

The Third Interim Scientific Advisory Group Meeting  
on the Acid Deposition Monitoring Network  
in East Asia  
31 July-1 August 2000, Manila, Philippines

## **REPORT OF THE MEETING**

### **Introduction**

1. The Interim Scientific Advisory Group for the Acid Deposition Monitoring Network in East Asia (EANET) (hereinafter referred to as ISAG) held its Third Meeting in Manila from 31 July - 1 August 2000.
2. The Meeting was attended by the members of ISAG and their alternates nominated by the following participating countries: China, Indonesia, Japan, Malaysia, Mongolia, the Philippines, the Republic of Korea, Thailand and Vietnam.
3. The Meeting was also attended by experts from the following organizations with competence in relevant fields: Asian Development Bank (ADB), Commonwealth Scientific and Industrial Research Organization (CSIRO), European Monitoring and Evaluation Program (EMEP), and the United Nations Economic Commission for Europe (UN/ECE).
4. The list of participants is attached as Annex I of this report.

### **Agenda Item 1: Opening of the Meeting**

5. The Meeting was opened with remarks by Mr. Masao Nii, Director of the Interim Secretariat (IS), followed by welcoming addresses by Mr. Peter Anthony Abaya, Director, Environmental Management Bureau (EMB), Department of Environment and Natural Resources (DENR), the Philippines, and Dr. Warren Evans, Chief, Environment Section, Office of Environment and Social Department, ADB.

Agenda Item 2: Election of the officers

6. The Meeting elected a Chairperson, two Vice-Chairpersons and a Rapporteur: Ms. Erlinda Gonzales, Regional Director, EMB-Reg. IVA, Department of Environment and Natural Resources-Region IV, the Philippines (Chairperson); Dr. RTM Sutamihardja, Lecturer, Senior Expert, Department of Natural Resources and Environment, Graduate School, Bogor Agricultural University, Indonesia and Prof. Teng Enjiang, Director, Department of Scientific, Technical Management, China National Environmental Monitoring Centre, China (Vice-Chairpersons), Dr. Hajime Akimoto, Program Director, Atmospheric Composition Research Program, Institute for Global Change Research, Yokohama Campus, Japan (Rapporteur).

Agenda Item 3: Adoption of the agenda

7. The Meeting adopted without revision the provisional agenda (EANET/ISAG 3/3/1) that had been prepared and circulated by IS.

Agenda Item 4: Consideration and adoption of the report on the acid deposition monitoring of EANET during the preparatory phase

(Data report on the acid deposition in the East Asian Region)

8. Interim Network Center (INC) presented the data report on the acid deposition in the East Asian Region (EANET/ISAG 3/4/1). Major discussions on this topic included the following:

- To avoid unnecessary rounding errors, data should be reported to the maximum number of significant digits permitted by measurement system performance.
- Site classification criteria should be further elaborated in the future. Site classification on some sites should be reviewed carefully and reclassified if necessary.
- The importance of the levels of QA/QC activities was emphasized in relation to the data reporting.
- Some countries informed about corrections of data in the data report.
- Usefulness of histograms in terms of data quality assessment was suggested for future presentations.

9. It was agreed that additional comments and corrections on the data report (final draft), if any, should be submitted to INC by Friday, 18 August 2000. Thereafter, INC would finalize the data report, taking such comments into account.

(Report on the acid deposition monitoring of EANET during the preparatory phase – Its results, major constraints and ways to overcome them)

10. INC presented the report on the acid deposition monitoring of EANET during the preparatory phase – Its results, major constraints and ways to overcome them (EANET/ISAG 3/4/2). Major discussions on this topic included:

- The climatic/meteorological information in this region is quite important. The Annex 1 of the report (EANET/ISAG 3/4/2) should be revised to provide more detailed information on atmospheric circulation in EANET region and seasonal weather patterns in most sensitive to acid deposition areas.
- The reason why the data on the three months (June - August 1999) were used for Table 5.1 and Fig 5.2 should be clarified in the report by adding a new paragraph.
- The need to further elaborate site classification criteria was emphasized again. In this connection, it was suggested that the description on the evaluation of different category (remote, rural and urban) be deleted.
- The concentrations of constituents in artificial rainwater samples should include lower concentrations to more closely reflect rainwater from clean sites.
- Data on SO<sub>2</sub> should be carefully examined in terms of the detection limit of the instrument.
- Training on QA/QC activities should be strengthened. The need for training on soil/vegetation monitoring and monitoring for inland aquatic environment was also emphasized.
- Certified reference materials (CRMs) may need to be provided to the participating laboratories if they have significant difficulties in obtaining CRMs.
- Use of passive samplers and filter packs may be considered in the region.
- The words “data quality assessment” should be used rather than the words “data verification” to more precisely express the activities undertaken by INC.
- The objective of the Network should be further elaborated, and on that basis priority activities should be determined.

11. The informal drafting committee on the report prepared the modifications of the report. The Meeting adopted the report with the modifications in Annex II of this report. INC was requested to prepare the final version of the report with the guidance described in Annex II of this report, and distribute it to the ISAG members.

#### Agenda Item 5: Review of the preparatory-phase activities of the Network

12. IS made a short presentation on the recent progress of EANET. Then INC presented the report on the review of the preparatory-phase activities of EANET (EANET/ISAG 3/5/1). There were no special comments on this topic.

#### Agenda Item 6: Consideration of the work program and budget of the Network for the year 2001

13. IS and INC presented the work program and budget of the Network for the year 2001 (EANET/WG 5/9). Major discussions on this topic included:

- It was recommended that additional laboratories from other regions be included in the inter-laboratory comparison projects in the future.
- The activities of the Task Forces should be emphasized. In this connection, it was clarified that the budget for the Task Forces on Attachment 2 of this document included only costs for communication with Task Force members.
- Inter-field comparison projects may also be undertaken in 2001/2002.
- It was pointed out that the ways to convince the participating governments of the importance of acid deposition problem may need to be developed.

Agenda Item 7: Review of information on the other scientific activities relating to acid deposition problems

14. The expert from ADB introduced following issues: 1) Goal and objectives, Development tools, and Country Operational Strategy Study of ADB, 2) Objectives, scope and outcome of Regional technical assistances (RETAs) for Acid Rain Emissions Reduction in Asia (RAINS ASIA: Phases I and II), 3) RETAs for Environmental Cooperation in Northeast Asia (Phases I and II), and 4) Other technical assistances (TAs), and loans that contribute to the reduction of acid deposition, including a very recently approved project preparatory TA for the Acid Rain Control and Environmental Improvement Project in the Peoples' Republic of China.

15. The expert from CSIRO presented initial results of the performance evaluation activities which have been included in the Malaysian EANET measurement program to enable evaluation of measurement system performance under actual operating conditions. This brief overview suggests that the passive samplers, while not precise at the low levels encountered at Tanah Rata, are adequate to define time-averaged gas levels. In the case of the wet-only rainwater system, it appears that control of biological degradation is an important element in ensuring reproducible measurement of biologically labile species.

16. The expert from EMEP made a presentation explaining the acid deposition data series in Europe that reflect the large emission reductions of sulphur dioxide, over the past twenty years. The emissions of nitrogen oxides have also been reduced, but to a much less extent than sulphur dioxide. Fine particles in air is a regional problem in Europe and activities with respect to emissions, modeling and measurements are now being organized within ECE (EMEP, 1999). EMEP's Manual for Sampling and Analysis (EMEP, 1996) is being updated and extended with measurement methods for heavy metals (<http://www.emep.int>).

17. The expert from UN/ECE presented some features of the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone which had been negotiated on the basis of critical loads and cost optimizations. Findings from the various monitoring programmes under the Convention on Long-range Transboundary Air Pollution (LRTAP) had supported the preparation of this multi-pollutant, multi-effect agreement among Parties in Europe and North America ([www.unece.org/env/lrtap](http://www.unece.org/env/lrtap)). He also made reference to a project recently initiated by the International Union of the Pollution Prevention and Environmental Protection Associations to consider global perspectives on transboundary pollution and the prospects for cooperation between existing regional networks. In his capacity as project adviser, he offered to provide for any specific information at a later stage, as required.

18. The following discussions were held under this agenda item.

- The present status of RAINS ASIA Phase II Project was clarified and further collaboration with EANET was discussed.
- The negotiation processes of the protocols under LRTAP were explained. It was emphasized that the benefit of the reduction policies, which is often neglected at the negotiations, is a useful tool to convince the policy-makers for adopting such policies.
- It was informed by the expert from CSIRO that the analytical results of the constituents of PM10 and PM2.5 would become available in the near future, which could contribute to the discussions on PM issues.

#### Agenda Item 8: Other issues

19. Some participating countries may have difficulties in measuring PM2.5.

#### Agenda Item 9: Consideration and adoption of the report of the meeting

20. The Meeting adopted the Report of the Third Meeting of Interim Scientific Advisory Group of EANET (31 July - 1 August 2000, Manila, the Philippines).

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on the Acid Deposition Monitoring Network  
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### List of participants

#### **CHINA**

Prof. Teng Enjiang  
Director, Department of Scientific Technical Management, China National Environmental  
Monitoring Center (CNEMC)  
#1 Yuhuinanlu, Beisihuangonglu, Beijing, 100029, China  
TEL: +86-10-6496-6374 FAX: +86-10-6492-4244  
E-mail: ejteng@svr1-pek.unep.net

Mr. Wang Ruibin  
Director, Senior Engineer, Dept. of Air Monitoring, China National Environmental Monitoring  
Center (CNEMC)  
#1 Yuhuinanlu, Beisihuangonglu, Beijing, 100029, China  
TEL: +86-10-6496-6375 FAX: +86-10-6492-4244  
E-mail: rbwang@svr1-pek.unep.net

#### **INDONESIA**

Dr. RTM Sutamihardja  
Senior Expert of Ministry of Environment, Lecturer of Department of Natural Resources of  
Environment, Graduate School, Bogor Agricultural University, Indonesia  
TEL: (Residence) +62-251-325-811 (Office) +62-251-324-820  
FAX: (Residence) +62-251-325-811 (Office) +62-251-324-820  
E-mail: Sutam-ipb@indo.net.id

Dr. Emil Budianto  
Head, Research and Development Div. , Environmental Management Center  
Pusarpedal-Bapedal, Kawasan Puspiter-Serpong, Serpong, Tangerang, Indonesia  
TEL: +62-21-756-3114 FAX: +62-21-756-3115  
E-mail: e\_budianto@yahoo.com

#### **JAPAN**

Dr. Hajime Akimoto  
Program Director, Atmospheric Composition Research Program, Frontier Research System for  
Global Change, Institute for Global Change Research(IGCR)  
3173-25, Showa-machi, Kanagawa-ku, Yokohama, Kanagawa236-0001, Japan

TEL: +81-45-778-2354 FAX: +81-45-778-2292  
E-mail: akimoto@frontier.esto.or.jp

Dr. Tsumugu Totsuka  
Professor, Dept. of Environments and Information, Edogawa University  
474 Komaki, Nagareyama, Chiba 270-0198 Japan  
TEL: +81-471-52-0661 FAX: +81-471-54-2490  
E-mail: totsuka@edogawa-u.ac.jp

Dr. Hiroshi Hara  
Head, Section of Environmental Health Effects, Dept. of Community Environmental Sciences,  
National Institute of Public Health  
Shirokanedai 4-6-1, Minato-ku, Tokyo 108-8638, Japan  
TEL: +81-3-3441-7111 FAX: +81-3-3446-4314  
E-mail: harahrs@iph.go.jp

#### **MALAYSIA**

Dr. Mohd Kamil Yusoff  
Associate Professor, Dept. of Environmental Sciences, Universiti Putra Malaysia  
43400 UPM-Serdang, Selangor, Malaysia  
TEL: +60-3-8945-7077 FAX: +60-3-8943-8109  
E-mail: mkamil@fsas.upm.edu.my

Ms. Maharam Jusoh  
Director, Environmental Health Div., Dept. of Chemistry, Ministry of Science, Technology and  
Environment, Malaysia  
Jalan Sultan, 46661, Petaling Jaya, Selangor, Malaysia  
TEL: +60-3-756-9522 FAX: +60-3-755-6764  
E-mail: maharam@jkpj.kimia.gov.my

#### **MONGOLIA**

Dr. Zamba Batjargal  
General Director, National Agency for Meteorology, Hydrology and Environment Monitoring  
of Mongolia  
Khudaldaany Gudamj 5, Ulaanbaatar 46, Mongolia  
TEL: +976-1-326-592 FAX: +976-1-326-611  
E-mail: z\_Batjargal@env.pmis.gov.mn

Ms. Bulgan Tumendemberel  
Chief Engineer, Central Laboratory of Environmental Monitoring  
P.O.Box-150, Ulaanbaatar-36, Mongolia

TEL: +976-1-341-818    FAX: +976-1-341-818  
E-mail: bnb@magicnet.mn

**PHILIPPINES**

Ms. Erlinda A. Gonzalez  
Regional Director, Environment Management Bureau Region IV-A  
DENR Bldg., 1515 Roxas Blvd., Ermita, Manila, Philippines  
TEL: +63-2-536-9784    FAX: +63-2-536-9784; +63-2-928-1215  
E-mail: acidrain@pworld.net.ph

Ms. Clarissa C. Cabacang  
Chief, Environmental Protection and Monitoring Division (EPMD), Department of Energy,  
Energy Center  
Merritt Road, Fort Bonifacio, Taguig, Metro Manila, Philippines  
TEL: +63-2-845-0853    FAX: +63-2-845-0859  
E-mail: cabacang@doe.gov.ph

Dr. Merab A. Chan  
Assistant Professor, Dept. of Biology, Ateneo de Manila University

Mr. Fernandino Y. Concepcion  
Assistant Director, Dept. of Environmental and Natural Resources, Environmental  
Management Bureau

Mr. Arturo BONGCO  
Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Leonita Baetiong  
Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Corazon Bautista  
Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Angelita Brabante  
Dept. of Environmental and Natural Resources, Environmental Management Bureau

Mr. Vicente Diaz  
Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Lerma Dimayuga  
Dept. of Environmental and Natural Resources, Environmental Management Bureau



Ms. Sabrina Cruz

Dept. of Environmental and Natural Resources, Environmental Management Bureau

Mr. Arthur Garcia

Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Joyceline Goco

Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Delia Mailum

Dept. of Environmental and Natural Resources, Environmental Management Bureau

Mr. Cesar Siador

Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Marissa Malabana

Dept. of Environmental and Natural Resources, Environmental Management Bureau

Ms. Noralyn M. Jubaira -Baja

Director, Div.2 United Nations and International Organizations, Dept. of Foreign Affairs

Mr. Marford Angeles

Dept. of Foreign Affairs

Dr. Susan M. Gallardo

Professor, Chemical Engineering Dept., De La Salle University

Mr. Ramon Y. Dones

Science Research Specialist, Environmental Impact Assessment and Permitting Section,  
Environmental Protection and Monitoring Div., Department of Energy

Ms. Elma Karunungan

Supervising Science Research Specialist, Environmental Quality Monitoring Section,  
Environmental Protection and Monitoring Div., Department of Energy

Ms. Edna L. Juanillo

Supervising Weather Specialist, Climate Research and Development Section, Climatology and  
Agromet Branch

Dr. Wilfredo M. Carandang

Associate Professor, College of Forestry and Natural Resources, University of the Philippines  
– Los Banos

Mr. Apolonio M. Ocampo  
Institute of Plant Breeding, University of the Philippines – Los Banos

Mr. Taizo Yamada  
JICA Expert, Dept. of Environmental and Natural Resources, Environmental Management  
Bureau  
DENR Compound, Visayas Ave., Diliman, Quezon City, Philippines  
TEL: +63-2-928-1212 FAX: +63-2-928-1215  
E-mail: taizoy@mozcom.com

**Republic of KOREA**

Dr. Seog-Yeon Cho  
Professor, Department of Environmental Engineering, Inha University  
253 Yonghyun Dong, Nam-Gu, Inchon, Republic of Korea  
TEL: +82-32-860-7506 FAX: +82-32-862-7412  
E-mail: sycho@inha.ac.kr

Dr. Jin-Seok Han  
Director, Atmospheric Chemistry Division, National Institute of Environmental Research  
(NIER)  
404-170, 2-1 Seoul Metropolitan Landfil, Inchun, Republic of Korea  
TEL: +82-32-560-7108 FAX: +82-32-560-7004  
E-mail: nierhan@hanmail.net

**THAILAND**

Dr. Pojanie Khummongkol  
Associate Professor, Chairperson, Environmental Technology Division, School of Energy and  
Materials, King Mongkut's University of Technology, Thonburi  
Suksawad 48 Bangmod, Rasburana, Bangkok 10140 Thailand  
TEL: +66-2-470-8651/8653 FAX: +66-2-470-8660  
E-mail: pojanie.khu@ac.th

Dr. Jesada Luangjame  
Technical Forest Official Level 8, Div. of Silviculture/Forest Research Office, Royal Forest  
Department  
61 Phaholyothin Road, Bangkok, Thailand  
TEL: +66-2-940-6586 FAX: +66-2-579-9576  
E-mail: jesada@mozart.inet.co.th

Mr. Sarawut Thepanondh

Environmental Officer, Air Quality and Noise Management, Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE)  
404 Phahonyothin Center Building, Phahonyothin Rd., Sam Sen Nai, Phayathai, Bangkok 10400, Thailand  
TEL: +66-2-619-2214 FAX: +66-2-619-2308  
E-mail: aciddep@pcd.go.th

**VIET NAM**

Dr. Vu Van Tuan  
Deputy Director, Institute of Meteorology and Hydrology, Hydrometeorological Service of Viet Nam (HMS)  
No.4 Dang Thai Than Street, Ha Noi, Viet Nam  
TEL: +84-4-8344-469 FAX: +84-4-8355-993  
E-mail: Vvtuan@netnam.org.vn

Mr. Hoang Manh Hoa  
Senior Expert, International Cooperation Department, Hydrometeorological Service of Viet Nam  
No.4 Dang Thai Than Street, Ha Noi, Viet Nam  
TEL: +84-4-8264-087 FAX: +84-4-8260-779  
E-mail: Vvtuan@netnam.org.vn

**ADB**

Mr. Warren Evans  
Chief, Environment Section, Office of Environment and Social Dept.  
6 ADB Ave., Mandaluyong City 0401, Metro Manila, Philippines  
TEL: +63-2-632-6883 FAX: +63-2-636-2195  
E-mail: jevans@adb.org

**CSIRO**

Dr. Gregory P. Ayers  
Aerosol Program Leader, CSIRO Atmospheric Research  
PMB #1, Aspendale, Victoria 3195 Australia  
TEL: +61-3-9239-4687 FAX: +61-3-9239-4553  
E-mail: greg.ayers@dar.csiro.au

**EMEP**

Mr. Jan Schaug  
Senior Scientist  
P.O.Box 100, N-2007 Kjeller, Norway

TEL: +47-63-89-80-00 FAX: +47-63-89-80-50  
E-mail: jan.schaug@nilu.no

**UN/ECE**

Mr. Lars O. Nordberg  
Former Deputy Director, CLRTAP, UN/ECE  
Tallhammarsvagen 62B, S-186 33, Vallentuna, Sweden  
TEL: +46-8-5117-5440 FAX:  
E-mail: lars.nordberg@swipnet.se

**Secretariat**

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**Interim Secretariat**

Mr. Masao Nii  
Director, Air Pollution Control Division, Air Quality Bureau, Environment Agency  
1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975, Japan  
TEL: +81-3-5521-8294 FAX: +81-3-3580-7173  
E-mail: interimsec@eanet.go.jp

Mr. Eisaku Toda, Assistant Director

Mr. Hajime Endo, Assistant Director

**Interim Network Center**

Mr. Katsunori Suzuki  
Acting Director General, Acid Deposition and Oxidant Research Center  
314-1, Sowa, Niigata 950-2144, Japan  
TEL: +81-25-263-0550 FAX: +81-25-263-0551  
E-mail: eanet@adorc.gr.jp

Mr. Jiro Sato  
Head, Planning and Training Department

Mr. Ken Yamashita  
Senior Researcher, Planning and Training Department

Mr. Akihito Morizumi  
General Affairs Department

Dr. Tsunehiko Otoshi

Head, Data Management Department

Mr. Shuji Toyama  
Senior Researcher, Data Management Department

Dr. Hiroyuki Sase  
Researcher, Ecological Impacts Research Department

**Environmental Management Bureau, Philippines**

Ms. Ella S. Deocadiz  
Research and Development Div., Environmental Management Bureau  
DENR Compound, Visayas Ave., Quezon City, Philippines  
TEL: +63-2-426-4339    FAX: +63-2-426-4335  
E-mail: elladocadiz@edsamail.com.ph

Ms. Adelaida B. Roman  
Engineer IV, Air Quality Management Section, Environmental Management Bureau  
DENR Compound, Visayas Ave., Quezon City, Philippines  
TEL: +63-2-928-3773    FAX: +63-2-928-3773  
E-mail: acidrain@pworld.net.ph

Mr. Roberto L. Co  
Research and Development Div., Environmental Management Bureau  
DENR Compound, Visayas Ave., Quezon City, Philippines  
TEL: +63-2-426-4336    FAX: +63-2-426-4335  
E-mail: roberto\_co@edsamail.com.ph

Ms. Romana Magat  
Research and Development Div., Environmental Management Bureau  
DENR Compound, Visayas Ave., Quezon City, Philippines  
TEL: +63-2-426-4332    FAX: +63-2-426-4335

Ms. Dulce Abel  
Environment Quality Div., Environmental Management Bureau  
DENR Compound, Visayas Ave., Quezon City, Philippines  
TEL: +63-2-426-4332    FAX: +63-2-426-4335

Mr. Joselito Tagasa  
Research and Development Div., Environmental Management Bureau  
DENR Compound, Visayas Ave., Quezon City, Philippines

TEL: +63-2-426-4332    FAX: +63-2-426-4335

**Overseas Environmental Cooperation Center**

Mr. Mitsuhiro Yamamoto

Project Manager, Overseas Environmental Cooperation Center

3-1-8, Shiba-koen, Minato-ku, Tokyo 105-0011, Japan

TEL: +81-3-5472-0144    FAX: +81-3-5472-0145

E-mail: m8yamamo@oecc.or.jp

Ms. Naoko Iwakami, Researcher

Ms. Kaoru Yoshitsubaki, Assistant Researcher