

WORLD METEOROLOGICAL ORGANIZATION

COMMISSION FOR BASIC SYSTEMS

OPEN PROGRAMME AREA GROUP

ON INTEGRATED OBSERVING SYSTEM

TASK TEAM ON GOS REGULATORY MATERIAL

Second session

GENEVA, SWITZERLAND

20 - 22 February 2006



FINAL REPORT

DISCLAIMER

Regulation 42

Recommendations of working teams shall have no status within the Organization until they have been approved by the responsible constituent body. In the case of joint working teams the recommendations must be concurred with by the presidents of the constituent bodies concerned before being submitted to the designated constituent body.

Regulation 43

In the case if a recommendation made by a working team between sessions of the responsible constituent body, either in a session of a working team or by correspondence, the president of the body may, as an exceptional measure, approve the recommendation on behalf of the constituent body when the matter is, in his opinion, urgent, and does not appear to imply new obligations for members. He may then submit this recommendation for adoption by the Executive Council or to the President of the Organization for action in accordance with Regulation 9(5).

EXECUTIVE SUMMARY

The second session of the Task Team on GOS Regulatory Material was held in Geneva at the WMO Headquarters from 20 to 22 February 2006. In accordance with the tasks assigned to the Team by CBS, the major issues reviewed by the meeting were:

- Review and updates to the Manual on the GOS (Volume I and Volume II, Regional Aspects – Region VI);
- Review and updates to the Guide on the GOS;
- Review of status of the development of the revised Volume A of WMO Publication No. 9;
- The action plan and outline of final proposals on the updating of the above publications to CBS ICT-IOS.

In reviewing and updating the Manual on the GOS and the Guide on the GOS, the meeting kept in mind the following criteria:

- The original text of the Manual and Guide should be retained as far as possible to avoid re-opening of discussions at CBS or in other forums;
- No parts of the Manual or Guide should be deleted unless the material was erroneous, outdated, irrelevant or was not part of the regulatory material and could be located elsewhere. In the latter case appropriate cross-referencing would be provided;
- Additional new material should be included where considered necessary;

Regarding Vol. A of the WMO publication No. 9, the meeting was informed of the current status of the revised version on Volume A. The meeting was shown a live demonstration of the revised Volume A, and several suggestions were made by the meeting for improvements to the new application.

Finally, the meeting agreed on the following action plan on the updating of publications:

Manual on the GOS (WMO- No. 544)

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|--------------|--|
| 1 April 2006 | - Collection of amendments on the Manual |
| 1 May 2006 | - Completion of Supplement to the Manual |
| 31 May 2006 | - Review and issue of Supplement to the Manual |

Guide on the GOS (WMO- No. 488)

- | | |
|---------------------|--|
| 30 Jun 2006 | - Completion of the first final draft of the revised Guide |
| 1 Jul - 31 Aug 2006 | - Seeking comments from Members |
| 11 Sep 2006 | - Completion of the final draft of the revised Guide on the GOS |
| 11-15 Sep 2006 | - Review of the draft revised Guide by CBS ICT-IOS |
| 9-16 Nov 2006 | - Consideration of the draft new version of the Guide to CBS-Ext. (06) |

Volume A (WMO-No. 9)

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|---------------------|---|
| 31 March 2006 | - Completion of development of the new Volume A |
| 30 April 2006 | - Final migration of operational data to the new Volume A |
| 1 May -15 June 2006 | - Operational trial of the new A Volume in Secretariat |
| 15-31 May 2006 | - Seeking comments from Members |
| 1 July 2006 | - Deployment of the new Volume A to Members |

1. ORGANIZATION OF THE MEETING

The meeting of the Task Team on Regulatory Material was held in Geneva at the WMO Headquarters Building from 20 to 22 February 2006. The list of participants is attached as Appendix A.

1.1 Opening of the meeting

The meeting was opened at 10 a.m. on 22 February by Dr Alexander Karpov, Chief of the Observing Systems Division. He welcomed the participants and recalled the objectives of the meeting, and advised that the final result for the Task Team was to report on its activities to the next session of CBS. The expected and essential tasks of the meeting were to revise the GOS Regulatory Material, namely the revised Volume A, updates to the Manual on the GOS and revisions to the Guide on the GOS. He also advised that it was expected that all the amendments proposed by the Task Team be made available on the WMO website, so that WMO Members could make comments as necessary, and that the final versions of the amended documents be presented to CBS ICT-IOS in September. Dr Karpov finally wished the participants a successful meeting and for a pleasant stay in Geneva.

1.2 Election of the Chairman

Dr Alexander Vasiliev was unanimously elected as the chairman of the meeting.

1.3 Adoption of the agenda

The provisional agenda submitted for the meeting was adopted and is given in Appendix B.

1.4 Working arrangements

The team agreed on its working hours and on a tentative work plan.

2. REVIEW OF THE DEVELOPMENT OF THE REVISED VERSION OF WMO PUBLICATION 9, VOLUME A

The meeting was advised of the current status of the revised Volume A. The team was informed that the reason why the application had been changed from an Access 2000 application to a fully relational Oracle database, which resulted in a delay in its development, was due primarily to staff changes in the Secretariat and to a commitment by WMO to convert all its databases to the Oracle database system.

A demonstration of the current development version of the revised Volume A was presented to the meeting. The team was informed that this new Oracle version of Volume A will allow interactive access by WMO Members. This will facilitate live updating of the contents of Volume A by Members, although WMO Secretariat will maintain its role as the body giving final approval of information that is accepted into Volume A. A lively debate ensued, with such issues as data security, inclusion or linking of monitoring data, maintenance and user help required by the Members for inputting data. The team recognised the need for a help desk or similar system to provide timely assistance to WMO Members by the Secretariat regarding problems with the interactive Volume A. It was decided that a phased implementation of the revised Volume A would be a preferable means of introducing this new application. It was suggested that the first phase should be to implement the revised Volume A in WMO, so that CBS can be informed regarding the adequacy and usefulness of the revised Volume A. Deployment to the WMO Members would then need to be carefully coordinated, with complete training documentation provided to Members. The meeting requested that a full description of the new Volume A be prepared and sent out to WMO Members as soon as possible advising them of the status of the revised Volume A and acquainting them with the new requirements regarding updating of the new Volume A.

3. UPDATES TO THE MANUAL ON THE GOS

The meeting discussed proposed amendments and adjustments to the Manual on the GOS. The majority of suggested changes were of a minor nature, and the meeting generally adopted these amendments. There was a discussion of the classification for scales for meteorological phenomena, resulting from the fact that the scales in the new 7th edition of the Guide to Meteorological Instruments and Methods of Observation, WMO-No. 8, differed from the classification used in the Manual of the GOS. It was decided to adopt the scales from the new CIMO Guide so as to ensure consistency in the field of observations. However, the meeting requested that the source of these new classification scales be determined. It was agreed that this issue should also be coordinated with the President of CAS.

The meeting also discussed some additional questions that were realised regarding Part III of the Manual on the GOS. The issue on the required resolution of the elevation of a meteorological land station received some discussion. The current resolution as stated in the Manual is that the elevation shall be specified in whole metres. It was felt by the meeting that this resolution may not be sufficient, especially for some applications such as NWP and the requirements for BUFR coding. It was decided to seek the guidance of the OPAG-DPFS for a final decision.

The meeting discussed at some length the use of the terms 'accuracy' and 'uncertainty'. The meeting confirmed that in accordance with the ISO standards the term 'uncertainty' should be applied to the measurements instead of 'accuracy'. When dealing with requirements from application areas, such as in the Rolling Requirements Review Process, it was agreed that the use of 'accuracy' was more appropriate.

The meeting reviewed some issues dealing with amendments to Volume II - Regional Aspects - Region VI of the Manual. These amendments were additional to amendments that were approved by XIV-RA VI. Additionally, several editorial changes were suggested. The meeting agreed to the suggested changes. It was proposed to remove paragraph 6.2.6.2 which deals with the ToRs of the Coordinators on the Regional Aspects of the GOS and JCOMM. The team recommended that the President of RA VI should be approached for approval.

The meeting was informed that Regional Association V would be meeting in May and that the session would revise their regional aspects of Volume II of the Manual. However the meeting noted that the draft text of the Manual relating to the Regional Associations I, II, III and IV would require additional revision. The meeting noted with appreciation that Dr Zahumensky kindly offered his assistance in drafting the appropriate sections of the Manual in coordination with Coordinators/Rapporteurs on the Regional Aspects of the GOS.

The meeting was advised that site layout requirements for automatic weather stations are not available in the Manual, whereas they are defined for manned stations. The team decided to inform ET-AWS of this shortcoming and to ask them for assistance in providing the relevant information on site selection layout definitions for AWS for inclusion in the Manual.

The meeting noted that in the Manual and in the Guide there are no adequate recommendations on the techniques and methodologies of averaging of data over time. The team discussed two levels of averaging: i) the instrument level of averaging and ii) the Level II data of averaging. It was decided to seek the final guidance from the ET-AWS in revising the appropriate section of the Manual.

The team discussed several changes required to the satellite related parts of the Manual. The suggested changes were reviewed and several additional changes were also made. The Chairman thanked Mr Lafeuille for his excellent work in revising Part IV of the

Manual. The meeting agreed that all revisions to the Manual would now be collated into a Supplement to the Manual of the GOS, and submitted to CBS ICT-IOS for their approval.

4. AMENDMENTS TO THE GUIDE ON THE GOS

The team reviewed a new revised version of Part II – Requirements for Observational Data of the Guide on the GOS. The team discussed the revisions in detail, and made many additional changes. Considerable effort was made by the team to ensure consistency in terminology between the Guide and the Manual. A new section on end-user applications was drafted by the team. It was suggested to replace Part II of the Guide with the newly updated material.

The meeting considered the revised version of Part IV - The Space-based Subsystem of the Guide. One of the aims of this revision was to reflect recent changes that had occurred in the space-based subsystem of the GOS. Several diagrams in this part were amended by the team so as to make them more understandable to wider users of the Guide. The team also recommended that this part of the Guide be forwarded to ET-SAT or ET-SUP members for review before it is incorporated into the revised Guide on the GOS. The Chairman thanked Mr Lafeuille for his excellent work in revising Part IV of the Guide.

Dr Zahumensky prepared an electronic version of the Guide, which was presented to the team. The meeting noted that rectification of the deficiencies and inconsistencies between the Guide on the GOS and Manual on the GOS and the CIMO Guide were done. These included updating of the references to the new versions of the above documents. The team expressed its gratitude to Dr Zahumensky for the excellent work he had done on revising the Guide.

The team discussed the issue of Quality Management Framework as endorsed by Executive Council, and the fact that this concept is not incorporated into the current version of the Guide. The team decided to add an additional part to the Guide, Part VIII entitled "Quality Management", which would describe the general goals of quality management in relation to the observing systems. It was agreed that upon receiving the appropriate guidance, the relevant chapters of the Guide would be updated accordingly.

The team proposed that all amendments and updates should be brought together following the agreed action plan. It was also suggested that the draft of the revised Guide should be posted on the WMO website, and the draft can then be discussed by WMO Members who would be asked to provide their comments and suggestions.

5. ACTION PLAN AND OUTLINE OF FINAL PROPOSALS TO CBS ICT-IOS

The meeting discussed the future action plan taking into account the CBS/OPAG/IOS calendar of activities in 2006. It agreed on the following:

Manual on the GOS (WMO- No. 544)

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|--------------|--|
| 1 April 2006 | - Collection of amendments on the Manual (Secretariat) |
| 1 May 2006 | - Completion of Supplement to the Manual (Secretariat) |
| 31 May 2006 | - Review and issue of Supplement to the Manual (Secretariat) |

Guide on the GOS (WMO- No. 488)

- | | |
|---------------------|--|
| 30 Jun 2006 | - Completion of the first final draft of the revised Guide (Consultant) |
| 1 Jul - 31 Aug 2006 | - Seeking comments from WMO Members (Secretariat) |
| 11 Sep 2006 | - Completion of the final draft of the revised Guide on the GOS (Consultant) |
| 11-15 Sep 2006 | - Review of the draft revised Guide by CBS ICT-IOS (Rapporteur) |
| 9-16 Nov 2006 | - Consideration of the draft new version of the Guide to CBS-Ext (06). (Secretariat) |

Volume A (WMO-No. 9)

- 31 March 2006 - Completion of development of new Volume A (Consultant WWW/ITD)
- 30 April 2006 - Final migration of operational data to new Volume A (Consultant ITD)
- 1 May -15 June 2006 - Operational trial of new A Volume in Secretariat (Consultant WWW)
- 15-31 May 2006 - Seeking comments from WMO Members (Secretariat)
- 1 July 2006 - Deployment of the new Volume A to WMO Members
(Secretariat/Consultant)

6. ANY OTHER BUSINESS

There being no further business, the meeting approved the report of its session.

7 CLOSURE OF THE MEETING

The meeting was closed at 2.00 pm on 22 February 2006.

LIST OF PARTICIPANTS

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AGENDA

1. **ORGANIZATION OF THE SESSION**
 - 1.1 Opening of the meeting
 - 1.2 Selection of the Chairman
 - 1.3 Adoption of the agenda
 - 1.4 Working arrangements

 2. **STATUS OF THE DEVELOPMENT OF THE REVISED VERSION OF VOL A (WMO-No. 9)**

 3. **AMENDMENTS TO THE MANUAL ON THE GOS (WMO-No. 544)**
 - 3.1 Updates to the Manual on the GOS – Parts I-III, V
 - 3.1.1 Issues related to surface observations
 - 3.2 Updates to the Manual on the GOS – Part IV (Space-based Subsystem)
 - 3.3 Updates to the Manual on the GOS, Vol. II – Regional Aspects

 4. **STATUS OF THE DEVELOPMENT OF THE REVISED VERSION OF THE GUIDE ON THE GOS (WMO-No. 488)**
 - 4.1 Updates of the development of the revised Guide on the GOS
 - 4.1.1 Issues related to surface observations
 - 4.2 Updates to the Guide on the GOS – Parts II and IV

 5. **PROPOSALS AND RECOMMENDATIONS TO CBS ICT-IOS MEETING AND ACTION PLAN**

 6. **ANY OTHER BUSINESS**

 7. **CLOSURE OF THE SESSION**
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