	Tel : +(7 495) 205 4813 Fax : +(7 495) 255 2414 Email : gusev@mecom.ru
Assistant to CBS president Ms Olga PETROVA Federal Service for Hydrometeorology and Environmental Monitoring Novovagankovsky Street 12 123242 MOSCOW Russian Federation	Tel : +(7 495) 205 4813 Fax : +(7 495) 255 2414 Email : olpetrova2004@yandex.ru
CBS vice-president Prof. Geerd-Ruediger HOFFMANN Deutscher Wetterdienst P.O. Box 10 04 65 63004 OFFENBACH Germany	Tel: +(49 69) 8062 2824 Fax: +(49 69) 8062 5217 Email: geerd-ruediger.hoffmann@dwd.de
Co-chair, OPAG-IOS and Coordinator DRR Dr Sue BARRELL Bureau of Meteorology G.P.O. Box 1289 MELBOURNE, VIC 3001 Australia	Tel: +(61 3) 9669 4222 Fax: +(61 3) 9669 4168 Email: s.barrell@bom.gov.au
Chair, OPAG-ISS Mr Peiliang SHI China Meteorological Administration Meteorological Information Centre 46 Zhongguancun Nandajie BEIJING 100081 China	Tel: +(86 10) 6840 7074 Fax: +(86 10) 6217 3225 Email: shipl@cma.gov.cn
Representative of Co-chair, OPAG-ISS Mr Fredrick R. BRANSKI NOAA – National Weather Service (W/CIO11) 1325 East-West Highway SILVER SPRING Maryland 20910-3283 United States of America	Tel. +1 (301) 713 0864 x146 Fax +1 (301) 713 1409 E-mail fred.branski@noaa.gov
Chair, OPAG-DPFS Mr Bernard STRAUSS Météo-France 42, avenue Gaspard Coriolis F-31057 TOULOUSE Cédex 1 France	Tel: +(33 5) 6107 8200 Fax: +(33 5) 6107 8209 Email: bernard.strauss@meteo.fr
Representative of Co-chair, OPAG-DPFS Dr Masashi NAGATA Japan Meteorological Agency 1-3-4 Otemachi Chiyoda-ku TOKYO 100-8122 Japan	Tel: +(81 3) 3211 4966 Fax: +(81 3) 3211 2032 Email: mnagata@met.kishou.go.jp

Chair, OPAG-PWS Mr Gerald FLEMING Met Eireann The Irish Meteorological Service 30 Parkview WEXFORD Ireland	Tel: +(353) 534 1536 Fax: +(353) 534 5721 Email: gffleming@eircom.net
Co-chair, OPAG-PWS Mr Mnikeli NDABAMBI South African Weather Service Department of Environment Affairs Private Bag X097 PRETORIA 0001 South Africa	Tel: +(271 2) 367 6033 Fax: +(271 2) 367 6042 ; 367 6043 Email: mnikeli@weathersa.co.za
Co-coordinator, GEOSS Mr Michel JEAN Canadian Meteorological Centre Environment Canada 2121 TransCanada Highway DORVAL, Quebec Canada H9P 1J3	Tel: +(1 514) 286 1600 Fax: +(1 514) 421 4600 Email: michel.jean@ec.gc.ca
WMO SECRETARIAT http://www.wmo.int/pages/prog/www/index_en.html	
Director, Observing and Information Systems Department <i>Dr Wenjian ZHANG</i>	Tel: +(41 22) 730 8519 Fax: +(41 22) 730 8474 Wzhang@wmo.int
Director, Weather and Disaster Risk Reduction Services Department <i>Dr Geoffrey LOVE</i>	Tel: +(41 22) 730 8264 Fax: +(41 22) 730 8128 Glove@wmo.int
Acting Director, WMO Information System Branch <i>Mr Jean-Michel RAINER</i>	Tel: +(41 22) 730 8219 Fax: +(41 22) 730 8021 JMRainer@wmo.int
Acting Director, GCOS and Chief, WIGOS Planning Office <i>Dr Alexander KARPOV</i>	Tel: +(41 22) 730 8222 Fax: +(41 22) 730 8021 Akarpov@wmo.int
Chief, Observing Systems Division <i>Dr Miroslav ONDRAS</i>	Tel: +(41 22) 730 8409 Fax: +(41 22) 730 8021 Mondras@wmo.int
Acting Chief, Information and Telecommunication System Division <i>Mr José Arimatea DE SOUSA BRITO</i>	Tel: +(41 22) 730 8265 Fax: +(41 22) 730 8021 Jarimatea@wmo.int
WIS Project Manager <i>Mr Dave THOMAS</i>	Tel: +(41 22) 730 8241 Fax: +(41 22) 730 8021 DThomas@wmo.int
Chief, Public Weather Services Division <i>Ms Haleh KOOTVAL</i>	Tel: +(41 22) 730 8333 Fax: +(41 22) 730 8128 HKootval@wmo.int

Annex 1**Time table for preparation of CBS-XIV and TECO-WIGOS**

TeCo WIGOS 23-24.III.2009; CBS-XIV 25.III-2.IV.2009, Dubrovnik, Croatia

15 November 2008: D - 4.3 months (129 days)

Technical Conference		
Organisational preparation	deadline	comments
Decision on topic	D -12 months	<i>Done</i>
Designation of Conference Director and Conference committee	D -12 months	<i>Done</i>
Conference organization, agenda, sessions	D -10 months	<i>Provisional done</i>
Call for presentations, posters, call for financial contributions	D -8 months	<i>Done</i>
Consolidated list of presentations & lecturers	D -3 months	-

CBS Session		
Administrative procedures	deadline	comments
Offer to host Conference	D -300 days	<i>Received – Agreement WMO-Host being finalized (for signature)</i>
SG informs all Members of proposed session	D -240 days	<i>Done on 14 August 2008</i>
Members inform of intent to participate	D -180 days	<i>current</i>
Procedures for visa etc confirmed by host	D -135 days	<i>current</i>
Notification to Members of date & place	D -120 days	-
Support Services		
Preparation interpreters contracts	D -8 to 3 months	<i>current</i>
interpreters contracts	D -6 to 3 months	<i>current</i>

15 November 2008: D - 4.3 months (129 days)

CBS Session		
Organisational preparation	deadline	comments
Draft future work programme and draft OPAG structure (ETs)	D -6 months	MG and OPAGs
Call for experts' nomination to participate in OPAGs and ETs	D -4 months	With a view to OPAGs & ET membership
Finalization prov. agenda	D -4 months	Draft from MG-VIII
Organization of CBS session (committees' chairs, time plan, etc)	D -2 months	-
CBS Operational Planning Framework document	D -3 months	MG responsibility
Technical preparation		
OPAG-IOS ETs	D -3 months	Meetings held
OPAG-IOS ICT	D -2 months	Session held Sept. 2008
OPAG-ISS ETs	D -3 months	Meetings held
OPAG-ISS ICT	D -2 months	Session 10-13 Nov. 2008
OPAG-DPFS ETs	D -3 months	Meetings held
OPAG-DPFS ICT	D -2 months	Session held Oct. 2008
OPAG-PWS ETs	D -3 months	Meetings held
OPAG-PWS ICT	D -2 months	Session held May 2008

Annex 2
Draft Provisional Agenda for CBS-XIV

- 1. OPENING OF THE SESSION**
 - 2. ORGANIZATION OF THE SESSION**
 - 2.1 Consideration of the report on credentials
 - 2.2 Adoption of the agenda
 - 2.3 Establishment of committees
 - 2.4 Other organizational questions
 - 3. REPORT BY THE PRESIDENT OF THE COMMISSION**
 - 4. REVIEW OF DECISIONS OF CONGRESS AND THE EXECUTIVE COUNCIL RELATED TO THE COMMISSION**
 - 5. STATUS OF WORLD WEATHER WATCH IMPLEMENTATION AND OPERATION**
 - 6. WORLD WEATHER WATCH PROGRAMME AND SUPPORT FUNCTIONS, INCLUDING THE REPORTS BY THE CHAIRS OF THE OPEN PROGRAMME AREA GROUPS**
 - 6.1 Integrated Observing Systems (IOS) – ER 4
 - 6.2 Information Systems and Services (ISS) – ER 5
 - 6.3 Data-Processing and Forecasting System (DPFS), including Emergency Response Activities – ER 1
 - 6.4 Operational Information Service (OIS) – ER 5
 - 6.5 System support activities, including technical cooperation – ER 9
 - 7. WMO SPACE PROGRAMME – ER 4**
 - 8. PUBLIC WEATHER SERVICES, INCLUDING THE REPORT BY THE CHAIR OF THE OPEN PROGRAMME AREA GROUP – ER 7**
 - 9. WMO INFORMATION SYSTEM – ER 5**
 - 10. WMO INTEGRATED GLOBAL OBSERVING SYSTEM – ER 4**
 - 11. OTHER CROSS-CUTTING ACTIVITIES**
 - 11.1 Group on Earth Observations
 - 11.2 Disaster Risk Reduction
 - 11.3 Quality Management Framework
 - 11.4 THORPEX
 - 11.5 IPY
 - 12. CBS PROGRAMME AND PLANNING – ER 10 & 11**
 - 12.1 Long-Term Planning relevant to the Commission
 - 12.2 Future Work Programme
 - 12.3 Review of previous Resolutions and Recommendations of the Commission and relevant Resolutions of the Executive Council
 - 12.4 Working methods and adoption of non-controversial documents between sessions
 - 12.5 Date and place of the Extraordinary Session 2010
 - 13. ELECTION OF OFFICERS**
 - 14. OTHER BUSINESS**
 - 15. CLOSURE OF THE SESSION**
-

Annex 3



**WORLD METEOROLOGICAL
ORGANIZATION**
Weather Climate Water

*Commission for Basic
Systems*

Technical Conference
WMO Integrated Global Observing Systems
(TECO-WIGOS)

Dubrovnik, Croatia, 23-24 March 2009

TECO-WIGOS Conference Committee

Conference Director: Dr James Rasmussen (USA)

Co-Director: Dr Sue Barrell (Australia)

Members of the Conference Committee: Mr H.H. Ciappesoni (Argentina), F. Uirab (Namibia), **Mr T. Sutherland (British Caribbean Territories)**, Mr J.R. Mukabana (Kenya), Mr M. Ostojski (Poland), Mr G. Foley (Australia), **Dr A. Divino Moura (Brazil)**, **Dr J. Purdom (USA)**, **Dr J. Eyre (UK)**, **Dr A. Zaitsev (Russian Federation)**, Mr Fred Bransky (USA), **Mr Peiliang Shi (China)**, **Mr G. Fleming (Ireland)**, **Mr B. Strauss (France)**, Representative(s) of Croatia, D/OBS; C/PO WIGOS (WMO Secretariat)

Provisional TECO-WIGOS Programme

Monday - 23 March 2009			
10.00-10.15	OPENING		Mr A.I. Gusev <i>President of CBS</i> (Russian Federation)
10.15-10.30	Conference Goals: WIGOS – Crossroad for WMO, A historical perspective [PDF, PowerPoint]		Dr James Rasmussen Conference Director
SESSION 1 – GOVERNANCE AND MECHANISMS FOR THE IMPLEMENTATION OF WIGOS CONCEPT <i>Co-chairs: Mr T. Sutherland, Second Vice-President of WMO (British Caribbean Territories), Mr J. R. Mukabana (Kenya)</i>			
10.30-11.00	Session 1- Keynote: WIGOS as a challenging initiative of WMO [PDF, PowerPoint]		Dr A. Divino Moura, Third Vice-President of WMO, <i>Chair, EC WG WIGOS-WIS</i> (Brazil)
11.00-11.30	1(1)	WIGOS Development and Implementation Plan (WDIP) and WIGOS Concept of Operations (CONOPS) [PDF, PowerPoint]	(Expert nominated by EC WG WIGOS-WIS) TBD
11.30-12.00	1(2)	Vision for the Evolution of the GOS in the context of WIGOS [PDF, PowerPoint]	Dr. J. Eyre <i>Chair, CBS ET-EGOS</i> (UK)

12.00-13.30	LUNCH BREAK		
13.30-13.50	1(3)	WIGOS Requirements for Instruments and Methods of Observation [PDF, PowerPoint]	Dr J. Nash <i>president of CIMO</i> (UK)
13.50-14.20	1(4)	WIS Project and Implementation Plan and WIGOS Requirements for Data Dissemination and Exchange [PDF, PowerPoint]	Prof G.-R. Hoffman <i>Vice-president of CBS</i> (Germany)
14.20-14.40	1(5)	WIGOS Requirements for end-products quality assurance [PDF, PowerPoint]	Dr A. Zaitsev <i>CBS Rapporteur on QMF</i> (Russian Federation)
14.40-15.10	1(6)	WIGOS and the Co-sponsored Observing Systems (GOOS, GTOS and GCOS) [PDF, PowerPoint]	Prof J. Zillman <i>Chair WMO-IOC-UNEP-ICSU Steering Committee for GCOS</i> (Australia)
15.00-15.20	1(7)	EUMETSAT Integrated Contribution to WIGOS	EUMETSAT (Wolf Lother)
15.20-15.40		Questions and Answers, Discussion	
15.40-16.00	COFFEE BREAK		
SESSION 2 – WIGOS PILOT AND DEMONSTRATION PROJECTS-CONTRIBUTION OF REGIONAL ASSOCIATIONS AND TECHNICAL COMMISSIONS <i>Co-chairs: Mr G. Foley (Australia), F. Uirab (Namibia)</i>			
16.00-16.15	2(1)	Session 2- Keynote: WIGOS Pilot and Demonstration Projects [PDF, PowerPoint]	Dr Sue Barrell Conference Co-Director
WIGOS Pilot Projects (PPs)			
16.15-16.30	2(2)	Improvement of Dissemination of Ozone (total column, profiles and surface) and Aerosol observations through the WIS [PDF, PowerPoint]	(Expert nominated by CAS) TBD
16.30-16.45	2(3)	Hydrological Applications Runoff Network [PDF, PowerPoint]	(Expert nominated by CHy) TBD
16.45-17.00	2(4)	Integration of AMDAR into WIGOS [PDF, PowerPoint]	(Expert nominated by AMDAR Panel) TBD
17.00-17.15	2(5)	Elaborating on the underpinning/crosscutting role and responsibilities of the Instruments and Methods of Observation Programme in the context of WIGOS [PDF, PowerPoint]	(Expert nominated by CIMO) TBD
17.15-17.30	2(6)	Integration of Marine Meteorological and other appropriate Oceanographic Observations into	(Expert nominated by JCOMM)

		the WMO Global Observing System [PDF, PowerPoint]	TBD
17.30-17.45	2(7)	PP on SAT activities	SP-TBD
17.45-18.00		Questions and Answers, Discussion	

Tuesday - 24 March 2009

SESSION 2 (cont'd) – WIGOS PILOT AND DEMONSTRATION PROJECTS-CONTRIBUTION OF REGIONAL ASSOCIATIONS AND TECHNICAL COMMISSIONS

Co-chairs: Dr A. Zaitsev (Russian Federation), Mr M. Ostojki (Poland)

WIGOS Demonstration Projects (DPs)

09.00-09.15	2(8)	DP in Kenya (RA I) [PDF, PowerPoint]	(Kenya) TBD
09.15-09.30	2(9)	DP in Namibia (RA I) [PDF, PowerPoint]	(Namibia) TBD
09.30-09.45	2(10)	DP in Morocco (RAI) [PDF, PowerPoint]	(Morocco) TBD
09.45-10.00	2(11)	DP in Republic of Korea (RA II) [PDF, PowerPoint]	(Republic of Korea) TBD
10.00-10.15	2(12)	DP in Brazil (RA III) [PDF, PowerPoint]	(Brazil) TBD
10.15-10.30	2(13)	DP in the USA (RA IV) [PDF, PowerPoint]	(USA) TBD
10.30-11.00	COFFEE BREAK		
11.00-11.15	2(14)	DP in Australia (RA V) [PDF, PowerPoint]	(Australia) TBD
11.15-11.30	2(15)	DP in the Russian Federation (RA VI) [PDF, PowerPoint]	(Russian Federation) TBD
11.30-11.50	2(16)	From Concept to Reality [PDF, Power Point]	Dr Sue Barrell (CBS MG)
12.00-12.30		Questions and Answers, followed by Conference Discussion on importance of WIGOS and CBS's leadership role within the implementation of WIGOS initiative	Conference Director and Co-director
12.30-13.00		Conference Statement	president and vice-president of CBS