Training Programs

for

EANET in the Regular Phase

November 2001

Network Center for EANET

“Training Programs for EANET in the Regular Phase” was endorsed at the Third Session of the Intergovernmental Meeting held in November 2001 in Chiang Mai, Thailand.

TABLE OF CONTENTS

The Third Session
of the Intergovernmental Meeting
on the Acid Deposition Monitoring Network
in East Asia
19-20 November 2001, Chiang Mai, Thailand

Training Programs for EANET in the Regular Phase

I. INTRODUCTION

1. The Interim Network Center/Network Center (INC/NC) of the Acid Deposition Monitoring Network in East Asia (EANET) has implemented various activities of training/capacity building among participating countries (ANNEX I) in line with the Training Programs for the Network (EANET/ISAG 1/5/1 rev.) that was endorsed at the First Session of the Interim Scientific Advisory Group (ISAG) Meeting, held in October 1998 in Yokohama, Japan.

2. The Second Session of the Intergovernmental Meeting on EANET, held in October 2000 in Niigata, Japan, concluded that the preparatory-phase activities had been successful, recognizing that there still remain many issues in EANET that require improvement, such as capacity building and the level of quality assurance/quality control (QA/QC) activities.

3. NC is requested to develop and implement education/training programs for those engaged in the network activities in the regular phase, as described in the Tentative Design of EANET (EANET/IG 2/5/3) that was endorsed at the Second Session of the Intergovernmental Meeting. At the First Senior Technical Managers' Meeting in February 2001 in Niigata, Japan, it was emphasized that intensive training should further be undertaken at national and regional levels as the priority technical issue.

4. NC implemented a Questionnaire Survey for Training/Capacity Building Needs (hereinafter referred to as the "Questionnaire Survey"), and developed the Draft Training Programs for EANET in the Regular Phase, based on the request at the Second Session of the Intergovernmental Meeting, and taking account of the preparatory-phase activities of EANET and the results of the Questionnaire Survey (ANNEX II).

II. IDENTIFICATION OF TRAINING NEEDS

5. It is very important to know the present status of the participating countries in terms of their capability in dealing with acid deposition problems, and identify their actual training needs.

6. Through the experiences in the preparatory phase and in the regular phase, and with the results of the Questionnaire Survey, INC/NC has been making effort to identify specific training needs of participating countries, improve its training activities and elaborate the relevant capacity building activities in close communication, cooperation and coordination with relevant organizations. As the result, it is recognized that there are still various training needs among participating countries. NC will continue doing such effort in the future.

III. TARGET OF TRAINING ACTIVITIES

7. Based on the communication with participating countries, and the training needs identified through the above activities, it is proposed that the target of the training programs should be to create sufficient capability in respective participating countries in dealing with acid deposition problems, with particular emphasis on monitoring activities that differ from country to country in terms of progress, research activities for preventing or reducing adverse environmental impacts of acid deposition. It was also pointed out that awareness raising for general public as well as decision makers is priority.

8. Target groups of the training programs will be the personnel to work for EANET and relevant researchers in participating countries.

IV. CONTENTS OF TRAINING/CAPACITY BUILDING

9. Based on the activities of training/capacity building of EANET from 1998, the result of the Questionnaire Survey, and close communication with participating countries and relevant organizations, the following activities are identified as significantly important.

IV.1 Implementation of national training programs

10. The implementation of national training programs is considered to be very effective in disseminating the outcomes of the regional training for the Network. NC expects that the participating countries continue to implement national training programs on various fields, for example, maintenance of sampler, transportation and analysis of samples, and data management. NC will continue to provide assistance to the national training programs in communication with participating countries

IV.2 Utilization of existing programs (JICA Training Course)

11. In the Training Programs for the Network (EANET/ISAG 1/5/1/rev.), this course was identified as one of the activities under EANET. In 2001, this training course was strengthened to the country focused training course entitled the "Acid Deposition Monitoring Network in East Asia (EANET)" from a viewpoint to more strengthen EANET activities. It is important to continue effort for obtaining appropriate participants from the participating countries.

12. The course is playing an important role for training junior laboratory staff in the participating countries. NC will maintain close communication and coordination with the organizers of this course on the curriculum by sending its staff to the steering committee, holding ad hoc technical coordination meetings and informing EANET activities in a timely manner. It is expected that the course will continue to contribute and even strengthen its contribution by increasing laboratory exercises, including training for maintenance of equipments and focusing more on specific issues of concern etc.

IV.3 Development and implementation of training programs by NC

IV.3.1 Implementation of individual training

13. Considering the importance of intensive training, individual training by NC is expected to be continued/strengthened. The individual training aims at improving various monitoring skills of participating countries, taking account of specific situations of those countries. A possibility of using existing fellowship schemes should also be explored to provide opportunities for (junior) researchers to study advanced sciences on acid deposition.

14. Individual training at NC is tentatively planned for five or six trainees from the participating countries in each year. In consultation with the participating countries, NC will invite trainees, taking account of the results of QA/QC activities, and specific needs for training in participating countries. NC might also implement individual training on broader topics, including some or all of the topics on site selection, data management, maintenance of equipment, management and coordination for monitoring activities and public awareness for acid deposition problems.

IV.3.2 Training workshops

15. NC generally considers that its training workshops should be reorganized to meet the latest needs. Considering the results of the Questionnaire Survey, NC may undertake workshops on special concern of the participating countries, such as dry deposition monitoring (filter pack method, denuder method and/or automatic air concentration monitoring method) and soil/vegetation monitoring, in discussion with Task Forces on Dry deposition, and Soil and Vegetation Monitoring. NC will also explore a possibility of holding a workshop on administrative issues such as management of training for monitoring activities, and management and coordination for implementation of monitoring activities, in the future.

V. RELEVANT ACTIVITIES FOR CAPACITY BUILDING OF PARTICIPATING COUNTRIES

V.1 Technical missions to the participating countries

16. Technical missions will be undertaken in line with the work programs in each year. These missions are considered very useful for NC in grasping the present capacities of the participating countries, and for participating countries in having detailed technical discussions among various experts from relevant agencies and academies, and in obtaining technical advice and latest technical information.

V.2 Dispatch of short/long-term experts

17. In consultation with NC, aid agencies such as the Japan International Cooperation Agency (JICA) are expected to dispatch short-term experts to the

participating countries to assist in development of national monitoring plans, implementation of acid deposition monitoring etc. A possibility will further be explored to send short/long-term experts to meet the needs in each country and assist EANET activities, as appropriate.

V.3 Development of training materials

18. In a variety of training activities, appropriate training materials are required for trainees. NC will develop detailed training materials, technical documents for wet deposition, dry deposition, soil and vegetation and inland aquatic environment monitoring in a step by step manner.

V.4 Implementation of joint research activities

19. NC will explore a possibility for researchers in East Asia to carry out joint research activities in Japan, by using existing fellowship schemes such as the fellowship scheme under the Ministry of Education, Culture, Sports, Science and Technology and the Eco-frontier Fellowship Program under the Global Environment Research Program. Through such activities, the overall scientific and technical levels of the network activities will be improved. It is especially expected to undertake research on ecological impact for soil and vegetation.

VI. CLOSE COMMUNICATION, COOPERATION AND COORDINATION WITH OTHER RELEVANT ORGANIZATIONS

20. There are many international as well as bilateral organizations that have been carrying out training activities in the field of acid deposition issues. NC will continue effort to have close communication, cooperation and coordination with those organizations, obtain information on their training activities and so on., and disseminate it to the participating countries, so that they can apply for such training.

ANNEX I

Major training activities of EANET from 1998 to 2001

1. The major training/capacity building activities among participating countries are summarized below. They were implemented in line with the Training Programs for the Network (EANET/ISAG 1/5/1 rev.), which was endorsed by the First Session of the Interim Scientific Advisory Group (ISAG) in October 1998 in Yokohama, Japan.

I. Implementation of national training programs

2. The participating countries of EANET have carried out various activities on national training, such as training workshops, technical discussions, annual seminars for environmental monitoring and studies on acid deposition mainly for wet and dry deposition monitoring methods, in cooperation with the Interim Network Center (INC) and other relevant organizations. INC/the Network Center (NC) has provided assistance such as the provision of training materials and advice on training curricula for those who had undertaken such training, and dispatch of experts to those national workshops.

3. Many countries carried out their training activities during the INC/NC technical missions. INC/NC has been providing technical support and in some cases, financial support for the national training activities upon request. Some other organizations, such as the Asian Development Bank (ADB), the United Nations Environment Programme (UNEP), the World Bank, the Japan International Cooperation Agency(JICA), the Commonwealth Scientific and Industrial Research Organization (CSIRO) in Australia have provided similar support for national training activities in the participating countries.

II. Utilization of existing training programs (JICA Group Training Course)

4. JICA has been implementing the Group Training Course on Monitoring and Control Technologies of Acid Deposition since 1997 for leading technical officials or researchers in national or local governments of East Asia, in cooperation with Hyogo Prefecture of Japan and other relevant organizations. In the training programs for EANET, this training course was designated as one of the training activities under EANET.

III. Development and implementation of training programs by INC (Training workshops on EANET)

5. The First Training Workshop on EANET was conducted by INC in November 1998 in Niigata, Japan. The objective of the workshop was to assist the participating countries in implementing the preparatory-phase monitoring activities in a smooth and effective manner, by disseminating the major outcomes of the First Session of the ISAG Meeting and the Third Session of the WG Meeting, particularly regarding the technical matters on monitoring, and by exchanging information and views on the situations of respective countries. Senior managers of the national centers participated in the workshop and discussed various issues related to EANET. Questionnaire survey on training and equipment needs was undertaken prior to the workshop and discussed during the workshop.

6. Taking into account the recommendations of the First Training Workshop, the Second Training Workshop on EANET was held in 1999 in Beijing, China, focusing on ecological impact monitoring of acid deposition (soil and vegetation monitoring). Intensive discussions were held among soil/vegetation experts in the participating countries, which resulted in the identification of the objectives and future directions of soil and vegetation monitoring.

IV. Implementation of individual training/technical meetings

7. Considering the importance of intensive training, the individual training/technical meetings at INC/NC have been undertaken for the participating countries. INC/NC invited the trainees, considering specific training needs such as the results of QA/QC activities among the participating countries. The numbers of the individual training/technical meetings carried out by August 2001 are as follows:

- November 1998: a technical official of the Pollution Control Department, Thailand (training for the filter pack method of dry deposition monitoring);
- November 1998: the Head, Laboratory of Hydrochemistry and Atmospheric Chemistry, Russia (training for the filter pack method of dry deposition monitoring);
- April 1999: an official of the Ministry of Environment, Indonesia;
- April 1999: technical meeting with nine members from the State Environmental Protection Administration and the three EANET participating cities, China;
- March 2000: Assistant Director of Environmental Management Bureau, the Philippines;
- May to June 2000: two officials of the Pollution Control Department (PCD), Thailand

(training for the wet and dry deposition monitoring and data management);

- February to March 2001: one each official from the Environmental Management Center (EMC), Indonesia, Department of Chemistry (DOC), Malaysia and Environmental Management Bureau (EMB), the Philippines (training for the wet and dry deposition monitoring especially in terms of data analysis and data management); and
- October to November 2001: One each official from the Geophysics and Meteorological Agency(BMG), the Environmental Management Center (EMC), Indonesia, Institute of Meteorology and Hydrology, Hydrometeorological Service, Viet Nam(training for the wet and dry deposition monitoring especially focusing on chemical analysis and data management).

V. Technical missions to the participating countries

8. INC/NC has dispatched technical missions to the participating countries to exchange information and experiences, to provide technical advice and to disseminate the latest technical information. The INC/NC missions visited (candidate) network monitoring sites and laboratories, and had technical discussions with local experts on acid deposition and to exchange information and experiences on EANET activities. In some countries, technical workshops were held during the INC/NC technical missions.

VI. Dispatch of short-term experts

9. In consultation with INC/NC, JICA dispatched short-term experts on acid deposition monitoring to the participating countries, namely, China, Indonesia, Philippines, Thailand and Viet Nam by September 2001.

VII. Development of training materials

10. ISAG, with support by INC, reviewed and revised the monitoring guidelines and technical manuals, which may be considered as important materials for both actual monitoring activities and training. Based on the experiences during the preparatory phase, and taking account of the latest scientific information, NC will develop training materials on dry deposition monitoring methodologies and QA/QC methods on soil monitoring in 2001.

VIII. Implementation of joint research activities

11. A researcher from Republic of Korea joined ADORC in October 2001, to carry out study on inland aquatic environment at ADORC, by utilizing Eco-frontier Fellowship Program under the Global Environment Research Program of the Ministry of Environment, Japan.

IX. Cooperation and coordination with other relevant organizations

12. INC/NC has been making effort to have closer communication, cooperation and coordination with many international as well as bilateral organizations such as UNEP, the World meteorological Organization (WMO), the European Monitoring and Evaluation Programme (EMEP) and the Economic and Social Commission for Asia and the Pacific (ESCAP), obtain information on relevant training and other activities and so on. NC sent request to those organizations for detailed information on training/capacity building activities in October 2001.

ANNEX II

Result of Questionnaire Survey for Training/Capacity Building Needs

1. It is very important to know the status of the participating countries in terms of their capability in dealing with acid deposition problems, and identify actual training needs. A letter on "Questionnaire Survey for Training/capacity Building Needs (hereinafter referred to as "Questionnaire Survey")" was sent to the participating countries in August 2001 (i) to get information on national training program in 2000 and (ii) to identify the training/capacity building needs in the participating countries of EANET. The formats of Questionnaire Survey are attached as Appendix.

2. The summary of the survey results on national training program in 2000 is shown in Table 1. Most participating countries carried out national training/capacity building activities in 2000 such as national workshops, technical meetings and individual training etc. They implemented some kinds of training/capacity building activities in line with their specific needs and under existing institutional framework.

3. The summary of the training needs for specific items is shown in figure 1. There may be following observations:

- Training on wet and dry deposition is the most necessary among the monitoring methodologies. Training on vegetation monitoring and monitoring on inland aquatic environment seems to be less needed than others.
- Data management (C) is one of the most required items on monitoring of wet deposition, dry deposition, vegetation and inland aquatic environment. Many countries wish to get intensive training in this area.
- Training on maintenance of sampler (A-4) and apparatus in laboratory (B-2) are also highly needed. It is noted in remarks that equipment such as wet only sampler and ion chromatograph sometimes break down, and it is necessary for proper maintenance to obtain skill to repair.
- Needs on training for administrative activities (management of training for monitoring activities, and management and coordination for implementation of monitoring activities) are high, especially on intensive training for experienced staff.
- Comprehensive training on whole monitoring methodologies are still needed for experienced staff and novice staff respectively.

4. The summary of views on various training activities is shown in Table 2. The following views are expressed.

-
- Regarding the group training course, though the number of trainees and duration of training in the existing JICA course are considered appropriate, some countries consider that the program should focus on some specific issues rather than general issues.
- Individual training focusing on specific issues that were implemented for a few trainees is generally deemed adequate. It was pointed out that individual training on maintenance of equipment is in high priority.
- Dispatch of short and long term experts is considered to be good for meeting various needs of participating countries. One/two week(s) may be needed for maintenance of equipment, and approximately six months for dry deposition monitoring in some countries.
- Some countries are planning to hold national workshops and wish to invite experts to them.
- The training workshops in the preparatory phase are considered very useful and effective, and workshops on some specific topics such as dry deposition, soil and vegetation monitoring should be periodically undertaken. It should be discussed at Task Forces on Dry Deposition, and Soil & Vegetation.
- Many expectations for training/capacity building of EANET are expressed: sending of researchers to ADORC, study at universities in Japan by using fellowships; improvement of monitoring activities; willingness to contribute to EANET by sharing experiences; necessity of support to research and other related activities, intensive training to enhance staff capability etc.

Table 1 National Training Programs in 2000

Country Name		Title of training course/ meeting	Duration	No. of Participants	Major topics
China	1	The China National Workshop on Dry Deposition, Soil and Vegetation Monitoring of EANET	Jun. 14-16, 2000 (3 days)	37	Dry deposition, soil and vegetation monitoring
Indonesia	1	1st Technical Meeting	2 days	16	Acid Deposition Monitoring Plan
	2	2nd Technical Meeting	2 days	17	Acid Deposition Monitoring Reporting
	3	External meeting	1 day	6	Strengthened the coordination among member
Japan	1	Training on Ambient Air Conservation	Jul. 3-7 2000 (5 days)	100	General ambient air conservation (Including 3 hours lecture about SPM)
	2	Training on Instrumental Analysis	Jan. 22-Feb. 2, 2001 (12 days)	60	Ambient air and water analysis (Including practice on Atomic Absorption Spectrometry 1 day, Ion chromatography 7days)
	3	Training on Water Analysis	May 22-Jun. 6, 2000 (16 days)	45	Practices on water analysis (related to inland aquatic)
	4	Training on Operation of Automatic Ambient Air Monitoring Instruments	Dec. 4-6, 2000 (1 day, Kobe), Dec. 18-20, 2000 (1 day, Tokyo)	79	Gaseous concentration monitoring (related to dry deposition)
	5	Meeting on Survey and Research of Acid deposition	Sep. 25, 2000 (4 hours)	90	Overview of acid deposition monitoring in Japan, Progress on EANET activities, Some topics related to acid deposition monitoring by local governments
	6	Meeting on National Acid Deposition Monitoring, JFY2000	Mar. 27, 2001 (4 hours)	100	Wet/Dry deposition monitoring
Malaysia	1	Basic Air Pollution Meteorological Course	5 days	9	Wet Deposition and Dry Deposition Monitoring
Mongolia	1	Yearly seminar for environmental monitoring	Apr. 24–28, 2000 (5 days)	7	Environmental quality monitoring including acid deposition monitoring, QA/QC program

	2	Individual training	2000	4	Wet & dry deposition, soil monitoring techniques: sampling, sample handling, operation of analytical instruments such as pH-meter, EC meter, IC, chemical analysis and data processing
Philippines	1	EANET Scientific Lecture Session	Sep. 6, 2000 (1 day)	20	1. wet deposition 2. dry deposition 3. soil & vegetation, 4. inland aquatic environment 5. QA/QC activities
	2	Training Seminar on Philippine Initiatives for Environmental Management: Making a Difference in 21st Century	May 9-11, 2000 (3 days)	50	1.Environmental monitoring and enforcement 2.Air quality monitoring and analysis
	3	1.Environmental monitoring and enforcement 2.Air quality monitoring and analysis	April 10-28, 2000 (19 days)	20	1. Air pollution passive and active sampling and analysis 2.Acid deposition monitoring and analysis
R. of Korea	1	Air quality measurement	Mar. 13-18, 2000 (6 days)	31	Sampling and analysis of air pollutants and wet deposition
	2	Air quality measurement	Sep. 25-30, 2000 (6 days)	31	Sampling and analysis of air pollutants and wet deposition
Russia	-	-	-	-	-
Thailand	1	Environmental Training course for Teachers	Apr. 17-30, 2000 (14 days)	50	Effect of acid deposition for environment
	2	The study of Acid Deposition in Thailand	Sep. 4–6, 2000 (3 days)	30	Wet deposition, Dry deposition
	3	The study of Acid Deposition in Thailand	Oct. 19, 2000 (1 day)	47	Wet deposition, dry deposition, soil & vegetation, inland aquatic environment
	4	Continuous Emission Monitoring(CEMS)	Dec. 12-15, 2000 (4 days)	40	Emission monitoring
	1	The 2nd National Training Course on Acid Deposition Monitoring	Dec. 11-14, 2000 (4 days)	40	Training on Wet Deposition, Dry Deposition, Monitoring soil - vegetation, Monitoring Inland Aquatic Environment (from

Viet Nam					Technical Manual and Guideline of EANET)
	2	The 2nd Workshop on Acid Deposition Monitoring	Jan. 11, 2001 (1day)	50	Discussion on Wet Deposition, Dry Deposition, Monitoring soil - vegetation, Monitoring Inland Aquatic Environment (from Technical Manual and Guideline of EANET)

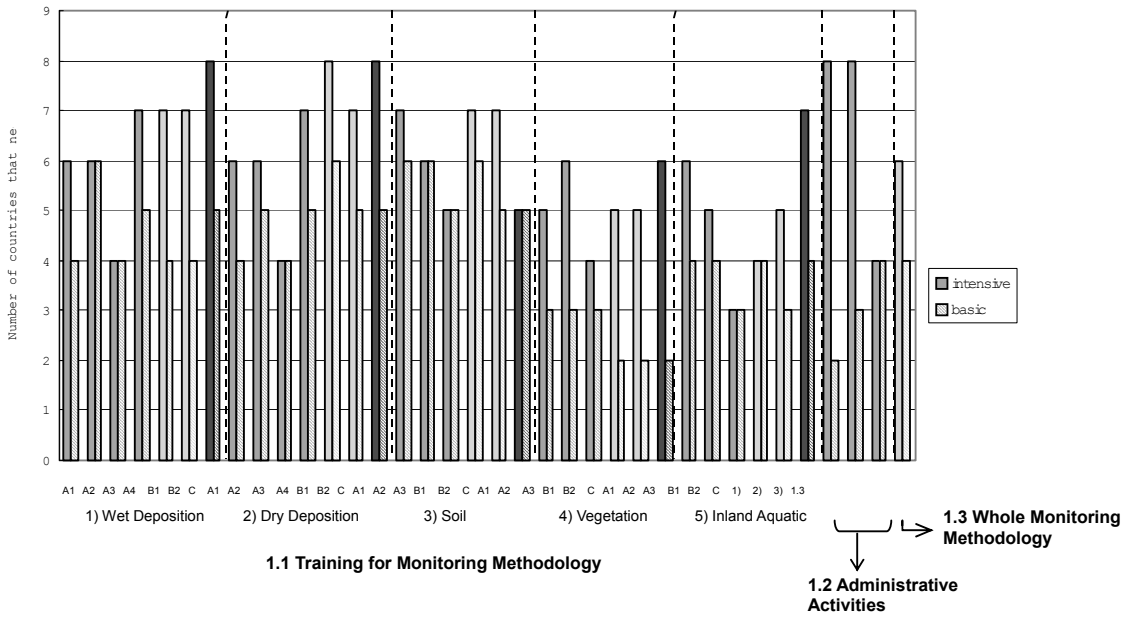

Figure 1 Training/Capacity building needs for specific items

1.1. Training for monitoring methodology
A1:Site selection, A2:Sampling, A3:Transportation/Storage, A4:Maintenance of sampler
B1:Analysis of samples, B2:Maintenance of apparatus
C: Data management

1.2. Training for administrative activities
1) Management of training for monitoring activities
2) Management and coordination for implementation of monitoring activities
3) Environmental education and public awareness

1.3. Training for whole monitoring methodology: Comprehensive training

Table 2 Views on various training activities and expectations for training/capacity building of EANET

Training	Item	Opinions
2.1.Group training course	*number*	1-2 persons from each country a time is appropriate, more than 1 person
	duration	1-2 (3) months are appropriate
	program	should focus on some issues, general issues, need theory/practice
	other comment	not utilized, need training for policy makers for 2 weeks
2.2.Individual training	*number*	2-3 persons a time are suitable, 4-6 persons, depend on topics/skill of participants
	duration	2-4 weeks are appropriate, more than 1month, depend on topics/skill of participants
	program	should reflect specific needs, depend on topics/skills of participants
	specific field	chemical analysis using IC, preparing filters & analysis of samples of filter pack, maintenance of sampler & IC, monitoring on passive & filter pack, to improve data quality
	other comment	monitoring, sampling techniques and equipment maintenance for 1-3 weeks for technicians, trainees should pass group training, not utilized
2.3.Dispatch of short and long term experts	*duration*	1-2 weeks, 1-6 month(s), 1 year
	specific field	experts of monitoring & analysis, dry deposition, data management & QA/QC activities, repair/maintenance of equipments
	other comment	for plan to expand monitoring site, cheapest and effective
2.4.Workshop in each country	*period*	planning this and next year, every year
	specific field	wet and dry deposition
	other comment	will invite experts to WS, very useful, not required
2.5.Training workshop on specific topics	*duration*	should have periodic Training Workshop
	specific field	wet, dry (velocity of acid compounds) and soil & vegetation
	other comment	very useful and effective in past, should have such WS on specific topics, need discussion by Task Forces on Dry, Soil & Vegetation
3 Expectation for training/capacity building of EANET		expect to send researchers to ADORC and study at University in Japan using fellowship, to improve monitoring activities, willing to contribute to EANET by sharing experiences, support to research work and other related activities are necessary, intensive training enhance staff, wish grant of equipment for soil & vegetation, Inter-lab comparison be encouraged, information exchange/network be established

APPENDIX

Formats on Information on National Training Program in 2000

Date (data reporting)	
Country Name	
Organization Name	
Department	
Name	
Postal Address	
Contact Address	Tel: Fax: E-mail:

1) Training course/ meeting report No.1

Title of training course/ meeting	
Implementation agency	
Duration	(m, d, y) - (m, d, y)
Target group	
Number of Participants	
Frequency	1. (times/ year) 2. irregular 3. only this time
Objectives (to disseminate technical information on data reporting procedures, etc.)	
Major topics (wet deposition, dry deposition, soil & vegetation, inland aquatic environ, etc.)	

1) Training course/ meeting report No.2

Title of training course/ meeting	
Implementation agency	
Duration	(m, d, y) - (m, d, y)
Target group	
Number of Participants	
Frequency	1. (times/ year) 2. irregular 3. only this time
Objectives (to disseminate technical information on data reporting procedures, etc.)	
Major topics (wet deposition, dry deposition, soil & vegetation, inland aquatic environ, etc.)	

1) Training course/ meeting report No.3

Title of training course/ meeting	
Implementation agency	
Duration	(m, d, y) - (m, d, y)
Target group	
Number of Participants	
Frequency	1. (times/ year) 2. irregular 3. only this time
Objectives (to disseminate technical information on data reporting procedures, etc.)	

Major topics (wet deposition, dry deposition, soil & vegetation, inland aquatic environ, etc.)

2) Summary table of training course/ meeting

No.	Title of training course/ meeting	Duration	No. of Participants	Major topics

Explanatory Note:

- This format is not included in "Data Reporting Procedures and Formats for Acid Deposition Monitoring in East Asia" which was adopted at the Second ISAG Meeting. We would like to intend to obtain the information on national training activities from the participating countries of EANET, by implementing this questionnaire survey annually.
- "The training course" in this format involves not only the well-programmed training course focussing on of acid deposition such as JICA group training course, but also other training courses aiming at, e.g., air pollution control, which include component on acid deposition, workshops of air pollution or meetings relevant to acid deposition in a broad sense.
- Please attach the materials of the each training course such as the training program and the text book etc., and also those in English if these exist.

Questionnaire on Training/Capacity building Needs for Acid Deposition Monitoring

Country:_____ Organization:_____ Name:_____

Training needs for specified items

Please check one button in each item.

If you choose a button of "Need", please write in parentheses the number of staff in your country/organization who needs the training in next five years.

Remarks

If you choose a button of "Need", please write the names and organization of persons who need the training in Remarks. Please also attach the organization chart which shows the organization s and the number of staff members persons who work for EANET activities in your country need the training belong to.

1.1. Training for Monitoring methodology

Items	Intensive training for experienced staff	Basic training for novice staff	Remarks
1) Wet deposition monitoring			
A-1. Site selection	□Need ( ) □No need	□Need ( ) □No need	
A-2. Sampling	□Need ( ) □No need	□Need ( ) □No need	
A-3. Transportation/ Storage	□Need ( ) □No need	□Need ( ) □No need	
A-4. Maintenance of sampler	□Need ( ) □No need	□Need ( ) □No need	
B-1. Analysis of samples	□Need ( ) □No need	□Need ( ) □No need	
B-2. Maintenance of apparatus such as Ion Chromatography	□Need ( ) □No need	□Need ( ) □No need	

C. Data management	□Need ( ) □No need	□Need ( ) □No need	
2) Dry deposition monitoring			
A-1. Site selection	□Need ( ) □No need	□Need ( ) □No need	
A-2. Sampling	□Need ( ) □No need	□Need ( ) □No need	
A-3. Transportation/ Storage	□Need ( ) □No need	□Need ( ) □No need	
A-4. Maintenance of sampler	□Need ( ) □No need	□Need ( ) □No need	
B-1. Analysis of samples	□Need ( ) □No need	□Need ( ) □No need	
B-2. Maintenance of apparatus such as Ion Chromatography	□Need ( ) □No need	□Need ( ) □No need	
C. Data management	□Need ( ) □No need	□Need ( ) □No need	
3) Monitoring of soil			
A-1. Site selection	□Need ( ) □No need	□Need ( ) □No need	
A-2. Sampling	□Need ( ) □No need	□Need ( ) □No need	
A-3. Transportation/ Storage	□Need ( ) □No need	□Need ( ) □No need	
B-1. Analysis of samples	□Need ( ) □No need	□Need ( ) □No need	

B-2. Maintenance of apparatus such as Ion Chromatography	□Need ( ) □No need	□Need ( ) □No need	
C. Data management	□Need ( ) □No need	□Need ( ) □No need	
4) Monitoring of vegetation			
A-1. Site selection	□Need ( ) □No need	□Need ( ) □No need	
A-2. Survey method	□Need ( ) □No need	□Need ( ) □No need	
A-3. Transportation/ Storage	□Need ( ) □No need	□Need ( ) □No need	
B-1. Analysis of samples	□Need ( ) □No need	□Need ( ) □No need	
B-2. Maintenance of apparatus such as Atomic Absorption Spectrometer	□Need ( ) □No need	□Need ( ) □No need	
C. Data management	□Need ( ) □No need	□Need ( ) □No need	
5) Inland aquatic environment monitoring			
A-1. Site selection	□Need ( ) □No need	□Need ( ) □No need	
A-2. Sampling	□Need ( ) □No need	□Need ( ) □No need	
A-3. Transportation/ Storage	□Need ( ) □No need	□Need ( ) □No need	
B-1. Analysis of samples	□Need ( ) □No need	□Need ( ) □No need	

B-2. Maintenance of apparatus such as Ion Chromatography	□Need ( ) □No need	□Need ( ) □No need	
C. Data management	□Need ( ) □No need	□Need ( ) □No need	

1.2. Training for Administrative activities

Items	Intensive training for experienced staff	Basic training for novice staff	Remarks
1) Management of training for monitoring activities	□Need ( ) □No need	□Need ( ) □No need	
2) Management and Coordination for Implementation of monitoring activities	□Need ( ) □No need	□Need ( ) □No need	
3) Environmental education and public awareness	□Need ( ) □No need	□Need ( ) □No need	

1.3. Training for Whole Monitoring methodology

In this format, you can may double check as above. In other words,, or this is not exclusive question from the above.

Items	Intensive training for experienced staff	Basic training for novice staff	Remarks
Comprehensive training	□Need ( ) □No need	□Need ( ) □No need	

2. Views on various training activities

Training activities	Please write your opinion of the each training activity in terms of number of trainees, duration, program, needed specific field and so on.
2.1. Group training course Group training course is implemented including comprehensive monitoring method for acquisition of general proficiency.	
2.2 Individual training Individual training is implemented intensively focusing on specific monitoring skills in line with individual needs.	
2.3. Dispatch of short and long term experts Short and long term experts are dispatched to relevant organizations for technical assistance and cooperation, in close communication and cooperation collaboration, and financial assistance with donor agency such as JICA.	

2.4. Workshop in each country Workshop is carried out during the mission of the Network Center of EANET usually for a few days cooperated with relevant organization in each country.	
2.5. Training workshop on specific topics Training workshops were held in 1998 and 1999, and developed into STM Meeting in order to discuss various technical issues. The needs for the training workshop on specific topics might be explored.	

3. Expectation for training/capacity building of EANET

What do you expect for the training/capacity building of EANET? Please write down your opinion.

Thank you very much for your cooperation.