

WORLD METEOROLOGICAL ORGANIZATION

EXECUTIVE COUNCIL

FIFTY-FIFTH SESSION

GENEVA, 26–28 MAY 2003

ABRIDGED FINAL REPORT WITH RESOLUTIONS

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Secretariat of the World Meteorological Organization - Geneva - Switzerland

REPORTS OF RECENT WMO SESSIONS

Congress and Executive Council

- 903 — Executive Council, fifty-first session, Geneva, 27–29 May 1999
- 915 — Executive Council, fifty-second session, Geneva, 16–26 May 2000
- 929 — Executive Council, fifty-third session, Geneva, 5–15 June 2001
- 932 — Thirteenth World Meteorological Congress, Proceedings, Geneva, 4–26 May 1999
- 945 — Executive Council, fifty-fourth session, Geneva, 11–21 June 2002
- 960 — Fourteenth World Meteorological Congress, Geneva, 5–24 May 2003

Regional associations

- 924 — Regional Association II (Asia), twelfth session, Seoul, 19–27 September 2000
- 927 — Regional Association IV (North and Central America), thirteenth session, Maracay, 28 March–6 April 2001
- 934 — Regional Association III (South America), thirteenth session, Quito, 19–26 September 2001
- 942 — Regional Association VI (Europe), thirteenth session, Geneva, 2–10 May 2002
- 944 — Regional Association V (South–West Pacific), thirteenth session, Manila, 21–28 May 2002
- 954 — Regional Association I (Africa), thirteenth session, Mbabane, 20–28 November 2002

Technical commissions

- 921 — Commission for Hydrology, eleventh session, Abuja, 6–16 November 2000
- 923 — Commission for Basic Systems, twelfth session, Geneva, 29 November–8 December 2000
- 931 — Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology, first session, Akureyri, 19–29 June 2001
- 938 — Commission for Climatology, thirteenth session, Geneva, 21–30 November 2001
- 941 — Commission for Atmospheric Sciences, thirteenth session, Oslo, 12–20 February 2002
- 947 — Commission for Instruments and Methods of Observation, thirteenth session, Bratislava, 25 September–3 October 2002
- 951 — Commission for Agricultural Meteorology, thirteenth session, Ljubljana, 10–18 October 2002
- 953 — Commission for Aeronautical Meteorology, twelfth session, Montreal, 16–20 September 2002
- 955 — Commission for Basic Systems, extraordinary session, Cairns, 4–12 December 2002

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Regional Association V	—	English, French
Regional Association VI	—	Arabic, English, French, Russian
Technical Commissions	—	Arabic, Chinese, English, French, Russian, Spanish

WMO issues authoritative publications on scientific and technical aspects of meteorology, hydrology and related subjects. These include manuals, guides, training materials, public information and the *WMO Bulletin*.

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GENERAL SUMMARY OF THE WORK OF THE SESSION

The Executive Council (EC) of the World Meteorological Organization (WMO) held its fifty-fifth session from 26 to 28 May 2003 at the WMO Headquarters after the closure of the Fourteenth World Meteorological Congress at the Geneva International Conference Centre, under the chairmanship of Mr A. Bedritsky, President of WMO.

1. ORGANIZATION OF THE SESSION

(agenda item 1)

1.1 OPENING OF THE SESSION (agenda item 1.1)

1.1.1 The President of the Organization opened the session at 9:30 a.m. on 26 May 2003.

1.1.2 In his opening remarks, the President stressed that the fifty-fifth session of the Executive Council was important as it was the first one after Fourteenth Congress. He congratulated members on their election to the Executive Council and welcomed especially the new members of the Council. A complete list of participants is given in Appendix A to this report.

1.1.3 The President referred to the earlier meeting of EC-elect which was organized to facilitate the work of the present session of the Council and reminded members of the role of the Executive Council, of their important responsibilities and of the many critical tasks they had to carry out over the next four years. He drew attention to the guidance, which the Executive Council had to provide in the implementation of the decisions of Congress.

1.1.4 During the short session of the Council, immediately following Fourteenth Congress, a number of important actions relating to the mandatory annual work of the Executive Council, such as consideration of reports of sessions of constituent bodies, subsidiary bodies and matters relating to various prizes and awards were to be taken. In addition, the Council was also required to agree on the programme and budget for the first biennium (2004–2005) and the establishment of a number of bodies reporting to the Council, some of which had to commence work without delay.

1.2 APPROVAL OF THE AGENDA (agenda item 1.2)

The Executive Council approved the proposed provisional agenda.

1.3 ESTABLISHMENT OF COMMITTEES (agenda item 1.3)

1.3.1 The Executive Council decided not to set up the traditional working committees. Most items were therefore considered in the Committee of the Whole. However, the following small subgroups were established to consider specific items:

Programme and budget 2004–2005

Chairperson: U. Gärtner
Core members: M.S. Mhita
T. Kitade
M.A. Rabiolo
J.J. Kelly
Chow Kok Kee

Scientific lectures for EC-LVI

Chairperson: T. Kitade
Core members: M. L. Bah
M.A. Rabiolo
A.J. Dania
R. Sorani

World Meteorological Day 2005

Chairperson: A. N'Diaye
Core members: A.C. Vaz de Athayde
M.D. Everell
J. Lumsden
H. Al-Sha'er

1.3.2 The Council also agreed on the membership of the Selection Committees for the International Meteorological Organization Prize, the WMO Research Award for Young Scientists, the Professor Dr Vilho Vaisala Award, the Norbert Gerbier-MUMM International Award and the WMO Staff Pension Committee (see agenda item 7.2).

1.3.3 The Council appointed Mr E. Zárate as Rapporteur to review previous resolutions of the Council.

1.4 PROGRAMME OF WORK OF THE SESSION (agenda item 1.4)

The necessary arrangements concerning the working hours and the allocation of agenda items to the Committee of the Whole were made.

1.5 APPROVAL OF THE MINUTES (agenda item 1.5)

The Executive Council noted the decision made by the Executive Council at its fiftieth session and confirmed by Thirteenth Congress that no minutes of plenary meetings at sessions of the Executive Council, regional associations and technical commissions should be prepared unless otherwise decided for special items. Tape recordings of plenaries would continue to be made and would be retained for record purposes.

2. REVIEW OF PANELS AND OTHER BODIES OF THE EXECUTIVE COUNCIL (agenda item 2)

2.1 The decisions of Fourteenth Congress requiring follow-up action by the Executive Council were discussed and recorded under agenda item 3 along with the decisions of the Executive Council relating to changes in the structure of its panels and other bodies.

2.2 It was agreed to re-establish the Executive Council Panel of Experts on Education and Training.

2.3 It was agreed to re-establish the following Executive Council working groups:

- (a) Executive Council Working Group on Antarctic Meteorology;
- (b) Executive Council Working Group on Long-term Planning;
- (c) Executive Council Advisory Group on the International Exchange of Data and Products;
- (d) Executive Council Advisory Group of Experts on Technical Cooperation;
- (e) Executive Council Advisory Group on Role and Operation of NMHSs;
- (f) Executive Council Advisory Group on Climate and Environment.

2.4 It was agreed to re-establish the following selection committees for WMO awards and prizes:

- (a) Selection Committee for the IMO Prize;
- (b) Selection Committee for the WMO Research Award for Young Scientists;
- (c) Selection Committee for the Professor Dr Vilho Vaisala Award;
- (d) Selection Committee for the Norbert Gerbier-MUMM International Award.

2.5 It was agreed to re-establish the following other bodies reporting to the Executive Council:

- (a) Joint WMO/IOC/ICSU Scientific Committee for the World Climate Research Programme;
- (b) Steering Committee for the Global Climate Observing System;
- (c) Meetings of Presidents of Technical Commissions;
- (d) Staff Pension Committee.

2.6 The membership of Executive Council panels and other bodies is given in Annex I to this report.

2.7 In that connection, the Council adopted Resolutions 1 and 2 (EC-LV).

3. **CONSIDERATION OF DECISIONS OF FOURTEENTH CONGRESS REQUIRING URGENT ACTION BY THE EXECUTIVE COUNCIL** (agenda item 3)

Technical Cooperation Programme

3.1 The Executive Council noted that Fourteenth Congress decided that the WMO VCP would be continued during the fourteenth financial period (Resolution 20 (Cg-XIV) — The WMO Voluntary Cooperation Programme). Congress also agreed on the fields of cooperation covered by the VCP and the continuation of the use of the previously established rules and procedures for the VCP.

3.2 The Council noted that the VCP(F) funds were used mainly for expert services, short-term fellowships, TCDC activities, support to regional specialized centres activities, and high priority programmes, in particular for support to upper-air and surface observing stations, for the improvement

of the GTS, and operational hydrology activities, in accordance with the guidelines approved by the forty-eighth session of the Executive Council.

3.3 The Council noted that several areas needed to be further supported under the VCP(F) scheme, especially in the GOS, GTS and satellite activities. The Council also noted the concern expressed relating to funding long-term fellowships which was crucial to the human resources development of NMHSs of several Members, and agreed that the allocations made under the WMO regular budget and VCP(ES) schemes should continue to be used for that purpose. Furthermore, the Council agreed that an allocation of US \$20 000 should be made available from the VCP(F) for the WMO programme for the LDCs.

3.4 The Council approved the allocations of the VCP(F) for 2003, based on an estimated income of approximately US\$ 250 000, as given in Annex II to this report, and authorized the Secretary-General to implement those activities as funds became available. The Council urged Members to make further contributions to the VCP(F).

Evolving role of WMO

3.5 The Council noted that Fourteenth Congress requested the Council to continue to address the matter of the evolving role of WMO as well as the WMO structure and mode of operations and to take further action. The Council also noted that Congress agreed that a continuing further review of the WMO structure and of the mode of operation was needed in order to:

- (a) Identify ways to improve direct linkages between the structural elements and the WMO Programmes;
- (b) Manage better the cross-cutting issues and evolving initiatives; and
- (c) Enhance WMO's mode of operation.

3.6 The Council further noted that Congress decided that there was a need for further work to be done on questions concerning the WMO Convention, particularly in light of the relevant advances and developments which could be reflected in the Convention.

3.7 In that connection, the Council recognized the relationship of the aspects mentioned above to other relevant work being undertaken such as those relating to the WMO long-term planning process as well as the role and operation of NMHSs.

3.8 The Council agreed that in order to enable a suitable response to pertinent Congress decisions and deliberations, it was necessary to consider an overall framework through which specific related issues could be addressed in connection with the evolving role of WMO.

3.9 In that regard, the Council decided to set up an ad hoc group to establish a firm foundation on which the Council could conduct an in-depth discussion on the evolving role of WMO. The group, in particular, should:

- (a) Identify areas of concern relating to the evolving role of WMO, as well as its structure, mode of operation and Convention;
- (b) Collate the relevant data, information and other work already undertaken on that subject;
- (c) Analyse the relevant issues that needed to be addressed;
- (d) Prepare a discussion paper that would form the basis of discussion by its fifty-sixth session on that matter and which should lead to specific decisions for the realization of Congress decisions. That should provide recommendations on the way ahead, including specific recommendations that could be adopted by its fifty-sixth session and lead to changes by Fifteenth Congress, if deemed advisable by the Council. The possible establishment of any subsidiary body or bodies that might be necessary should also be addressed.

3.10 The Council decided to designate Mr U. Gärtner as chairperson of that ad hoc group and the following as members:

J. P. Beysson

P. D. Ewins

M. S. Mhita

A.-M. Noorian

J. W. Zillman

the vice-president of CAgM and the president of CHy as invited experts

3.11 The Council agreed that that group should consult as widely as possible with Members and their NMHSs, regional associations and technical commissions as well as draw on all relevant expertise required for completion of its work before the fifty-sixth session of the Council. For that purpose, an electronic mailbox should be set up.

3.12 The Council requested the Secretary-General to provide the appropriate support in that connection, bearing in mind the importance that the Congress and the Executive Council attached to that topic.

Long-term planning

3.13 The Council noted the relevant decisions of Fourteenth Congress relating to the monitoring of the implementation of the 5LTP (2000–2009), the adoption of the 6LTP and the preparation of the 7LTP.

3.14 The Council noted that Congress stressed that the preparation of the 7LTP should be interactive and synergistic. There should be maximum opportunity for input from Members in order to ensure that WMO Programmes and activities were developed in response to the wishes and aspirations of Members. Members could also be surveyed regarding their use and implementation of the WMO Long-term Plans. The regional associations should be instrumental in providing an integrated view of their respective activities and priorities in the context of the 7LTP and in providing regional analyses and assessments in addition to regional priorities. The active participation

of the technical commissions, particularly in connection with the scientific and technical programmes, should be ensured. In addition, consideration should also be given to ensuring that WMO Programmes and the performance results expected of them during the planning period be clearly linked to facilitate performance monitoring and assessment; that should take into account the RBB approach used in the preparation of the programme and budget for the financial period, with its accompanying key performance indicators.

3.15 The Council further noted the request of Fourteenth Congress to review the monitoring process and to assess the implementation of the 6LTP and established the necessary mechanism for the preparation of the 7LTP. It decided to re-establish the Executive Council Working Group on Long-term Planning that would meet twice during the fourteenth financial period (2004–2007).

3.16 In that connection, the Council adopted Resolution 3 (EC-LV).

International exchange of data and products

3.17 The Council noted that Fourteenth Congress agreed that it was important to give close attention to the issue of international exchange of meteorological, hydrological and related data and products, as that was a matter of highest importance to the Members and their NMHSs. It recognized that there had been political, legal, economic, social, scientific and technological developments which had a bearing on the implementation of Resolution 40 (Cg-XII) — WMO policy and practice for the exchange of meteorological and related data and products including guidelines on relationships in commercial meteorological activities and Resolution 25 (Cg-XIII) — Exchange of hydrological data and products and that those should be taken into account in any review of those two resolutions and the consideration of relevant action in the future. Those included globalization, alternative services delivery, commercialization, cost recovery and the Internet.

3.18 The Council also noted that Fourteenth Congress requested the Executive Council to keep that issue under review, particularly the implementation of Resolution 40 (Cg-XII) and Resolution 25 (Cg-XIII), as well as identifying and addressing specific concerns, and to report to Fifteenth Congress. It also requested the Secretary-General to provide the needed support and to take appropriate action.

3.19 The Council further noted the differences in circumstances relating to the exchange of meteorological and hydrological data and products. The Council requested CHy to pursue further efforts so that the letter and spirit of Resolution 25 (Cg-XIII) became closer to those of Resolution 40 (Cg-XII).

3.20 In light of the above, the Council adopted Resolution 4 (EC-LV).

Role and operation of NMHSs

3.21 The Council noted that Fourteenth Congress recognized that the role and operation of NMHSs were intimately linked to many other issues of major interest to WMO. It recognized that such links should be carefully considered and should be such as to help WMO and its Members to strengthen complementarity and strategic alliances as well as to meet the major challenges and commitments facing the Organization.

3.22 The Council also noted that Congress expressed its thanks to Members which had taken pertinent initiatives, including the organization of events in support of enhancing the role and operation of NMHSs. Congress encouraged Members to contribute further in that connection.

3.23 The Council further noted that Congress requested the Executive Council to keep relevant topics under review and requested the Secretary-General to take the necessary initiatives and provide the required support. In that connection, Congress felt that the work should proceed taking into account the evolving role of WMO.

3.24 In the light of its consideration of the wide range of issues associated with the role and operation of NMHSs and its conclusion that those should be further pursued as a matter of great importance, the Executive Council adopted Resolution 5 (EC-LV).

Quality management

3.25 The Council noted that Fourteenth Congress decided that WMO should work towards a QMF for NMSs that would eventually include and develop the following distinct though related elements, which could be addressed, possibly on a phased basis:

- (a) WMO technical standards;
- (b) Quality management system(s), including quality control; and
- (c) Certification procedure(s)

while recognizing that the cost associated with the development of such a framework had yet to be assessed.

3.26 It further noted that the development of a WMO QMF should enable the provision of early and continuing relevant advice to Members on developing their quality management system, and that the first priority was to consolidate the available pertinent technical standards to enable easy access and reference in the WMO QMF.

3.27 The Executive Council recalled that Congress had requested the Executive Council:

- (a) To take the lead in that matter, with the help of the technical commissions, making use of the already developed comprehensive system of WMO procedures and practices documented in the *Technical Regulations* (WMO-No. 49), *Manuals, Guides, Guidelines* and *Technical Publications*; and considering the need for possible adaptation of existing systems and

procedures, especially relevant WMO regulatory material, that would assist NMSs to meet increasing expectations of users/customers for more effective and efficient service delivery;

- (b) To guide the development of the QMF, including the early availability of broad guidelines for Members, especially their NMSs; and
- (c) To establish the appropriate mechanism for ensuring that that work was carried out.

3.28 The Council requested the technical commissions to assist in the provision of technical guidance, advice, review and assessment, as appropriate; and the regional associations to provide advice and feedback on that matter.

3.29 Members were encouraged to share relevant experience and to cooperate with one another in progressing work in that area, including providing assistance to Members with specific needs on that matter, as appropriate.

3.30 The Council also requested the Secretary-General to provide support and to take appropriate initiatives for the implementation of relevant actions. In particular, the Secretary-General was requested by the Council to assist in arrangements for a wide ranging discussion on that topic during its fifty-sixth session. In that connection, the Council designated Mr Chow Kok Kee as its focal point on quality management and the related arrangements. The Secretary-General was further requested to take into account the work of the Intercommission Task Group as well as the relevant experiences of Members in that area. The preparatory activities were expected to facilitate the identification by the Council of further steps to be taken.

4. REPORTS OF SESSIONS OF CONSTITUTENT BODIES (agenda item 4)

Report on the thirteenth session of Regional Association I (Africa)

4.1 The Executive Council considered the report of the thirteenth session of RA I (Africa), and embodied its decisions in Resolution 6 (EC-LV).

Report of the thirteenth session of the Commission for Instruments and Methods of Observation

4.2 The Executive Council noted with appreciation the *Abridged Final Report with Resolutions and Recommendations of the Thirteenth Session of the Commission for Instruments and Methods of Observation* (WMO-No. 947) (Bratislava, Slovakia, 25 September to 3 October 2002). The Council expressed its gratitude to all members of the Commission for their valuable work done within the interessional period since CIMO-XII (1998).

4.3 The Council recognized that much of the work planned for the interessional period had been completed or had reached a very advanced stage. It agreed that significant progress was achieved in the past four years in several priority areas, in particular, improved quality and reliability of GPS-based

radiosondes, raingauges and pyr heliometers through calibrations and intercomparisons. It noted with appreciation the development of functional definitions and standards for automated weather stations that assisted in the production and application of those systems. It also noted improvements in the installation, application and maintenance of instruments through the provision of technical assistance to developing countries, the technical publications, the *Guide to Meteorological Instruments and Methods of Observation* (WMO-No. 8), as well as technical conferences.

4.4 As regarded the Instrument and Methods of Observation Programme, the Council recognized that the programme output fell somewhat short of the targets of the 5LTP, specifically concerning the technical and training support needed for developing countries' instrument maintenance and calibration. It also noted that progress was slower than planned in certain specific areas of instrument development and standardization of procedures and practices. The reasons for those shortfalls were seen as the insufficient number and/or time of experts made available by Members for that work, compounded by the limited financial resources allocated to that programme by Congress. The Council urged Members to assign appropriate experts to the various expert teams established by CIMO. The Council also recommended that that expertise might have to be found outside NMHSs.

4.5 The Council emphasized the importance of the WMO intercomparisons carried out in various fields of surface and upper-air measurements and thanked all Members which hosted those trials. The Council invited the president of CIMO to continue strengthening the work of the Commission related to the improvement of the quality of observations through the intercomparisons, in particular the International and Regional Pyr heliometer Comparisons, the International Rainfall Intensity Measurement Intercomparison, the Thermometer Screen and Shields Intercomparison, the International Hygrometer Intercomparison and the International Radiosonde Intercomparison. The Council urged CIMO to consider possible means to minimize the impact on the cost of the continuous improvements of instruments, taking the difficulties experienced by developing countries into account.

4.6 The Council confirmed the need for the international calibration of instruments measuring infrared radiation and welcomed the recommendation of the thirteenth session of CIMO that a World Infrared Radiometer Calibration Centre be established at the Physikalisch Meteorologisches Observatorium Davos (PMOD) in Davos, Switzerland. The Council noted with appreciation the offer of Switzerland to operate the World Infrared Radiometer Calibration Centre as from 2004.

4.7 The Council recognized the importance of the publications in the Instruments and Observing Methods Report series prepared by instrument

experts, which contained the results of intercomparisons and other specific studies as well as status reports in various fields of instruments. It also recognized that work had been started on the substantial revision of the *Guide to Meteorological Instruments and Methods of Observation* (WMO-No. 8), with a view to publishing it in an electronic version at the beginning of 2005. In that regard, the Council urged Members, and in particular experts on instruments and methods of Observation, to support actively that important activity.

4.8 The Council agreed that the technical conferences TECO-2000 and TECO-2002 contributed to the exchange of knowledge among the scientific and operational personnel in the area of instruments and methods of observation and promoted capacity building through improved management practices and better application of scientific and technological development. It also agreed that the exhibitions of meteorological instruments and observing systems METEOREX-2000 and METEOREX-2002 contributed to the exchange of experience and knowledge between the experts of Meteorological Services and the representatives of the private instrument sector. The Council underlined the importance of continuing to carry out conjointly the technical conferences and exhibitions of meteorological instruments and observing systems in the future.

4.9 The Council noted the usefulness of the Instrument Catalogue, of which a second edition had been produced by the China Meteorological Administration, under the auspices of CIMO, for assisting Members in selecting the most suitable instruments for application within their operational networks. The distribution of the Instrument Catalogue to Members was initiated.

4.10 The Council reviewed the future work programme as agreed during the CIMO-XIII session which emphasized the following future main activities of the Commission:

- (a) Develop performance measures to demonstrate continuous improvement in the quality of observations;
- (b) Conduct instrument intercomparisons;
- (c) Contribute to the review and update of WMO *Technical Regulations, Guides* and other material related to quality management and standardization of observations;
- (d) Evaluate existing Regional Instruments Centres and review their terms of reference;
- (e) Facilitate standardization of measurements of long-wave radiation;
- (f) Facilitate automation of manual, visual and subjective observations;
- (g) Strengthen links with relevant international organizations.

It was expected that in the implementation phase (2004–2007), the following key results would be achieved:

- (a) Basic procedures for quality management of observations, instrument maintenance, calibration and operational practices would be developed within an overall performance management framework. A methodology to demonstrate the effectiveness of such management procedures would be established;
- (b) At least four instrument intercomparisons would be completed;
- (c) The seventh edition of the *Guide to Meteorological Instruments and Methods of Observation* would be published;
- (d) Regional Instrument Centres would be evaluated against established criteria and regional associations would have enhanced capability in instrument maintenance;
- (e) A World Infrared Radiometer Calibration Centre would be established;
- (f) Standards for automation of manual, visual and subjective observations would be agreed;
- (g) Relevant international organizations would participate in the work programme of CIMO and would attend as observers at relevant meetings/conferences.

4.11 The Council noted that the automation of some manual, visual and subjective observations appeared not to be possible in the foreseeable future. It emphasized, however, that possible alternative methods should be explored for replacing some traditional observations which could then be terminated, taking full benefit from technological developments.

4.12 The Council welcomed the collaboration of CIMO with international organizations such as the International Bureau of Weights and Measures, ISO and ITU that was important for addressing interdisciplinary issues. It appreciated that the close collaboration with the instrument manufacturers, inter alia, which had resulted in the establishment of the Association of the Hydrometeorological Equipment Industry, strengthened the position of the Members vis-à-vis that community and furthered mutual understanding of needs and opportunities.

4.13 The Council took special note that the thirteenth session of CIMO had established a new working structure consisting of a Management Group, Open Programme Area Groups on Surface Observation Technology, on Upper-air Observation Technology, and on Capacity Building, and Expert Teams. The Council commended CIMO on the new structure and expressed confidence that that would improve the delivery of the Instruments and Methods of Observation Programme, especially in developing countries.

4.14 The Council recorded its decisions on the recommendations of the thirteenth session of CIMO in Resolution 7 (EC-LV).

Report of the extraordinary session (2002) of the Commission for Basic Systems

4.15 The Council noted with appreciation the *Abridged Final Report with Resolutions and*

*Recommendations of the Extraordinary Session (2002) of the Commission for Basic Systems (WMO-No. 955) (Cairns, Australia, 4–12 December 2002) and the activities of the Commission. Taking into account the views and directives of Fourteenth Congress, the Council considered the recommendations submitted by the extraordinary session (2002) of CBS concerning the review of the *Manual on the GOS* (WMO-No. 544); amendments to the *Manual on the GTS* (WMO-No. 386), the *Manual on Codes* (WMO-No. 306), the *Manual on the GDPFS* (WMO-No. 485), and the broadening of the functions of an RSMC to include provisions of ultraviolet index forecasts for Europe. The recommendations relating to the *Manuals* comprised:*

- (a) Publication of a revised *Manual on the GOS*;
- (b) Updates to telecommunication functions and procedures;
- (c) Additions to binary code and CREX tables;
- (d) Amendments to alphanumeric codes;
- (e) Ensemble prediction activities;
- (f) Emergency response procedures;
- (g) Standard verification system for long-range forecasts;
- (h) Procedures and formats for data quality monitoring of marine, aircraft and satellite data.

4.16 The Council was pleased to note the progress made in the Public Weather Services programme. Specifically with respect to the pilot Web sites on severe weather warnings and on city forecasts, it encouraged Members to supply more information to those Web sites, and where possible, to host similar sites in additional language versions. The Council reiterated the importance of achieving positive and collaborative partnerships with the national and international media while promoting at the same time the role of the NMSs as the single official source for the issue of warnings and the primary source of public forecasts and encouraging the media organizations to attribute the source of their information to the NMSs concerned. The Council also encouraged dialogue with private sector meteorological service providers as a means of promoting mutual understanding of respective roles.

4.17 Concerning the WMO QMF, the Council recorded its decisions, including activities that were requested from relevant technical commissions, under agenda item 3.

4.18 Concerning development and implementation of the FWIS, the Council requested the president of CBS to pursue the further development of the FWIS towards the refinement and consolidation of the concept and then the design and implementation planning phases. In that regard, the comprehensive information exchange requirements of all WMO Programmes as regarded information types and volumes, timeliness, sources and users, security, etc., needed to be taken into account. The Council stressed that the FWIS development should pay special attention to a smooth and coordinated transition. It emphasized that the support and

involvement of regional associations and technical commissions was needed, as early as possible, in all phases of the FWIS development in order to ensure a full and shared ownership of the project, and its effective implementation.

4.19 Concerning development and implementation of the strategy for the WMO-wide migration to table-driven code forms, the Council endorsed the migration plan developed by CBS. It highlighted the complexity of the migration process and requested the president of CBS to put in place an effective implementation/coordination mechanism for guiding, assisting and monitoring the migration to table-driven code forms. The Council requested the Secretary-General to organize the relevant training programme, including the use of computer-aided learning tools, covering all WMO Regions over the period 2003-2005. It also urged NMHSs to train their staff on computer and information technologies at the local level in order to facilitate and speed up the migration to table-driven code forms as well as the introduction of computer-based techniques.

4.20 With respect to the AMDAR programme and the pertinent conclusions of Fourteenth Congress, the Council agreed with the recommendation of the extraordinary session (2002) of CBS that CBS and CAeM be invited to develop a mechanism to integrate more fully the AMDAR programme in the WWW Programme. It also agreed to initiate activities under the WWW and the Aeronautical Meteorological Programmes for training to facilitate the availability and use of AMDAR data in areas where they were currently not available, in particular in developing countries. The Council approved the corresponding recommendation of the extraordinary session (2002) of CBS.

4.21 The Council recorded its decisions on the recommendations adopted by the session in Resolution 8 (EC-LV).

4.22 The Council noted the request of CBS to use more frequently electronic publications methods, in particular CD-ROM and the Web-posting. It welcomed the fact that the Secretary-General had already increased the use of those publication methods wherever that was practical for WWW technical reports and documents, *Guides*, operational information, and selected material from some *Manuals*, etc. and for supplementing the documentation of sessions of CBS and CIMO and technical conferences. The Council urged the Secretary-General to resort to electronic publication, whenever possible, with a view to increasing the amount of WWW guidance material and reports that were published, and to expediting the publication process at reduced cost.

Report of the twelfth session of the Commission for Aeronautical Meteorology

4.23 The Council noted with appreciation the *Abridged Final Report with Resolutions and*

Recommendations of the Twelfth Session of the Commission for Aeronautical Meteorology (WMO-No. 953) (Montreal, 16–20 September 2002). The Council congratulated Messrs N.D. Gordon (New Zealand) for his re-election as president of the Commission and C. McLeod (Canada) for his election as vice-president. The Council expressed its appreciation to the Meteorological Service of Canada and to ICAO for the excellent support they provided for convening the CAeM-XII session and the Conjoint CAeM session/ICAO Meteorology Divisional Meeting.

4.24 The Council noted with satisfaction the major achievements of the Commission during its intersessional period. Those achievements related, among other things, to training, fostering closer contacts with the aviation community, cost recovery, quality management, the implementation of WAFS, observations, forecasting and warnings in the terminal area, automated aircraft observations and the topical issue of aviation impact on the environment. The Council also noted with satisfaction that the *Compendium on Tropical Meteorology for Aviation Purposes* (WMO-No. 930) and the *AMDAR Reference Manual* (WMO-No. 958) had been published, a Framework for implementing cost recovery for aeronautical meteorological services had been developed, a booklet on aviation and the global environment had been prepared and the *Guide to Practices for Meteorological Services Serving Aviation* (WMO-No. 732) was being updated. The Council agreed that most of the achievements, in particular the 13 training events conducted since 1999, had only been possible through the active participation of WMO Members, other WMO technical commissions and international organizations including ICAO, ASECNA and aviation user organizations.

4.25 The Council was pleased to note that among the most important decisions of the twelfth session of CAeM had been the improvement and endorsement of the 6LTP for AeMP and that the AeMP 6LTP would continue to give training and fostering closer contacts with the aviation community the highest priority. In that regard, the Council noted with satisfaction the steps taken by the Commission to introduce innovative means of delivering training, including the proposal for a technical conference to be held in conjunction with the next session of the Commission. The Council noted with satisfaction that the Conjoint Meeting had agreed that ISO 9000 provisions should remain as recommended practices rather than being upgraded to standards (also see general summary paragraphs 3.23 to 3.28). The Council welcomed the incorporation of a specific item related to quality management in the AeMP 6LTP, and the Conjoint Meeting recommendation for ICAO and WMO to develop quality management related guidance material. In that regard, the Council concurred with the view of the Commission that it was important to have appropriate performance

indicators for both the elements of the 6LTP and for aviation weather services.

4.26 The Council welcomed the evolution of the structure of CAeM, with the establishment of a new CAeM Management Group and two OPAGs — PROMET and TREND — composed of a number of Expert Teams and Rapporteurs. The Council was pleased to learn that more than 150 experts had offered their services to work for the Commission. However, the Council noted that because of limited funding for AeMP, it was likely that only a few of the proposed eight Expert Teams would be able to meet during the fourteenth financial period, and others would work by correspondence.

4.27 The Council noted with satisfaction the progress made by the Commission in developing a unified and user-oriented method of TAF verification. The Council noted with interest that the AeMP 6LTP included work on TAF improvement and the development and implementation of a WMO approved set of methods for performance measurements of aviation forecasts and warnings with initial focus on the finalization and implementation of the work done on TAF verification systems.

4.28 The Council agreed that greater attention should be given to the recovery of fair and equitable meteorological service costs from the airline industry and that the role of the Secretariat as a voice for the whole meteorological community in addressing cost recovery issues was very important. In that regard, the Council thanked the Secretary-General for the useful assistance given to Members, in particular in developing countries, regarding the recovery of meteorological costs from the airline industry. It requested the Secretary-General to continue to liaise with ICAO and IATA to ensure a firm foundation for the international framework for cost recovery. It also requested the Secretary-General to continue to assist Members, on request, with establishing stable cost recovery arrangements at the national level.

4.29 The Council noted with satisfaction the remarkable progress that had been made in implementing the WMO AMDAR Programme highlighted by the current exchange of over 140 000 AMDAR reports per day on the GTS, the development and publication of an *AMDAR Reference Manual*, as well as progress made in developing a universal AMDAR software, implementing the AMDAR high priority projects in Southern Africa and the Middle East and improving AMDAR data exchange and quality control. The Council was pleased to note research activities being carried out on humidity sensors in Member countries. The Council noted with interest that under the high priority AMDAR projects on data exchange and quality control, the Panel would continue to monitor and support the development of new measurements and sensors including humidity, icing and turbulence. In relation to ongoing support for, and sustainability of, AMDAR Panel activities, the Council agreed to

invite CBS and CAeM to develop a mechanism to integrate more fully the AMDAR programme in the WWW Programme. It also agreed to initiate activities under the WWW and the Aeronautical Meteorology Programmes for training to facilitate the availability and use of AMDAR data in areas where they were currently not available, in particular in developing countries (see also general summary paragraph 4.20).

4.30 The Council recorded its decision on the various resolutions and recommendations of the twelfth session of CAeM in Resolution 9 (EC-LV).

Report of the Conjoint WMO CAeM Session/ICAO Meteorology Divisional Meeting

4.31 The Council was pleased to note that the Conjoint WMO CAeM Session/ICAO Meteorology Divisional Meeting (Montreal, Canada, 9-13 and 23-27 September 2002) was attended by 188 participants from 70 ICAO Contracting States/WMO Members.

4.32 The Council noted with satisfaction the results of discussions on various agenda items for the Conjoint Meeting, including the meteorological component of the ICAO communication navigation and surveillance/air traffic management system, meteorological support for operations at aerodromes and the terminal area, the restructuring of Annex 3/Technical Regulation [C.3.1] and the important issue for WMO and NMSs of institutional changes in the provision of meteorological services for international air navigation. Regarding the latter, detailed discussions had been related to the topical issues of alternative meteorological service delivery, the role of the meteorological authority designated to ICAO, the commercialization of aeronautical meteorological data and products and the use of the Internet for the exchange of aeronautical meteorological information.

4.33 The Council noted with appreciation the report of the Conjoint Meeting that included eight recommendations related to amendment proposals to existing provisions in Annex 3/Technical Regulation [C.3.1] and 28 recommendations related to matters discussed under various agenda items indicated above. The Council noted with interest that six recommendations addressed to WMO related to the continued support of the WWW Programme to the operations of the WAFS, cost recovery including the extension of the current guidance material, training in the use of GRIB/BUFR-coded WAFS products, research in the detection of volcanic ash by satellite and the standardization of algorithms for automated observations of cloud amount and cloud base height. With regard to volcanic ash, the Council noted the continuing difficulties in monitoring volcanic ash in cloudy conditions, thus affecting the safety and regularity of aviation operations. It recognized the importance of improving the detection of volcanic ash, both en-route and in terminal areas, by satellites as well as by other remote-sensing

techniques. Important recommendations addressed to both ICAO and WMO related to the adoption of various proposals that would form part of Amendment 73 to Annex 3/Technical Regulation [C.3.1] for implementation in November 2004.

4.34 The Council recorded its decision on relevant recommendations of the Conjoint Meeting in Resolution 10 (EC-LV).

Report of the thirteenth session of the Commission for Agricultural Meteorology

4.35 The Council noted with appreciation the *Abridged Final Report with Resolutions and Recommendations of the Thirteenth Session of the Commission for Agricultural Meteorology* (WMO-No. 951) (Ljubljana, Slovenia, 10–18 October 2002). The Executive Council expressed its gratitude to all CAgM members for their valuable work undertaken since the last session of the Commission in 1999. The Council in particular wished to thank Messrs R.P. Motha and L.E. Akeh, the president and vice-president of the Commission, for their leadership in guiding its activities. The Council congratulated them on their re-election.

4.36 The Council noted with satisfaction the major achievements of the Commission during its intersessional period related to training and the outcomes of various international workshops and expert group meetings conducted in different regions of the world. Other major achievements included the organization of an interregional workshop to improve agrometeorological bulletins, which led to the development of the World Agrometeorological Information Service, and the preparation of various publications and training material. Further, electronic publications of two CD-ROM's had vastly enhanced the productive capability and accessibility of information. The Council concurred with the view that most of those achievements had only been possible through the active participation of WMO Members and the active collaboration with a number of international and regional organizations.

4.37 The Council noted with particular satisfaction the efforts put forth by Members, other partner international organizations and the WMO Secretariat in conducting several workshops and meetings for the benefit of the members, including 10 training seminars, three international workshops, one inter-regional workshop, four expert group meetings and one consultants meeting on a wide range of topics related to agricultural meteorology. The Council recorded its appreciation for the participation and collaboration of several international, regional and national organizations in WMO activities related to training in agricultural meteorology, in particular the United States Department of Agriculture, the Institute of Agrometeorology and Environmental Analysis for Agriculture (Italy), the Global Change System for Analysis, Research and Training, FAO, UNDP/UNSO and UNEP.

4.38 The Council congratulated the CAgM Advisory Working Group and the WMO Secretariat

for their excellent efforts in organizing the International Workshop on Reducing Vulnerability of Agriculture and Forestry to Climate Variability and Climate Change prior to the session. The Council commended the WMO Secretariat for mobilizing significant extrabudgetary financial resources for the workshop which facilitated the participation of a number of developing countries in the workshop.

4.39 The Council complimented the Commission for adopting "To promote operational applications of agrometeorology using innovative technologies for services to agriculture, silviculture and aquaculture" as the theme upon which to focus its activities during the next intersessional period.

4.40 The Council emphasized the importance of the impacts of climate change on agriculture, forestry, fisheries, animal husbandry and ecosystems, especially those related to droughts and floods. The Council noted the importance of adopting appropriate mitigation and adaptation measures for coping with those impacts.

4.41 The Council noted that the third award for outstanding and/or exceptionally long-term services to the Commission was presented to Ms Zipora Gat (Israel).

4.42 The Council recorded its decision on the various resolutions and recommendations of the twelfth session of CAgM in Resolution 11 (EC-LV).

5. REPORTS OF SESSIONS OF PANELS AND WORKING GROUPS REPORTING TO THE EXECUTIVE COUNCIL (agenda item 5)

Report of the eighth session of the Executive Council Working Group on Antarctic Meteorology

5.1 The Executive Council noted the report of the eighth session of the Executive Council Working Group on Antarctic Meteorology, held in Geneva from 25 to 27 November 2002, and expressed its appreciation for the work carried out by the Working Group under the chairpersonship of Mr H. Hutchinson (Australia). It noted in particular the deliberations of the Working Group related to the essential WWW activities in the Antarctic including implementation of observational and telecommunication networks, data processing and management, climate-related issues as well as cooperation with other international Antarctic programmes and organizations. The Council reviewed the terms of reference of the Working Group and decided to maintain its Working Group on Antarctic Meteorology. In that connection, the Council also decided that Resolution 10 (EC-LI) — Executive Council Working Group on Antarctic Meteorology, be kept in force.

5.2 The Council considered the revised list of stations comprising the ABSN proposed by the Working Group. In that connection, its adopted Resolution 12 (EC-LV). Furthermore, it noted the initiative taken by all regional associations in

adopting the concept of RBCNs. Recognizing the need to improve the availability of climate data and to apply more fully WWW monitoring procedures for that purpose, the Council decided to approve the ABCN as proposed by the Working Group, which included all GSN and GUAN stations in the Antarctic as well as CLIMAT and CLIMAT TEMP reporting stations. Accordingly, it adopted Resolution 13 (EC-LV). The Council noted that any modification to the ABSN/ABCN needed careful study since surface- and especially upper-air observations in the Antarctic were a very important tool to use in forecast models in the southern hemisphere. Taking into account the importance of those data for regional, local and aviation forecasts, satellite calibration and validation, etc., the Council adopted Resolution 14 (EC-LV).

5.3 The Council reiterated the importance of the efforts being made by Members to secure sustainable performance and the further development of the GOS in the Antarctic using new observing technologies, such as automatic weather stations (land and marine), ASAP, AMDAR and advanced satellite-based systems and services. In that connection, the Council decided that Resolution 12 (EC-XLVI) — Further development of the Global Observing System in the Antarctic, be retained in force. The Council also stressed the importance of implementing the International Programme for Antarctic Buoys and adopted Resolution 15 (EC-LV).

5.4 Considering the telecommunications issues within the Antarctic region, the Council adopted the plan proposed by the Working Group related to the collection of data from the stations, which constituted the ABSN/ABCN. In support of that plan, and taking into account new developments in telecommunication arrangements in the Antarctic, the Council adopted Resolution 16 (EC-LV).

5.5 Regarding the requirements for data processing in the Antarctic and the functions proposed for stations in the Antarctic providing data-processing and other meteorological services, including services for shipping, aircraft, local operations and research, the Council agreed that the operation of the distribution of observational data and processed information required at Antarctic stations was satisfactory. Considering the existing list of defined stations to perform data-processing and meteorological service functions in the Antarctic — as listed in the *Manual on the Global Data-processing and Forecasting System* (WMO-No. 485), Volume II, The Antarctic — the Council agreed to modify the list of stations, giving the new capabilities and actual performed functions, and adopted Resolution 17 (EC-LV).

Coordination activities within the Climate Agenda; the report of the Executive Council Advisory Group on Climate and Environment

5.6 The Council noted that the Inter-agency Committee on the Climate Agenda had not met since 1999. The Council understood that the chairperson had resigned following the 1999 meeting and that

since the other agencies showed little interest in the activities of the Committee, it was impossible for the Secretariat to arrange further meetings. The Council stated a need to understand better why the Inter-agency Committee had not functioned as envisaged. The Council noted that the entire subject area of climate and the environment remained a major concern for the entire WMO community, that WMO's leadership in climate was clearly important for the Organization and that the leadership must be carried on into the future. To that end, the Council requested the Secretary-General to work closely with the Executive Council Advisory Group on Climate and Environment for developing a discussion paper on that subject for its next session. That paper should include matters concerning climate and environment affecting the WMO community, an analysis of why the Inter-agency Committee had not functioned properly and should also include discussion on a strategy for ensuring WMO leadership in that area. The Council requested that that issue be a major topic at its fifty-sixth session.

5.7 The Council noted the discussion that occurred at Fourteenth Congress concerning the Third World Climate Conference. The Council recognized the differences of opinions of members concerning when and if such a conference should be held and, in that regard, the Council agreed to keep the matter under consideration for its next session. The Council also requested its Advisory Group on Climate and Environment to advise on that matter at its fifty-sixth session.

5.8 The Council was informed of the International Conference on Natural Disasters related to Climate Change, to be held in Hyderabad, India, in July 2003.

5.9 The Council adopted Resolution 18 (EC-LV), re-establishing the Executive Council Advisory Group on Climate and Environment, with its draft terms of reference to include a request that, with the assistance of the Secretary-General, a discussion paper on the issues surrounding the subject of climate and the environment should be completed for its fifty-sixth session.

WMO/ICSU/IOC Joint Scientific Committee for the World Climate Research Programme

5.10 The Council noted the report of the WMO/ICSU/IOC Joint Scientific Committee for the WCRP and expressed satisfaction at the continuing progress being made in the implementation of the programme. In particular, the Council acknowledged with immense satisfaction the successful conclusion of WOCE. Its achievements were celebrated at a final international scientific conference in San Antonio, Texas, in November 2002. The Council expressed its gratitude to all those who had contributed to the undoubted success of WOCE.

5.11 As WCRP approached its twenty-fifth anniversary, it was appropriate to consider the progress that had been made towards its main goals, its specific objectives for the next period and what

changes in programme and structure might be required to achieve those. The Council therefore welcomed the conscientious and thorough deliberations at recent sessions of the JSC on the future scientific direction, structure and priorities of the WCRP. The two original aims of the WCRP were to determine to what extent climate could be predicted and the extent of human influence on climate. Those remained the general mission statements for WCRP and were consistent with the vision of a seamless prediction problem, from weeks through decades to the projection of climate change. There were three fundamental ways in which WCRP approached its aims, namely, through the development, evaluation and use of climate models, through climate observations and their analysis, and through fundamental research on climate processes. To recognize a renewed emphasis of WCRP on its prediction aims and the observational activities that were needed to fulfil them, the JSC was contemplating a major overarching and integrating initiative, tentatively called the Climate System Observational and Prediction Experiment (COPE), conducted over a decade up to about 2015. It was intended that the proposed focus on the aims of the WCRP, setting objectives and viewing them in the context of COPE would provide a new stimulus for the science of WCRP, and widen the recognition of its relevance and importance for a globally-sustainable future. In supporting that in-depth review of the scientific direction and structure of the WCRP, the Council encouraged the JSC to develop further the initial concept of COPE.

WMO/IOC/UNEP/ICSU Steering Committee for the Global Climate Observing System

5.12 The Council noted the draft report of the WMO/IOC/UNEP/ICSU Steering Committee for GCOS. It welcomed the progress made in implementing the GCOS networks and thanked the Members involved for their support, while recognizing the need to improve the overall performance of the networks and many individual stations. The Council urged Members to continue, and where possible to strengthen, their support for those components of their observational systems which had been identified as part of GCOS, in particular GSN, GUAN and GAW stations.

5.13 The Council noted with appreciation the activities being carried out by GCOS, on behalf of WMO Members and the global observing systems for climate, in responding to the decisions of the UNFCCC Conference of the Parties, including implementation of the GCOS Regional Workshop Programme and the development of Regional Action Plans. It welcomed the increasing emphasis on resource mobilization in support of implementation activities and the investigations under way into the concept of a voluntary donor fund in support of GCOS networks.

5.14 The Council welcomed the preparation of the Second Report on the Adequacy of the Global

Observing Systems for Climate, led by GCOS in response to the request of the Steering Committee with endorsement by the UNFCCC Subsidiary Body for Scientific and Technological Advice. It noted that Fourteenth Congress had strongly endorsed the conclusions of the Report and had urged all Members to support the implementation of its recommendations as a matter of urgency. The Council reiterated that strong endorsement of the Second Adequacy Report and its findings and recommendations, noting with satisfaction that the Report would provide excellent guidance for effecting future progress in implementing the global observing systems for climate. The Council recognized the increased burden that would be placed on the GCOS Secretariat in responding to the findings of the Report and suggested that GCOS sponsors review their funding plans for GCOS to ensure adequate levels of support. It urged Members to consider support to GCOS in the form of secondments of qualified staff and/or contributions to the Climate Observing System Fund, to assist in carrying out those activities.

5.15 The Council noted with satisfaction the invitation to WMO to participate in the forthcoming Earth Observation Summit, being organized by the United States, to discuss global environmental monitoring systems and plan for the establishment of a comprehensive and integrated Earth observation system. It requested the Secretary-General to ensure that WMO responded strongly in taking advantage of the opportunities presented by that important initiative for climate and other environmental monitoring objectives, and encouraged Members to support fully the event and to participate to the extent feasible. The Council also noted the several other high-level events in the near future at which systematic observation of the climate system would be a significant topic of discussion, and requested the Secretary-General to report to its fifty-sixth session on the outcomes of those events.

6. PROGRAMME AND BUDGET FOR 2004-2005 (agenda item 6)

6.1 The Executive Council adopted Resolution 19 (EC-LV) concerning the budget and contributions for the biennium 2004–2005. The appropriations thus approved amounted to SFR 127 169 800.

6.2 The Executive Council furthermore approved the list of possible sessions of panels and working groups and of symposia, technical conferences, seminars and workshops as contained in Annex III to this report. The implementation of those events should take place subject to the availability of funds within the approved budget following the guidelines set by Fourteenth Congress. It also authorized the Secretary-General to approve amendments to that list as necessary.

6.3 The Council noted the decisions of Fourteenth Congress contained in general summary paragraphs 8.5 to 8.8 of the *Abridged Final Report*

with Resolutions of the Fourteenth World Meteorological Congress (WMO-No. 960) regarding the implementation of the programme and budget. It recognized that, as a consequence, budgetary transfers might be necessary in accordance with the financial regulations.

6.4 The Council noted that the budget for the first biennium (2004–2005) in conformity with the maximum expenditure for the fourteenth financial period was based on salary rates, prices and official United Nations exchange rates prevailing in March 2003.

6.5 The Council agreed that in accordance with Resolution 30 (Cg-XIV) — Maximum expenditures for the fourteenth financial period, and Articles 6.6 and 6.7 of the Financial Regulations, the Secretary-General may submit supplementary estimates to the Executive Council at its fifty-sixth session in order to finance fully costed high priority activities listed in Annex 2 to the above resolution as guidance. Those activities would be funded from any cash surplus deriving from the thirteenth financial period, over and above the amount of SFR 4 million which was included in the maximum expenditures for the fourteenth financial period. Those activities would also be completed within the fourteenth financial period in the most cost-effective and efficient manner. The Council expressed its view that the supplementary estimates should be fully justified in the results-based budgeting format, and should also be transmitted to all Council members at least five weeks prior to the opening of its fifty-sixth session.

6.6 The Council recalled that in Resolution 5 (Cg-XIV) — WMO Space Programme, Fourteenth Congress recognized the critical importance for data, products and services provided by the WWW's expanded space-based component of the GOS to WMO Programmes and supported Programmes. Fourteenth Congress, therefore, decided to initiate a new major WMO Space Programme as a cross-cutting programme to increase the effectiveness and contributions from satellite systems to WMO Programmes. The Council noted that regular budget resources for the first biennium of the fourteenth financial period for the new WMO Space Programme totalled SFR 1 284 870 cutting across various Parts/Major Programmes as shown in the annex to Resolution 19 (EC-LV) and as recorded in WMO's 6LTP. The Council would decide at its next session in which way the WMO Space Programme should report as a separate Major Programme.

6.7 The Council approved the budget for the Joint WMO/ICSU/IOC Climate Research Fund for the biennium 2004-2005 as reproduced in Annex IV to this report. It noted that ICSU and IOC were expected to contribute SFR 1 441 000 (equivalent of US\$ 1 100 000) to the Fund as shown in Annex IV to this report. It accordingly authorized the payment of an equal sum by WMO. In addition the Council decided that a further unilateral contribution would be made to the joint Fund on behalf of WMO, in

accordance with WMO/ICSU/IOC agreement, to bring the total WMO contribution authorized to SFR 3 935 400 for the biennium 2004-2005.

6.8 The Council made provisions for sessions in 2004 and 2005 of the following technical commissions and regional associations:

2004

Regional Association II (thirteenth session)
Commission for Basic Systems (thirteenth session)
Commission for Hydrology (twelfth session)

2005

Regional Association III (fourteenth session)
Regional Association IV (fourteenth session)
Regional Association VI (fourteenth session)
Commission for Atmospheric Sciences (fourteenth session)
Commission for Climatology (fourteenth session)
Joint WMO/IOC Commission for Oceanography and Marine Meteorology (second session)

7. GENERAL AND ADMINISTRATIVE MATTERS (agenda item 7)

7.1 FORTY-EIGHTH INTERNATIONAL METEOROLOGICAL ORGANIZATION PRIZE (agenda item 7.1)

7.1.1 The Executive Council awarded the forty-eighth IMO Prize to Professor Ye Duzheng.

7.1.2 Mr B. Kassahun was appointed to the Selection Committee to replace Mr J.R. Mukabana. The Committee now consisted of Messrs Qamar uz-Zaman Chaudhry (chairperson), Woon Shih Lai, P. Korkutis and B. Kassahun.

7.2 OTHER AWARDS (agenda item 7.2)

Professor Dr Vilho Vaisala Award

7.2.1 With respect to the eighteenth Professor Dr Vilho Vaisala Award, the Selection Committee of the Executive Council recommended that Messrs U. Baltensperger, M. Gysel and E. Weingartner (Switzerland) should receive the eighteenth Professor Dr Vilho Vaisala Award for the paper entitled "Hygroscopicity of aerosol particles at low temperatures, new low-temperature H-TDMA instrument: setup and first applications" published in *Environmental Science and Technology*, Volume 36, Number 1, 2002. The proposal of the Selection Committee was approved by the Council.

Norbert Gerbier-MUMM International Award

7.2.2 The Council approved the proposal of the Selection Committee for the Norbert Gerbier-MUMM International Award for 2004 and conferred the 2004 award on Messrs B.E. Law, E. Falge, L. Gu, D.D. Baldocchi, P. Bakwin, P. Berbigier, K. Davis, A.J. Dolman, M. Falk, J.D. Fuentes, A. Goldstein, A. Granier, A. Grelle, D. Hollinger, I.A. Janssens, P. Jarvis, N.O. Jensen, G. Katul, Y. Mahli, G. Matteucci, T. Meyers, R. Monson, W. Munger, W. Oechel, R. Olson, K. Pilegaard, K.T. Paw U,

H. Thorgeirsson, R. Valentini, S. Verma, T. Vesala, K. Wilson and S. Wofsy for the paper entitled "Environmental controls over carbon dioxide and water vapor exchange of terrestrial vegetation" published in *Agricultural and Forest Meteorology*, Volume 113, pp. 97-120, 2002.

WMO Research Award for Young Scientists

7.2.3 Based on the recommendation of its Selection Committee, the Council conferred the 2003 WMO Research Award for Young Scientists upon Messrs Z. Zhang, Y. Ding and Z. Zhao (China) for the paper entitled "On westerly wind bursts in equatorial western Pacific before and during the onset and initial development phases of ENSO".

7.2.4 The Council appointed the following four members to serve on its Selection Committee to determine the winner(s) of the 2004 award:

- A. N'Diaye (chairperson)
- M.A. Rabiolo
- J. Lumsden
- M. Couchoud Gregori (Ms)

7.3 ARRANGEMENTS FOR SCIENTIFIC LECTURES FOR THE FIFTY-SIXTH SESSION OF THE EXECUTIVE COUNCIL (agenda item 7.3)

7.3.1 The Executive Council selected two lecture themes for the scientific lectures to be delivered during its fifty-sixth session. The following themes were chosen:

- (a) Vision on the use of new observation technologies for meteorology and hydrology in the next decade;
- (b) Progress in reducing uncertainties in seasonal and interannual climate predictions.

7.3.2 The Secretary-General was requested to make the necessary arrangements.

7.4 WORLD METEOROLOGICAL DAY, THEME FOR 2005 (agenda item 7.4)

The Executive Council decided that the theme for the World Meteorological Day in 2005 would be "Weather, climate, water and sustainable development".

7.5 STAFF MATTERS (agenda item 7.5)

Report on appointments, promotions, nominations and transfers of staff in the Professional category and above

7.5.1 In accordance with Article 21(b) of the Convention, the Council examined and approved the appointments made by the Secretary-General since its fifty-fourth session, as followed:

<i>Name and nationality</i>	<i>Title, grade and organizational unit</i>	<i>Effective date</i>
Mr V. SATYAN (India)	Director (D.1), Climate Modelling, World Climate Research Programme	12 October 2002

Ms M. DRAZENOVIC-CARRIERI (Croatia)	Director (D.1), Linguistic Services and Publications Department	1 December 2002
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Ms E. MANAENKOVA (Russian Federation)	Director (D.1), Atmospheric Resources and Environment Programme Department	7 January 2003
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Mr A.C. TYAGI (India)	Director (D.1), Hydrology and Water Resources Department	10 February 2003
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Mr Y. SALAHU (Nigeria)	Regional Director (D.1), Regional Office for Africa	22 April 2003
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Mrs C. RICHARD-VAN MAELE (Switzerland)	Chief (P.5), Information and Public Affairs Office, External Relations Office	1 August 2003
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Mr Y.R. ADEBAYO (Nigeria)	Executive Assistant to the Secretary-General (P.5), Secretary-General's Office	29 September 2002
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Ms Maria do Rosario VEIGA (Portugal)	Chief (P.5), Internal Audit and Investigation Service, Secretary-General's Office	1 June 2003
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Mr M. NICOLAS (France)	Chief (P.4), Building Maintenance Unit, Common Services Division, Resource Management Department	1 August 2002
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Mr S.-W. KIM (Republic of Korea)	Junior Professional Officer (P.2), Regional Office for Asia and the South-West Pacific	1 July 2002
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7.5.2 The Council noted the nominations and/or promotions made by the Secretary-General since its last session as a result of competition after issuance of vacancy notices, as followed:

<i>Name and nationality</i>	<i>Title, grade and organizational unit</i>	<i>Effective date</i>
Ms L.M. JALKANEN (Finland)	Senior Scientific Officer (P.5), Environment Division, Atmospheric Research and Environment Programme Department	1 September 2002

Mr M.M. TAWFIK (Egypt)	Chief (P.5), Hydrology Division, Hydrology and Water Resources Department	15 October 2002
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Mr P.L. KERHERVÉ (France)	Senior Scientific Officer (P.5), Data Management Office, World Weather Watch, Basic Systems Department	1 April 2003
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7.5.3 The Council noted the transfers initiated by the Secretary-General since the last session, as followed:

<i>Name and nationality</i>	<i>Title, grade and organizational unit</i>	<i>Effective date</i>
Mr. K. KONARÉ (Mali)	From the position of Regional Director (D.1), Regional Office for Africa to that of Director, Education and Training Department (D.1)	11 November 2002

7.5.4 The Council also noted the extensions of appointment of staff beyond the statutory age of retirement initiated by the Secretary-General since the last session, as followed:

<i>Name and nationality</i>	<i>Title, grade and organizational unit</i>	<i>Effective date</i>
Mr A.R. THOMAS (United States)	Director (D.2), Global Climate Observing System	11 months to 30 June 2003
Mr E.I. SARUKHANIAN (Russian Federation)	Acting Director (D.1), World Weather Watch, Applications Department	a further 8 months to 31 August 2003
Mr W. DEGEFU (Ethiopia)	Director-Coordinator (D.2), Support to Scientific Programmes	a further 3 months to 31 March 2003 plus a further 9 months to 31 December 2003
Mr M.E. HASSAN (Sudan)	Chief (P.5), Fellowships Division, Education and Training Department	a further 9 months to 31 December 2003
Mr E.A. ROUSSEAU (Chile)	Programme Manager for South America (P.4), Technical Cooperation Department	12 months to 29 February 2004

Amendments to Staff Rules

7.5.5 The Council noted the amendments to the Staff Rules, applicable to Secretariat staff and to technical assistance project personnel made by the Secretary-General since its fifty-fourth session.

Salaries of ungraded officials

7.5.6 The Council noted the decision of Fourteenth Congress with regard to the salaries of ungraded officials (Secretary-General, Deputy Secretary-General and Assistant Secretary-General).

7.5.7 The Council also noted the decision of Fourteenth Congress to authorize the Executive Council to carry out any readjustment of salary which might become necessary if, during the fourteenth financial period, changes in the salary of comparable United Nations staff should occur.

Annual report of the International Civil Service Commission

7.5.8 The Council took note of the twenty-eighth annual report of the International Civil Service Commission, submitted in accordance with Article 17 of the Commission's Statute.

Staff Development, Learning and Training Strategy

7.5.9 The Council took note of the good progress made thus far in the implementation of the Staff Development, Learning and Training Strategy.

Representation of women in the Secretariat

7.5.10 The Council took note of the statistics provided by the Secretary-General on gender distribution in senior positions within the Secretariat, welcomed the increased number of women appointed to such positions since its fifty-fourth session and encouraged the Secretary-General to pursue further his efforts towards a more equitable gender distribution within the Secretariat.

Restructuring of the former Publications and Distribution Services and the Conferences and Languages Services Departments

7.5.11 The Council took note of the actions taken and the progress made in respect of the restructuring of the former Publication and Distribution Services and the Conferences and Languages Services Departments.

Development of a Human Resources Management Strategy for WMO

7.5.12 The Council took note of the report by the Secretary-General regarding the development and implementation of a Human Resources Management Strategy and encouraged him to pursue efforts in that area and to continue its implementation in a timely manner. The Council further requested the Secretary-General to present a progress report at its next session.

Review of the pay and benefits of the United Nations Common System

7.5.13 The Council took note of progress made in the context of the reform of the United Nations common system. It recognized the importance for WMO to continue to participate actively at all stages of the Review of Pay and Benefits initiated by the International Civil Service Commission and reiterated its request that the outcomes of the Review, including a review of the granting of permanent contracts, be integrated into the human resources management strategy.

7.6 FINANCIAL MATTERS (agenda item 7.6)

Appointment of the External Auditor

7.6.1 The Executive Council noted that in accordance with Resolution 14 (EC-LI) — Appointment of the External Auditor, the term of office of the External Auditor of WMO would expire on 30 June 2004.

7.6.2 It examined the information prepared by the Secretary-General on the term of office applicable in the United Nations organizations concerning the appointment of their respective External Auditors. It also examined the list of Auditor-Generals of some Member States who had notified WMO of their interest to serve as the External Auditor of the Organization.

7.6.3 The Council noted that the current External Auditor of WMO, the President of the *Cour des Comptes* of France, had informed that he did not wish to be considered for another term of office. It recognized that all those Auditor-Generals who were nominated performed duties and assumed responsibilities in their respective countries requiring an equivalent level of professional expertise for auditing the WMO accounts. It also noted the analysis of the nominations undertaken by the Financial Advisory Committee, in particular previous experience in international organizations and with the implementation of results-based budgeting,

proposed fees as well as overall value-for-money, duration of audit work (as a measure of appreciation of the scope involved), and proposed audit approach.

7.6.4 With those requirements in mind, the Council decided to appoint the Comptroller and Auditor-General of the United Kingdom to serve as the External Auditor of WMO as from 1 July 2004 for a term of office to terminate on 30 June 2008.

7.6.5 The Council also decided that it would take appropriate action at its next session to notify formally the President of the *Cour des Comptes* of France of its expression of deep appreciation for the long and valuable services he had rendered to the Organization.

7.6.6 The Council adopted Resolution 20 (EC-LV).

Interim financial report of the Secretary-General

7.6.7 The Council noted the information that the Secretary-General had submitted in his interim financial report regarding the financial situation for the thirteenth financial period at Fourteenth Congress, which preceded the present session of the Executive Council.

Technical Cooperation Programme

2004–2005 budget for Secretariat support to the Technical Cooperation Programme through the Technical Cooperation Fund

7.6.8 The Council reviewed the 2004–2005 proposals of the budget for the Secretariat support to the Technical Cooperation Programme through the Technical Cooperation Fund and noted that the project delivery for UNDP and Trust Fund arrangements were estimated to be approximately SFR 59 million for the biennium and the related revenues were estimated to be at SFR 5.450 million. The Council also noted that for several Trust Fund projects, direct cost recovery for support services such as missions, communication and expert services was being applied, thus contributing towards meeting related costs.

7.6.9 The Council approved the proposed budget provided that shortfalls in revenues were balanced by corresponding reductions in expenditures during the 2004–2005 biennium. In that connection, the Council adopted Resolution 21 (EC-LV).

Report of the Financial Advisory Committee

7.6.10 The Council considered the report of the Financial Advisory Committee. It noted with appreciation the recommendation of the Committee contained in Annex V to this report. The Council took account of the recommendation in making its decision under the related agenda item.

7.7 COOPERATION WITH OTHER INTERNATIONAL ORGANIZATIONS (agenda item 7.7)

Draft working arrangements with the Permanent Inter-State Committee on Drought Control in the Sahel (CILSS)

7.7.1 The Executive Council took note of the request submitted by CILSS for the establishment of a working arrangement with WMO.

7.7.2 The Council considered the objectives and functions of CILSS, and taking into account the practice followed by WMO in establishing working arrangements concerning its scientific and technical cooperation with other organizations, it agreed that it would be of mutual benefit to WMO and to CILSS to establish such close working relationship.

7.7.3 The Council, therefore, authorized the Secretary-General to finalize working arrangements with the Executive Secretary of CILSS on the basis of the texts contained in Annex VI to this report. The Council noted that the implementation of the working arrangement would also involve other development partners.

7.7.4 The Council noted the efforts under way to establish a Memorandum of Understanding with the European Union for the benefit of NMHSs. The Council further noted the numerous working arrangements entered into between WMO and other international organizations, and invited the Secretary-General to review periodically such working arrangements with the view to ascertaining and enhancing, as appropriate, the level of cooperation with such organizations.

8. REVIEW OF PREVIOUS RESOLUTIONS OF THE EXECUTIVE COUNCIL (agenda item 8)

In accordance with Rule 27 of its Rules of Procedure, the Executive Council reviewed those of its previous resolutions, which were still in force at the time of the fifty-fifth session and adopted Resolution 22 (EC-LV).

9. DATE AND PLACE OF THE FIFTY-SIXTH AND FIFTY-SEVENTH SESSIONS OF THE EXECUTIVE COUNCIL (agenda item 9)

The fifty-fifth session agreed that the fifty-sixth session of the Council would be held at the WMO Headquarters, in Geneva from 8 to 18 June 2004. The fifty-seventh session of the Council would be held at the WMO Headquarters from 7 to 17 June 2005, subject to any change which might be decided by the Executive Council.

10. CLOSURE OF THE SESSION (agenda item 10)

The fifty-fifth session of the Executive Council closed at 5.30 p.m. on 28 May 2003.

RESOLUTIONS ADOPTED BY THE SESSION

RESOLUTION 1 (EC-LV)

EXECUTIVE COUNCIL ADVISORY GROUP OF EXPERTS ON TECHNICAL COOPERATION

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 1 (EC-LI) — Executive Council Advisory Group of Experts on Technical Cooperation,
- (2) Resolution 20 (Cg-XIV) — The WMO Voluntary Cooperation Programme,
- (3) General summary paragraph 3.7.2.4 of the *Abridged Final Report with Resolutions of the Fourteenth World Meteorological Congress* (WMO-No. 960),

CONSIDERING the need for a continued mechanism to review on a regular basis issues related to technical cooperation activities, including those related to the WMO Voluntary Cooperation Programme,

RE-ESTABLISHES the Executive Council Advisory Group of Experts on Technical Cooperation to serve as an advisory body on technical cooperation matters, including the VCP. The terms of reference of the Group will be as follows:

- (a) To advise on policy regarding all technical cooperation matters, including the VCP, the level of funding and implementation of technical cooperation, mobilization of resources, and the overall structure and execution of the Programme;
- (b) To advise on current trends regarding priorities of external funding sources, potential funding organizations and methods of access to funding;
- (c) To advise on new opportunities for activities in technical cooperation, including new approaches and new sources of external funding and contribute to resource mobilization efforts;
- (d) Concerning the VCP:
 - (i) To advise on further enhancement of the management and efficiency of the VCP; and
 - (ii) To identify and advise on requirements that could be met with VCP support, including the VCP(F);
- (e) To advise on the development and implementation of the WMO programme for

the LDCs, to monitor the progress made and to assist in the mobilization of resources for the NMHSs of the LDCs;

- (f) To promote technical cooperation activities in the countries and regions; and
- (g) To advise on the performance of technical cooperation activities in support of other WMO Programmes;

DECIDES that the Executive Council Advisory Group of Experts on Technical Cooperation shall be composed of the following experts from six regions:

T. Sutherland (chairperson), Second Vice-President
M.L. Bah
Chow Kok Kee
M. Couchoud Gregori (Ms)
A. N'Diaye
H.H. Oliva
Qin Dahe
R. Sorani

In addition, the chairperson of the Informal Planning Meeting on the Voluntary Cooperation Programme and related technical cooperation programmes and experts designated by the following countries: Australia, Brazil, Canada, Finland, France, Germany, Japan, the Russian Federation, the United Kingdom and the United States will also be invited to attend sessions of the Group at their own expense;

DECIDES that the Executive Council Advisory Group of Experts on Technical Cooperation:

- (a) May invite representatives of other Members to attend its meetings at their own expense;
- (b) May seek advice from, or invite to its meetings, experts from professional bodies or external funding sources, as necessary;
- (c) Should follow the traditional procedures of such WMO bodies, seeking to formulate its proposals through a consensus of views;
- (d) Should meet at least twice during the fourteenth financial period in conjunction with sessions of the Executive Council;
- (e) Should report to the Council;

REQUESTS the Secretary-General to provide the Executive Council Advisory Group of Experts on Technical Cooperation with the necessary supervision to carry out its work.

NOTE: This resolution replaces Resolution 1 (EC-LI), which is no longer in force.

RESOLUTION 2 (EC-LV)

EXECUTIVE COUNCIL PANEL OF EXPERTS ON EDUCATION AND TRAINING

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 10 (EC-L) — Executive Council Panel of Experts on Education and Training,
- (2) Resolution 19 (Cg-XIV) — Education and Training Programme,

CONSIDERING that the level of education and training is the key factor for the development and effectiveness of NMHSs and is thus fundamental to the successful implementation of all the individual WMO Programmes and activities in support of social, economic and technical progress at the global, regional and national levels,

DECIDES to maintain the Executive Council Panel of Experts on Education and Training to serve as an advisory body on all aspects of technical and scientific education and training in meteorology and operational hydrology with the following terms of reference:

- (a) To promote the education and training of personnel of NMHSs, particularly in developing countries;
- (b) To coordinate the activities of the WMO regional associations and technical commissions in the field of education and training within their respective areas of competence;
- (c) To keep under review the effectiveness of the education and training activities undertaken by WMO;
- (d) To review the fellowships programme, providing guidance and advice on actions aimed at strengthening the programme and its efficient implementation and to advise on the preparation of Long-term Plans for the utilization of trained staff within the Services;
- (e) To contribute to the preparation of the Seventh WMO Long-term Plan by providing input, comments and recommendations with regard to the Education and Training Programme parts of the Plan;
- (f) To recommend suitable WMO symposia, courses, workshops and seminars which are directly concerned with education and training;

- (g) To advise on actions for strengthening the existing RMTCs and for monitoring their activities as well as on the designation of suitable training institutions as WMO RMTCs;
- (h) To advise on the training equipment, material and methodology suitable for use by WMO RMTCs, NMHSs and training institutions;
- (i) To develop criteria for the review and analysis of RMTCs' activities and carry out an evaluation of each RMTC every two financial periods (eight years);
- (j) To collaborate with the education and training organizations, such as SCHOTI, and other international organizations, including FAO, ILO, UNDP and UNESCO in their respective education and training activities in meteorology, hydrology and related fields;
- (k) To consider any other matters relating to education and training which the Executive Council may specifically request;

DECIDES that the Executive Council Panel of Experts on Education and Training shall be composed of the following experts:

- A. I. Bedritsky, chairperson (Russian Federation)
- A. Lagha (Algeria)
- G. Necco (Argentina)
- C. Depradine (British Caribbean Territories)
- Z. Sun (China)
- C. Billard (France)
- N. Jayanthi (Ms) (India)
- F. Gnoumou (Niger)
- B. Soriano (Philippines)
- C. Garcia-Legaz (Spain)
- R. Riddaway (United Kingdom)
- P. Thomas (United States)

REQUESTS the Panel of Experts to meet as necessary and to report to sessions of the Executive Council;

REQUESTS the Secretary-General to provide the Panel with the necessary assistance.

NOTE: This resolution replaces Resolution 10 (EC-L), which is no longer in force.

RESOLUTION 3 (EC-LV)

EXECUTIVE COUNCIL WORKING GROUP ON LONG-TERM PLANNING

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 25 (Cg-XIV) — Sixth WMO Long-term Plan,
- (2) Resolution 26 (Cg-XIV) — Preparation of the Seventh WMO Long-term Plan,

DECIDES:

- (1) To establish an Executive Council Working Group on Long-term Planning with the following terms of reference:
 - (a) To review the process of the monitoring, evaluation and assessment of the results achieved in the implementation of the Sixth WMO Long-term Plan;
 - (b) To refine further the WMO planning process in the light of experience gained in the preparation, monitoring and implementation of the earlier Long-term Plans, the guidance provided by Fourteenth Congress and developments relating to the major issues facing WMO;
 - (c) To recommend the proposed WMO programme structure for drafting the Seventh WMO Long-term Plan, taking into account other relevant work being undertaken by the Council;
 - (d) To guide generally the work of the technical commissions, Regions and Secretariat in the preparation of the Seventh WMO Long-term Plan on behalf of the Executive Council;
 - (e) To assist the Executive Council:

- (i) To evaluate progress towards the realization of the desired outcomes and strategies, as well as the objectives and the established targets of WMO Programmes as given in the Sixth WMO Long-term Plan;

- (ii) To review the draft of the Seventh WMO Long-term Plan for submission to Fifteenth Congress;

- (2) That the following should serve as members of the Working Group:

A.M. Noorian (First Vice-President)

H. Al-Sha'er

M. M. Arafa

J.-P. Beysson

M.D. Everell

P. Ewins

A.M.H. Isa

T. Kitade

J.R. Mukabana

A.J. Dania

H.B. Valiente

Woon Shih Lai

DESIGNATES Mr A.M. Noorian as chairperson of the Working Group;

REQUESTS the Secretary-General to take the relevant actions to support the activities of this Working Group.

NOTE: This resolution replaces Resolution 2 (EC-LI), which is no longer in force.

RESOLUTION 4 (EC-LV)

EXECUTIVE COUNCIL ADVISORY GROUP ON THE INTERNATIONAL EXCHANGE OF DATA AND PRODUCTS

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 40 (Cg-XII) — WMO policy and practice for the exchange of meteorological and related data and products including guidelines on the relationships in commercial meteorological activities,
- (2) Resolution 25 (Cg-XIII) — Exchange of hydrological data and products,
- (3) The relevant decisions of Congress as contained in the pertinent paragraphs in the general summary of the *Abridged Final Report with Resolutions of the Fourteenth World Meteorological Congress* (WMO-No. 960),

INVITES:

- (1) The president of the Commission for Basic Systems to assist the Council further with respect to the monitoring of the implementation of Resolution 40 (Cg-XII);
- (2) The president of the Commission for Hydrology to assist further in providing advice and assistance on technical aspects of the implementation of Resolution 25 (Cg-XIII);
- (3) The president of the Commission for Climatology to progress work further on the application of Resolution 40 (Cg-XII) to climate data and products;

- (4) The president of the Commission for Aeronautical Meteorology to assist with any specific task that may arise in connection with the international exchange of aeronautical meteorological data and products;
- (5) The co-presidents of the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology to assist in connection with the development by IOC of an oceanographic data exchange policy;

DECIDES:

- (1) To establish an Executive Council Advisory Group on the International Exchange of Data and Products to assist the Council on this topic, in particular, to:
- (a) Ensure that Members and the WMO constituent bodies are regularly advised on relevant developments and issues, as well as their implications;
- (b) Ensure the provision of consolidated advice and clarification related to the implementation of Resolution 40 (Cg-XII) and Resolution 25 (Cg-XIII);
- (c) Serve as a mechanism to address concerns as well as differences of views and interpretations that may arise and provide advice;
- (d) Monitor the implementation of Resolution 40 (Cg-XII) and Resolution 25 (Cg-XIII), as well as the associated data availability;
- (e) Cover new relevant areas that may arise such as those relating to the

exchange of climatological, oceanographic and aeronautical meteorological data and products;

(f) To report regularly to the Executive Council;

- (2) That the following should serve as members of the Advisory Group:
- M. A. Rabiolo (Third Vice-President)
 J.-P. Beysson
 Q.-Z. Chaudhry
 M. Couchoud Gregori (Ms)
 J. J. Kelly
 J. Lumsden
 D. K. Keuerleber-Burk
 M. S. Mhita
 B. T. Sekoli
 Acting president of CBS
 President of CHy

DESIGNATES Mr M.A. Rabiolo as chairperson of the Advisory Group;

REQUESTS the Secretary-General to:

- (1) Take the relevant actions to support the activities of the Advisory Group;
- (2) Take appropriate actions on the related issues and to keep Members and other pertinent international organizations informed on relevant developments associated with the international exchange of data and products.

NOTE: This resolution replaces Resolution 4 (EC-LI), which is no longer in force.

RESOLUTION 5 (EC-LV)

EXECUTIVE COUNCIL ADVISORY GROUP ON THE ROLE AND OPERATION OF NATIONAL METEOROLOGICAL AND HYDROLOGICAL SERVICES

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 28 (Cg-XIV) — Role and operation of National Meteorological Services,
- (2) The Geneva Declaration of the Thirteenth World Meteorological Congress,
- (3) The relevant decisions of Congress as contained in the pertinent paragraphs in the general summary of the *Abrided Final Report with Resolutions of the Fourteenth World Meteorological Congress* (WMO-No. 960),

DECIDES:

- (1) To establish an Executive Council Advisory Group on the Role and Operation of National Meteorological and Hydrological Services with the following terms of reference:
- (a) To keep the subject of the role and operation of NMHSs under review and

- advise the Executive Council on desirable revision of the WMO Statement on the Role and Operation of National Meteorological Services for endorsement by Fifteenth Congress;
- (b) To develop further guidance material for enhancing the role and operation of NMHSs;
- (c) To encourage actively and facilitate the development of cooperative arrangements and partnerships, including with specific groups, among all relevant sectors and service providers;
- (d) To suggest mechanisms by which Members could be more actively involved in promoting the role and operation of NMHSs, as well as the work of WMO;
- (e) To undertake relevant studies;
- (f) To report to the Executive Council;

- (2) That the following shall serve as members of the Advisory Group:
 A.I. Bedritsky (President)
 H. Al-Sha'er
 M.D. Everell
 P. Ewins
 A.M.H. Isa
 J.J. Kelly
 R.D.J. Lengoasa
 M.S. Mhita
 R. Sorani
 S.K. Srivastav
 A.C. Vaz de Athayde
 J.W. Zillman

- DESIGNATES** Mr A.I. Bedritsky as chairperson of the Advisory Group;
REQUESTS the Secretary-General:
 (1) To take the relevant actions to support the activities of the Advisory Group;
 (2) To take appropriate actions on the related issues and to keep Members and other pertinent international organizations informed on relevant developments associated with the role and operation of NMHSs.

NOTE: This resolution replaces Resolution 3 (EC-LI), which is no longer in force.

RESOLUTION 6 (EC-LV)

REPORT OF THE THIRTEENTH SESSION OF REGIONAL ASSOCIATION I (AFRICA)

THE EXECUTIVE COUNCIL,
HAVING CONSIDERED the *Abridged Final Report with Resolutions of the Thirteenth Session of Regional Association I (Africa)*, (WMO-No. 954),
DECIDES:
 (1) To take note of the report;

- (2) To note Resolutions 1 to 20 (XIII-RA I);
REQUESTS the Secretary-General to bring this decision to the attention of all those concerned;
APPROVES the recommendation that this resolution replaces Resolution 6 (EC-LI), which is no longer to be kept in force.

RESOLUTION 7 (EC-LV)

REPORT OF THE THIRTEENTH SESSION OF THE COMMISSION FOR INSTRUMENTS AND METHODS OF OBSERVATION

THE EXECUTIVE COUNCIL,
HAVING CONSIDERED the *Abridged Final Report with Resolutions and Recommendations of the Thirteenth Session of the Commission for Instruments and Methods of Observation* (WMO-No. 947);
DECIDES:
 (1) To note the report;
 (2) To note Resolutions 1 to 4 (CIMO-XIII);
 (3) To take action on each of the recommendations as follows:
Recommendation 1 (CIMO-XIII) — Establishment of a World Infrared Radiometer Calibration Centre
 (a) Approves this recommendation;
 (b) Agrees that a World Infrared Radiometer Calibration Centre consonant with guidelines agreed by CIMO-XIII be established at the Physikalisch Meteorologisches

- Observatorium Davos (PMOD) in Davos, Switzerland;
 (c) Requests the Secretary-General to bring this recommendation to the attention of Members as well as technical commissions concerned to provide technical/scientific guidance in the establishment and continuing quality assurance of such a centre;
Recommendation 2 (CIMO-XIII) — Review of the resolutions of the Executive Council related to the Commission

Approves this recommendation;
AGREES to keep in force Resolution 13 (EC-XXXIV) – Development and comparison of radiometers.

NOTE: This resolution replaces Resolution 4 (EC-L), which is no longer in force.

RESOLUTION 8 (EC-LV)

REPORT OF THE EXTRAORDINARY SESSION (2002) OF THE COMMISSION FOR BASIC SYSTEMS

THE EXECUTIVE COUNCIL,

NOTING the *Abridged Final Report with Resolutions and Recommendations of the Extraordinary Session (2002) of the Commission for Basic Systems* (WMO-No. 955),

DECIDES:

- (1) To note the report;
- (2) To note Resolution 1 (CBS-Ext.(02)) and Resolutions 1, 2 and 3 (CBS-XII);
- (3) To take action on each of the recommendations as follows:

Recommendation 1 (CBS-Ext.(02)) — Review of the *Manual on the Global Observing System* (WMO-No. 544), Volume I, Global aspects

- (a) Approves this recommendation;
- (b) Requests the Secretary-General to make arrangements for publishing the revised *Manual on the GOS* as soon as possible;
- (c) Authorizes the Secretary-General, in consultation with the president of CBS, to make any consequent purely editorial amendments to the *Manual on the GOS*;

Recommendation 2 (CBS-Ext.(02)) — AMDAR activities

- (a) Approves this recommendation;
- (b) Requests CBS and CAeM to develop an appropriate mechanism to integrate more fully AMDAR activities to the WWW Programme and to submit a proposal to the Council;
- (c) Agrees that specific activities are initiated under the WWW and AeM Programmes, including training to facilitate the availability and use of AMDAR data in areas where they are currently not available, in particular in developing countries;

Recommendation 3 (CBS-Ext.(02)) — Amendments to the *Manual on the Global Telecommunication System* (WMO-No. 386), Volume I, Global aspects, Parts I and II

- (a) Approves this recommendation to take effect from 3 November 2003;
- (b) Requests the Secretary-General to incorporate the amendments in the *Manual on the GTS*;
- (c) Authorizes the Secretary-General, in consultation with the president of CBS, to make any consequent purely editorial amendments to the *Manual on the GTS*;

Recommendation 4 (CBS-Ext.(02)) — Amendments to the *Manual on Codes*

(WMO-No. 306), Volume I.1, Alphanumeric codes and Volume I.2, Binary codes and common features

- (a) Approves the following amendments take effect from 5 November 2003:
 - (i) Additions to FM 92-XII GRIB;
 - (ii) Additions to FM 94-XII BUFR and FM 95-XII CREX tables;
 - (iii) Amendments to FM 12-XI Ext. SYNOP, FM 13-XI Ext. SHIP, FM 14-XI Ext. SYNOP MOBIL, FM 75-XII CLIMAT TEMP and FM 76-XII CLIMAT TEMP SHIP;
- (b) Approves the Amendments to FM 15-XII METAR, FM 16-XII SPECI and FM 51-XII TAF to take effect from 3 November 2004;
- (c) Requests the Secretary-General to incorporate these amendments in Volumes I.1 and I.2 of the *Manual on Codes*;

Recommendation 5 (CBS-Ext.(02)) — Amendments to the *Manual on the Global Data-Processing System* (WMO-No. 485)

- (a) Approves this recommendation to take effect from 1 July 2003;
- (b) Requests the Secretary-General to incorporate the amendments in the *Manual on the GDPFS*;
- (c) Authorizes the Secretary-General, in consultation with the president of CBS, to make any consequent purely editorial amendments to the *Manual on the GDPFS*;

Recommendation 7 (CBS-Ext.(02)) — Broadening of the functions of a Regional Specialized Meteorological Centre to include the provisions of ultraviolet index forecasts for Europe

- (a) Approves this recommendation to take effect from 1 July 2003;
- (b) Requests the Secretary-General to incorporate the amendment in the *Manual on the GDPFS*;

Recommendation 6 (CBS-Ext.(02)) — Review of resolutions of the Executive Council based on previous recommendations of CBS or related to the WWW

- (a) Approves this recommendation;
- (b) Agrees to keep in force Resolution 1 (EC-XXXVI) – Support to the continuity of WWW facilities; and Resolution 5 (EC-XLII) — Composite Observing Systems for the North Atlantic.

RESOLUTION 9 (EC-LV)

REPORT OF THE TWELFTH SESSION OF THE COMMISSION FOR AERONAUTICAL METEOROLOGY

THE EXECUTIVE COUNCIL,
HAVING CONSIDERED the *Abridged Final Report with Resolutions and Recommendations of the Twelfth Session of the Commission for Aeronautical Meteorology* (WMO-No. 953),

DECIDES:

- (1) To note the report;
- (2) To note Resolutions 1 to 4 (CAeM-XII);
- (3) To take action on the recommendations of CAeM-XII as follows:

Recommendation 2 (CAeM-XII) — Review of resolutions of the Executive Council based on previous recommendations of the Commission for Aeronautical Meteorology

APPROVES the recommendation that Resolutions 9 (EC-LI) and 8 (EC-LIII) no longer be kept in force.

RESOLUTION 10 (EC-LV)

REPORT OF THE CONJOINT WMO CAeM SESSION/ICAO METEOROLOGICAL DIVISIONAL MEETING

THE EXECUTIVE COUNCIL,
HAVING CONSIDERED the report of the Conjoint WMO CAeM Session/ICAO Meteorological Divisional Meeting (the Conjoint Meeting);

DECIDES:

- (1) To note the report;
- (2) To take action on the recommendations of the Conjoint Meeting as follows:

Recommendation 1/1 — Support of WWW to the operation of WAFS;

Recommendation 1/19 — Research in the detection of volcanic ash from satellite data

Approves Recommendations 1/1 and 1/19 addressed only to WMO;

Recommendation 1/2 — Training assistance to States/Members on workstation operation and display of WAFS products using GRIB and BUFR code forms;

Recommendation 2/4 — Development of standard algorithms for the processing of cloud base height and cloud amount to be used in the automation of the aeronautical meteorological observations;

Recommendation 2/5 — Development of a migration plan concerning the use of table-driven code forms for the dissemination of METAR/SPECI and TAF;

Recommendation 4/1 — Seminars on the cost recovery

Approves Recommendations 1/2, 2/4, 2/5 and 4/1 addressed to WMO for action in coordination with ICAO;

Recommendation 1/10 — Improvement in detection, forecast algorithms and WAFS output products for turbulence and icing

Endorses Recommendation 1/10 addressed to ICAO Contracting States and WMO Members;

Recommendation 4/3 — Guidance material on quality management systems

Approves Recommendation 4/3 addressed to both ICAO and WMO;

Recommendation 4/5 — Use of the Internet as a backup

Notes Recommendation 4/5;

Recommendation 1/7 — Quality control of the meteorological information included in ADS reports;

Recommendation 1/9 — Consideration of the code to be used for uplinking meteorological information to aircraft in flight;

Recommendation 1/12 — Implementation of SIGMET requirements;

Recommendation 1/18 — Completion of the assessment of the usefulness of seismic and infrasonic data from the CTBTO observing networks to IAVW;

Recommendation 1/20 — Evaluation of developing SARPs for radiation and other hazardous materials released into the atmosphere;

Recommendation 2/2 — Development of a manual on the use of automatic meteorological observing systems at aerodromes;

Recommendation 2/3 — Studies related to meteorological reports and aerodrome forecasts;

Recommendation 2/6 — Development of the MET component of the global CNS/ATM concept;

Recommendation 4/2 — Extension of guidance material on cost recovery,

Recommendation 4/6 — Development of guidance and criteria for the accreditation/qualification of providers of

aeronautical meteorological information via the Internet;

Recommendation 4/7 — Development of guidelines for access to aeronautical meteorological information

Notes Recommendations 1/7, 1/9, 1/12, 1/18, 1/20, 2/2, 2/3, 2/6, 4/2, 4/6 and 4/7 addressed to ICAO for action in coordination with or, with assistance of, WMO.

RESOLUTION 11 (EC-LV)

REPORT OF THE THIRTEENTH SESSION OF THE COMMISSION FOR AGRICULTURAL METEOROLOGY

THE EXECUTIVE COUNCIL,

NOTING the *Abridged Final Report with Resolutions and Recommendations of the Thirteenth Session of the Commission for Agricultural Meteorology* (WMO-No. 951),

DECIDES:

- (1) To note Resolutions 1 to 4 (CAGM-XIII);
- (2) To take action on the recommendations of CAGM-XIII as follows:

Recommendation 1 (CAGM-XIII) — National reports on progress made in agricultural meteorology

- (a) Approves the recommendation;
- (b) Requests the Secretary-General:
 - (i) To bring the recommendation to the attention of Members;
 - (ii) To arrange for the update of a comprehensive database on agrometeorology by 31 December 2003;

- (iii) Arrange for a review of the questionnaire before it is sent out before CAGM-XIV;

Recommendation 2 (CAGM-XIII) — WMO activities on training in agricultural meteorology

- (a) Approves the recommendation;
- (b) Requests the Secretary-General to consider a significant increase in the existing WMO training fund allocation for training in agricultural meteorology;

Recommendation 3 (CAGM-XIII) — Review of resolutions of the Executive Council based on previous recommendations of the Commission for Agricultural Meteorology

Approves the recommendation.

NOTE: This resolution replaces Resolution 4 (EC-LIV), which is no longer in force.

RESOLUTION 12 (EC-LV)

ANTARCTIC BASIC SYNOPTIC NETWORK

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 5 (EC-LIII) — Antarctic basic synoptic network,
- (2) Fifth WMO Long-term Plan as it relates to the World Weather Watch and to the Antarctic,
- (3) *Manual on the Global Observing System* (WMO-No. 544), Volume I, Part III, paragraphs 2.1.4 and 2.1.6,

CONSIDERING:

- (1) That the establishment and maintenance of a basic synoptic network of surface and upper-air stations in the Antarctic, adequate to meet the requirements of Members and of the WWW, constitutes one of the most

important obligations of Members under Article 2 of the WMO Convention,

- (2) That the density of the current network of surface and upper-air stations is generally much less than that desirable,
- (3) That global models can at present identify biases in station elevation measurements and are being rerun on past observations,

DECIDES that the stations and the observational programmes listed in the annex to this resolution constitute the Antarctic basic synoptic network;

URGES Members:

- (1) To spare no effort in their endeavours to secure full implementation of the network of stations and observational programmes set forth in the annex to this resolution;

- (2) To seek to maintain radiosonde stations in the Antarctic Peninsula and to establish, when possible, further stations in the interior of Antarctica;
- (3) To consider the possibility of cooperating with other Members in sharing the costs of re-opening and operating previously functioning stations;
- (4) To comply fully with the standard times of observation, the coding procedures and the data-collection standards, as laid down in the WMO *Technical Regulations* (WMO-No. 49) and in the *Manuals on the GOS* (WMO-No. 544), *on Codes* (WMO-No. 306), *on the GTS* (WMO-No. 386) and *on the GDPS* (WMO-No. 485);
- (5) To re-measure station elevations using modern surveying techniques and to communicate the results of these measurements to the WMO Secretariat;
- REQUESTS** the Secretary-General to bring any changes to the Antarctic basic synoptic network to the attention of the Members of WMO.

ANNEX TO RESOLUTION 12 (EC-LV)

LIST OF PROPOSED STATIONS IN THE ANTARCTIC BASIC SYNOPTIC NETWORK**STATIONS OPERATED BY ARGENTINA**

		ABSN
88963	BASE ESPERANZA	S
88968	BASE ORCADAS	S
89034	BASE BELGRANO II	S
89053	BASE JUBANY	S
89055	BASE MARAMBIO (CENTRO MET. ANTARTICO)	S/WR
89066	BASE SAN MARTIN	S

STATIONS OPERATED BY AUSTRALIA

89564	MAWSON	S/WR
89568	LAMBERT GLACIER BASIN, LGB 35 AWS	S
89571	DAVIS	S/WR
89576	LGB 69 AWS	S
89610	CASEY (POINSETT)	S
89611	CASEY	S/WR
89612	CASEY AIRSTRIP AWS 2	S
89614	CASEY (PETERSON)	S
89618	CASEY (HALFWAY)	S
89757	MAWSON (LGB 20 AWS)	S
89758	MAWSON (LGB 10 AWS)	S
89762	MAWSON (LGB 00 GE 03 AWS)	S
89767	AMERY ICE SHELF AWS	S
89774	DAVIS (LGB 59 AWS)	S
89803	WILKES LAND, GF 08 AWS	S
89811	LAW DOME SUMMIT AWS	S
89812	AO28 AWS, SOUTH OF LAW DOME	S
89813	WILKES LAND, GC 41 AWS	S

STATIONS OPERATED BY CHILE

89056	CENTRO MET.ANTARTICO "PDTE.EDUARDO FREI"	S
89057	BASE ARTURO PRAT	S
89059	BASE BERNARDO O'HIGGINS	S

STATIONS OPERATED BY CHINA

89058	GREAT WALL	S
89573	ZHONGSHAN	S

STATIONS OPERATED BY FINLAND

89014	NORDENSKIOLD BASE	S
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STATIONS OPERATED BY FRANCE

89642	DUMONT D'URVILLE	S/WR
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STATIONS OPERATED BY GERMANY

89002 NEUMAYER S/WR

STATIONS OPERATED BY INDIA

89514 MAITRI S

STATIONS OPERATED BY ITALY

89662 BASE BAI A TERRA NOVA S

STATIONS OPERATED BY JAPAN

89532 SYOWA S/WR

STATIONS OPERATED BY THE REPUBLIC OF KOREA

89251 KING SEJONG AWS S

STATIONS OPERATED BY THE RUSSIAN FEDERATION

89050 BELLINGSHAUSEN S

89512 NOVOLAZAREVSKAJA S/WR

89574 PROGRESS S

89592 MIRNYJ S/WR

89606 VOSTOK S

STATIONS OPERATED BY SOUTH AFRICA

89004 S.A.N.A.E. AWS S

STATIONS OPERATED BY SPAIN

89064 JUAN CARLOS 1 AWS S

STATIONS OPERATED BY UKRAINE

89063 VERNADSKY S

STATIONS OPERATED BY THE UNITED KINGDOM

89022 HALLEY S/WR

89062 ROTHERA S/WR

STATIONS OPERATED BY URUGUAY

89054 DINAMET-URUGUAY S

STATIONS OPERATED BY THE UNITED STATES

89009 AMUNDSEN-SCOTT S/WR

89061 PALMER STATION S

89664 MCMURDO S/WR

**STATIONS OPERATED BY THE UNITED STATES
(UNIVERSITY OF WISCONSIN)**

89108 UNIV. WI ID 8985 (HENRY) S

89208 UNIV. WI ID 8987 (CLEAN AIR) S

89257 UNIV. WI ID 8925 (LIMBERT) S

89261 UNIV. WI ID 8947 (RACER ROCK) S

89262 UNIV. WI ID 8926 (LARSEN ICE SHELF) S

89264 UNIV. WI ID 8920 (URANUS GLACIER) S

89266 UNIV. WI ID 8902 (BUTLER ISLAND) S

89272 UNIV. WI ID 8917 (SKY-BLU) S

89314 UNIV. WI ID 21358 (THERESA) S

89324 UNIV. WI ID 8903 (BYRD STATION) S

89327 UNIV. WI ID 8981 (MOUNT SIPLE) S

89332 UNIV. WI ID 21361 (ELIZABETH) S

89345 UNIV. WI ID 8900 (SIPLE DOME) S

89376 UNIV. WI ID 8911 (GILL) S

89377 UNIV. WI ID 8908 (LETTAU) S

89667 UNIV. WI ID 8927 (PEGASUS NORTH) S

89744 UNIV. WI ID 8918 (RELAY STAT) S

89799	UNIV. WI ID 8924 (NICO)	S
89828	UNIV. WI ID 8989 (DOME C II)	S
89834	UNIV. WI ID 8916 (D-47)	S
89864	UNIV. WI ID 8905 (MANUELA)	S
89866	UNIV. WI ID 8906 (MARBLE POINT)	S
89868	UNIV. WI ID 8913 (SCHWERDTFEGER)	S
89869	UNIV. WI ID 8931 (MARILYN)	S
89873	UNIV. WI ID 8915 (ELAINE)	S
89879	UNIV. WI ID 8984 (POSSESSION ISLAND)	S

RESOLUTION 13 (EC-LV)

ANTARCTIC BASIC CLIMATOLOGICAL NETWORK

THE EXECUTIVE COUNCIL,

NOTING:

- (1) The WMO *Technical Regulations* (WMO-No. 49), Regulation [B.1.] 3.1.1.2,
- (2) Resolution 4 (XII-RA II) — Regional Basic Climatological Network in Region II,
- (3) Resolution 3 (XIII-RA IV) — Regional Basic Climatological Network,
- (4) Resolution 3 (XIII-RA III) — Regional Basic Climatological Network in Region III,
- (5) Resolution 3 (XIII-RA VI) — Regional Basic Climatological Network in Region VI,
- (6) Resolution 3 (XIII-RA V) — Regional Basic Climatological Network,
- (7) Resolution 3 (XIII-RA I) — Regional Basic Climatological Network in Region I,

CONSIDERING that Thirteenth Congress stressed the important role of regional associations in the evolution of networks of stations necessary to provide a good representation of climate on the regional scale, in addition to the global scale,

RECOMMENDS that the stations listed in the annex to this resolution constitute the Antarctic basic climatological network,

URGES Members:

- (1) To spare no effort in their endeavours to ensure, at the earliest date possible, full implementation of the network of stations set forth in the annex to this resolution;
- (2) To comply fully with the global and regional coding procedures and data collection standards in accordance with the procedures laid down in the WMO *Technical Regulations* (WMO-No. 49) and the *Manuals on the GOS* (WMO-No. 544), *on Codes* (WMO-No. 306), and *on the GTS* (WMO-No. 386) when operating the Antarctic basic climatological network;

REQUESTS the Secretary-General of WMO:

- (1) To arrange for the inclusion in *Weather Reporting* (WMO-No. 9), Volume A, the information concerning the CLIMAT and CLIMAT TEMP stations; and
- (2) To bring any changes to the Antarctic basic climatological network to the attention of all Members of WMO.

ANNEX TO RESOLUTION 13 (EC-LV)

LIST OF PROPOSED STATIONS IN THE ANTARCTIC BASIC CLIMATOLOGICAL NETWORK

	GSN	GUAN	CLIMAT	CLIMAT TEMP
STATIONS OPERATED BY ARGENTINA				
88963	BASE ESPERANZA	X	X	
88968	BASE ORCADAS	X	X	
89034	BASE BELGRANO II		X	
89053	BASE JUBANY		X	
89055	BASE MARAMBIO (CENTRO MET. ANTARTICO)	X	X	X
89066	BASE SAN MARTIN		X	
STATIONS OPERATED BY AUSTRALIA				
89564	MAWSON	X	X	X
89571	DAVIS	X	X	X
89611	CASEY	X	X	X
89757	MAWSON (LGB 20 AWS)	X		

		GSN	GUAN	CLIMAT	CLIMAT TEMP
STATIONS OPERATED BY CHILE					
89056	CENTRO MET.ANTARTICO "PDTE.EDUARDO FREI"	X		X	
89057	BASE ARTURO PRAT			X	
89059	BASE BERNARDO O'HIGGINS			X	
STATIONS OPERATED BY CHINA					
89058	GREAT WALL			X	
89573	ZHONGSHAN	X		X	
STATIONS OPERATED BY FRANCE					
89642	DUMONT D'URVILLE	X	X	X	X
STATIONS OPERATED BY GERMANY					
89002	NEUMAYER	X	X	X	X
STATIONS OPERATED BY INDIA					
89514	MAITRI			X	
STATIONS OPERATED BY ITALY					
89662	BASE BAIJA TERRA NOVA	X			
STATIONS OPERATED BY JAPAN					
89532	SYOWA	X	X	X	X
STATIONS OPERATED BY THE RUSSIAN FEDERATION					
89050	BELLINGSHAUSEN	X		X	
89512	NOVOLAZAREVSKAJA	X	X	X	X
89574	PROGRESS			X	
89592	MIRNYJ	X	X	X	X
89606	VOSTOK	X		X	
STATIONS OPERATED BY UKRAINE					
89063	VERNADSKY	X		X	
STATIONS OPERATED BY THE UNITED KINGDOM					
89022	HALLEY	X	X	X	X
89062	ROTHERA	X		X	X
89065	FOSSIL BLUFF	X		X	
STATIONS OPERATED BY URUGUAY					
89054	DINAMET-URUGUAY			X	
STATIONS OPERATED BY THE UNITED STATES					
89009	AMUNDSEN-SCOTT	X	X	X	X
89664	MCMURDO	X	X	X	X
STATIONS OPERATED BY THE UNITED STATES (UNIVERSITY OF WISCONSIN)					
89262	UNIV. WI ID 8926 (LARSEN ICE SHELF)	X			
89266	UNIV. WI ID 8902 (BUTLER ISLAND)	X			
89272	UNIV. WI ID 8917 (SKY-BLU)	X			
89324	UNIV. WI ID 8903 (BYRD STATION)	X			
89327	UNIV. WI ID 8981 (MOUNT SIPLE)	X			
89345	UNIV. WI ID 8900 (SIPLE DOME)	X			
89377	UNIV. WI ID 8908 (LETTAU)	X			
89828	UNIV. WI ID 8989 (DOME C II)	X			
89879	UNIV. WI ID 8984 (POSSESSION ISLAND)	X			

RESOLUTION 14 (EC-LV)

MAINTENANCE OF MANNED METEOROLOGICAL (INCLUDING CLIMATOLOGICAL) STATIONS IN THE ANTARCTIC

THE EXECUTIVE COUNCIL,

NOTING:

- (1) The importance of manned stations in order to maintain a continual record of meteorological (including climatological) data from Antarctica,
- (2) The progress made to develop and to run GSN and GUAN stations at coastal and continental areas during recent years,
- (3) The need for meteorological data as an input for global numerical models (such as ECMWF and others) in order to keep the quality of those models that force regional high resolution forecast models in Antarctica,

CONSIDERING:

- (1) The growing need of high quality (high resolution) weather forecast products to support increasing logistic activities such as

intercontinental and intracontinental aircraft operations as well as long distance continental field expeditions,

- (2) The quality of forecast products for selected Antarctic regions also significantly depends on the data quality and number of GSN and GUAN stations currently operated in the Antarctic region,

INVITES operators, particularly those currently running permanently occupied stations to continue their efforts to keep manned stations running in the long term, and by so doing to keep the quality of global and regional forecast models at the necessary level for demanding operations in Antarctica;

REQUESTS the Secretary-General to bring this resolution to the attention of the Antarctic Treaty Parties.

RESOLUTION 15 (EC-LV)

MAINTENANCE OF, AND SUPPORT TO, THE INTERNATIONAL PROGRAMME FOR ANTARCTIC BUOYS OF THE WORLD CLIMATE RESEARCH PROGRAMME

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 11 (EC-XLVI) — Organization of an International Programme for Antarctic Buoys,
- (2) The report of the third session of the WCRP ACSYS/CLIC Scientific Steering Group (Beijing, 21–25 October 2002),
- (3) The report of the eight session of the Executive Council Working Group on Antarctic Meteorology (Geneva, 25-27 November 2002),

CONSIDERING the importance of IPAB observations in the Antarctic sea-ice zone for the WWW, WCRP, GCOS, GOOS, the programme activities of JCOMM and the research activities of the Scientific Committee for Antarctic Research,

RECOGNIZING:

- (1) The positive impact of existing IPAB observations on operational weather prediction,
- (2) That the desired density of the buoy array in the Antarctic sea-ice zone with a spacing of 500 km has never been achieved despite the efforts of the Programme participants,
- (3) That systematic differences in the mean sea-level atmospheric pressure between analyses of numerical weather forecast centres tend to have their maximum in the Southern Ocean,
- (4) The shortage or lack of atmospheric pressure and temperature observations will lead to detrimental consequences for

satellite gravity measurements with subsequent implications for meteorological and oceanographic uses,

- (5) The limited lifetime of drifting buoys in the Antarctic sea-ice zone,

URGES Members, in particular those which have active meteorological and oceanographic programmes in the Antarctic and that use satellite gravity and altimetry data in their operational and research activities:

- (1) To participate actively in the WCRP IPAB programme by providing and/or deploying sea-ice buoys capable of measuring sea-level atmospheric pressure, air temperature and sea-ice drift, or to support the Programme through other appropriate means;
- (2) To spare no efforts in the maintenance of the drifting buoy network in the Antarctic sea-ice zone, particularly through using internationally-coordinated deployment opportunities with the goal that buoys are more frequently deployed in areas of minimal data coverage;
- (3) To undertake necessary actions to ensure that observations from buoys deployed in the area of IPAB interest are reported through the GTS.

NOTE: This resolution replaces Resolution 11 (EC-XLVI), which is no longer in force.

RESOLUTION 16 (EC-LV)

AMENDMENTS TO THE MANUAL ON THE GLOBAL TELECOMMUNICATION SYSTEM (WMO-No. 386), VOLUME II, REGIONAL ASPECTS, THE ANTARCTIC

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 6 (Cg-XII) — WMO Antarctic activities,
- (2) Resolution 6 (EC-LIII) — Amendments to the *Manual on the Global Telecommunication System* (WMO-No. 386), Volume II, Regional aspects, The Antarctic,
- (3) The Fifth WMO Long-term Plan as it relates to the WWW and to the Antarctic,

DECIDES to adopt the amendments to the *Manual on the Global Telecommunication System*, Volume II, Regional aspects, The Antarctic, given in the annex to this resolution;

REQUESTS the Secretary-General to make the appropriate amendments as given in the annex to this resolution in the *Manual on the Global Telecommunication System*, Volume II, Regional aspects, The Antarctic.

ANNEX TO RESOLUTION 16 (EC-LV)

AMENDMENTS TO THE MANUAL ON THE GTS, VOLUME II, THE ANTARCTIC

To replace the text of the section "ANTARCTIC DATA TELECOMMUNICATION ARRANGEMENTS" by the following:

1. GENERAL

1.1 The telecommunication network within the Antarctic and the interconnecting links between the Antarctic and the GTS should ensure the rapid and reliable collection, exchange and further distribution of Antarctic meteorological data to satisfy the needs of WMO Members.

1.2 Meteorological services at many Antarctic stations are run by National Antarctic Programmes and not by the Meteorological Authority of the operating country.

2. DATA TO BE TRANSMITTED

The data transmitted from the Antarctic should be composed of:

- (a) Surface synoptic reports for main and intermediate standard hours (0000, 0300, 0600, 0900, 1200, 1500, 1800 and 2100 UTC), radiosonde data for 0000 and 1200 UTC (and if available for other hours) from all stations in the Antarctic basic synoptic network (ABSN) and also from reports from additional stations, as available;
- (b) All reports from ships, aircraft and buoys;
- (c) CLIMAT and CLIMAT TEMP reports;
- (d) Priority reports, such as warnings of dangerous weather phenomena;
- (e) Other types of information as agreed.

3 COLLECTION AND DISTRIBUTION OF DATA

3.1 The responsibility of collecting centres for the collection of observational data from Antarctic stations is as follows:

<i>Collecting centre</i>	<i>Station index numbers</i>
Davis	89571, 89573
Frei	89054, 89056, 89057, 89058, 89059, 89251
Hobart	89564, 89611
Marambio	88963, 88968, 89034, 89053, 89055, 89066
McMurdo	89009, 89664
St Petersburg (see note)	89050, 89512, 89574, 89592, 89606
New Delhi	89514
Darmstadt (EUMETSAT)	89002, 89022, 89532
Pretoria	89004
Rome	89662
Rothera	89061, 89062, 89063, 89065
Toulouse	89642
Toulouse (ARGOS)	89014, 89568, 89576, 89610, 89612, 89614, 89618, 89757, 89758, 89762, 89767, 89774, 89803, 89811, 89812, 89813
Landover (ARGOS)	89108, 89208, 89257, 89261, 89262, 89264, 89266, 89272, 89314, 89324, 89327, 89332, 89345, 89376, 89377, 89667, 89744, 89799, 89828, 89834, 89864, 89866, 89868, 89869, 89873, 89879

NOTE: Novalazarevskaya is a backup collecting centre.

3.2 The principal routes by which Antarctic meteorological data enter the GTS are given in the figure.

3.3 The Antarctic Meteorological Centres at Casey, Frei and Marambio operate high frequency broadcasts including forecasts and other products. Details of the transmission programmes are included in *Weather Reporting* (WMO-No. 9), Volume C2.

4. SPECIFIC ARRANGEMENTS FOR THE EXCHANGE OF OBSERVATIONAL DATA

4.1 As regards ship's reports, Antarctic collecting stations should make every effort to collect reports from ships which do not otherwise transmit to GTS centres outside Antarctica.

4.2 Data from buoys and automatic weather stations in the Antarctic are normally collected and disseminated by ARGOS centres located in Toulouse (France) and Landover (United States).

5. MONITORING THE OPERATION OF THE GTS

In addition to participating in the annual specific monitoring on the exchange of Antarctic data, Members may carry out their own monitoring. When shortcomings are identified, the results of such a survey should be communicated to the relevant GTS centres, including the Antarctic collecting stations, and to the WMO Secretariat, to take appropriate action.

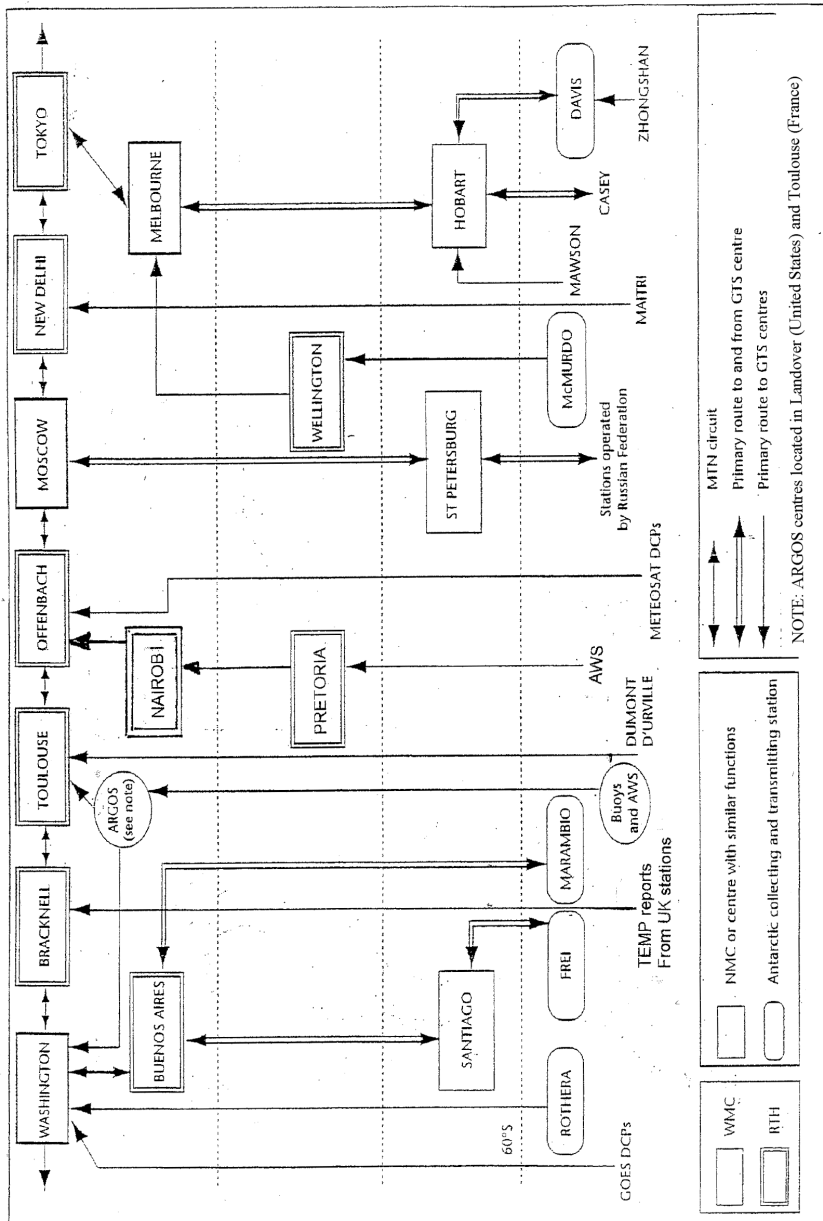


Figure 1 : The principal routes by which Antarctic meteorological data enter the GTS

RESOLUTION 17 (EC-LV)

AMENDMENTS TO THE MANUAL ON THE GLOBAL DATA-PROCESSING AND FORECASTING SYSTEM (WMO-NO. 485), VOLUME II, REGIONAL ASPECTS, THE ANTARCTIC

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Resolution 13 (EC-XLVI) — Amendments to the *Manual on the Global Data-processing System*, Volume II, Regional aspects – The Antarctic,
- (2) Resolution 5 (EC-LIII) — Antarctic basic synoptic network,
- (3) The Fifth WMO Long-term Plan as it relates to the WWW and to the Antarctic,

CONSIDERING that in order to meet the requirements of Members and of the WWW, responsibility must be clearly assigned for data

collection, data-processing and meteorological services within the Antarctic,

RECOMMENDS that data-processing and meteorological service functions be carried out by the following stations in the Antarctic: Davis (Casey will assume responsibility from Davis in October 2003), McMurdo, Marambio, Presidente Frei and Rothera;

REQUESTS the Secretary-General to arrange for the inclusion of this amendment in Volume II, Regional aspects, the Antarctic, of the *Manual on the GDPFS* (WMO-No. 485).

NOTE: This resolution replaces Resolution 13 (EC-XLVI), which is no longer in force.

RESOLUTION 18 (EC-LV)

EXECUTIVE COUNCIL ADVISORY GROUP ON CLIMATE AND ENVIRONMENT

THE EXECUTIVE COUNCIL,

NOTING:

- (1) That WMO has a long and dynamic history as the leader in the field of climate,
- (2) That WMO convened the first World Climate Conference in 1979, and subsequently the Eighth Congress established the World Climate Programme (WCP) as a major programme of the Organization,
- (3) The second World Climate Conference held in 1990 launched GCOS and renamed the major components of the World Climate Programme,

RECOGNIZING:

- (1) That climate and climate services are major topics both scientifically and politically around the world,
- (2) That continuation of WMO's leadership role in climate and environmental issues is critical to the NMHSs of its Members,
- (3) That the scientific assessments have gained wide acceptance that climate change is occurring at unprecedented levels,

- (4) That there is a need to establish a more effective framework for coordination of climate and environmental matters for the entire WMO community,

DECIDES that:

- (1) The Executive Council Advisory Group on Climate and Environment should be re-established with the following membership:
A.M. Noorian (chairperson) – First Vice-President
Chow Kok Kee
B. Kassahun
D.K. Keuerleber-Burk
Qin Dahe
B.T. Sekoli
S.K. Srivastav
H.B. Valiente
E. Zárate H.
J.W. Zillman
- (2) That the terms of reference for the Advisory Group, contained in the annex to this Resolution, are adopted by the Executive Council.

ANNEX TO RESOLUTION 18 (EC-LV)

DRAFT TERMS OF REFERENCE OF THE EXECUTIVE COUNCIL ADVISORY GROUP ON CLIMATE AND ENVIRONMENT

The Executive Council Advisory Group on Climate and Environment will recommend an overall strategy through which NMHSs nationally and collectively, and WMO internationally, could enhance their participation

in, and contributions to, national and international activities related to climate and environment. In developing this strategy the Group will:

- (a) Coordinate, advise on, and review a discussion paper (to be developed by experts and the Secretariat) on all issues related to WMO's involvement and leadership in climate and environment matters. This paper will include proposals for the way forward;
- (b) Review present WMO activities in the field of climate and the environment, and make recommendations with respect to their effectiveness in supporting national and international activities related to sustainable development;
- (c) Review and recommend strategies to increase the support from national funding agencies and from international development agencies, such as GEF and UNDP, for NMHS activities relating to WMO programmes on climate and environmental matters;
- (d) Review current agreements between WMO and other intergovernmental and non-governmental agencies on matters related to climate and the environment, and make recommendations for new or modified agreements as appropriate;
- (e) Promote and strengthen the cooperation between, and coordination of, existing efforts of the WMO technical commissions, regional bodies, and of Members in general on climate and related environment issues;
- (f) Provide advice on the policy implications for WMO of the decisions of other international organizations and conventions on climate and related environmental issues;
- (g) Determine the need for more effective and, where possible, simpler mechanisms to facilitate the development and implementation of specific programmes and projects on climate and environment supported by WMO;
- (h) Continue to consider and provide advice to the Executive Council on matters related to the possibility of organizing a third World Climate Conference.

RESOLUTION 19 (EC-LV)

BUDGET FOR THE BIENNIUM 2004-2005

THE EXECUTIVE COUNCIL,

NOTING:

- (1) Articles 6.5 and 7.7 of the Financial Regulations,
- (2) Resolution 30 (Cg-XIV) — Maximum expenditures for the fourteenth financial period,

- (3) Resolution 36 (Cg-XIV) — Assessment of proportional contributions of Members for the fourteenth financial period,

ADOPTS the budget for the biennium 2004–2005 as given in the annex to this resolution;

DECIDES that the contribution of Members will be assessed as defined in the annex to Resolution 36 (Cg-XIV).

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*

ANNEX TO RESOLUTION 19 (EC-LV)
BUDGET FOR THE FIRST BIENNIUM (2004–2005) OF THE FOURTEENTH FINANCIAL PERIOD
(thousands of Swiss francs)

<i>Revenue</i>		<i>Expenditures</i>	<i>Assessed budget</i>	<i>Cash surplus resulting from the thirteenth financial period*</i>	<i>Total</i>
Assessed contributions	124 900.0	1. Policy-making organs	2 581.2	0.0	2 581.2
Cash surplus resulting from the thirteenth financial period*	2 269.8	2. Executive management	6 803.2	20.0	6 823.2
		3. Scientific and technical programmes			
		3.0 Overall coordination of the scientific and technical programmes	4 408.1	0.0	4 408.1
		3.1 World Weather Watch Programme	12 993.3	390.5	13 383.8
		3.2 World Climate Programme	12 902.8	234.3	13 137.1
		3.3 Atmospheric Research and Environment Programme	7 299.0	218.4	7 517.4
		3.4 Applications of Meteorology Programme	8 004.7	113.7	8 118.4
		3.5 Hydrology and Water Resources Programme	6 083.1	180.5	6 263.6
		3.6 Education and Training Programme	7 730.8	154.1	7 884.9
		3.7 Technical Cooperation Programme	2 839.3	54.4	2 893.7
		3.8 Regional Programme	7 368.3	258.8	7 627.1
		Sub-total Part 3	69 629.4	1 604.7	71 234.1
		4. Linguistic, Publication and Conference Services	22 088.3	309.3	22 397.6
		5. Resource management	21 451.0	335.8	21 786.8
		6. Other budgetary provisions	960.7	0.0	960.7
		7. Acquisition of capital assets – Headquarters building	1 386.2	0.0	1 386.2
TOTAL	127 169.8	TOTAL	124 900.0	2 269.8	127 169.8

* Subject to availability of cash surplus resulting from the thirteenth financial period.

RESOLUTION 20 (EC-LV)

APPOINTMENT OF THE EXTERNAL AUDITOR

THE EXECUTIVE COUNCIL,

NOTING Article 15 of the Financial Regulations,
NOTING ALSO that the term of office of the External
Auditor expires on 30 June 2004,

DECIDES to appoint the Comptroller and Auditor-
General of the United Kingdom to serve as the
External Auditor of the World Meteorological
Organization as from 1 July 2004 for a term of
office to terminate on 30 June 2008.

RESOLUTION 21 (EC-LV)

2004–2005 BUDGET FOR SECRETARIAT SUPPORT TO THE TECHNICAL COOPERATION PROGRAMME THROUGH THE TECHNICAL COOPERATION FUND

THE EXECUTIVE COUNCIL,

NOTING:

- (1) That the Technical Cooperation Programme is an integral element of the mandate of WMO,
- (2) That WMO is involved in the development and implementation, on a regular basis, of technical cooperation projects and programmes funded through UNDP and other sources such as Trust Funds and development banks,

NOTING FURTHER:

- (1) The decisions of Fourteenth Congress on the organization and funding of the Technical Cooperation Programme (*Abridged Final Report with Resolutions of the Fourteenth World Meteorological*

Congress (WMO-No. 960), general summary paragraphs 3.7.2.2 and 3.7.2.3),

- (2) The estimated 2004–2005 revenues from the implementation of projects and programmes funded through the UNDP and trust fund arrangements,
- (3) The budgetary and staff requirements for Secretariat support to the Technical Cooperation Programme in 2004–2005,

APPROVES the budget for the Secretariat support to the Technical Cooperation Programme through the Technical Cooperation Fund for 2004–2005 as contained in the annex to this resolution;

AUTHORIZES the Secretary-General to adjust expenditures during the biennium 2004–2005 to the actual revenues.

ANNEX TO RESOLUTION 21 (EC-LV)

2004–2005 BUDGET FOR SECRETARIAT SUPPORT TO THE TECHNICAL COOPERATION PROGRAMME THROUGH THE TECHNICAL COOPERATION FUND

(thousands of Swiss francs)

		<i>Revenues</i>		<i>Expenditures</i>	
		<i>2004–2005</i>	<i>EC-LIII approved 2002–2003</i>	<i>Proposed 2004–2005</i>	<i>EC-LIII approved 2002–2003</i>
1.	UNDP	720.0	1 100.0		
2.	Other extrabudgetary resources	4 730.0	4 500.0		
	TOTAL*	5 450.0	5 600.0	5 450.0	5 600

(*) Based on an estimated delivery of SFR 7 250 000 for UNDP projects and SFR 51 750 000 for Trust Fund projects during the biennium.

*

* *

**2004–2005 BUDGET FOR SECRETARIAT SUPPORT TO THE TECHNICAL COOPERATION
PROGRAMME THROUGH THE TECHNICAL COOPERATION FUND
EXPENDITURES**

(thousands of Swiss francs)

		<i>Proposed for 2004–2005</i>	<i>Approved by EC-LIII 2002–2003</i>
Part 3.7 – SUPPORT TO TECHNICAL COOPERATION PROGRAMME			
3.701	Personnel TCO		3 530.0
3.702	Personnel ETR (Fellowships)	4 755.0	300.0
3.703	Personnel REM (FIN, HRM, Travel and Registry Units)		850.0
3.704	Seconded experts, consultants and temporary Staff	<u>150.0</u>	<u>185.0</u>
	Total Part 3.7	<u>4 905.0</u>	<u>4 865.0</u>
Part 5 – OPERATION COSTS			
5.030	Stationery and office supplies	30.0	30.0
5.040	Office equipment and machines	20.0	20.0
5.050	Communications	75.0	75.0
5.070	Computer support	20.0	45.0
5.080	Travel	<u>350.0</u>	<u>465.0</u>
	Total Part 5	<u>495.0</u>	<u>635.0</u>
Part 6 – OTHER BUDGETARY PROVISIONS			
6.040	Insurance, audit, contingencies and unforeseen expenditures	<u>50.0</u>	<u>100.0</u>
	Total Part 6	<u>50.0</u>	<u>100.0</u>
	GRAND TOTAL	<u>5 450.0</u>	<u>5 600.0</u>

RESOLUTION 22 (EC-LV)

REVIEW OF PREVIOUS RESOLUTIONS OF THE EXECUTIVE COUNCIL

THE EXECUTIVE COUNCIL,

NOTING:

- (1) General Regulation 155(9), concerning the review of the Executive Council resolutions,
- (2) Rule 27 of Rules of Procedure of the Executive Council on the same subject,

HAVING EXAMINED its previous resolutions still in force,

DECIDES:

- (1) To keep in force the following resolutions:

EC-X	2
EC-XII	6, 30
EC-XIX	9
EC-XXI	15
EC-XXV	8,12
EC-XXIX	11
EC-XXXIV	13,18
EC-XXXV	18, 21
EC-XXXVI	1, 2, 6
EC-XXXVII	13
EC-XXXVIII	9

EC-XXXIX	7, 17, 24
EC-XL	2, 4
EC-XLI	6
EC-XLII	5, 19
EC-XLIV	14 (except paragraphs under DECIDES), 15, 20
EC-XLV	7, 13, 16
EC-XLVI	12, 19
EC-XLVIII	3, 4, 12
EC-L	12
EC-LI	5, 10, 13, 14
EC-LII	3, 4, 6
EC-LIII	1, 2, 9, 11, 12, 15
EC-LIV	1, 2, 3, 5, 6, 7, 8, 9, 10, 11,12, 13, 14, 15, 16, 17

- (2) Not to keep in force the other resolutions adopted before its fifty-fifth session.

NOTE: This resolution replaces Resolution 19 (EC-LIV), which is no longer in force.

ANNEXES

ANNEX I

Annex to paragraph 2.6 of the general summary

MEMBERSHIP OF PANELS AND OTHER BODIES REPORTING TO THE EXECUTIVE COUNCIL

EXECUTIVE COUNCIL PANELS OF EXPERTS

Executive Council Panel of Experts on Education and Training

A.I. Bedritsky	–	President of WMO (chairperson)
A. Lagha	–	Algeria
G. Necco	–	Argentina
C. Depradine	–	British Caribbean Territories
Z. Sun	–	China
C. Billard	–	France
N. Jayanthi (Ms)	–	India
F. Gnoumou	–	Niger
B. Soriano	–	Philippines
C. Garcia Legaz	–	Spain
R. Riddaway	–	United Kingdom
P. Thomas	–	United States

EXECUTIVE COUNCIL WORKING GROUPS AND ADVISORY GROUPS

Executive Council Working Group on Antarctic Meteorology

The working group is composed of members nominated by the Permanent Representatives of countries which are Parties to the Antarctic Treaty and experts designated by Permanent Representatives of Members who have not yet acceded to the Treaty but have active meteorological programmes in the Antarctic. The present membership is as follows:

Qin Dahe	–	China (chairperson)
H. Sosa	–	Argentina
S. Pendlebury	–	Australia
A. W. Setzer	–	Brazil
J. Carrasco	–	Chile
Bian Lingen	–	China
Ju Damski	–	Finland
F. Gérard	–	France
W. Seifert	–	Germany
R.R. Kelkar	–	India
G. Frustaci	–	Italy
T. Hiraki	–	Japan
H. Kelder	–	The Netherlands
S. Nichol	–	New Zealand
M. Kristensen (Ms)	–	Norway
C. del Carmen	–	Peru
M. Mietus	–	Poland
Yu. Tsaturov	–	Russian Federation
G.J.R. Goetzee	–	South Africa
A. Labajo	–	Spain
N. Tokar (Ms)	–	Ukraine
J.D. Shanklin	–	United Kingdom
H. Lobato	–	Uruguay
B. Lettau	–	United States

Executive Council Working Group on Long-term Planning

A.M. Noorian	–	First Vice-President (chairperson)
H. Al-Sha'er		
M.M. Arafa		
J.-P. Beysson		

M.D. Everell
 P. Ewins
 A.M.H. Isa
 T. Kitade
 J.R. Mukabana
 A.J. Dania
 H.B. Valiente
 Woon Shih Lai

Executive Council Advisory Group on the International Exchange of Data and Products

M.A. Rabiolo – Third Vice-President (chairperson)
 J.-P. Beysson
 Q.-Z. Chaudhry
 M. Couchoud Gregori (Ms)
 J.J. Kelly
 J. Lumsden
 D.K. Keuerleber-Burk
 M.S. Mhita
 B.T. Sekoli
 Acting President of CBS
 President of CHy

Executive Council Advisory Group of Experts on Technical Cooperation

T. Sutherland – Second Vice-President (chairperson)
 M.L. Bah
 Chow Kok Kee
 M. Couchoud Gregori (Ms)
 A. N'Diaye
 H.H. Oliva
 Qin Dahe
 R. Sorani

Executive Council Advisory Group on the Role and Operation of NMHSs

A.I. Bedritsky – President (chairperson)
 H. Al-Sha'er
 M.D. Everell
 P. Ewins
 A. M. H. Isa
 J.J. Kelly
 R. D. J. Lengoasa
 M.S. Mhita
 R. Sorani
 S.K. Srivastav
 A.C. Vaz de Athayde
 J.W. Zillman

Executive Council Advisory Group on Climate and Environment

A.M. Noorian – First Vice-President (chairperson)
 Chow Kok Kee
 B. Kassahun
 D. K. Keuerleber-Burk
 Qin Dahe
 B.T. Sekoli
 S.K. Srivastav
 H.B. Valiente
 E. Zárate H.
 J. W. Zillman

SELECTION COMMITTEES

Selection Committee for the IMO Prize

Q.-Z. Chaudhry (chairperson)
 B. Kassahun
 P. Korkutis
 Woon Shih Lai

Selection Committee for the WMO Research Award for Young Scientists

A. N'Diaye (chairperson)
 M.A. Rabiolo
 J. Lumsden
 M. Couchoud Gregori (Ms)

Selection Committee for the Professor Dr Vilho Vaisala Award

S.K. Srivastav (chairperson)
 F.P. Mote
 R.D. Canterford, acting president of CIMO

Selection Committee for the Norbert Gerbier-MUMM International Award

H. H. Oliva (chairperson)
 B. Kassahun
 President of CAgM

OTHER BODIES REPORTING TO THE EXECUTIVE COUNCIL**Joint WMO/IOC/ICSU Scientific Committee for the World Climate Research Programme**

P. Lemke	– Germany (chairperson)
J. Church	– Australia
K. Denman	– Canada
D. Whelpdale	– Canada
Y.H. Ding	– China
P. Cornejo R. de Grunaeur	– Ecuador
G. Pant	– India
M. Zamanian	– Iran, Islamic Republic of
T. Yasunari	– Japan
L. Ogallo	– Kenya
S. Gulev	– Russian Federation
V. Meleshko	– Russian Federation
B.J. Hoskins	– United Kingdom
V. Ramaswamy	– United States
P. Schlosser	– United States
J. Shukla	– United States
K. Trenberth	– United States

Steering Committee for the Global Climate Observing System

P.J. Mason	– United Kingdom (chairperson)
K. Dawson	– Canada
Y. Ni	– China
P. Courtier	– France
S. Mildner	– Germany
D. Williams	– EUMETSAT
Y. Furuhashi	– Japan
K. Nagasaka	– Japan
L.A. Ogallo	– Kenya
K.K. Chow	– Malaysia
O. Johannessen	– Norway
V. Meleshko	– Russian Federation
G. Withee	– United States

Ex-officio members

M. Manton	– Australia (chairperson, AOPC)
A. Belward	– Italy (chairperson, TOPC)
D. Williams	– EUMETSAT
D.E. Harrison	– United States (chairperson, OOPC)

WMO Staff Pension Committee

U. Gärtner
 M.M. Arafa
 T. Sutherland

ANNEX II
Annex to paragraph 3.4 of the general summary

VCP(F) STATUS AND PROPOSAL FOR ALLOCATIONS IN 2003
(United States dollars)

Currently active projects and new proposed projects	Allocations approved by EC 1968–2001	Expenditure in previous years 1968–2001	Balance (31/12/01)	Allocations and adjustments approved by EC-LIV for 2002	Balance after 2002 allocations (01/01/02)	Expenditure* and obligations 2002 (excluding admin. costs)	Balance (31/12/02)	Allocations and adjustment for approval by EC-LV for 2003	Balance after 2003 allocations
1 VCP spares/shipping of equipment in good working condition	583 750	544 383	39 367	10 000	49 367	7 161	42 206		42 206
2 Expert services	1 339 300	1 286 829	52 471	10 000	62 471	12 192	50 279	-10 000	40 279
3 Short-term fellowships	2 397 200	2 421 490	-24 290	120 000	95 710	118 895	-23 185	100 000	76 815
3.1 Group training activities	20 000	14 845	5,155	10 000	15 155	870	14 285	10 000	24 285
4 TCDC activities	453 285	444 894	8,391	20 000	28 391	28 399	-8	25 000	24 992
5 Improvement of GTS General	72 841	20 769	52 072	-10 000	42 072		42 072		42 072
5.1 Improvement of GTS Caribbean	139 020	89 961	49 059	-20 000	29 059		29 059	-10 000	19 059
5.2 Improvement of GTS Asia/Pacific	169 900	109 290	60 610	-10 000	50 610	45	50 565	-10 000	40 565
5.3 Improvement of GTS Africa	619 995	605 342	14 653	10 000	24 653	2 120	22 533	20 000	42 533
5.4 Improvement of GTS South America	367 900	338 791	29 109	-10 000	19 109	1 382	17 727		17 727
5.5 Improvement of GTS South-East RA VI	196 750	171 781	24 969	-10 000	14 969	12 506	2 463	10 000	12 463
5.6 Improvement of GTS central and eastern Europe/Newly Independent States	61 213	31 994	29 219		29 219	6 410	22 809		22 809
6 Improvement of observing subsystem of GOS and GCOS (general)	434 729	422 172	12 557	40 000	52 557	57 631	-5 074	50 000	44 926
6.1 Upper-air stations in central and eastern Europe/Newly Independent States	382 000	377 582	4 418	10 000	14 418	21 897	-7 479	30,000	22 521
7 Improvement of GDPS	120 000	114 123	5 877	10 000	15 877	7 628	8 249	10 000	18 249
8 Agricultural meteorology activities	65 000	54 063	10 937		10 937	1 915	9 022		9 022
9 Support to CLICOM and climatological activities	143 500	117 245	26 255	10 000	36 255	3 969	32 286	-10 000	22 286
10 Mitigation of natural disasters	80 000	49 044	30 956	10 000	40 956	1 800	39 156	-10 000	29 156
10.1 Emergency disaster assistance	80 000	37 724	42 276		42 276	227	42 049		42 049
11 ASMC	101 000	67 569	33 431	-10 000	23 431		23 431	-10 000	13 431
12 ACMAD	180 000	168 134	11 866	10 000	21 866	32 326	-10 460	20 000	9 540
13 EAMAC	60 000	59 763	237	10 000	10 237	37	10 200		10 200
14 Operational hydrology activities	145 000	136 738	8 262	20 000	28 262	17 554	10 708	10 000	20 708
15 Improvement of satellite reception	10 000	1 681	8 319		8 319	1 346	6 973	10 000	16 973
16 Internet capabilities	60 000	19 161	40 839		40 839		40 839	-5 000	35 839
17 Year 2000 problem (closed)	40 000	34 439	5 561	-5,561	0		0		0
18 Reserve	10 332	4 764	5 568	-4 439	1 129		1 129		1 129
Transfer to LDC TF as agreed by Cg-XIV								20 000	20 000
TOTAL	8 332 715	7 744 571	588 144	220 000	808 144	336 310	471 834	250 000	721 834

* Provisional, interim figures which will be audited with the 2002–2003 biennium accounts.

ANNEX III

Annex to paragraph 6.2 of the general summary

LIST OF PROPOSED SESSIONS OF PANELS AND WORKING GROUPS AND OF SYMPOSIA,
TECHNICAL CONFERENCES, SEMINARS AND WORKSHOPS

Project
Code

PANELS, WORKING GROUPS, STUDY GROUPS AND MEETINGS OF EXPERTS

Part 1: Policy-making organs

- 1020 (a) Executive Council session (EC-LVI) (2004)
 1020 (b) Executive Council session (EC-LVII) (2005)
 1021 (c) Financial Advisory Committee (2004, 2005)
 1031 (d) Bureau sessions (2004, 2005)
 1032 (e) Fourth session Consultative Meeting on High-Level Policy on Satellite Matters (2004)
 1032 (f) Fifth session Consultative Meeting on High-Level Policy on Satellite Matters (2005)

Part 3: Scientific and technical programmes

Major Programme 3.0: Overall Coordination of the Scientific and Technical Programmes

- 3011 (a) Meetings of Presidents of Technical Commissions (2004, 2005)
 3021 (b) EC Working Group on Long-term Planning (2004, 2005)
 3022 (c) EC Working Group on Data Exchange Issue (2004–2005)
 3023 (d) EC Advisory Working Group on the Role and Operation of National Meteorological and Hydrological Services

Major Programme 3.1: World Weather Watch Programme

- 3101 (a) CBS-XIII Session (2004)
 3101 (b) CBS Management Group (2005)
 3101 (c) Expert Meetings on High-priority EC Task (2004, 2005)
 3111 (d) CBS Expert Team on Observational Data Requirements and Redesign of the GOS (2004)
 3111 (e) CBS Expert Team on Requirements for Data from Automatic Weather Stations (2004)
 3121 (f) CBS Expert Meeting on Information Systems and Services (2004)
 3122 (g) CBS Expert Meeting on Enhanced Data Communication Systems (2004)
 3124 (h) Expert Meeting on Specific Communication Technologies (2004)
 3125 (i) CBS Steering Group on Radio Frequency Coordination (2004)
 3131 (j) Expert Meeting on Quality and Use of NWP/GPS Products (2005)
 3131 (k) Expert Meeting on Dissemination and Uses of LRF Products (2005)
 3132 (l) Meeting on Severe Weather Forecasting (2004)
 3134 (m) Expert Meeting on Early Warning Systems for Response Strategies to Severe Weather (2004)
 3141 (n) CBS Expert Meetings on Future WMO Information System (2004, 2005)
 3142 (o) CBS Expert Meeting on FWIS Implementation (2005)
 3143 (p) CBS Expert Meetings on Data Representation and Codes (2004, 2005)
 3152 (q) Expert Meeting on Innovative Collaboration Concepts (2005)
 3152 (r) Expert Meetings on Quality Management (2004, 2005)
 3153 (s) Expert Meeting on Members' OIS Requirements (2004)
 3162 (t) Expert Team on Surface Technology and Measurement Techniques (2004)
 3162 (u) Expert Team on Upper-air Systems Intercomparisons (2004)
 3162 (v) Expert Team on Remote Sensing Upper-air Technology and Techniques (2004)
 3162 (w) Meeting of Committee on GPS Radiosonde Intercomparison (2005)
 3163 (x) Expert Team on Training Activities and Training Materials (2004)
 3171 (y) CBS OPAG IOS Expert Team on Satellite Systems Utilization and Products (2004, 2005)
 3181 (z) ESCAP/WMO Typhoon Committee, thirty-sixth session (2004)
 3181 (aa) WMO/ESCAP Panel on Tropical Cyclones, thirty-first session (2004)
 3181 (ab) RA IV Hurricane Committee, twenty-sixth session (2004)
 3181 (ac) ESCAP/WMO Typhoon Committee, thirty-seventh session (2005)
 3181 (ad) WMO/ESCAP Panel on Tropical Cyclones, thirty-second session (2005)
 3182 (ae) Expert Meeting on Formulation of TCP Sub-Project No. 24 (2004)
 3183 (af) Expert Meeting on Tropical Cyclone Warnings (2005)
 3191 (ag) Meeting of the Emergency Response Activities Coordination Group (2004)
 3192 (ah) Meeting on Enhanced Role of NMHSs (2005)
 3192 (ai) Expert Meetings on Development of ERA Capabilities (2004, 2005)

Major Programme 3.2: World Climate Programme

- 3201 (a) CCI-XIV session (2005)
- 3201 (b) CCI Management Working Group, third session (2004)
- 3201 (c) CCI Management Working Group, fourth session (2005)
- 3211 (d) EC Advisory Group on Climate and Environment, first session (2004)
- 3211 (e) EC Advisory Group on Climate and Environment, second session (2005)
- 3211 (f) Meeting of New Interagency Coordination Mechanism (2005)
- 3225 (g) Expert Group Meeting on Drought Preparedness (2004)
- 3241 (h) Expert Team Data Rescue (2004)
- 3241 (i) Expert Team Data Rescue (2005)
- 3241 (j) Expert Meeting on Climate Database Management System in RA I (2005)
- 3242 (k) Expert Meeting on Procedures and Processes in Climate Change (2005)
- 3242 (l) RA I Expert Meeting on Climate Change Detection and Monitoring (2004)
- 3242 (m) RA II Expert Meeting on Climate Change Detection and Monitoring (2005)
- 3251 (n) Expert Team on Research Needs for Seasonal Prediction (2005)
- 3251 (o) Expert Team on CLIPS Operations (2004)
- 3251 (p) Expert Team on Verification (2004)
- 3251 (q) Expert Team on End-user Liaison (2005)
- 3251 (r) Expert Team on Capacity Building (2005)
- 3252 (s) Expert Team on Heat/Health Warnings (2004)
- 3252 (t) Expert Team on Heat-related Indices and their Use (2005)
- 3252 (u) Expert Team on Training in Urban Climatology (2005)

Major Programme 3.3: Atmospheric Research and Environment Programme

- 3301 (a) CAS-XIV Session (2005)
- 3301 (b) CAS/JSC Working Group on Numerical Experimentation (2004, 2005)
- 3301 (c) CAS Advisory Working Group (2005)
- 3311 (d) Meeting of Ozone Research Managers (2004)
- 3311 (e) Expert Meeting on Ozone Assessment (co-sponsored) (2005)
- 3312 (f) Expert Meeting on EMEP Assessment (2004)
- 3313 (g) Technical Expert Meeting on Regional Air Pollution (2005)
- 3313 (h) Expert Meetings on Pollution Deposition (2004, 2005)
- 3313 (i) Expert Meeting on Atmospheric Transport Modelling (2005)
- 3321 (j) CAS Working Group on Atmospheric Chemistry and Environmental Pollution (2005)
- 3322 (k) Regional Technical Meeting on Quality Assurance (2004)
- 3322 (l) Expert Meeting on Quality Assurance (2005)
- 3322 (m) Meeting of SAG on Aerosols (co-sponsored) (2005)
- 3322 (n) Meeting of SAG on Precipitation Chemistry & Deposition (2005)
- 3322 (o) Two Expert Meetings on UV (co-sponsored) (2004, 2005)
- 3322 (p) Two Expert Meetings on GAW Technical Subjects (2004, 2005)
- 3323 (q) Expert Meeting on Ozone Data and Measurements (2005)
- 3323 (r) Meeting of SAG on Greenhouse Gases (co-sponsored) (2004)
- 3323 (s) Technical Meeting on Carbon Dioxide (co-sponsored) (2005)
- 3323 (t) Meeting of SAG on Ozone (2005)
- 3324 (u) Meeting of Managers of GAW Data Centres (2005)
- 3324 (v) Expert Meeting on Environment and Climate (co-sponsored) (2004)
- 3325 (w) Meeting of SAG on GURME (2004)
- 3325 (x) Regional Technical Meeting (2005)
- 3325 (y) Expert Meeting on Urban Environment Guidelines (2005)
- 3331 (z) WWRP Science Steering Committee, seventh session (2004)
- 3331 (aa) WWRP Science Steering Committee, eighth session (2005)
- 3341 (ab) CAS Working Group on Tropical Meteorology Research (2004)
- 3351 (ac) CAS Working Group on Physics and Chemistry of Clouds (2004 or 2005)

Major Programme 3.4: Applications of Meteorology Programme

- 3411 (a) Expert Team on Product Development (2005)
- 3412 (b) Expert Team on Presentation and Dissemination Technologies (2004)
- 3414 (c) Expert Team on Warnings and Forecasts Exchange Issues (2004)
- 3415 (d) Expert Meeting on Strategies Towards Capacity Building (2004)
- 3416 (e) Expert Meeting on Strategies for Implementation of Disaster Reduction (2005)
- 3421 (f) CAgM Management Group Meeting on Strengthening Operational Agromet Services (2005)
- 3422 (g) Meeting of the Expert Team on Strengthening Operational Agromet Services (2004)
- 3431 (h) CAeM Management Group (2004)

- 3432 (i) PROMET OPAG (2004, 2005)
- 3432 (j) TREND OPAG (2004, 2005)
- 3441 (k) JCOMM Second Session (2005)
- 3441 (l) JCOMM Management Committee Sessions (2004, 2005)
- 3442 (m) IOC/WMO/CPPS Working Group El Niño, tenth session (2005)
- 3442 (n) JCOMM Expert Team on Sea Ice, Second Session (2004)
- 3443 (o) JCOMM Expert Team on Data Management Practices, second session (2005)
- 3443 (p) JCOMM Expert Team on Marine Climatology, first session (2004)
- 3444 (q) JCOMM Ship Observations Team, third session (2005)

Major Programme 3.5: Hydrology and Water Resources Programme

- 3501 (a) CHy Session (2004)
- 3501 (b) CHy Advisory Working Group (2004)
- 3502 (c) Regional Expert Meetings for Improving Collaboration between NMSs and NHSs regarding Hydrological Forecasting (2005)
- 3511 (d) CHy Working Group on Water Resources (2005)
- 3513 (e) WHYCOS International Advisory Group (2004)
- 3521 (f) CHy Working Group on Hydrological Forecasting and Prediction (2005)
- 3521 (g) Expert Meeting on Risk Awareness in Developing Countries (2005)
- 3521 (h) Expert Meeting on Disaster Preparedness in Flood Management in RA I (2004)
- 3522 (i) Expert Meeting on Public Awareness and Risk Management
- 3522 (j) Expert Meeting on Flood Risk Mapping
- 3523 (k) Expert Meeting on the variability of Hydrological Processes (2004)
- 3523 (l) Expert Meeting on Hydrological Trends and Changes in Vulnerable Basins (co-sponsored) (2005)
- 3531 (m) Expert Meeting on Water Resources of Arid and Semi-arid Regions (2004)
- 3541 (n) Inter-regional Expert Meeting on Institutional Development and Management of NHSs in Extreme Hydrological Situations in RA I (2004)
- 3541 (o) Inter-regional Expert Meeting on Institutional Development and Management of NHSs in Extreme Hydrological Situations in RA II and V (2005)
- 3542 (p) Expert Meeting on Computer Aided Distance Learning (2005)
- 3551 (q) WMO/UNESCO Liaison Committee for Hydrological Activities (2004)
- 3551 (r) WMO/UNESCO Liaison Committee for Hydrological Activities (2005)

Major Programme 3.6: Education and Training Programme

- 3601 Twenty-first session of the EC Panel of Experts on Education and Training (2004)

Major Programme 3.7: Technical Cooperation Programme

- 3711 (a) Fifth session of the EC Advisory Group of Experts on Technical Cooperation (2004)
- 3711 (b) Informal Planning Meeting on the Voluntary Cooperation Programme (VCP) and Related Technical Cooperation Programmes (2004, 2005)

Major Programme 3.8: Regional Programme

- 3816 (a) RA II-XIII session (2004)
- 3816 (b) RA III-XIV session (2005)
- 3816 (c) RA IV-XIV session (2005)
- 3817 (d) RA I Advisory Working Group (2005)
- 3817 (e) RA III Advisory Working Group (2004)
- 3817 (f) RA IV Advisory Working Group (2004)
- 3817 (g) RA V Advisory Working Group (2005)
- 3817 (h) RA VI Advisory Working Group (2005)
- 3817 (i) RA I Tropical Cyclones for the South-West Indian Ocean, seventeenth session (2005)
- 3817 (j) RA IV Hurricane Committee, twenty-seventh session (2005)
- 3817 (k) RA V Tropical Cyclone Committee for the South Pacific and South-East Indian Ocean, tenth session (2004)
- 3825 (l) Two Meetings of Regional Capacity Building on Climate Applications (2005)
- 3825 (m) Meeting of Regional Capacity Building on Hydrology (2005)

IMPLEMENTATION COORDINATION MEETINGS

Major Programme 3.0: Overall Coordination of the Scientific and Technical Programmes

- 3031 Coordination Group Meeting of the Presidents of the Technical Commissions for Enhanced International Coordination of ISDR Activities

Major Programme 3.1: World Weather Watch Programme

- 3111 (a) Implementation Coordination Meeting on Adaptable Observing Systems in RA II (2004)
- 3111 (b) Implementation Coordination Meeting on Adaptable Observing Systems in RA V (2004)
- 3112 (c) CBS Implementation Coordination Team on Integrated Observing System (2004)
- 3112 (d) CBS/GCOS Coordination Meeting on Implementation of GSN and GUAN (2005)
- 3113 (e) Implementation Coordination Meeting on Network Adaptation (2005)
- 3113 (f) Implementation Coordination Meeting
- 3126 (g) Implementation Coordination Meeting on Specific Communication Technologies (2005)
- 3133 (h) Implementation Coordination Meeting on DPFS Issues and NWP Output on Severe and Extreme Events (2004)
- 3151 (i) Implementation Coordination Meeting on CAL for WWW (2005)
- 3193 (j) Coordination Meeting on Antarctic Meteorology (2004)

Major Programme 3.2: World Climate Programme

- 3241 (a) Implementation Coordination Meeting on Climate Data Management (2004)
- 3251 (b) Implementation Coordination Team of CCI OPAG3 (2004)

Major Programme 3.3: Atmospheric Research and Environment Programme

- 3311 (a) Implementation Coordination Meeting on Ozone Depleting Substances (2004)
- 3312 (b) Implementation Coordination Meeting of Experts (2004)
- 3324 (c) Implementation Coordination Meeting on New Requirements for GAW Data (2004)
- 3325 (d) Implementation Coordination Meeting (2004)

Major Programme 3.4: Applications of Meteorology Programme

- 3413 (a) Core Public Weather Services Implementation Coordination Meeting (2005)
- 3422 (b) Meeting of the Implementation Coordination Team on Agrometeorological Services (2005)
- 3423 (c) Meeting of the Implementation Coordination Team on Support Systems for Agrometeorological Services
- 3424 (d) Meeting of the Implementation Coordination Team on Impacts of Climate Change/Variability and Natural Disasters on Agriculture (2005)
- 3442 (e) JCOMM Services Coordination Group, second session (2004)
- 3443 (f) JCOMM Data Management Coordination Group, second session (2004)
- 3444 (g) JCOMM Observations Coordination Group, second session (2004)
- 3447 (h) JCOMM Capacity Building Coordination Group (2004)

Major Programme 3.8: Regional Programme

- 3817 (a) Working Group on WWW and Implementation Coordination Meeting on WWW Strategy in RA I (2004)
- 3817 (b) Working Group on WWW and Implementation Coordination Meeting on WWW Strategy in RA II (2005)
- 3817 (c) Working Group on WWW and Implementation Coordination Meeting on WWW Strategy in RA V (2004)
- 3817 (d) Working Group on WWW and Implementation Coordination Meeting on WWW Strategy in RA VI (2005)
- 3817 (e) Working Group on Hydrology and Implementation Coordination Meeting of RA V (2005)
- 3817 (f) Working Group on Hydrology and Implementation Coordination Meeting of RA VI (2005)
- 3817 (g) Working Group on Climate Application and Implementation Coordination Meeting of RA III (2004)
- 3817 (h) Working Group on Climate Application and Implementation Coordination Meeting of RA IV (2005)

SYMPOSIA, TECHNICAL CONFERENCES, SEMINARS, WORKSHOPS AND TRAINING COURSES**Major Programme 3.0: Overall Coordination of the Scientific and Technical Programmes**

- 3041 (a) Media Seminar for Weather Presenters (2003)
- 3041 (b) First World Broadcast Meteorology Conference (2004)
- 3041 (c) International Conference
- 3042 (d) Training Workshop for IPA Focal Points (2005)
- 3042 (e) Media Training Workshop for NMHSs

Major Programme 3.1: World Weather Watch Programme

- 3111 (a) Workshop on Redesign of the GOS (2004)
- 3112 (b) Training Seminar on CLIMAT and CLIMAT TEMP Reporting (2005)
- 3113 (c) Workshop on Adaptable Observational Programmes (2005)
- 3122 (d) Roving Seminar on Data Communications (2005)

- 3124 (e) Roving Seminar on Communication Technologies (2005)
- 3125 (f) Workshop on Radio-Frequency for Meteorology (2005)
- 3132 (g) Workshop on Use of EPS Products (2004)
- 3134 (h) Workshop on Data Assimilation Techniques (2005)
- 3134 (i) Three Training Workshops on Emergency Response to Severe Weather and Extreme Natural Events (2004, 2005)
- 3141 (j) Expert Video Conference (2004)
- 3143 (k) Expert Video Conference (2004)
- 3143 (l) Roving Seminar on Codes Migration (2005)
- 3151 (m) Training Seminar on WWW Systems Planning (2004)
- 3151 (n) Training Seminar on WWW System Components (2004)
- 3151 (o) Two Training Seminars on WWW System Components and Codes (2005)
- 3163 (p) Technical Conference (TECO-2005)
- 3173 (q) Second International Precipitation Working Group Workshop (IPWG) (2004)
- 3173 (r) 8th International Winds Workshop (2005)
- 3173 (s) 14th International TOVS Study Conference (2005)
- 3175 (t) Symposium for Research and Development Satellite Data Usage (2004)
- 3176 (u) Symposium for Research and Development Satellite Data Usage (2005)
- 3177 (v) Training Seminar for Natural Disaster Support from Research and Development Satellites (2005)
- 3184 (w) Second Technical Conference on Tropical Cyclones and Storm Surges (2004)
- 3184 (x) Workshop on Storm Surges for the South China Sea (2005)
- 3184 (y) Workshop on Storm Surges for the Bay of Bengal Area (2005)
- 3186 (z) Southern Hemisphere Training Course on Tropical Cyclones (2004)
- 3186 (aa) RA I Training Course on Tropical Cyclones (2005)
- 3187 (ab) Third Technical Conference on Tropical Cyclones and Storm Surges (2005)

Major Programme 3.2: World Climate Programme

- 3223 (a) RA III Workshop on Observing Systems for Climate (2004)
- 3223 (b) RA V Workshop on Observing Systems for Climate (2005)
- 3226 (c) Workshop on Adaptation to Climate Change and Variations (2005)
- 3226 (d) Workshop on Climate Extremes Analysis and Database Development (2005)
- 3241 (e) Climate Data and Data Management Training Seminar and Workshop in RA IV (2004)
- 3251 (f) CLIPS Training Workshops for RA II and III (2004, 2005)
- 3251 (g) Training Seminar dealing with Climate Predictions and Floods (2005)
- 3252 (h) Training Seminar on Human Health and Climate Application Matters (2005)

Major Programme 3.3: Atmospheric Research and Environment Programme

- 3324 (a) International Conference on Carbon Dioxide (co-sponsored) (2005)
- 3332 (b) Fourth WMO International Symposium on Assimilation of Observation in Meteorology and Oceanography (2004)
- 3332 (c) International Symposium for WWRP/RDP (2004)
- 3333 (d) International Workshop on High Impact Weather Forecast (2005)
- 3335 (e) International Conference on High Impact Weather Forecast and Disaster Reduction (2005)
- 3342 (f) Third International Workshop on Monsoon Studies (2005)
- 3352 (g) Workshop on Cloud Modelling (co-sponsored) (2004 or 2005)

Major Programme 3.4: Applications of Meteorology Programme

- 3416 (a) Training Seminar on the Role of PWS in Natural Disaster (2005)
- 3421 (b) Workshop on Agricultural Meteorology and Climate Change associated with CAgM-XIV (2005)
- 3423 (c) Workshop on Climatic Analysis and Mapping for Agriculture (2005)
- 3423 (d) Roving Seminar on Applications of GIS and Remote Sensing (2004, 2005)
- 3424 (e) Workshop on the Contribution of Agriculture to the State of Climate (2005)
- 3432 (f) Training Event on Cost Recovery (2005)
- 3441 (g) Symposium on Operational Oceanography associated with JCOMM-II (2005)
- 3446 (h) Two JCOMM Workshops on Marine Pollution and Ocean Products (2004)

Major Programme 3.5: Hydrology and Water Resources Programme

- 3512 (a) Roving Seminar on HOMS Component of Relevance to NHSs of RA III (2004)
- 3512 (b) Roving Seminar on HOMS Component of Relevance to NHSs of RA II (2005)
- 3513 (c) Regional Workshop on Application of New Technologies in Data Collection and Dissemination in RA II (2004)
- 3522 (d) International Symposium on Hydrological Risk Awareness and Response Mechanisms of Communities (2005)

- 3543 (e) International Symposium on Product Delivery and Public Awareness of Hydrological Services (2005)
 3551 (f) Technical Symposium as Input to WWAP (2005)
 3551 (g) Sixth WMO/UNESCO International Conference on Hydrology (25% cost to WMO) (2005)

Major Programme 3.6: Education and Training Programme

- 3624 (a) Training Seminar on Curriculum Development (2005)
 3624 (b) Regional Seminar for National Instructors from RA III and RA IV (2004)
 3624 (c) Regional Seminar for National Instructors from RA II and RA V (2005)
 3641 (d) Training Seminar on Instruments (2005)
 3641 (e) Training Seminar on Satellite Based Forecasting Tools (2004)
 3641 (f) Regional Seminar on PWS and GDPS to better support Natural Disaster Prevention (2005)
 3641 (g) Training Seminar on GDPS (2005)
 3641 (h) Workshop on Hurricane Forecasting and Warning (2004)
 3641 (i) Workshop on Hurricane Forecasting and Warning (2005)
 3642 (j) Training Workshop on Climate Early Warning Systems in RA III (2004)
 3643 (k) GAW Training Workshop on Measurement and Quality Assurance (2004)
 3643 (l) GAW Training Workshop on Measurement and Quality Assurance (2005)
 3643 (m) Training Workshop on Very Short and Short-range Forecast (2005)
 3643 (n) Training Workshop on Monsoon Studies in RA I and RA II (2004)
 3644 (o) Training Seminar on Nowcasting and TAF Verification (2005)
 3644 (p) Training Workshop on PMOs (2005)
 3644 (q) Training Workshop on GIS and Remote Sensing (2005)
 3644 (r) Roving Seminars on Weather, Climate and Farmers (2005)
 3645 (s) Roving Course on Discharge Measurements on Large Rivers (2004)
 3645 (t) International Postgraduate Course on Applied Hydrology (2004)
 3645 (u) WMO/NOAA Training Course on Hydrological Forecasting (2005)
 3645 (v) Latin-American Course on Hydrology (2005)
 3646 (w) Regional Training Seminar on Capacity Building in RA III (2004)
 3646 (x) Regional Training Seminar on Capacity Building in RA IV (2004)
 3646 (y) Regional Training Seminar on Capacity Building in RA VI (2005)

Major Programme 3.8: Regional Programme

- 3823 (a) Regional Seminar on Alternative Services Delivery/NMHSs Administration in RA II (2004)
 3823 (b) Regional Seminar on Alternative Services Delivery/NMHSs Administration in RA III (2004)
 3823 (c) Regional Seminar on Alternative Services Delivery/NMHSs Administration in RA IV (2004)
 3823 (d) Regional Seminar on Alternative Services Delivery/NMHSs Administration in RA VI (2004)
 3824 (e) Regional Technical Conference on Management of Meteorological and Hydrological Services in RA I (2004)
 3824 (f) Regional Technical Conference on Management of Meteorological Services in RA V (2005)

WORKING GROUPS, STUDY GROUPS AND MEETINGS OF EXPERTS FINANCED FROM THE WMO/ICSU/IOC JOINT CLIMATE RESEARCH FUND

- 8100 (a) Annual session of WMO/ICSU/IOC Joint Scientific Committee for the WCRP (2004, 2005)
 8100 (b) Biennial session of JSC Officers (2004)
 8300 (c) Annual sessions of CAS/JSC Working Group on Numerical Experimentation (2004, 2005)
 8300 (d) Sessions of Working Group on Coupled Modelling (2004, 2005)
 8300 (e) Biennial session of GEWEX Modelling Panel (2004)
 8300 (f) Session of CLIVAR Prediction Panel (2004)
 8300 (g) Biennial session of Cryospheric Modelling Panel (2004)
 8300 (h) Biennial Workshop on Atmospheric Reanalysis (2005)
 8300 (i) Session of CLIVAR Prediction Panel (2005) (Option B)
 8400 (j) Annual sessions of GEWEX Scientific Steering Group (2004, 2005)
 8400 (k) Annual sessions of GEWEX Hydrometeorology Panel (2004, 2005)
 8400 (l) Annual sessions of GEWEX Radiation Panel (2004, 2005)
 8400 (m) Biennial Workshop for Baseline Surface Radiation Network (2004)
 8400 (n) Annual sessions of Panel on Cloud System Studies (2004, 2005)
 8400 (o) Biennial Workshop on Land-surface Processes (2004)
 8400 (p) Biennial Workshop on GEWEX Field Experiments (2004)
 8400 (q) Expert Meeting on Data Management for GEWEX Projects (2005)
 8400 (r) Scientific Conference on GEWEX (2005)
 8500 (s) Annual sessions of CLIVAR Scientific Steering Group (2004, 2005)
 8500 (t) Annual sessions of CLIVAR Monsoon Panel (2004, 2005)

8500	(u)	Biennial session of CLIVAR African Climate Variability Panel (2004)
8500	(v)	Expert Meeting on Decadal to Centennial Climate Change (2005)
8500	(w)	Biennial Workshop on Detection of Climate Change (2005)
8500	(x)	Biennial session of Working Group on Air-sea Fluxes (2004)
8500	(y)	Annual Sessions of Ocean Observations Panel (2004, 2005)
8500	(z)	Annual Implementation/Coordination Meetings for Ocean Observations (2004, 2005)
8500	(aa)	Scientific Conference on CLIVAR (2004)
8600	(ab)	Annual sessions of Climate and Cryosphere (CliC) Scientific Steering Group (2004, 2005)
8600	(ac)	Biennial Implementation/Coordination Meeting for Planning Cryosphere Observations (2004)
8600	(ad)	Biennial Expert Meeting on Cryosphere Data Management (2005)
8600	(ae)	Conference on CliC (2005)
8700	(af)	Annual sessions on SPARC Scientific Steering Group (2004, 2005)
8700	(ag)	Biennial Expert Workshop on Trends in Stratospheric Parameters (2004)
8700	(ah)	Biennial Expert Workshop on Stratospheric Processes (2005)
8700	(ai)	Scientific Conference on SPARC (2004)
8800	(aj)	Annual Panel / Workshop on Carbon Cycle (2004, 2005)
8800	(ak)	Annual Panel / Workshop on Water or Food Resources (2004, 2005)
8800	(al)	Annual Climate Observations Panels (2004, 2005)

ANNEX IV

Annex to paragraph 6.7 of the general summary

BUDGET FOR THE WMO/ICSU/IOC JOINT CLIMATE RESEARCH FUND FOR THE BIENNIUM 2004–2005

	SFR'000
Institutional support to WCRP	
Staff costs	3 294.7
Temporary staff	10.2
Activities of the JSC	208.3
Operation of the JPS	111.6
Climate Modelling Programme	277.2
Global Energy and Water Cycle Experiment (GEWEX)	452.8
Climate Variability and Predictability (CLIVAR)	434.4
Climate and Cryosphere (CliC)	223.4
Stratospheric Processes and their Role in Climate (SPARC)	223.4
Cooperation/joint activities with global environmental change programmes	140.4
TOTAL	5 376.4
ICSU contribution to the Joint Climate Research Fund*	786.0
IOC contribution to the Joint Climate Research Fund *	655.0
WMO contribution to the Joint Climate Research Fund	3 935.4

* NOTE: At United Nations official exchange rate of May 2003 (SFR 1.31/US dollar).

ANNEX V

Annex to paragraph 7.6.10 of the general summary

RECOMMENDATION OF THE FINANCIAL ADVISORY COMMITTEE TO THE FIFTY-FIFTH SESSION OF THE EXECUTIVE COUNCIL

Recommendation

That the Executive Council appoint the Comptroller and Auditor-General of the United Kingdom to serve as the External Auditor of WMO as from 1 July 2004 for a term of office to terminate on 30 June 2008.

ANNEX VI
Annex to paragraph 7.7.3 of the general summary

**DRAFT WORKING ARRANGEMENT BETWEEN THE WORLD METEOROLOGICAL ORGANIZATION AND
THE PERMANENT INTER-STATE COMMITTEE FOR DROUGHT CONTROL IN THE SAHEL**

1. The Secretary-General of the World Meteorological Organization (WMO) and the Executive Secretary of the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), with the aim of effectively attaining the objectives set forth in their respective constituent instruments, will act in close cooperation with each other and will consult each other regularly in regard to matters of common interest.
2. WMO and CILSS agree to set up such cooperation and consultation for the purpose of effective coordination of activities of both Organizations, to ensure optimum benefits from weather services, agricultural meteorology, drought monitoring, water resources management, human resources development and relevant research, to maximize the benefits to Members concerned from the application of these activities to sustainable development, especially in areas such as natural disaster reduction, drought monitoring and control and warning, and to optimize the application of weather and climate information in agriculture, drought control, desertification, and environmental protection.
3. Both Organizations agree to keep each other informed on current and planned activities in which there may be mutual interest. They also agree to collaborate in the implementation of the Programmes of WMO in areas of common interest.
4. WMO and CILSS agree to exchange publications concerning these and related fields.
5. Suitable arrangement will be made for the participation of each Party to the Working Arrangement as an observer in those sessions and meetings of the other Party at which matters of common interest are discussed.

APPENDIX A

LIST OF PERSONS ATTENDING THE SESSION

A. Members of the Executive Council

A.I. Bedritsky	President
A.M. Noorian	First Vice-President
T.W. Sutherland	Second Vice-President
M.A. Rabiolo	Third Vice-President
M.S. Mhita	President RA I
A. Majeed. H. Isa	Acting President RA II
H.B. Valiente	Acting President RA III
A.J. Dania	President RA IV
Woon Shih Lai	President RA V
P. Korkutis	Acting President RA VI

H. Al-Sha'er	}	Elected members
M.M. Arafa		
A.C. Vaz de Athayde		
M.L. Bah		
J.-P. Beysson		
Q.Z. Chaudhry		
Chow Kok Kee		
M. Couchoud Gregori (Ms)		
P. Ewins		
U. Gärtner		
B. Kassahun		
D.K. Keuerleber-Burk		
R.D.J. Lengoasa		
J. Lumsden		
F.P. Mote		
J.R. Mukabana		
A. N'Diaye		
H.H. Oliva		
Qin Dahe		
B.T. Sekoli		
R. Sorani		
S.K. Srivastav		
E. Zárate		
J.W. Zillman		

B. Alternates and advisers

V. Bakoumov	Adviser to A.I. Bedritsky
A.H. Delju	Alternate to A.M. Noorian
F.P. Requena	Alternate to M.A. Rabiolo
M. Valle Fonrouge	Adviser to M.A. Rabiolo
M.R. Matitu	Adviser to M.S. Mhita
S.K. Ali	Adviser to M.S. Mhita
P.F. Tibajjuka	Adviser to M.S. Mhita
H.A. Al-Aali	Adviser to A.M.H. Isa
A. Ngari	Adviser to Woon Shih Lai
M.H. Doss	Adviser to M.M. Arafa
A.H. Ibrahim	Adviser to M.M. Arafa
F. Duvernet	Alternate to J.-P. Beysson
S.S. Hasan	Alternate to Q.Z. Chaudhry
J. García-Legaz	Alternate to M. Couchoud Gregori
E. Cormenzana	Adviser to M. Couchoud Gregori
J. Segovia	Adviser to M. Couchoud Gregori
B. Angle	Alternate to M.D. Everell

B. O'Donnell	Adviser to M.D. Everell
P. Mason	Adviser to P. Ewins
D. Frömming	Alternate to U. Gärtner
S. Aklilu	Adviser to B. Kassahun
J. Jones	Alternate to J.J. Kelly
W. Bolhofer	Adviser to J.J. Kelly (part-time)
D. Koran	Adviser to J.J. Kelly (part-time)
J.S. Lewis (Ms)	Adviser to J.J. Kelly (part-time)
R. Masters	Adviser to J.J. Kelly (part-time)
L. Poulton-Kamakura (Ms)	Adviser to J.J. Kelly (part-time)
D. Rogers	Adviser to J.J. Kelly (part-time)
M. Yerg	Adviser to J.J. Kelly (part-time)
K. Nagasaka	Alternate to T. Kitade
K. Kuroiwa	Adviser to T. Kitade (part-time)
S. Nakagawa	Adviser to T. Kitade (part-time)
I. Takahashi	Adviser to T. Kitade (part-time)
K. Wurodu	Adviser to F.P. Mote
W. Nyakwada	Alternate to J.R. Mukabana
S. Aura (Ms)	Adviser to J.R. Mukabana
Yu Jixin	Alternate to Qin Dahe
Chen Zhenlin	Adviser to Qin Dahe (part-time)
Pang Hong Kui	Adviser to Qin Dahe (part-time)
Zheng Yunjie	Adviser to Qin Dahe (part-time)
P. Pagano	Alternate to R. Sorani
F. Ferrini	Adviser to R. Sorani
L.M. Michaud	Adviser to R. Sorani
V.K. Tsui	Alternate to J.W. Zillman
D.E. Woods (Ms)	Adviser to J.W. Zillman (part-time)

C. Presidents of technical commissions

N.D. Gordon	Commission for Aeronautical Meteorology
L.E. Akeh (Vice-president)	Commission for Agricultural Meteorology
A.I. Gusev (Acting president)	Commission for Basic Systems
D.G. Rutashobya	Commission for Hydrology

D. Invited expert

M.C. Dumesnil (Ms)

APPENDIX B

LIST OF ABBREVIATIONS

ABCN	Antarctic Basic Climatological Network
ABSN	Antarctic Basic Synoptic Network
ACMAD	African Centre of Meteorological Applications for Development
ACSYS	Arctic Climate System Study
AeMP	Aeronautical Meteorology Programme
AMDAR	Aircraft Meteorological Data Relay
AOPC	Atmospheric Observation Panel for Climate
AREP	Atmospheric Research and Environment Programme
ASAP	Automated Shipboard Aerological Programme
ASEAN	Association of South-East Asian Nations
ASECNA	Agency for Air Safety in Africa and Madagascar
ASMC	ASEAN Specialized Meteorological Centre
CAeM	Commission for Aeronautical Meteorology
CAgM	Commission for Agricultural Meteorology
CAS	Commission for Atmospheric Sciences
CBS	Commission for Basic Systems
CCI	Commission for Climatology
CHy	Commission for Hydrology
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CIMO	Commission for Instruments and Methods of Observation
CLiC	Climate and Cryosphere
CLIPS	Climate Information and Prediction Services
CLIVAR	Climate Variability and Predictability
CLS	Conferences and Languages Services Department
COPE	Climate System Observational and Prediction Experiment
DPFS	Data-processing and Forecasting System
EAMAC	African School of Meteorology and Civil Aviation
EC	Executive Council
ECMWF	European Centre for Medium-Range Weather Forecasts
ERA	Emergency Response Activity
EUMETSAT	European Organization for the Exploitation of Meteorological Satellites
5LTP	Fifth WMO Long-term Plan
FAO	Food and Agriculture Organization of the United Nations
FWIS	Future WMO Information System
GAW	Global Atmosphere Watch
GCOS	Global Climate Observing System
GDPFS	Global Data-processing and Forecasting Systems
GDPS	Global Data-processing System
GEF	Global Environment Facility
GEWEX	Global Energy and Water Cycle Experiment
GOOS	Global Ocean Observing System
GOS	Global Observing System
GPS	Global Positioning System
GSN	GCOS Surface Network
GTS	Global Telecommunication System
GUAN	GCOS Upper-air Network
GURME	GAW Urban Research Meteorology and Environment

IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICSU	International Council for Science
ILO	International Labour Organization
IMO	International Meteorological Organization
IOC	Intergovernmental Oceanographic Commission
IPA	Information and Public Affairs
IPAB	International Programme for Antarctic Buoys
ISDR	International Strategy for Disaster Reduction
ISO	International Organization for Standardization
ITU	International Telecommunication Union
JPS	Joint Planning Staff
JSC	Joint Scientific Committee
LDC	Least Developed Country
METEOREX	Exhibition of Meteorological Instruments, Equipment and Services
NHS	National Hydrological Service
NMHS	National Meteorological and Hydrological Service
NMS	National Meteorological or Hydrometeorological Service
NOAA	National Oceanic and Atmospheric Administration
OOPC	Ocean Observation Panel for Climate
OPAG	Open Programme Area Group
PDS	Publications and Distribution Services Department
PMOD	Physikalisch Meteorologisches Observatorium Davos
PROMET	Provision of Meteorological Information Required by Civil Aviation
QMF	Quality Management Framework
RBB	Results-based Budgeting
RBCN	Regional Basic Climatological Network
RBSN	Regional Basic Synoptic Network
RMTC	Regional Meteorological Training Centre
RSMC	Regional Specialized Meteorological Centre
7LTP	Seventh WMO Long-term Plan
6LTP	Sixth WMO Long-term Plan
SAG	Scientific Advisory Group
SCHOTI	Standing Conference of Heads of Training Institutions of National Meteorological Services
SPARC	Stratospheric Processes and their Role in Climate
TCDC	Technical Cooperation Among Developing Countries
TECO	Technical Conference
TIROS	Television Infrared Observation Satellite
TOPC	Terrestrial Observation Panel for Climate
TOVS	TIROS operational vertical sounder
TREND	Working Group on Training, the Environment and New Developments in Aeronautical Meteorology
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNSO	United Nations Sudano-Sahelian Office
VCP	Voluntary Cooperation Programme
VCP(ES)	Voluntary Cooperation Equipment and Services
VCP(F)	Voluntary Cooperation Fund

WAFS	World Area Forecast System
WCRP	World Climate Research Programme
WHYCOS	World Hydrological Cycle Observing System
WMO	World Meteorological Organization
WOCE	World Ocean Circulation Experiment

