

WORLD METEOROLOGICAL ORGANIZATION

COMMISSION FOR INSTRUMENTS AND METHODS OF OBSERVATION

**MEETING
of the
INTERNATIONAL PROGRAMME COMMITTEE FOR TECO-2000**

Beijing, China

20 - 22 September 1999

FINAL REPORT



AGENDA

1. ORGANIZATION OF THE SESSION
 - 1.1 Opening of the session
 - 1.2 Working arrangements for the session
 - 1.3 Adoption of the agenda
2. TERMS OF REFERENCE OF THE IPC/TECO-2000
3. DETERMINATION OF THE CONFERENCE THEMES
4. NOMINATION OF CONFERENCE AND SESSION CHAIRPERSONS AS WELL AS KEY-NOTE SPEAKERS
5. MATTERS RELATED TO THE ANNOUNCEMENT OF TECO-2000 AND "CALL FOR PAPERS"
6. SELECTION CRITERIA FOR ACCEPTING/REJECTING PAPERS
7. DETERMINATION OF DEADLINES FOR SUBMISSION AND SELECTION OF PAPERS
8. MATTERS RELATED TO THE PUBLICATION OF THE CONFERENCE PREPRINTS
9. ORGANIZATION OF TECO-2000 AND METEOREX-2000
 - 9.1 Report of the Chairman of the Local Organizing Committee for TECO-2000 and METEOREX-2000
 - 9.2 Conference language(s)
 - 9.3 Local arrangements for the Conference
 - 9.4 Organizational issues related to the preparation of METEOREX-2000
 - 9.5 Schedule for TECO-2000 and METEOREX-2000
 - 9.6 Determination of the working arrangements for the IPC up to TECO-2000
10. ANY OTHER BUSINESS
 - 10.1 Consideration of side meetings tentatively planned to be held in conjunction with TECO-2000
 - 10.2 Other matters
11. CLOSURE OF THE SESSION

GENERAL SUMMARY OF THE WORK OF THE SESSION

1. ORGANIZATION OF THE SESSION

1.1 *Opening of the session*

The *Meeting of the International Programme Committee for TECO-2000* (IPC) was held on kind invitation of the China Meteorological Administration (CMA) in Beijing, China, from 20 to 22 September 1999. The lists of participants and their addresses are attached as **Appendices A and B** to this report.

Dr R. Canterford, Vice-president of CIMO and chairman of the IPC, opened the *Expert Meeting* on Monday, 20 September 1999, at 10.00 h. He welcomed the delegates to Beijing and thanked CMA for making the arrangements for the session of the IPC. Furthermore, he underlined the importance of convening WMO technical conferences, including the related instrument exhibitions, for exchange of experience between experts and for technology transfer especially to developing countries. He expressed his appreciation to the Government of China and to CMA for their offer to host these events in the year 2000. He wished the participants a successful meeting and a pleasant stay in Beijing.

Mr K. Schulze, WMO Secretariat, welcomed the participants to the session on behalf of Prof. G.O.P. Obasi, Secretary-General of WMO. He expressed the gratitude of WMO to CMA for hosting the IPC Meeting in Beijing. He was pleased to note that all experts invited were able to attend. He wished the participants a successful session.

1.2 *Adoption of the agenda*

The proposed Provisional Agenda was adopted for the work of the session with the understanding that it could be amended during the session if necessary. The final agenda can be found in front of this report.

1.3 *Working arrangements for the session*

The session determined its working hours and the participants were informed on the arrangements necessary for carrying out the session. English was decided to be the working language at the session.

2. TERMS OF REFERENCE OF THE IPC/TECO-2000

The IPC considered and adopted the terms of reference for its work in preparation of TECO-2000 as follows:

- a) Propose and decide on the conference and the session themes;
- b) Agree on the rules for submission of abstracts and papers as well as the deadlines for submission;
- c) Selection and approval of papers for oral and poster presentation, and, if appropriate, for "manufactures' sessions";
- d) Propose chairmen of individual sessions;
- e) Propose themes for key-note papers and support the selection of experienced speakers;
- f) Develop the conference schedule;
- g) Support the WMO Secretariat and the host, on organizational matters related to TECO 2000 and, as far as possible, to METEOROEX-2000.

In adopting the terms of reference, the IPC will also bear in mind the tasks to be handled by the Local Organizing Committee (LOC) and ensure that all necessary functions are performed between the two committees without overlap of responsibilities.

3. DETERMINATION OF THE CONFERENCE THEMES

Based on proposals for conference themes developed prior to and during the meeting, the IPC agreed on the following themes to be used for the announcement letter:

The overall conference theme of TECO-2000 will be:

Operational Measurement Technologies for the Next Decade – Critical Change or Business as Usual ?

The topics to be covered within the individual sessions are:

1. Measurement Technology, Performance and Quality Assurance related to:
 - 1.1 Surface Observation Systems
 - 1.2 In-situ and Remote Upper-air Observing Systems
 - 1.3 Weather Radars and Lightning Detection Systems
 - 1.4 Measurement of Atmospheric Composition
 - 1.5 Instruments and Systems Operated under Harsh Environmental Conditions (such as strong wind, including snow or sandstorms; very high or low temperatures, heavy ice and snow conditions, etc.)
2. Management Aspects of Technical Support for Operational Measurements (issues including user/supplier collaboration, maintaining expertise, impact on observations quality, etc.)
3. Capacity Building and Technology Transfer related to Instruments and Methods of Observations (including Education and Training)

After considering the present serious economic and financial constraints facing NMHSs of developing countries in particular and the future requirements for improving the quality of observations, the IPC agreed to organize at TECO-2000 two **panel** discussions. These will be titled "*Enhancement of collaboration with instrument manufacturers and suppliers*" and "*Capacity Building - its role in meeting increased observational needs*". Both discussions should not exceed one hour each.

4. NOMINATION OF CONFERENCE AND SESSION CHAIRPERSONS AS WELL AS KEY-NOTE SPEAKERS

The session agreed on the nomination of Dr R. Canterford, chairman of the IPC, as Conference Chairperson (or Scientific Director) of TECO-2000. It further considered the nomination of session chair- and co-chairpersons as well as keynote speakers. The latter related to overview presentations on the themes to be considered at the various sessions of TECO-2000. It came to the following conclusions for this further work:

- a. Session chair- and co-chairpersons

It was agreed that all members of the IPC as well as of the CIMO AWG, and according to requirements, individual rapporteurs as well as members of the two working groups will be invited to chair sessions, taking into account their expertise, experience, and abilities. Furthermore, it was proposed that at least one other expert from CMA in addition to Prof. Xu should be invited to assist in this regard, such as Mr Caifang WANG. Prof. Xu agreed to attend to this matter. It was confirmed that all further activities related to the selection of experts for this task would be left to the consideration of the chairman of the IPC, to be done, as far as possible, in consultation and with support of its members and the WMO Secretariat. When inviting the experts concerned for taking on this task and for obtaining their agreement, it should tentatively be considered whether their NMHSs might agree upon their participation at TECO-2000 and whether no financial support might be needed from WMO. The latter is important in so far that WMO can provide partial

financial support for an only very limited number of experts due to the serious financial constraints, which should mainly be applied for experts from developing countries.

b. Authors of Keynote or Overview papers

Resulting from a comprehensive discussion regarding the preparation of Keynote or Overview papers, the following proposal was agreed upon:

- Dr Canterford: Key-note paper immediately following the Opening Ceremony of TECO-2000, referring to the major current and future requirements of Members to be dealt with by IMOP
- Dr van der Meulen: Overview paper related to future requirements for surface observations
- Dr Nash: Overview paper on the composite upper-air observing system
- Prof. Oke: Overview paper related to the requirements for urban measurements
- Mr Artz: Overview paper on atmospheric composition observation (to be prepared in close cooperation with GAW)

c. **Panel** discussions

The IPC agreed that specific efforts are still required for making arrangements related to the tentatively planned two **panel** discussions aimed to discuss the following matters:

- (Chair and experts of the panel still need to be named)*) "Enhancement of collaboration with instrument manufacturers and suppliers" (such as *Cost-effectiveness of Upper-air Observations* or *Testing of new Sensors / Equipment under Operational and especially Harsh Conditions*)
- (Chair and experts of the panel still need to be named)*) " *Capacity Building – its role in meeting increased observational needs* " (such as matters related to *RICs* and/or *Education and Training*)

*) The chair and / or experts concerned may be invited to provide an introduction of not more than 5 minutes related to the matters of concern.

It is understood that the themes proposed under b. and c. above can be modified according to the actual needs when setting up the final Conference Programme. It was agreed to select and informally contact the experts concerned in due course, supported by the WMO Secretariat. They will be invited to prepare and present the requested papers or serve on the panel, provided their participation at TECO-2000 can be guaranteed according to their commitments and by the support of the Service concerned.

5. MATTERS RELATED TO THE ANNOUNCEMENT OF TECO-2000 AND "CALL FOR PAPERS"

Taking into account the experience obtained at previous TECOs organized under the auspices of CIMO, the IPC agreed on the principal contents of the initial letter of the Secretary-General of WMO announcing TECO-2000 and inviting experts to submit papers¹. The IPC also agreed on the mailing list, as reflected in the draft of this letter reproduced in **Appendix C**.

It was agreed to have TECO-2000, as well as the conjointly held exhibition METEOREX-2000, known to a wider audience than reflected in the above mailing list for the letter of the Secretary-General. It was also approved to announce it, as usual, within the next possible edition of the *WMO Bulletin* (i.e. January 2000). Furthermore, efforts should be made to have it advertised in the *AMS Bulletin*, while in addition CMA intends to advertise it within the *Bulletin of*

¹ Matters related to languages to be applied for the submission of abstracts are reflected in Section 9.2 below.

the Chinese Meteorological Society². It would be highly welcomed if members of the IPC could submit proposals for advertising these events in any other publications, as far as feasible.

6. SELECTION CRITERIA FOR ACCEPTING/REJECTING PAPERS

Firstly, the IPC considered how papers might best be presented at TECO-2000 taking into account the total time available. Following the experience already obtained at previous successful TECOs, it was agreed to allow "oral" as well as "poster" presentations. The Committee felt that only papers of high value should be accepted for any presentation while others should be rejected, i.e. poster presentations should also be of high value. In considering that all accepted papers will be reproduced within the conference pre-prints (see Section 8. below), this approach will guarantee that only valuable papers will be published. The time for presentation of "standard" papers should not exceed 15 minutes, while for "Overview or Keynote papers" up to 30 minutes should be reserved. A possibly discussion time of approximately 5 minutes should be permitted for any oral presentation. To guarantee a lively discussion of high scientific value at TECO-2000, it was furthermore agreed that preferably only authors or co-authors of accepted papers should be allowed to present their papers orally. Exceptions to the above principle for oral presentations may be made by the IPC in the following case only: Authors of accepted important papers who have nominated experienced experts of his/her NMHS or institute to present the paper who are able to answer questions in an appropriate manner at the discussion.

Secondly, the IPC discussed in depth proposals on how to improve the collaboration with manufacturers of instruments and equipment, especially by considering their enhanced involvement in TECO-2000. It was considered whether oral presentations of submitted papers which are more commercially oriented than of scientific value might be possible at a specific "Exhibitors' session". Such papers could be introduced for 5 minutes only while further discussions can be done at the stand of the exhibitor concerned. Resulting from a lengthy discussion it was decided that such an approach would not be very beneficial for both, the delegates and manufacturers, because scientific, technical, and commercial discussions will be undertaken in any case at METEOREX-2000 between delegates and exhibitors.

Thirdly, to facilitate the work of the IPC in selecting or rejecting submitted abstracts for presentation at the conference, it was proposed to apply similar criteria to those used for the assessment of papers submitted for the "Vaisala Award", namely *Scientific or Technical Merit*, and *Relevance to TECO or IMOP*. It was agreed to apply an evaluation scheme as proposed below:

| # ⁵ | Title of abstract (abbreviated) | Name of author / country | Assessment [with Marks (0) to (3)] ³ | | Result of assessment Σ | Proposal for present. / reject. ⁴ ("O" or "P" or "R") |
|----------------|------------------------------------|-----------------------------|--|------------------------------|------------------------------|--|
| | | | Scientific or Technical Merit | Relevance to TECO or IMOP | | |
| 1 | | | | | | |
| 2 | | | | | | |
| ... | | | | | | |
| M1 | | (Manufacturer) | | | | |
| ... | | | | | | |

In order to determine the number of selected papers for oral presentation, the IPC determined that allowance had to be made for the opening ceremonies of both TECO and METEOREX-2000, the planned panel discussion(s) and a tentatively planned excursion (see also Section 9.2 below). Probably **no more than 65 papers**, including Keynote papers (with a presentation time of up to 30 minutes), could be accepted for oral presentations.

² The WMO Secretariat will take care on the advertisement in the *WMO and AMS Bulletins*, while the LOC will initiate the necessary steps for publication in the *Bulletin of the Chinese Meteorological Society*.

³ (0) is the lowest mark to be applied while (3) is the highest evaluation.

⁴ The members of the IPC are invited to insert their personal proposals for presentation or rejection with: "O" = Oral- and "P" = Poster presentation, while "R" = Rejection from any presentation.

⁵ Each submitted abstract will get a number to facilitate the work of the IPC, while "M" will supplementary be applied if the abstract can unequivocally be identified as a paper submitted by a manufacturer.

It was finally agreed that further consideration are needed directly prior to TECO on how and how long poster papers should be displayed. This significantly would depend on the conference facilities available (number of panels or stands, etc.) and on the number of papers accepted for this kind of presentation. Also matters related to their possible brief oral introduction at a poster session(s), probably directly following each related conference session, might be considered in this regard, which still depends on the draft conference schedule (see also "Table of Contents" of IOM Report No. 70 - TECO-98). Such a decision could still be announced to authors concerned at TECO-2000 directly prior to such possible poster session(s).

7. DETERMINATION OF DEADLINES FOR SUBMISSION AND SELECTION OF PAPERS

The IPC agreed on the following schedule for preparation of TECO-2000, which was considered suitable to achieve all measures in a timely manner:

| # | Action | Deadlines |
|----------|---|-------------------|
| 1. | Decision on the conference and the session themes | 22 September 1999 |
| 2. | Distribution of the conference announcement and call for papers | 15 November 1999 |
| 3. | Submission of abstracts by authors | 31 January 2000 |
| 4. | Finalizing of the Provisional Programme | 31 March 2000 |
| 5. | Notice of acceptance to authors | 15 April 2000 |
| 6. | Submission of papers for publication | 15 July 2000 |
| 7. | Final programme and distribution of the pre-prints | 15 September 2000 |

8. MATTERS RELATED TO THE PUBLICATION OF THE CONFERENCE PREPRINTS

The IPC considered under this Agenda Item issues related to the submission of papers, their length, matters related to their publication, etc. Following the practice successfully applied at previous TECOs, the IPC agreed that all papers accepted for presentation are eligible for presentation in the conference pre-prints to be published in the *WMO Instruments and Observing Methods Report series* (IOM). It furthermore agreed that the guidelines used in the past for submission of the camera-ready copies of the final papers for publication should adequately be applied for TECO-2000 too. The length of papers should not exceed 4 pages, which already includes any annexes, etc. Authors of Keynote or Overview papers are allowed to submit up to 8 pages. It was underlined that authors are generally responsible for the contents and the quality of their submission and that no editing can be done in WMO prior to the publication.

The IPC considered it useful that in addition (or instead of) the Foreword of the Conference Chairman, a concise summary, which may also contain general information on the purpose of such a technical conference held under the auspices of CIMO, should be inserted and prepared by the president of CIMO. It should preferably not exceed 2 pages and not repeat or conflict with the contents of the first Keynote paper to be prepared by Dr Canterford.

The session invited the WMO Secretariat to make as many copies of the IOM pre-prints available so that each Member country will get 2 copies and all others referred to in the announcement letter, with the exception of instrument manufacturers and suppliers, one copy only. The IPC invited the WMO Secretariat to consider whether without significant additional efforts the conference pre-prints, although generally available as paper copies only, could be made accessible at the Internet through WMO's home page or on a CD-ROM. In particular, the latter would significantly reduce the mailing costs which could be higher than the printing costs.

It was agreed that the deadline for receiving the camera-ready papers is 15 July 2000. All papers arriving later in WMO may not be considered for publication.

The IPC further considered how important scientific papers presented at TECO-2000 could be made known to a wider audience than specifically reflected to the mailing list of IOM Reports. Within this context it was agreed that the initial basic Keynote paper, be prepared by Dr Canterford for presentation directly following the opening ceremony, and be considered for publication in the WMO Bulletin which will be issued still prior to TECO-2000 ("July edition 2000" (Volume 49/3)⁶. In

⁶ Deadline for submission of this manuscript: 17 March 2000.

addition to this it was agreed that authors of important scientific papers should be invited to submit them for publication in internationally recognized scientific journals too. This surely needs some additional work for the authors concerned in presenting the results of their work in greater depths and more comprehensively than is possible for TECO-2000. The members of the IPC are invited to propose, based on the submissions, some relevant papers so that the authors may be contacted to encourage them to consider and, finally, agree upon this approach. The appropriate members of the IPC are invited, as far as possible, to provide assistance to authors in editing the papers concerned. It was agreed that this should be done after TECO-2000.

The IPC appreciated that a short summary of the previous TECO-98 was prepared and distributed by a letter of the Secretary-General to all WMO Members for information and consideration. It was agreed that this approach should generally applied for TECO-2000 too, i.e. the main results of the Conference, including a concise summary of the panel discussions, should be prepared under the supervision of the Conference Chairman and be published to all concerned by WMO. This should not exceed 4 pages.

9. ORGANIZATION OF TECO-2000 AND METEOREX-2000

9.1 *Report of the Chairman of the Local Organizing Committee for TECO-2000 and METEOREX-2000*

The IPC was informed that CMA established a Local Organizing Committee (LOC) for the preparation of TECO-2000 and METEOREX-2000, chaired by Mr Caifang WANG. Prof. Xu briefed the IPC on behalf of the LOC on the present status of the preparation of these events. The session noted with pleasure that CMA already undertook steps towards a selection of suitable conference and exhibition facilities.

9.2 *Conference language(s)*

The IPC recalled that the provision of interpretation services for English, French, Russian, and Spanish at TECOs that were previously held in conjunction with a session of CIMO had contributed much to the success of the conferences. It was noted that the combination of CIMO and TECO sessions had helped to reduce significantly the cost of language services for TECO. As TECO-2000 would take place as a stand-alone event, such cost reduction would not be possible. It was also learnt from the earlier TECOs that the composition of the participants did not always require the provision of interpretation of all four languages, and savings achieved through removing one or two languages had been put to good use by providing assistance for more participants from developing countries. The IPC also noted the intent of the CMA to provide for Chinese language interpretation. The IPC was aware that the Executive Council had approved a rather limited budget for TECO-2000, and that it would be difficult to meet all financial requirements equally well. In conclusion, the IPC agreed that the planning for TECO-2000 should include full interpretation services, but that the issue should be revisited by the IPC and the WMO Secretariat in the second quarter of 2000, when the actual composition of the participants is better known than now. It was also agreed to allow the submission of abstracts and, later on, of the accepted papers in any of the above 4 languages (as it is already reflected in Section 5. above). Following this, papers will be published in the language submitted.

9.3 *Local arrangements for the Conference*

The session was informed that CMA intends to organize TECO-2000 as well as METEOREX-2000 within a suitable hotel in Beijing. According to the experience obtained regarding experts' participation at previous similar TECOs, it can be expected that up to 200 experts will attend TECO-2000. It is assumed that at least 150 delegates might attend at the same time TECO-2000 listening to presentations, i.e. the conference and interpretation facilities should permit such an attendance. The IPC also draw the attention to the technical facilities required for running the Conference. This relates to equipment and booths for realising simultaneous interpretation of papers orally presented as well as of the related discussions. The latter may need some additional equipment, such as mobile microphones. Also some computers with printers and photocopiers should be made accessible at least for CMA and WMO staff. In addition, it might be considered to make accessible for delegates Internet and Fax connections. Furthermore, panels

or stands have to be provided for poster presentations. The latter should be placed as tight as possible to the conference room so that an easy access and introduction of papers at possible poster sessions can be realised. The LOC might also consider that some additional offices/rooms are required at least for facilitating the work of the LOC and IPC as well as of WMO staff. It would highly be appreciated to have available a small meeting room in which informal discussions could separately be held (max. 20 participants). Furthermore, the LPC is invited to make arrangements that local staff will support WMO employees in the registry of delegates, preparation of the individual Conference badges, etc.

The LOC was also invited to estimate costs for experts' attendance at TECO-2000 so that it could be considered by WMO for application of a lump sum instead of per diem payment for experts getting support by WMO to effectively use the limited funds available and being able to support as many experts as possible.

The attention of the LOC was also directed to possibly organize a visit/excursion for delegates either of facilities of CMA or of sights within the time allocated for the Conference. The representative of the LPC already proposed that an excursion might be carried out which should, in agreement with the IPC, be organized for Friday afternoon. This arrangement would not significantly interfere neither in the Conference schedule nor affect the limited time available for visiting the exhibition. The LOC was also invited to consider providing specific service for delegates and accompanying spouses, e.g. for booking tours and excursions, and for handling travel arrangements, such as flight re-confirmation, etc.

9.4 Organizational issues related to the preparation of METEOREX-2000

The IPC highly recommended to make arrangements that the Conference and the Exhibition should be held at the same venue to prevent any long ways for the delegates on one hand for visiting the exhibited products so that also coffee breaks can be used for short consultations. On the other hand this would facilitate the attendance of exhibitors at TECO-2000 sessions of interest.

Prof. Xu was pleased with the offer of Mr A. Belhouji (Morocco), who was responsible for the organization of TECO-98 / METEOREX-98 held in Casablanca together with CIMO-XII, to provide any guidelines and assistance useful for the local organization of these events, if needed.

9.5 Schedule for TECO-2000 and METEOREX-2000

In considering the proposals developed above for the organization of both events as well as information provided by the LOC, the IPC considered the general arrangements as well as the daily schedule of the conference and the exhibition. It also agreed upon the tentative list of session topics, which is so far consistent with the proposed session themes for TECO-2000. This however requires a review when finalizing the Conference Programme on the basis of accepted papers. The IPC took note on the fact that no more than 3 hours each in the morning and in the afternoon are available for oral presentation of papers and discussions if simultaneous interpretation is applied according the rules for working hours valid in WMO for interpreters. These daily 6 hours also includes the time required for coffee breaks.

The following draft schedule was developed by the IPC with the purpose to serve as guideline only for facilitating further decisions of the IPC as well as of the LOC. It was agreed that it still needs further considerations, review, and refinement according to the specific conditions and requirements.

| | Monday 23. X. | Tuesday 24. X. | Wednesday 25. X. | Thursday 26. X. | Friday 27. X. |
|-------------------------|--|---|---|---|---|
| | TECO-2000 | | | | |
| Morning ^{*)} | 10.00 Opening Ceremony 10.45 Keynote paper Presentation of papers | 9.00 - 12.00 Presentation of papers | 9.00 - 12.00 Presentation of papers | 9.00 - 12.00 Presentation of papers | 9.00 Presentation of papers 12.00 Closure of TECO-2000 |
| Lunch break | 12.00 - 14.00 | 12.00 - 14.00 | 12.00 - 14.00 | 12.00 - 14.00 | |
| Afternoon ^{*)} | 14.00 - 18.00 Presentation of papers | 14.00 - 17.00 Presentation of papers | 14.00 - 17.00 Presentation of papers | 14.00 - 17.00 Presentation of papers | 14.00 Excursion (tentative) |
| | METEOREX-2000 | | | | |
| | | 10.30 Official Opening 18.30 | 9.00 18.30 | 9.00 18.00 Closure | |

^{*)} Including 20 minutes coffee breaks at the morning and the afternoon sessions respectively.

9.6 Determination of the working arrangements for the IPC up to TECO-2000

The session was informed that no further meeting of IPC could be convened prior to the Conference. It was agreed that the work of the IPC required in preparation of TECO-2000 has to be done by correspondence, preferably by E-mail or by fax. As far as appropriate, the WMO Secretariat will support the coordination of this work.

10. ANY OTHER BUSINESS

10.1 Consideration of side meetings tentatively planned to be held in conjunction with TECO-2000

The IPC briefly considered whether TECO-2000 can serve as a focus to conjointly hold formal or informal meetings of CIMO working groups, rapporteurs, or of experts related to specific issues of concern. Taking into account the limited time available for such kind of meetings, it was agreed that they could be carried out informally only in the evening after TECO-2000 is finished in possibly using the conference room or any other already available venue. However, it was considered to convene a one-day meeting of the Heads of Regional Instrument Centres in conjunction with TECO-2000, similarly as done at CIMO-XII, preferably on Saturday, 28 October 2000, i.e. directly following the Conference. The IPC kindly invited the LOC to already consider the provision of a meeting room for 20 participants for this purpose, if possible within the venue of the Conference or at any other suitable place including the Headquarters of CMA. An official request for hosting this event will be send in due course prior to TECO-2000.

10.2 Excursion

The reception given by the Deputy-Director of CMA for participants of all three WMO meetings hosted by CMA during this week was highly appreciated by the delegates. Especially his statement in which he, among others, underlined the need for an enhanced collaboration as well as for action in supporting developing countries in their efforts for getting high quality measurements by technology transfer was well received. He stressed in this regard the important role of TECO-2000. Furthermore, an excursion to the Great Wall combined with a brief visit of the Ming Tombs near Beijing was well received by the participants.

11 CLOSURE OF THE SESSION

Dr Canterford thanked the participants for their active work and their valuable contributions provided at the session. He highly appreciated the interest shown in TECO-2000 / METEOREX-2000 and the support given which contributed to the success of the IPC Meeting. He appreciated in particular the efforts of the CMA members led by Professor Xu.

Mr Schulze thanked all experts for their participation in the session and their dedicated work. On behalf of the participants, he thanked Dr Canterford for his excellent chairmanship. Furthermore, he thanked CMA and especially Mr XIN and his staff members as well as Prof. XU for the facilities provided for the session and for the support given as well as for the excellent hospitality extended to the participants. He wished the participants every success in their work related to the challenging tasks.

The Expert Meeting was closed on 22 September 1999 at 5.30 p.m.

APPENDIX A

LIST OF PARTICIPANTS

| | Name | From | Function |
|----|---------------------------------|------------------------|--|
| 1 | Dr R.P. Canterford | Australia | Chairman (Vice-president of CIMO) |
| 2 | Dr J. Nash | UK | |
| 3 | Mr A. Belhouji | Morocco | |
| 4 | Dr J. Kruus | Canada | |
| 5 | Dr A.A. Ivanov ¹ | Russian Federation | |
| 6 | Prof. Baoxiang XU | China | |
| 7 | Mr Xianhua XIN ² | China | Member of the Local Org. Committee for TECO-2000 |
| 8 | Mr Wenhua LU | China | Invited expert |
| 9 | Mr Zhenglin PAN | China | Invited expert |
| 10 | Ms Haifang DING | China | Invited expert |
| 11 | Dr S.K. Srivastava ² | India | Observer (President of CIMO) |
| 12 | D.C. Schiessl ² | D/BAS, WMO Secretariat | |
| 13 | K. Schulze | WMO Secretariat | |

¹ In replacing Mr A.I. Gusev (Russian Federation) at the IPC Meeting.

² Part time participation.

APPENDIX B

LIST OF ADDRESSES

Dr Ray P. Canterford

National Manager, Networks and Measurements
Observations and Engineering Branch
Bureau of Meteorology
P.O. Box 1289K
MELBOURNE, Vic. 3001
Australia
Tel: (+61 3) 9669 4225
Fax: (+61 3) 9669 4168
E-mail: R.Canterford@bom.gov.au

Dr John Nash

The Meteorological Office, RS(5)
Beaufort Park, Easthampstead
WOKINGHAM
GB-Berkshire, RG40 3DN
United Kingdom
Tel: (+44 1344) 85-5649
Fax: (+44 1344) 85 5897
Tlx: 849801
E-mail: jnash@meto.gov.uk

Dr Jaan Kruus

1215 - 39 Pemberton Ave.
Toronto, ON M2M 4L6
Canada
Tel: (+1 416) 229 4964
Fax: (+1 416) 739 4261
E-mail: jaankruus@attcanada.net

Prof. Baoxiang XU

Chinese Academy of Meteorological Sciences
China Meteorological Administration
46, Baishiqiao Road
100081 BEIJING
China
Tel: (+86 10) 6840 6738 or 6217 5931
Fax: (+86 10) 6217 5931
E-mail: cams@public.bta.net.cn

Mr Klaus Schulze

World Meteorological Organization
7 bis, Avenue de la Paix
P.O. Box 2300
CH-1211 Geneva 2
Switzerland
Tel: (+41 22) 7308 409 (direct)
Fax: (+41 22) 7308 021 (direct)
E-mail: schulze@wmo.ch
or: Schulze_K@gateway.wmo.ch

Dr Suresh K. Srivastava

ADDL. Director General of Meteorology
India Meteorological Department
Lodi Road
New Delhi - 110003
India
Tel: (+91 11) 4611 710 (Office) or 4629 770 (Private)
Fax: (+91 11) 4623 220 or 4699 216
E-mail: sks@imd.ernet.in

Mr Abdelaziz Belhouji

Deputy Director
Ministère de l'Équipement
Direction de la Météorologie Nationale
Aéroport Anfa
Casablanca
Morocco
Tel: (+212 2) 913 541
Fax: (+212 2) 911 690
E-mail: belhouji@marocnet.net.ma

Dr Alexei A. Ivanov

Central Aerological Observatory
Pervomayskaya Street 3
DOLGOPRUDNY, Moscow Region, 141700
Russian Federation
Tel: (+7 095) 408-7685 (or -6148)
Fax: (+7 095) 576 3327
Tlx: 911577 ZOND SU
E-mail: ivanov@caoadm.mipt.ru or
alexazarov@mtu-net.ru

Mr Xianhua XIN

China Meteorological Administration
Department of International Cooperation
46, Baishiqiao Road
100081 BEIJING
China
Tel: (+86 10) 6217 2957 or 6840 6662
Fax: (+86 10) 6217 4797
E-mail: xianhua@rays.cma.gov.cn

ANNOUNCEMENT LETTER FOR TECO-2000

WMO Letter Head

Draft

Our ref.:/W/IO/TECO-2000

GENEVA,1999

Annexes: 2

Subject: Announcement of and call for papers for the *WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation* (TECO-2000) with exhibition (METEOREX-2000)

Action required: 1. Announcement to be made widely known.
2. Abstracts of papers to be received in the WMO Secretariat not later than **15 January 2000.**

Dear Sir/Madam,

The World Meteorological Organization will organize under the auspices of the *Commission for Instruments and Methods of Observations* (CIMO) a *Technical Conference on Meteorological and Environmental Instruments and Methods of Observation* (TECO-2000). TECO-2000 will be held on the kind invitation of the China Meteorological Administration (CMA) in Beijing from 23 to 27 October 2000 and will be accompanied by METEOREX-2000, an exhibition on meteorological instruments, related equipment, and services. It is intended to arrange for simultaneous interpretation in English, French, Russian, and Spanish at TECO-2000.

TECO-2000 and METEOREX-2000 will be organized for the instrument experts from National Meteorological and Hydrological Services, research institutes, and the private sector to exchange information on the latest developments, in instrumentation, systems and services, and will provide a forum for training and capacity building, particularly for participants from developing countries. The Conference Announcement is attached in **Annex 1**.

An International Programme Committee (IPC) has been established that is chaired by Dr R.P. Canterford (Australia), vice-president of CIMO. The IPC is responsible for the determination of the conference theme and subjects and for selecting the papers for oral presentations or poster displays.

To Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (.....)

- cc: - Hydrological Advisors)
- Presidents and vice-presidents of technical commissions)
- Presidents of Regional Associations)
- Members of CIMO) (for information)
- Members of CIMO working groups and rapporteurs)
who are not members of CIMO)
- Heads of Regional Instrument Centres and of the WRC)
- ASECNA)
- Manufacturers and suppliers of equipment)

The purpose of this letter is to solicit abstracts of papers proposed for presentation at TECO-2000. Experts wishing to present a paper are kindly requested to complete and return the form given in **Annex 2** of this letter to the WMO Secretariat to be received not later than **15 January 2000**.

Abstracts of papers may be submitted in English, French, Russian, or Spanish. The length of the abstract should not exceed half a page. It would considerably ease the work of the IPC and help reducing cost if authors of abstracts in Russian or Spanish languages could include the English or French translation of their abstracts. Authors whose papers have been accepted will be notified in April 2000.

I should be grateful if you would make this announcement widely known within your Service and beyond.

Yours faithfully,

(G.O.P. Obasi)
Secretary-General

World Meteorological Organization

The World Meteorological Organization is pleased to announce the

WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation (TECO-2000)

Beijing, China, 23 to 27 October 2000

with the

Exhibition on Meteorological Instruments, Equipment, and Services (METEOREX-2000)

to be held at the same venue from 24 to 26 October 2000

Under the main conference theme:

***Operational Measurement Technologies for the Next Decade –
Critical Change or Business as Usual ?***

experts from National Meteorological and Hydrological Services, research institutes and the private sector will address the following main subjects:

1. Measurement Technology, Performance and Quality Assurance related to:
 - Surface Observation Systems
 - In-situ and Remote Upper-air Observing Systems
 - Weather Radars and Lightning Detection Systems
 - Measurement of the Atmospheric Composition
 - Instruments and Systems Operated under Harsh Climatological Environmental Conditions
(*such as strong wind, including snow or sandstorms; very high or low temperatures, heavy ice and snow conditions, etc.*)
2. Management of Technical Support for Operational Measurements
3. Capacity Building and Technology Transfer related to Instruments and Methods of Observations
(*including Education and Training*)

It is planned to provide simultaneous interpretation in English, French, Russian, and Spanish at TECO-2000. Abstracts of proposed papers, not exceeding half a page, are to be sent to the WMO Secretariat at the earliest convenience so that they will be received **not later than 15 January 2000**.

Papers accepted for presentation will be published prior to the TECO-2000 without any editing in their original language in the *WMO Instruments and Observing Methods Report series*. Details on the format of the papers and on presentations will be contained in the acceptance letter to be sent to authors in April 2000.

The chairperson of the International Programme Committee for TECO-2000 is:

Dr R.P. Canterford
Bureau of Meteorology
P.O. Box 1289K
MELBOURNE, Vic. 3001
Australia
Tel: (+61 3) 9669 4225
Fax: (+61 3) 9669 4168
E-mail: R.Canterford@bom.gov.au

WMO's point of contact is:

Mr K. Schulze
World Meteorological Organization
World Weather Watch Department
P.O. Box 2300
CH-1211 Geneva 2
Switzerland
Tel: (+41 22) 7308 409
Fax: (+41 22) 7308 021
E-mail: schulze@wmo.ch

WORLD METEOROLOGICAL ORGANIZATION

W/IO/TECO-2000, ANNEX 2
Available in English only

WMO TECHNICAL CONFERENCE
ON
METEOROLOGICAL AND ENVIRONMENTAL INSTRUMENTS AND METHODS OF
OBSERVATION

Beijing, China, 23 to 27 October 2000

FORM FOR SUBMISSION OF ABSTRACTS FOR PAPERS

1. Title of the paper:

2. Author (Co-authors): Family name First name Country
Author: Mr, Ms, Dr, Prof.¹ , /
Co-author: Mr, Ms, Dr, Prof. , /
Co-author: Mr, Ms, Dr, Prof. , /

3. Topic under which the paper is proposed for presentation/poster display²:
(Conference Theme 1.1).....
(Conference Theme 1.2).....
(Conference Theme 1.3).....
(Conference Theme 1.4).....
(Conference Theme 1.5).....
(Conference Theme 2.).....
(Conference Theme 3.).....

4. Abstract of the paper (should not exceed half a page)³:

¹ Please underline the appropriate one.

² Please tick "✓" the appropriate box.

³ If the abstract is in Russian or Spanish languages, the author(s) is (are) kindly requested to also attach in addition the English or French translation of the abstract.

W/IO/TECO-2000/ANNEX 2, p.2

5. Do you prefer¹:

Oral presentation Poster presentation

6. Do you require audio-visual means for your presentation¹:

Slides Overhead Computer display

7. Personal data of the author:

Family name, first name: Prof., Dr, Ms, Mrs, Mr²

Institution:

Address:

.....

.....

Country:

Telephone: Telex:

Telefax: E-mail:

Date: Signature:

Please, return the completed form as soon as possible so that it will be received **not later than 15 January 2000** in the

WORLD METEOROLOGICAL ORGANIZATION
World Weather Watch Department
P.O. Box 2300
CH-1211 GENEVA 2
Switzerland
Telefax: (+41 22) 7308 021

¹ Please tick "✓" the appropriate box.
² Please underline the appropriate one.