

WORLD METEOROLOGICAL ORGANIZATION

**COMMISSION FOR INSTRUMENTS
AND METHODS OF OBSERVATION**

**CIMO MANAGEMENT GROUP
Sixth Session**

St. Petersburg, Russian Federation

25 (p.m.) to 26 November 2008

FINAL REPORT



EXECUTIVE SUMMARY

The sixth session of the CIMO Management Group (CIMO-MG-6) was held from 25 (p.m.) to 26 November 2008 in St. Petersburg, Russian Federation.

The meeting reviewed the latest commission activities since CIMO-MG5 and addressed a number of issues related to the work of the commission that needed special attention or decisions, such as the nomination of experts and replacement of departing members of the management group. The meeting also started investigating ways to improve the effectiveness and efficiency of the commission, envisaging making changes to its structure as needed.

The meeting reviewed in detail the plan for future intercomparisons since they require a substantial commitment from host countries, experts and manufacturers which need careful planning and coordination.

The meeting addressed the matter of developing standards which has become increasingly relevant. It is of utmost importance in the development of WIGOS and is the basis of CIMO's contribution to WIGOS. Some of the guidelines currently published in the CIMO Guide should be considered for upgrading to the level of standards if they are widely accepted by WMO Members.

The final report of the sixth session of the CIMO Management Group is available at:

<http://www.wmo.int/pages/prog/www/reports.html>

AGENDA

AGENDA

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 - 2.1 Report of the President
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- 3. ISSUES RELATED TO THE PLANNING, COORDINATION AND MANAGEMENT OF THE WORK OF THE COMMISSION, ITS OPAGS AND EXPERT TEAMS**
 - 3.1 Review of the Working Structure of CIMO
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- 4. INTERACTION WITH OTHER WMO PROGRAMMES AND ACTIVITIES**
 - 4.1 WMO Integrated Observing Systems (WIGOS)
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- 5. ARRANGEMENTS FOR TECO/METEOREX-2008**
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Annex I List of Participants
Annex II Action List

GENERAL SUMMARY

1. ORGANIZATION OF THE SESSION

1.1 Opening of the meeting

1.1.1 The sixth session of the CIMO Management Group (CIMO-MG-6) was opened on Tuesday, 25 November 2008 at 14:00, by the President of CIMO, Dr John Nash. The list of participants is given in Annex I.

1.1.2 The Director of the WMO Observing and Information Systems Department, Mr Wenjian Zhang, welcomed the participants. He noted the importance of the WMO Integrated Observation System (WIGOS) development and implementation processes and highlighted that all high-level WMO officials expressed their desire to succeed on this initiative. He expressed that successful development and implementation should lead to improved effectiveness and cost savings, while providing greater and more efficient access to the data, as well as providing the basis for future observing system developments.

1.2 Adoption of the agenda

The meeting adopted the Agenda as reproduced at the beginning of this report.

1.3 Working arrangements

The working hours and tentative timetable for the meeting were agreed upon.

2. EVALUATION OF THE PROGRESS ACHIEVED IN THE WORK PROGRAMMES

2.1 Report of the president

2.1.1 The president reported on his activities as CIMO president during this past year. He participated in a number of meetings, such as the President of Technical Commission meeting, the GSICS meeting, an activity of the WMO Space Programme dealing with satellite inter-calibration, the meeting of the GCOS Steering Committee, the activation meeting of the GRUAN Lead Centre in Lindenberg (Germany), the EG-CLIMET COST action meeting, the WMO Executive Council (EC) session, and chaired the WIGOS Subgroup session supporting the EC Working group on WIGOS and WIS.

2.1.2 The president informed the meeting about the new WMO management philosophy as embodied in the WMO Operating Plan. Commissions have been requested to revise their key performance targets focusing on deliverables and not on the number of meetings held.

2.1.3 The presidents of technical commissions want to provide serious technical advices to WMO activities, but felt some difficulties in that respect, as was noted at the last session of the Executive Council at which presidents had only limited possibilities to provide their contribution.

2.1.4 As far as the development of WIGOS is concerned, the president stressed that CIMO should seize the opportunity to contribute to WIGOS by aligning its activities to the WIGOS plans while ensuring that it continued to address planned high priority activities. The President mentioned a number of issues that needed to be addressed by the MG, such as the reduction in the size of the MG, the problems of functioning encountered by some expert teams (ETs), how to incorporate new experts to allow them the opportunity to develop international expertise, and how prioritization of activities needs to be accomplished.

2.1.5 The president requested that CIMO experts who change their position or function within their home organisation quickly inform the Secretariat and ensure that their country advises the Secretariat of their interest in providing / proposing a replacement of the departing expert to ensure prompt replacement. The president requested he and the vice-president be copied when MG members discuss issues with the Secretariat. (see Annex II, Action 1).

2.1.6 The president was invited to provide the opening address for the Final Workshop of the COST 727 action on "Measuring and Forecasting Atmospheric Icing on Structures" that will be held in September 2009 in Andermatt, Switzerland.

2.2 Report of the OPAG Co-chairpersons

2.2.1 The OPAG Co-chairs reported on the recent activities of the ETs and rapporteurs under their responsibility. The meeting focussed its discussion on measures needed to foster the work of these teams and on issues that the teams had brought forward to the attention of the MG for decision.

2.2.2 The MG received a briefing on the status of the COST-727 Action. The meeting was informed that a number of test stations had been established in Europe by the COST-727 Action in order to monitor icing events under different climatic conditions with "reference" instruments. These stations have a temporary status and the icing test measurements will probably disappear at the end of the Action. Due to the limitations found with present market available ice detectors, the continued operation and maintenance of these stations would provide the opportunity to proceed with further instrument developments and tests, with the goal of identifying suitable instruments for the determination of meteorological icing. It would enable the WMO/CIMO community to improve the quality of meteorological measurements performed under icing conditions and benefit the National Weather Services as well as the industries maintaining these stations, following in this way the recommendations of the WMO/CIMO international Comparison of wind sensors (Mt. Aigoual, France, 1992-1993), of the recent EUMETNET SWS-II experiment as well as the recommendations of the present COST-727 Action. Furthermore, it would provide the modelling community with ground truth measurements for the validation of existing and future meteorological models.

2.2.3 Considering that further development of icing observations seems necessary, the CIMO MG encourages the WMO Members and Industries that are currently supporting the operation of these stations to keep them operating following the end of the COST-727 Action. The CIMO MG would encourage the R&D community to plan for further investigations, including under a new international umbrella and possible extension of this work to other Regions of WMO.

2.2.4 CIMO-MG-6 strongly supported the development of a siting classification system for weather stations. This is of utmost importance when to planning a station deployment. Such information is highly relevant in the context of WIGOS since it would allow different user communities to assess whether the data provided by the various stations meet their operational needs. CIMO-MG-6 requested that the final draft of this proposed site classification standard be sent to experienced staff from NMHSs as China, Switzerland and USA for review and recommended that the Secretariat identified funds that could be used to pay those reviewers if needed. CIMO-MG-6 agreed that such a standard could be considered as a candidate for an ISO-WMO common standard, but that a wide consensus on its content needed to be reached beforehand (see Annex II, Action 2).

2.2.5 CIMO-MG-6 recalled that it was possible for experts, not officially nominated as members of an ET, to contribute to the work of an ET, but that CIMO needed to ensure

proper credit be given for the work they were contributing. CIMO-MG-6 requested the ET chairs wanting to nominate new members to their teams to make such requests to the MG. Upon approval of such requests by the MG, the Secretariat would follow-up seeking the formal approval of the respective permanent representatives.

2.2.6 CIMO-MG-6 requested that questionnaires developed by ET members, such as the questionnaire on the use of lightning detection system and products in NMHSs, be thoroughly reviewed and endorsed by the full ET prior to being dispatched to WMO Members by the Secretariat.

2.2.7 At the time of the meeting a draft work plan of the ET on Upgrading Upper-Air Networks (ET-UGUN) was available, but the final plan had not been finalized. The meeting recognized that more frequent interactions between the ET-Chair, Co-Chair and members were necessary. CIMO-MG-6 requested the OPAG Upper-Air (OPAG-UA) Co-chair, Mr R. Stringer to liaise with the ET-UGUN Co-chair attending TECO-2008 and coordinate the completion of the work plan by the end of TECO-2008. The president requested the OPAG-UA Co-chair, ET-chair and Co-chair to agree on their respective responsibilities, to coordinate the ET tasks and to ensure their timely delivery. CIMO-MG-6 decided that the majority of the work of this team should be carried out by e-mail correspondence. A targeted meeting of part of the team could be considered upon request from the OPAG Co-chair to address particularly important tasks, as for example those that would significantly influence the WIGOS development (see Annex II, Action 3).

3. ISSUES RELATED TO THE PLANNING, COORDINATION AND MANAGEMENT OF THE WORK OF THE COMMISSION, ITS OPAGS AND EXPERT TEAMS

3.1 Review of the Working Structure of CIMO

3.1.1 CIMO-MG-6 discussed the working structure of CIMO in view of improving its efficiency and effectiveness as well as ensuring that issues of prime importance were addressed by the commission both, on a short-term basis, as well as on a longer-term basis, in the planning for the next intercessional period.

3.1.2 The meeting recognized that the MG should ideally be formed of five to six members, but at most eight, to be most effective and function as a strong team. To achieve this, the commission could have rapporteurs and coordinators that are not part of the MG, as has been done by other technical commissions, and agreed to revisit whether OPAG Co-chairs are really needed. CIMO-MG-6 decided not to replace resigning MG members for the present time.

3.1.3 CIMO-MG-6 decided not to refill the position of the Coordinator on the WMO Quality Management Framework left vacant because of the resignation of Mr U. Busch. The MG requested J. van der Meulen and M. Garcia to assume responsibilities for issues related to quality management.

3.1.4 CIMO-MG-6 was informed of a proposal from the Permanent Representative of Morocco with WMO offering that Mr R. Merrouchi replace Mr M. Nbou in his capacity as OPAG Capacity-Building Co-chairperson since the latter had resigned from the MG following his departure from the NMHS of Morocco. The CIMO-MG-6 welcomed this proposal, in particular since Mr Merrouchi was involved in the activities of the Regional Instrument Centre of Casablanca and in the Moroccan Demonstration Project on WIGOS. However, in view of the efforts of CIMO to reduce the size of its MG, it felt that the time was not appropriate to nominate new members to the MG. CIMO-MG-6 decided to consider inviting him as an invited expert to its next session in view of involving him in the management of the

commission and to consider him as a candidate future member of the MG while encouraging him to become a member of CIMO (see Annex II, Action 4).

3.1.5 CIMO-MG-6 confirmed that Mr S. Waas, Vice-Chairperson of the ET on Surface Technology and Measurement Techniques (ET-ST&MT) would replace Dr K.-H. Klapheck in his capacity of Chairperson of ET-ST&MT following his retirement. At this time there is no plan to fill the co-chair position vacated by Mr Waas.

3.1.6 It appears that some experts were not fully aware of the roles and responsibilities they would have when they applied for position within CIMO. CIMO-MG-6 therefore felt that it would be beneficial to have a more detailed description of the roles and responsibilities of each CIMO function (experts, ET-chairs, OPAG chairs, president, vice-president, rapporteurs and coordinators) so that candidates had a clear picture of their future role before they commit (see Annex II, Action 5).

3.1.7 The limited resources (financial, human and secretariat support) available do not allow the commission to work on all the tasks that should be addressed. CIMO-MG-6 agreed that activities needed to be prioritized.

3.1.8 CIMO ETs are normally meeting only once in four years, but a much larger output could be expected if they were to meet more frequently; it has been shown that frequent meetings improve communication and foster a better work environment. Infrequent meetings are particularly problematic considering that CIMO experts appear to be changing position frequently, which creates a loss of continuity and effectiveness. In the future, CIMO should consider whether smaller ETs, focusing on a specific subject and that would have the opportunity to meet more frequently would be better for CIMO, recognizing that some activities would then have to be postponed. Small, short-lived ETs that would be dissolved once they have achieved their tasks is also an option for the MG to consider addressing specific subjects.

3.1.9 CIMO-MG-6 recognized that ETs developing new concepts and guidance should meet more than once in 4 years while that would not be so stringent for ET having mainly a coordination/reviewing function. In general, ETs should focus on activities that cannot be achieved on an individual basis. However, CIMO-MG-6 noted that rapporteurs, that are not part of ETs, are sometimes very productive, but that it is not generally the case. CIMO should consider developing a mechanism that would improve this situation and possibly consider hiring paid experts to carry out some of the tasks that can be achieved by individuals.

3.1.10 CIMO-MG-6 agreed that each MG member would develop proposals on how to improve CIMO's working structure by mid-2009 addressing among others how to achieve the desired reduction of the MG size, the possibility/need to have smaller ETs and the areas on which they should focus their work (see Annex II, Action 6).

3.1.11 The OPAG Co-chairs should also make suggestions by mid-2009 on how to improve the effectiveness of their OPAGs identifying areas that need strong coordination and more frequent meetings from those that did not need frequent meetings (such as reviewing areas) or those that could be achieved by individuals and whether paid experts should be hired to carry out specific tasks within their areas of responsibility (see Annex II, Action 7).

3.2 Intercomparisons

3.2.1 CIMO-MG-6 was briefly informed as to the status of ongoing instrument intercomparisons and reviewed the plans for future intercomparisons.

3.2.2 CIMO-MG-6 was informed that the Field Intercomparison of Rainfall Intensity Gauges had been extended until 30 April 2009. CIMO-MG-6 recognized that ET-SBII&CM is a well functioning team. Despite this, CIMO-MG-6 recommended caution in the planning of intercomparisons and their extensions to ensure that the team would have the time to address the needed intercomparisons in a reasonable timeframe.

3.2.3 The intercomparison of thermometer screens and shields in conjunction with humidity measuring instruments officially started on 1st November 2008. The meeting welcomed this news and expressed its thanks to Météofrance and in particular Mr J. Duvernoy, who had carried out a mission to Algeria to finalize the preparation of the intercomparison site. CIMO-MG-6 requested the International Organizing Committee of the intercomparison to take all the necessary steps to ensure that the report would be published before CIMO-XV and to decide, at its next meeting, who would be carrying out the evaluation of this intercomparison (see Annex II, Action 8).

3.2.4 The meeting was informed that China had agreed to host the Eighth WMO Intercomparison of Radiosonde Systems in conjunction with the Regional Intercomparison in the first half of 2010. CIMO-MG-6 welcomed this offer and stressed that CIMO would do its utmost to provide appropriate support to China. This intercomparison will also be used to provide advice to GCOS on the suitable radiosondes for use in the GRUAN network and to develop the use of Best Quality Research Sounding Systems to supplement the operational radiosondes in the GRUAN network. It was recognized that China would need to provide information on the site and that a preparatory meeting of the International Organizing Committee would be needed. This meeting should ideally take place at the planned site of the intercomparison, preferably in the first half of 2009 to plan for the intercomparison (see Annex II, Action 9).

3.2.5 The CIMO provisional programme of WMO surface-based instrument intercomparisons encompasses an intercomparison of thermometer screens/shields in conjunction with humidity measuring instruments in arctic region as well as an intercomparison on solid precipitation including snowfall and snow depth measurements at automatic stations. The questionnaire on measurement and observation of solid precipitation at automatic stations is presently being evaluated and will provide the needs assessment for the intercomparison. CIMO-MG-6 requested the ET on Surface-Based Instrument Intercomparison to clarify by the end of the year whether both intercomparisons would be held simultaneously and whether the hosting country could provide the required support to conduct these two intercomparisons in parallel (see Annex II, Action 10).

3.2.6 ET-ST&MT suggested that an intercomparison on cloud amount should be considered. CIMO-MG-6 requested ET-ST&MT to develop a detailed proposal for this intercomparison as well as for an intercomparison on present weather sensors (see Annex II, Action 11).

3.2.7 The meeting was informed that Australia was conducting preliminary comparisons relevant to the intercomparisons of sea-level and tsunami monitoring instruments. CIMO-MG-6 requested J. van der Meulen and R. Stringer acquire more information on the work being done and to encourage Australia to publish these results as an IOM report. CIMO-MG-6 also requested the Secretariat to liaise with the Secretariat JCOMM representatives to assess whether such an activity could be addressed by JCOMM or in collaboration with JCOMM (see Annex II, Action 12).

3.2.8 An intercomparison of hydrological gauges had been placed in the provisional programme of intercomparisons. The president agreed to liaise with the president of the Commission for Hydrology at the next meeting of the presidents of technical commissions in

view of clarifying the collaboration of the two commissions with respect to this intercomparison (see Annex II, Action 13).

3.2.9 CIMO-MG-6 agreed that the international evaluation of the AMDAR Water Vapour Sensor should be dealt with by the AMDAR Pilot Project on WIGOS in connection with CIMO and its ET on Upper-Air System Intercomparison.

3.2.10 Since the comparison of weather radar algorithms requires considerable work, the CIMO-MG-6 was of the opinion that it should be dealt with as an intercomparison with a nominated project leader and international organizing committee and felt that a split-out meeting with the radar experts could be envisaged to plan the intercomparison. It was recalled that participants in the radar intercomparison should not be limited to CIMO ET members.

3.3 CIMO Guide

3.3.1 The Rapporteur on the CIMO Guide, Dr Igor Zahumensky, indicated a significant lack of time to continue at this position due to his involvement in WMO Secretariat work and suggested to be replaced. CIMO-MG-6 agreed to replace him and decided to invite Mr Krunoslav Premec from Croatia to serve as Rapporteur on the CIMO Guide (see Annex II, Action 14).

3.3.2 Within the development of the WMO Integrated Global Observing System (WIGOS), the Executive Council Working Group on WIGOS and WIS had recognized that the CIMO activities were at the heart of the WIGOS concept and that CIMO should in the future coordinate the development and the maintenance of observing standards for all types of observations carried out within WIGOS, in collaboration with the “owners” of the various observing systems. In this context, CIMO-MG-6 felt there would likely be needs for changes in the CIMO Guide because of the evolving requirements of WMO and in particular because some communities that had until now only limited information in the CIMO Guide might want to significantly enlarge their contributions to it.

3.3.3 The CIMO Guide is presently providing recommendations to Members, but has no binding authority. In view of achieving homogeneity and comparability of measurements, the non-controversial parts of the CIMO Guide should be upgraded to the level of standards. CIMO-MG-6 was of the opinion that CIMO should consider developing a CIMO Manual that would be an Annex to the WMO Technical Regulations in which the agreed upon standards would be published, while ensuring that the chosen standards are affordable to Members. The CIMO Guide would continue to provide guidelines to Members and should also remain understandable by non-meteorological specialist.

3.3.4 CIMO-MG-6 agreed that developing a CIMO Manual and significant updates to the CIMO Guide was a substantial activity that would possibly require to be addressed by an ET or by paid experts. CIMO-MG-6 requested the Rapporteur on the CIMO Guide to start identifying the CIMO Guide guidelines that would be appropriate standards, in particular within the WIGOS framework, recognizing that this would be a valuable contribution to CIMO Pilot Project on WIGOS. CIMO-MG-6 stressed that the work of reviewers that are substantially contributing to updates of the CIMO Guide should be properly acknowledged (see Annex II, Action 15).

3.3.5 Metrology issues are addressed in the CIMO Guide, for example referring to the Guide to the Expression of Uncertainty in Measurement (GUM), and the ISO/IEC 17025:2005 standard on “General requirements for the competence of testing and calibration laboratories”. CIMO-MG-6 tasked the Rapporteur on the CIMO Guide to review

the metrological aspects presented in the CIMO Guide and to advise on whether metrology issues should be addressed more extensively (see Annex II, Action 16).

3.3.6 An exhaustive proposal for revision of the chapter on “Marine Observations” had been received. CIMO-MG-6 decided that the adoption procedure for CIMO Guide updates needed to be changed so that the approval process is appropriate for inputs from other communities and decided to adopt an interim procedure that would be satisfactory to JCOMM. The JCOMM executive committee and IOC should approve the proposed changes to the Marine Observation chapter prior to the CIMO president.

3.3.7 ET-ST&MT had recommended that a new chapter on Extreme Weather should be published in the CIMO Guide. CIMO-MG-6 felt that a more precise proposal was necessary to approve such a recommendation and requested ET-ST&MT and the Rapporteur on the CIMO Guide to work on the proposal (see Annex II, Action 17).

3.3.8 The Coordinator on GEOSS, Mr A. Gusev, suggested that information on rescue operations addressing for example the specificities of automatic weather stations needed in such circumstances could be included in the CIMO Guide and proposed to prepare a more precise proposal for the next CIMO MG meeting (see Annex II, Action 18).

4. INTERACTION WITH OTHER WMO PROGRAMMES AND ACTIVITIES

4.1 WMO Integrated Observing Systems (WIGOS)

4.1.1 The meeting was informed about the latest developments related to the WIGOS, in particular concerning the outcome of the meeting of the Subgroup on WIGOS to the Executive Council Working Group on WIGOS/WIS (SG-WIGOS) that took place in November 2008, in Geneva, of which the CIMO president is the Chairman. The president of CIMO was selected of chair the SG-WIGOS because of the crucial role that CIMO should play in the development of the standardization of instruments and methods of observations that falls under the first area of WIGOS standardization. The meeting was also informed on the outcome of the meeting of the CIMO Ad-hoc Working Group on the WIGOS Pilot Project (CIMO-PP-2) that was held in St.-Petersburg, Russian Federation, 24-25 November 2008. At present there are 5 WIGOS Pilot Projects and a number of demonstration projects. CIMO has one pilot project of its own and is involved in other pilot and demonstration projects. It was decided by CIMO-PP-2 that, besides its own pilot project, CIMO would focus on assisting the JCOMM and AMDAR pilot projects and selected demonstration projects, such as Morocco and Brazil.

4.2 WMO Quality Management Framework

4.2.1 The meeting was informed about the outcome of the Inter-Commission Task Team on Quality Management Framework that was held from 28 to 30 October 2008 in Geneva. CIMO-MG-6 requested J. van der Meulen and M. Garcia to be focal points concerning quality management issues as mentioned in more details under agenda item 3.1.

4.2.2 The working arrangements between WMO and ISO have been signed and allow the development of common ISO-WMO technical standards. The meeting was informed of the work of some ETs that could be relevant in the context of these arrangements. In this context it should be recalled that CIMO is only responsible for standards addressing observations and metrology, but not quality management.

4.3 CIMO Operating Plan

4.3.1 The meeting addressed the need to align CIMO's activities to the WMO strategic planning initiative and recognized that all CIMO activities were clearly contributing to Expected Result 4 "Integration of WMO observing systems".

4.3.2 CIMO-MG-6 decided to embark on the development of its own operating plan based on the Draft CIMO strategic Plan and targets that had been developed for CIMO-XIV and welcomed the offer of the Vice-President to develop this operating plan. CIMO-MG-6 requested the OPAG co-chairs to identify within 2 months the key deliverables that their OPAG should achieve for the period 2008-2011. Finally, the meeting noted the need for a balanced approach for measuring the success of activities that were carried voluntarily or against payment.

5. ARRANGEMENTS FOR TECO/METEOREX-2008

The MG was informed about the arrangements for TECO and METEOREX-2008 and decided on the remaining organizational aspects related to chairing of these events and organization of the round-table discussion, which should address the highlights of the TECO-2008 as well as the new emerging issues that CIMO should address in its future work programme.

6. ANY OTHER BUSINESS

The Coordinator on GEOSS informed the meeting on the latest GEOSS developments.

7. CLOSURE OF THE SESSION

The session closed on Wednesday, 26 November 2008 at 17:45 hours

LIST OF PARTICIPANTS

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| <p>Dr John NASH President of CIMO</p> | <p>Met Office FitzRoy Road EXETER, DEVON EX1 3PB United Kingdom Tel.: +44 1392 88 5649 Fax: +44 1392 88 5681 E-mail: john.nash@metoffice.gov.uk</p> |
| <p>Mr Rainer N. DOMBROWSKY Vice-president of CIMO</p> | <p>111 Clubside Drive TANEYTOWN, MD 21787-1509 United States of America Tel.: +1 410 756 2525 Fax: +1 301 587 4524 E-mail: dombrowskyr@comcast.net</p> |
| <p>Dr Alexander I. GUSEV Co-ordinator for GEOSS</p> | <p>ROSHYDROMET 12 Novovagankovsky 12 123242 MOSCOW Russian Federation Tel.: +7 495 605 4813 Fax: +7 499 795 2414 E-mail: gusev@mecom.ru</p> |
| <p>Dr Jitze P. VAN DER MEULEN Co-chairperson of OPAG-Surface</p> | <p>Royal Netherlands Meteorological Institute (KNMI) Wilhelminalaan 10 P.O. Box 201 NL-3730 AE DE BILT The Netherlands Tel.: +31 30 220 6432 Fax: +31 30 221 0407 E-mail: jitze.van.der.meulen@knmi.nl</p> |
| <p>Dr Bertrand CALPINI Co-chairperson of OPAG-Surface</p> | <p>MeteoSwiss Measurement Technique Department Aerological Station P.O. Box 316 CH-1530 PAYERNE Switzerland Tel.: +41 26 662 6228 Fax: +41 26 662 6212 E-mail: bertrand.calpini@meteoswiss.ch</p> |

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| <p>Mr Russell STRINGER Co-chairperson of OPAG-Upper-Air</p> | <p>Bureau of Meteorology 700 Collins Street G.P.O. Box 1289 MELBOURNE, VIC 3001 Australia Tel.: +61 3 9669 4225 fax: +61 3 9669 4168 E-mail: R.Stringer@bom.gov.au</p> |
| <p>Mr Heng ZHOU Co-chairperson OPAG-Upper-air</p> | <p>China Meteorological Administration 46 Zhongguacun, Nandajie BEIJING 100081 China Tel.: +86 10 6840 6242 Fax: +86 10 6217 4797 E-mail: zhouheng@cma.gov.cn</p> |
| <p>Mr Mario J. GARCIA Co-chairperson of OPAG-Capacity Building</p> | <p>Servicio Meteorologico Nacional 25 de Mayo 658 (C1002 ABN) BUENOS AIRES Argentina Tel.: +54 11 5167 6714 Fax: +54 11 5167 6709 E-mail: garcia@smn.gov.ar</p> |
| <p>WMO SECRETARIAT 7 bis, avenue de la Paix P.O. Box 2300 CH-1211 GENEVA 2 Switzerland</p> | <p>WWW website www.wmo.int/web/www/www.html</p> |
| <p>Dr Wenjian ZHANG Director, Observing and Information Systems Department</p> | <p>Tel.: +41 22 730 8567 Fax: +41 22 730 8021 E-mail: WZhang@wmo.int</p> |
| <p>Dr Miroslav ONDRÁŠ Chief, WMO Observing Systems Division</p> | <p>Tel.: +41 22 730 8409 Fax: +41 22 730 8021 E-mail: MOndras@wmo.int</p> |
| <p>Dr Isabelle RÜEDI Head, Instruments and Methods of Observation Unit, WMO Observing Systems Division</p> | <p>Tel.: +41 22 730 8278 Fax: +41 22 730 8021 E-mail: IRuedi@wmo.int</p> |

CIMO-MG-6, ANNEX II

ACTION SHEET

| Action No. | Item No. | Action required | Responsible | Deadline | Status/remarks |
|-------------------|-----------------|--|--|-----------------------------------|-----------------------|
| 1 | 2.1.5 | Promptly inform Secretariat on any resignation Copy CIMO president when discussing issues with Secretariat | All experts MG Members | Ongoing Ongoing | |
| 2 | 2.2.4 | Organize review of siting classification by experts | Secretariat | Mid-2009 | |
| 3 | 2.2.7 | Finalization of ET-UGUN workplan | R. Stringer with ET-UGUN co- chairs | 30 Nov. 2008 | |
| 4 | 3.1.4 | Inform Morocco about decision | Secretariat | March 2009 | |
| 5 | 3.1.6 | Develop detailed description of all CIMO functions | MG with Secretariat | March 2010 | |
| 6 | 3.1.10 | Develop proposals to improve CIMO's working structure (how to reduce size of MG, changes of ETs,...) | MG Members | June 2009 | |
| 7 | 3.1.11 | Proposal on how to improve effectiveness of their OPAGs | OPAG Co-chairs | June 2009 | |
| 8 | 3.2.3 | Decide who will carry out evaluation of intercomparison and ensure publication of intercomparison report prior to CIMO-XV | ET-SBII&CM through J. van der Meulen | June 2009 | |
| 9 | 3.2.4 | Organize IOC-UA meeting | Secretariat | June 2009 | |
| 10 | 3.2.5 | Clarify whether both intercomparisons would be held simultaneously and whether the hosting country could provide the necessary support | ET-SBII&CM through J. van der Meulen | December 2009 | |
| 11 | 3.2.6 | Develop proposal for intercomparison on cloud amount and on present weather sensor | ET-ST&MT through J. van der Meulen | March 2010 | |
| 12 | 3.2.7 | Gather information on Australia sea-level pre-comparison Liaise with JCOMM representative on sea-level instrument intercomparison | J. van der Meulen and R. Stringer Secretariat | December 2009 July 2009 | |

| Action No. | Item No. | Action required | Responsible | Deadline | Status/remarks |
|-------------------|-----------------|--|-------------------------------------|--------------------------------|-----------------------|
| 13 | 3.2.8 | Liaise with president of CHy to clarify collaboration on intercomparison of hydrological gauges | President | February 2009 | |
| 14 | 3.3.1 | Seek concurrence of Croatia for nomination of Rapporteur on CIMO Guide | Secretariat | March 2009 | |
| 15 | 3.3.4 | Identifying CIMO Guide guidelines that would be appropriate standards, in particular within the WIGOS framework | Rapporteur on CIMO Guide | September 2009 | |
| 16 | 3.3.5 | Review metrological aspects presented in the CIMO Guide and to advise on need to address topic more extensively in the CIMO Guide. | Rapporteur on CIMO Guide | September 2009 | |
| 17 | 3.3.7 | Prepare a detailed proposal for inclusion of material on extreme weather in the CIMO Guide | ET-ST&MT & Rapporteur on CIMO Guide | CIMO-XV | |
| 18 | 3.3.8 | Proposal on specificities required specificities of automatic weather stations for rescue operations for inclusion in CIMO Guide | A. Gusev | March 2010 | |
| 19 | 4.3.2 | Develop a draft CIMO Operating Plan Identify OPAG 2 key deliverables | R. Dombrowsky OPAG Co-chairs | March 2009 January 2009 | |