

The Sixth Session of the Scientific Advisory Committee
on Acid Deposition Monitoring Network in East Asia
25-27 October 2006, Pathumthani, Thailand

Report on the Progress of EANET after the Fifth Session of the Scientific Advisory Committee (SAC5) and the Seventh Session of the Intergovernmental Meeting (IG7)

I. INTRODUCTION

1. This report is prepared to review the progress of the Acid Deposition Monitoring Network in East Asia (EANET) activities after the Fifth Session of the Scientific Advisory Committee (SAC5) and the Seventh Session of the Intergovernmental Meeting (IG7) held in Niigata, Japan on 1-3 September and 21-22 November 2005, respectively.

II. INSTITUTIONAL AND ADMINISTRATIVE ASPECT

II-1 Signing of Contracts/Agreements

2. In February and March 2006, the Ministry of the Environment (MoE), Japan and the United Nations Environment Programme, Regional Resource Centre for Asia and the Pacific (UNEP RRC.AP) signed agreements regarding the Japanese contribution in 2005 for the EANET activities including both the Secretariat and NC budget, and for NC budget covering the period January to March 2006 as well. Similarly, in March 2006 the Japan Environmental Sanitation Center (JESC) and the UNEP RRC.AP finalized the agreements for the transfer of budget for the implementation of NC core activities and additional budget activities in 2005 and for the first quarter of 2006.
3. A Sales Contract was executed between UNEP, RRCAP and the Archemica International Co. Ltd. for the procurement and complete installation of the Dionex Ion Chromatography System for Cambodia and Lao PDR, using the saving money of the Secretariat as decided by the Sixth Session of the Intergovernmental Meeting (IG6) in 2004.
4. The Contract for the transfer of money to NC for the implementation of the fellowship program in 2005, using the saving money of the Secretariat was signed between JESC and UNEP, RRCAP in July 2006.

II-2 Recruitment of Staff

5. At IG6 in 2004, a decision was made to initiate the recruitment process for the Coordinator position at the Secretariat. On 18 January 2005, the Secretariat circulated the vacancy announcement. Another letter was circulated on 21 February 2005. Neither response nor

application was received by the Secretariat. Based on the decision of the Seventh Session of the Intergovernmental Meeting (IG7) another round of announcement was transmitted to all National Focal Points (NFP) on 16 December 2005. Within the specified deadline, the Korean NFP informed the Secretariat that the Ministry of Environment of the Republic of Korea is willing to nominate one of their experts in the field of global environmental issues and international cooperation for that post. However, in August 2006 Korea sent a letter of withdrawal on their interest to send a nomination for the Coordinator position.

6. In accordance with the revised "Guidelines for Recruiting the Deputy Director General of the Acid Deposition and Oxidant Research Center (ADORC) in charge of the Network Center of EANET (2005)", JESC in cooperation with the Secretariat for EANET carried out the recruitment procedure of the next Deputy Director General of ADORC in charge of the Network Center from August 2005. The Selection Committee of JESC was held in May 2006, and selected a final candidate.

II-3 Maintain Communications

7. The Secretariat received communications from some National Focal Points (NFPs) regarding a few changes on institutional bodies of EANET in their respective countries, e.g. NFPs, Scientific Advisory Committee (SAC) members, etc., from time to time.
8. The Secretariat is communicating continuously to all concerns regarding administrative and financial matters for EANET which include: contracting with ADORC for the NC activities and the MOE, Japan, communicating with some countries, e.g. China, Japan, Korea, Thailand for the transfer of funds to EANET, promotion of public awareness and others.
9. On 21 Dec 2005, the Secretariat sent email to all National Focal Points requesting for any country who may be interested to host the Eighth Session of the Intergovernmental Meeting (IG8) in November 2006. The Center of Environment Research, Institute of Meteorology and Hydrology (IMH) in Viet Nam responded positively and confirmed interest to host the meeting in Hanoi, Viet Nam. The Secretariat is continuously discussing the arrangement for IG8 with IMH.

II-4 Publications of Report for Policy Makers, Proceedings and Summaries of the Meetings

10. Based on the result of IG7, the Secretariat published the Report for Policy Makers (RPM) and sent to NFPs and other relevant organizations and individuals.
11. Publications of Proceedings and Summaries of the following meetings were completed and distributed to the participating countries and participants of the sessions:
 - The Fourth Session of the Scientific Advisory Committee (SAC4) and the Sixth Session of the Intergovernmental Meeting (IG6)

- The Second Session of the Working Group on Future Development of EANET (WGFD2)
- The Sixth Senior Technical Managers' Meeting (STM6)
- The Second Scientific Workshop on Evaluation of the State of Acid Deposition in East Asia (SWS2)
- The Fifth Session of the Scientific Advisory Committee (SAC5) (only Proceedings)
- The Seventh Session of the Intergovernmental Meeting (IG7) (only Summary)
- The Sixth Workshop on Public Awareness for Acid Deposition Problems (WSPA6)
- The Second Meeting of the Drafting Committee (DC2) for the Periodic Report on the State of Acid Deposition in East Asia (PRSad)
- The Third Session of the Working Group on Future Development of EANET (WGFD3)

III. INTERGOVERNMENTAL MEETING/ITS SUBSIDIARY BODIES

III-1 WORKING GROUP ON FUTURE DEVELOPMENT OF EANET

12. The First Special Session of the Working Group on Future Development of EANET (WGFD-S1) was held just before IG7 on 20 November 2005 in Niigata Japan in order to finalize the documents that are required to be developed by the Working Group on Future Development of EANET (WGFD) and then to facilitate its adoption at IG7. The Session which was arranged by the Secretariat and NC, discussed the Report on the Review of Performance of the Secretariat and NC, the Report on the Feasibility Study on an Appropriate Instrument to Provide Sound Basis for Financial Contribution on EANET including the Decision 1/IG7, the Five-Year Medium Term Plan (MTP) for EANET and so on.
13. Based on the results of IG7 and in order to discuss the revision of the Terms of Reference (TOR) of the WGFD, the Components of the Instrument to Provide a Sound Basis for Contribution to EANET, Revised Draft Five-Year Medium Term, etc., the Secretariat in cooperation with the NC arranged for the Third Session of the Working Group on Future Development of EANET (WGFD3) on 17-18 May 2006 in Pathumthani, Thailand.
14. In accordance with the suggestion by WGFD3, and in order to finalize the documents to be submitted to the Eighth Session of the Intergovernmental Meeting (IG8), the Second Special Session of the Working Group on Future Development of EANET (WGFD-S2) was held on 30-31 August 2006 in Pathumthani, Thailand. "Draft Components of the Instrument to Provide a Sound Basis for Contribution to EANET", "Revised Draft Five-Year Medium Term Plan (MTP) for EANET", "Draft Report on the Review of the RRC.AP/AIT System and Establishment of a Trust Fund" and so on were discussed. Finally, it was agreed to submit the revised draft MTP to IG8 for its consideration after some modifications.

III-2 SCIENTIFIC ADVISORY COMMITTEE OF EANET

15. SAC5 was held on 1-3 September 2005 in Niigata, Japan in order to discuss all of the important technical and scientific issues of EANET including development of PRSAD, the 5-Year MTP for EANET, the Data Report on acid deposition monitoring in 2004, Review of QA/QC activities in the participating countries and so on. The revised "Strategy Paper for Future Direction of Dry Deposition Monitoring of EANET" was endorsed after a few modifications.

III-3 INTERGOVERNMENTAL MEETING OF EANET

16. The Secretariat and NC arranged for the IG7 which was held in Niigata, Japan on 21-22 November 2005. Major decisions during the IG7 include:
 - 1) Acknowledgement of the Report on the Feasibility Study on appropriate instrument to provide sound basis for financial contribution, the RPM;
 - 2) Endorsement/ approval of the general framework of the Report on the 5-Year MTP for EANET;
 - 3) Adoption of the Decision 1/IG7 (Niigata Decision);
 - 4) Adoption of the Guidelines on Administration and Financial Management for the Secretariat and NC including Procedures and Guidelines for Financial Contribution on EANET;
 - 5) Launching of the Report for Policy Makers; and
 - 6) Adopted in principle the Work Program and Budget in 2006 with the understanding that the Secretariat will revise reflecting the discussions made and so on.

III-4. TASK FORCES

17. NC continued the services as the Secretariats of the Task Force on Dry Deposition Monitoring, the Task Force on Soil and Vegetation Monitoring, and the Network of Soil and Vegetation Specialists to promote the improvement of monitoring methodologies.
18. Following the discussion on the issues of Dry Deposition Monitoring in EANET at SAC4, NC as the Secretariat of the Task Force on Dry Deposition Monitoring prepared the draft of "Revised Edition of Strategy Paper for Future Direction of Dry Deposition Monitoring of EANET" and distributed it to NFPs, Heads of National Centers, SAC members and the Task Force members in April 2005 for their comments. The revised Strategy Paper was presented at SAC5 for its consideration. Finally, it was endorsed by SAC5 with some modifications and published by NC.
19. The Task Force on Soil and Vegetation Monitoring of EANET was preparing the sub-manual on forest monitoring as one of the activities in line with the strategy paper. The

leading authors of the respective (sub-) chapters have prepared manuscripts based on the document, "Contents and authors for the sub-manual on forest monitoring in East Asia (EANET/SAC 4/11/2/Annex 2). NC as the Secretariat of the Task Force was editing the manuscripts for circulation among Task Force members, SAC members, and relevant experts for their consideration.

III-5. THE DRAFTING COMMITTEE FOR THE PERIODIC REPORT ON THE STATE OF ACID DEPOSITION IN EAST ASIA AND RELEVANT WORKSHOP

20. SWS2 was held in Niigata, Japan on 29-31 August 2005. The Workshop was attended by thirty-six participants including the members of Drafting Committee for the Periodic Report on the State of Acid Deposition in East Asia (DC) and observers from twelve participating countries.
21. The outlines of PRSAD were presented by DC members as well as materials of draft national reports at SWS2. Some modifications were proposed by the lead authors on content of PRSAD. The revised draft of PRSAD is expected to be discussed at the next scientific workshop held in 2006 among the wider circle of scientists and experts from EANET participating countries and outside of EANET. NC prepared the Proceedings of SWS2 for its dissemination among the DC members, the participants of workshop, NFPs and SAC members and distributed in February 2006.
22. In accordance with the "Procedures to prepare the periodic report on the state of acid deposition in East Asia" decided by SAC4 in November 2004, DC2 for PRSAD was held in April 2006 in Niigata, Japan. The meeting was attended by DC members from 11 participating countries and it was devoted to consideration of the first draft PRSAD. The further process of report preparation was discussed with correspondent revision of schedule. The meeting agreed that the scientific workshop for DC will be organized under the cooperation and with support of the Secretariat in conjunction with Regional scientific workshop in September 2006. DC2 decided that NC has to hold a Lead Authors Meeting of DC in June 2006. The Summary of DC2 was compiled and published by NC for using by members of DC and SAC, NFPs and other relevant bodies of EANET in June 2006 to observe this on-going process.
23. Based on the decision of DC2 the Lead Authors Meeting of DC was held on 28-29 June 2006 in Niigata, Japan in order to review the updated PRSAD and discuss discrepancies of materials. PRSAD will be finalized at the Sixth Session of the Scientific Advisory Committee (SAC6) to be held this autumn, and will be published after follow-on approval by the Eighth Session of the Intergovernmental Meeting (IG8).
24. The Regional Scientific Workshop on Air Pollution and Acid Deposition (RSW) was held on 28 September in Pathumthani, Thailand, hosted by the Secretariat for EANET. The

Workshop was attended by scientific community, national government and other international experts and agencies. Current situation of acid deposition in Asia and other parts of the world was presented by participants and discussed.

25. The Third Scientific Workshop on Evaluation of the State of Acid Deposition in East Asia (SWS3) was held on 29 September 2006 in Pathumthani, Thailand, back to back with RSW. The Drafting Committee (DC) members attended this workshop in order to review the draft PRSAD and discuss the contents for the finalization at SAC6.

IV. PREPARATION AND DISSEMINATION OF INFORMATION MATERIALS AND PARTICIPATION IN EANET-RELATED MEETINGS AND WORKSHOPS

IV-1. Development of the Report for Policy Makers (RPM)

26. The Secretariat of EANET in cooperation with NC has developed Draft RPM on EANET "Goals, Achievements and Way Forward". The RPM was launched during the High Level Segment of the Seventh Session of IG7. Before IG7, the Review Workshop on RPM was held in Pathumthani, Thailand in October 2005 for the review of its contents. Development of the RPM was based on IG6 decision, considering and recognizing that the policy makers have an important role in rendering their leadership support for coordination among the concerned agencies, creation of awareness and promotion of national and regional initiatives to take appropriate measures for acid deposition.

IV-2. Implementation of the Joint Seminar of EANET and EMEP

27. The joint seminar of EANET and the Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP) was organized by Russian NFP, the Secretariat and NC under the cooperation with CLRTAP in Moscow, Russia on 1-2 November 2005. The seminar was attended by thirty participants and observers from EANET countries and EMEP centres, Roshydromet, Russian research institutes, other international programs and considered as important first step for the exchange of experience between EANET and EMEP. Various activities of EANET, participating countries and EMEP in the fields of atmospheric monitoring, emission inventories and modeling of regional/hemispheric long-range transport were introduced and discussed. The number of conclusions and recommendations for future cooperation between EANET and EMEP were agreed by the participants, to encourage closer cooperation at the regional and hemispheric scale.

IV-3. Sixth Collaborative Assessment Network (CAN6)

28. The Secretariat participated in the Sixth Collaborative Assessment Network (CAN6)

meeting held in November 2005 in Thailand and presented report on EANET activities in connection with the environmental assessment in East Asia. The discussion on data access and exchange among CAN members was also carried out.

V. COMMUNICATION WITH PARTICIPATING COUNTRIES AND OTHER RELEVANT AGENCIES

29. The Secretariat and NC maintained close communication with the participating countries in all related activities of EANET and relevant organizations such as United Nations Economic Commission for Europe (UN/ECE).

VI. COMPILATION OF DATA AND DISSEMINATION OF DATA AND RELEVANT INFORMATION

30. After presentation and consideration of the draft "Data Report on the Acid Deposition in the East Asia 2004 (Data Report 2004)" at SAC5, NC finalized it taking into account the comments at SAC5 and then distributed it to NFPs, National Centers, SAC members and other relevant organizations in November 2005. Data Report 2004 was disclosed outside of EANET in January 2006.
31. In accordance with the Detailed Mechanism of Article 4 of the Procedures on Data and Information Disclosure for EANET decided by the Third Session of the Scientific Advisory Committee (SAC3) and the Fifth Session of the Intergovernmental Meeting (IG5) held in Pattaya, Thailand in 2003, all of the EANET monitoring data in 2001, 2002 and 2003 were disclosed outside of EANET with dissemination on CD upon the requests CD in January 2006. The data of 2004 will be disclosed in late autumn of 2006.
32. EANET all monitoring data in 2005 have already been submitted from the participating countries to NC.

VII. STRENGTHENING OF TECHNICAL CAPACITY IN THE PARTICIPATING COUNTRIES

VII-1. Dispatch of technical missions

33. NC dispatched technical missions to the participating countries to exchange information and experiences, to provide technical advices and to disseminate the latest technical information. As of September 2006, NC missions were sent to Russia and China (September-October 2005), R. of Korea (February 2006), Indonesia and Myanmar (March

2006), Myanmar and Viet Nam (August 2006), Russia (August-September 2006) and Mongolia (September 2006) after SAC5/IG7. (See Annex: Technical Missions of NC since SAC5/IG7).

VII-2. The Seventh Senior Technical Managers' Meeting (STM7)

34. At the First Session of the Working Group on Future Development of EANET (WGFD1) held in August 2004, NC was suggested to consider a possibility of convening the future Senior Technical Managers' Meetings in a participating countries other than Japan. In accordance with the suggestion, NC asked the participating country if they could host STM7 in February 2006. Myanmar expressed their willingness to host STM7 in their country. After receiving information from the National Center of Myanmar (Department of Meteorology and Hydrology, Ministry of Transport), NC held STM7 in Yangon, Myanmar on 1-3 August 2006.

VII-3. Implementation of the technical cooperation programs

35. With the financial support by Ministry of the Environment (MoE), Japan, NC has implemented the technical cooperation programs for some participating countries in Japanese Fiscal Year (JFY) 2005 and 2006 by providing technical and financial support to the countries. Technical and financial assistance were rendered for the Cambodia, Indonesia, Lao PDR, Mongolia, Myanmar, Philippines and Viet Nam.

VIII. IMPLEMENTATION AND COORDINATION OF QA/QC ACTIVITIES

36. Following the discussion on the draft reports of 2004 inter-laboratory comparison projects (the seventh one on wet deposition, the sixth one on soil and the fifth one on artificial surface water) at SAC5, NC finalized these reports taking into account the comments at SAC5 and distributed them to the participating laboratories in November 2006.
37. NC distributed samples of the 2005 inter-laboratory comparison projects (the eighth one on wet deposition, the seventh one on soil and the sixth one on artificial surface water and the first one on dry deposition (filter pack method) to the participating countries in November 2005.
38. Several National Centers and EANET laboratories of participating countries (Thailand, Philippines, Japan, Russia) took part successfully in the international inter-comparison 2005 organized as a part of the CLRTAP International Cooperative Programme on Assessment and Monitoring of Acidification in Rivers and Lakes (ICP-Waters). NC had also promoted a participation of EANET laboratories in EMEP 23rd inter laboratory comparison on artificial rain water of 2005. The report of this project with results of six EANET laboratories was

published in 2005.

IX. IMPLEMENTATION OF TRAINING ACTIVITIES

39. The following training activities have been implemented in accordance with the "Training Programs for EANET in the Regular Phase" endorsed at the Third Session of the Intergovernmental Meeting (IG3).
- IX-1. Assistance for national training activities
40. In line with the "Training Programs for EANET in the Regular Phase", NC implemented the "Questionnaire Survey for National Training Activities in 2005" this summer.
- IX-2. Utilization of existing training programs (Japan International Cooperation Agency (JICA) Training Course)
41. "JICA Area Focused Training Course on EANET" in JFY 2005 was held from 10 October through 17 December 2005 in Kobe, Japan. Ten trainees attended this course from ten EANET participating countries, namely Cambodia, China, Indonesia, Lao P.D.R., Malaysia, Mongolia, Myanmar, Philippines, Thailand and Viet Nam. Several lectures were delivered by NC staffs in Kobe for this period. In addition, during the visit of JICA trainees to Niigata, NC presented lectures and demonstrated practices on acid deposition monitoring of EANET.
42. NC has maintained close communication and coordination with the organizers of JICA training course on the curriculum by sending its staff to the steering committee informing of EANET activities in a timely manner.
43. The training course in JFY 2006 will be held from 9 October through 16 December 2006 in Kobe, Japan. Ten trainees will be invited from the ten EANET participating countries. NC in cooperation with JICA and the EANET participating countries, made effort to be selected appropriate trainees from the participating countries. The trainees in 2006 training course were already decided.
44. Regarding JICA Third Country Training on "Emission Inventory and Modeling for Acid Deposition Assessment" in Thailand held from 16 January through 3 February 2006, NC dispatched experts to Thailand during this training as lecturers of the training. There were 24 trainees from 10 EANET countries, namely Cambodia, China, Indonesia, Lao P.D.R., Malaysia, Mongolia, Myanmar, Philippines, Thailand and Viet Nam to get the knowledge and information on acid deposition monitoring and introduction courses on emission inventory and modeling studies. (Phase I of this course is continued until 2007.)

45. Regarding the training course in JFY 2006 to be held in Thailand from 14 January through 2 February 2007, in cooperation with Pollution Control Department (PCD), Thailand, NC has disseminated the General Information to the participating countries.

IX-3. Implementation of individual training

46. The individual training at NC has been implemented taking into account specific situations in the participating countries. One trainee from Thailand received individual training from 12 through 30 September 2005 focused on wet and dry deposition monitoring including data management. One trainee each from China Indonesia and Viet Nam received individual training at NC from 3 through 28 October 2005 on wet deposition monitoring, dry deposition, soil/vegetation monitoring, inland aquatic environment monitoring and data management. One trainee each from Cambodia and Lao P.D.R. also received individual training at NC from 1 through 24 February 2006, on wet deposition monitoring, overview of dry deposition and soil/vegetation monitoring and data management.

X. RESEARCH ACTIVITIES

47. In order to attain the objectives of EANET, it is important to evaluate appropriately the actual situation of environmental impacts of acid deposition and to research on monitoring methodologies and development of analytical methods suitable for East Asia. NC performed following research activities under considerations of the regional characteristics.

X-1. EANET research fellowship by using the saving of the Secretariat

48. Following the discussion at IG6 on EANET held in Siem Reap, Cambodia, November 2004, it was agreed that research fellowship should be established in NC during 2005-2006, and two researchers would be invited each year from the participating countries with the budget allocated in accordance with the "Proposal on the possible use of the previous savings of the Secretariat (EANET/IG 6/9)". Based on the Guidelines for short-term research fellowship discussed at WGFD2, NC in cooperation with the Secretariat carried out the application procedure on the research fellowship in 2005.
49. NC sent a letter "Announcement on application of the Research Fellowship of the Network Center in 2005" in August 2005 and informed all of NFPs on establishment of the research fellowship. Consequently, NC received 9 applications from 5 participating countries named China, Indonesia, Malaysia, Philippines and Viet Nam. Considering the contents of proposed research plans, future development of EANET and importance of promotion of research activity of EANET, NC discussed the selection of the candidates researcher seriously at the Selection Committee established in NC and decided to invite two researchers from China and Philippines.

50. The fellowship researches were carried out by two researchers from China and Philippine for two months from the end of March 2006. The titles of the researches were "Assessment of ozone concentration in Asia, especially in terms of long term exposure" and "Determination of unanalyzed components in rainwater" respectively. Based on the results of the fellowship research, the researchers are expected to prepare the scientific papers on mentioned themes in order to submit it for publication.
51. In accordance with the "Guidelines for Fellowship in the Network Center" endorsed at IG7 in 2005, NC has sent a new letter of "Announcement on application of the Research Fellowship of the Network Center in 2006" to NFPs and SAC members on 4 July 2006.
52. NC received 8 applications from 7 participating countries named Cambodia, Indonesia, Mongolia, Philippines, Russia, Thailand and Viet Nam. Considering the contents of proposed research plans, from the viewpoint of promotion of research activity and future development of EANET, NC decided to invite two researchers from Mongolia and Russia.

X-2. Joint research projects with the participating countries

(1) Joint research project with Russia

53. The joint research project Phase 3 with the Limnological Institute, Russian Academy of Science, Siberian Branch (RAS/SB) has been implemented. Annual acid deposition as well as heavy metals (mercury and lead) and lead isotope ratio in rain and snow have been determined at four sites in East Siberia and Primorsky Region in Russia. The methodologies on data analysis used in the project for the acid deposition data were expected to be useful for data analysis of EANET network. The monitoring data were important to evaluate long-range transportation of air pollutants from Europe and industrial regions of Russia to East Asia.

(2) Joint research project on dry deposition flux with Thailand

54. In order to investigate the deposition velocities above specific surfaces in East Asia, NC has been promoting a joint research project on dry deposition flux with Pollution Control Department (PCD), Thailand. A flux observation system using micrometeorological techniques was established in a teak forest located in Mae Moh, Lampang Province, Thailand, and then the observation was started in late 2001. Since the available data for more than four years were accumulated, both organizations decided to finish the project in December 2005. Data evaluation will be continued by the Japanese experts.

(3) Joint research project on dry deposition monitoring with Thailand

55. Following the termination of the Joint Research on dry deposition flux (Phase I) from

January 2000 to December 2005, NC and PCD agreed to establish Phase II of the Joint Research Project focusing on QA/QC of gas concentration monitoring method in tropical region in August 2005. The difference of gas concentrations among some deferent types of monitoring methods (automatic monitor, filter-pack method, and passive sampling method) in southern sites of EANET region will be evaluated through the joint research.

(4) Joint research project on catchment analysis with Thailand

56. NC started the joint research project on catchment analysis in Thailand with Royal Forest Department (RFD) and Environmental Research and Training Center (ERTC) by using the Global Environment Research Fund, the Ministry of the Environment, Japan in 2005. Monitoring on input (deposition) and output (stream water) fluxes in/from a small catchment area, and analyses on other biogeochemical aspects have been carried out continuously, and nutrient dynamics and acid deposition impacts in the area would be estimated. The project will be informative for evaluation of adverse effect on ecosystems in line with the Strategy Paper for Future Direction of Soil and Vegetation Monitoring of EANET.

(5) Joint research project with Mongolia

57. Two scientific papers were published in the international journal of plant science, *Phyton*, Austria, in 2005, based on the joint research project on plant sensitivity in Mongolia. NC and Central Laboratory of Environmental Monitoring (CLEM), Mongolia continued passive sampling of O₃ and SO₂ and measurement of tree growth in the Bogdkhan Mountain, where tree decline was reported. The data will be informative for discussion on acid deposition impacts on forest ecosystems.

(6) Joint research project with Republic of Korea

58. In the discussion at SAC4 for the improvement of dry deposition monitoring methodologies, it was suggested that a study on PM₁₀, PM_{2.5} and their components in special sites should be considered. In line with the suggestion of SAC4, the project on aerosol monitoring was planed as a joint research between National Institute of Environmental Research (NIER), Ministry of the Environment, Republic of Korea and NC. Preliminary research was implemented in October 2005 and the workshop to be discussed the results was held in February 2006 by using the opportunity of NC technical mission to Republic of Korea. In order to evaluate aerosol sampling methodology and PM_{2.5} behavior in Japan and Republic of Korea, intensive monitoring is planed in October 2006.

X-3. Other research activities

59. Catchment analysis is one of the issues described in the Strategy Paper for Future Direction

of Soil and Vegetation Monitoring of EANET. For obtaining basic data on this issue, research activities were implemented in a small catchment area in Shibata City, Niigata Prefecture, Japan. The data will be informative for development of guidelines or manual on catchment monitoring as well as implementation of the joint research project on catchment analysis with Thailand.

XI. ACTIVITIES RELATED TO PUBLIC AWARENESS FOR ACID DEPOSITION PROBLEMS

XI-1. Joint projects with selected participating countries

60. Since 1999, the (Interim) Network Center (INC/NC) has been undertaking joint projects with selected participating countries to develop their own national brochures and/or videotapes on acid deposition. In 2005, NC undertook a project with Lao PDR to develop brochures, and supported an in-country workshop in Cambodia held in February 2006.
61. In 2006, NC is now undertaking a project with Myanmar to develop their national brochure, and a project on support of an in-country workshop in Lao PDR. The contract with Lao PDR was already made.

XI-2. Workshop on Public Awareness for Acid Deposition Problems

62. NC organized WSPA6 on 21 - 22 February 2006 in Niigata, Japan. The purposes of the workshop were to introduce the progress of EANET activities in order to promote clear common understanding on acid deposition problems, to develop more appropriate EANET materials for the policy makers and general public, etc. in the future, to exchange information and share experiences on achievements at the national and regional levels relating to acid deposition, the progress on pollution control in the participating countries and transboundary pollution issues and so on. The workshop was attended by approximately thirty participants and observers from Cambodia, China, Indonesia, Japan, Lao P.D.R., Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Russia, Thailand and Viet Nam.
63. A national workshop entitled "Public Awareness Seminar/Workshop on Acid Deposition Monitoring and Management" was held on 6-7 June 2006 in Manila, Philippines using the saving money as decided by IG6. The Seminar/Workshop was participated in the government, private sector, NGO, academe, and media representatives. The government was represented by the executive (line departments and local government units) and legislative branch (House of Representatives). A representative from Secretariat also attended the Workshop. The Environmental Management Bureau (EMB) staff acted as the Seminar/Workshop facilitators. The workshop sought to review in plenary, the initially

Filipino-translated Report for Policy Makers on Acid Deposition Monitoring Network in East Asia (EANET) and raised awareness on acid deposition to different stakeholders.

XI-3. Development of e-Learning program

64. NC also has been developing an e-Learning program on acid deposition problems for environmental education in collaboration with Institute for Global Environmental Strategies (IGES) since 2002. Its English version was finalized in March 2006 and issued on EANET web site. NC also distributed the CDs of the program in July 2006 considering the situation on the circumstances of internet access in the participating countries.

XII. OTHER ACTIVITIES

XII-1 Communication with relevant organizations/programs

65. In order to investigate the differences among the long-range transport models developed for East Asian region, NC has been collaborating with the Model Inter-comparison Study (MICS-Asia) Phase II. The Eighth Workshop on the Transport of Air Pollution in Asia was held at the International Institute for Applied Systems Analysis (IIASA), Austria on 18-19 January 2006, financially supported by ADORC. The progress on the model simulation (Phase II) was presented by each participant. It was decided at the Workshop that the relevant scientific papers would be prepared under the cooperation with MICS participants and would be submitted to Atmospheric Environment.
66. NC has been collaborating with the International Joint Research of Long-range Transboundary Air Pollutants in Northeast Asia (LTP), which is implemented by the experts of Republic of Korea, China, and Japan. The 8th Expert Meeting was held at Jeju, Republic of Korea in November 2005. Annual reports on monitoring and modeling activities in each country were presented by the experts of three countries. The 2nd Year Research Work Plan of the 2nd Stage (2005-2007) was reviewed and adopted.
67. The representative of EANET participated at the Workshop on Intercontinental Transport Modelling Intercomparison organized by the Task Force on Hemispheric Transport of Air Pollution (TF HTAP) of the Convention on Long-Range Transboundary Air Pollution (CLRTAP) in Washington, DC, USA on January 30-31, 2006. The approaches were created to organize comparison studies on hemispheric transport of air pollutants including acidifying compounds with special requests to regional/global monitoring programs on data for model validation. And the necessity was discussed also to contribute to the HTAP Assessment Report through the review of Report Outlines.

68. NC attended the Second Meeting of TF HTAP held in Moscow, 6-8 June 2006 with the goal to observe the cooperation of CLRTAP and other monitoring programs on the assessment of environmental pollution in remote sensitive area as well as intercontinental transport of heavy metals and POPs. Future research and assessment activities on northern hemispheric air pollution issues were discussed together with steps on the HTAP Assessment Report for 2006-2009.

Technical Missions of NC since SAC5/IG7

Country	Period	Main Purposes
Russia	24 September - 2 October 2005	(i) to finalize MOA of the Cooperative Research Project in 2005 by using the Global Environmental Research Fund by Ministry of the Environment (MOE), Japan; (ii) to visit three atmospheric monitoring stations, Irkutsk, Listvyanka and Mondy in East Siberia and one site for inland aquatic environment, Prereemnaya River and one site for gas/aerosol monitoring, Pribikalskiy Istok for cooperative research project funded by Ministry of Education, Culture, Sports, Science and Technology (MEXT);
China	25 September - 1 October 2005	(i) to exchange information and views on progress of the Acid Deposition Monitoring Network in East Asia (EANET) including Draft Decision of IG7 and Draft Medium Term Plan of EANET and monitoring activity in China; (ii) to visit candidate monitoring site in China (Lijiang); and (iii) to discuss implementation of filter-pack method in China.
Republic of Korea	21-24 February 2006	(i) to exchange information and views on progress of the monitoring activity on the Acid Deposition Monitoring Network in East Asia (EANET) in Republic of Korea; (ii) to exchange information and views in detail on the progress of wet & dry deposition and the soil & vegetation monitoring of EANET in Republic of Korea; and (iii) to hold a Workshop on Joint Research Project for the Measurement of Aerosol.
Indonesia	12-18 March 2006	(i) to exchange views and information on the institutional arrangement on the acid deposition monitoring of EANET in the Indonesia; (ii) to discuss and exchange information on technical issues, especially QA/QC activities and data reporting, including check on condition of analytical instruments; and (iii) to visit the candidate monitoring site for inland aquatic environment, and discuss on the arrangement of suitable site performance with the relevant experts.
Myanmar	20-24 March 2006	(i) to exchange information on start of acid deposition monitoring and appointment of relevant organization of EANET in Myanmar; (ii) to exchange information and views on progress of the Acid Deposition Monitoring Network in East Asia (EANET); and (iii) to visit a candidate monitoring site in Myanmar.
Myanmar	4 August 2006	(i) to visit Department of Meteorology and Hydrology (DMH), Ministry of Transport, Myanmar to discuss

Country	Period	Main Purposes
		<p>and exchange information and views on progress of EANET;</p> <p>(ii) to visit a laboratory of DMH and a monitoring site in Myanmar; and</p> <p>(iii) to discuss technical issues on monitoring of acid deposition in Myanmar.</p>
Viet Nam	4-10 August 2006	<p>(i) to exchange information and views on the progress of activities on the acid deposition monitoring in Viet Nam;</p> <p>(ii) to hold seminar on acid deposition monitoring; and</p> <p>(iii) to visit relevant agencies and laboratories for exchange information and discussion on the cooperation in acid deposition monitoring activities in Viet Nam.</p>
Russia	26 August – 3 September 2006	<p>(i) to finalize MOA of the Cooperative Research Project in 2006 by using the Global Environment Research Fund of Ministry of the Environment (MOE), Japan;</p> <p>(ii) to discuss the results of 2005 monitoring, especially focused on the SO₂ concentration observed in East Siberia; and</p> <p>(iii) to visit atmospheric monitoring stations, Mondy, Irkutsk, and Listvyanka in East Siberia and Primorskaya in Primorsky Region.</p>
Mongolia	11-15 September 2006	<p>(i) to exchange information and views on the progress of the monitoring activities on the Acid Deposition Monitoring Network in East Asia (EANET) in Mongolia;</p> <p>(ii) to discuss and exchange information on technical issues, especially QA/QC activities and data reporting, including condition of analytical instruments; and</p> <p>(iii) to visit the wet and dry deposition monitoring site and discuss about the maintenance of sampling instruments.</p>