

The Fourteenth Senior Technical Managers' Meeting
of the Acid Deposition Monitoring Network in East Asia
26-28 August 2013, Tokyo, Japan

Report on the Progress of the Acid Deposition Monitoring Network in East Asia (EANET) since the Thirteenth Senior Technical Manager's Meeting (STM13)

I. INTRODUCTION

1. The Senior Technical Managers' Meeting (STM) of the Acid Deposition Monitoring Network in East Asia (EANET) has been organized annually by the Network Center (NC) for the EANET in collaboration with the Secretariat for the EANET since the commencement of the regular phase activities of the EANET in 2001. The STM Meetings have been attended by the Senior Technical Managers of all the participating countries, who are responsible for monitoring operations and technical issues of the EANET activities in their countries. The number of topics discussed at the STM Meetings concerned the progress on scientific and technical matters related to the EANET, national monitoring activities and data, results of the inter-laboratory comparison projects and other issues to be considered further at the Session of the Scientific Advisory Committee (SAC) for the EANET.
2. This report presents a review of the progress of the EANET activities since the Thirteenth Senior Technical Managers' Meeting (STM13) held in Hanoi, Vietnam on 30-31 August 2012. In general, the activities of the EANET implemented during this period were guided by the "Medium Term Plan for EANET (2011-2015)", adopted at the Twelfth Session of the Intergovernmental Meeting (IG12) on the EANET held in November 2010 in Niigata, Japan. The activities were also in accordance with the Work Program and Budget of the EANET in 2012 and 2013 adopted at the Thirteenth Session of the Intergovernmental Meeting (IG13) on the EANET in November and December 2011 in Hanoi, Vietnam and the Fourteenth Session of the Intergovernmental Meeting (IG14) on the EANET in November 2012 in Yangon, Myanmar respectively.

II. INSTITUTIONAL AND ADMINISTRATIVE ARRANGEMENT

II-1 Voluntary Financial Contribution from the Participating Countries

3. In accordance with the Procedures and Guidelines for Voluntary Financial Contributions to the EANET for 2011-2013 adopted at the IG12 in November 2010 and the Revised Guidelines on Administrative and Financial Management for the Secretariat and the Network Center approved at the IG14 in November 2012, the Secretariat sent letters in early January 2013 to inform all National Focal Points (NFPs) of the EANET of the estimated financial contributions of the participating countries both for the Secretariat budget and the Network Center (NC) core budget

in 2013 based on the Work Program and Budget of the EANET in 2013 approved at the IG14 and requested the participating countries to make voluntary financial contribution accordingly.

II-1-1 Secretariat Budget

4. In 2012, the Ministry of Natural Resource and Environment of Vietnam made contribution for Secretariat budget in 2011 and 2012 during the IG14 in November. In December 2012, the Federal Service for Hydrometeorology and Environment Monitoring of Russian Federation made contribution to the Secretariat budget in 2012 as well as Ministry of Environment Protection of China. Also, Ministry of Environment of Japan (MOEJ) and the Regional Resource Centre for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT) on behalf of the Secretariat signed an agreement regarding the Japanese financial contribution for the budget of the Secretariat in 2012. In accordance with the agreement, the financial contribution to the Secretariat budget in 2012 from Japan was made in January 2013.
5. In early 2013, Ministry of Transport of Myanmar made the contribution to the Secretariat budget in 2012. As a result, all 12 participating countries that signed the Instrument for Strengthening the Acid Deposition Monitoring in East Asia had made voluntary financial contributions to the Secretariat budget in 2012 for a total of US\$385,435.41 which was less than the expected amounts of US\$441,914.00 indicated in the Work Program and Budget of the EANET in 2012 which was approved at the Thirteenth Session of the Intergovernmental Meeting (IG13) on the EANET in November-December 2011 as shown in details in Table 1 of Annex 1.
6. Up to this date, the participating countries that made the voluntary contribution to the Secretariat budget in 2013 include Cambodia, Japan, Malaysia, Mongolia, Philippines, Russia, and Thailand for a total of US\$340,563.00 compared to the expected amounts of US\$441,914.00 indicated in the Work Program and Budget of the EANET in 2013 which was approved at the IG14 in November 2012 as shown in details in Table 1 of Annex 1.

II-1-2 Network Center Budget

7. In accordance with the Procedures and Guidelines for Voluntary Financial Contribution to EANET for 2011-2013 and the Work Program and Budget of the EANET in 2012 and 2013, Cambodia (June 2012), Japan (March 2012), Lao PDR (August 2012), Mongolia (March 2012), Thailand (March 2012) and Vietnam (August 2012) made contributions to the NC core budget for the year 2012 and Cambodia (July 2013), Japan (March 2013), Mongolia (January 2013), Philippines (March 2013), Russia (March 2013) and Thailand (February 2013) made contributions to the NC core budget for the year 2013. In March 2012 and March 2013, Japan made contributions for the budget for implementation of the NC additional budget activities for the year 2012 and 2013 respectively.

8. Details of the financial contribution from the participating countries to the NC are shown in Table 2 of Annex 1.

II-2 Staff Recruitment of the Secretariat and the NC

Deputy Director General (DDG) of the ACAP in charge of the NC

The term of the current DDG of the Asia Center for Air Pollution Research (ACAP) in charge of the NC will be completed on 30th September 2013. As requested by the NC and in accordance with the Revised Guidelines on Administrative and Financial Management for the Secretariat and the Network Center approved at the IG14 in November 2012, the Secretariat sent out the DDG vacancy announcement and invitation letters in April 2013 to all National Focal Points (NFPs) to nominate the candidate for the DDG position. There were three applicants nominated by Mongolia, Philippines, and Republic of Korea. The short list of the three applicants was circulated to the NFPs for their comments in May 2013. The recommendation of Director General of the ACAP on the final candidate for the DDG position taking into account of comments from the NFPs was submitted to the President of Japan Environmental Sanitation Center (JESC) in July 2013. Based on the recommendation, the applicant nominated by Republic of Korea, Dr. Sukjo Lee, was selected for the new DDG position by the president of JESC on 22 July 2013. The information on the selection of the final candidate, Dr. Sukjo Lee, for the DDG position was sent to the NFPs on 24 July 2013 and the new DDG was formally appointed on 5 August 2013 to start working at ACAP on 1 October 2013 for a period of two years.

Coordinator of the Secretariat

9. The term of the Coordinator of the Secretariat will be completed on 31 March 2014. The Secretariat has prepared for the recruitment of the new Coordinator following the procedure specified in the Revised Guidelines on Administrative and Financial Management for the Secretariat and the Network Center" approved at the IG14 in November 2012. The recruitment process will start from 1 October 2013 and will take about 6 months aiming at contracting the new Coordinator by the end of March and being effective from 1 April 2014 for a period of two years. Schedule for the recruitment of the new Coordinator of the Secretariat for the EANET (2014-2016) is presented in Annex 2.

II-3 Representative of the EANET in the RRC.AP Advisory Committee

10. Under the Framework on the Establishment of the Secretariat of the Acid Deposition Monitoring Network in East Asia (EANET) between the Chairperson of the Intergovernmental Meeting on the EANET and UNEP signed in 2002, the Secretariat will be housed in the office of UNEP RRC.AP supported by Regional Office for Asia and the Pacific (ROAP) and a senior official representing EANET will be invited to the Policy Advisory Committee for UNEP

RRC.AP. The Intergovernmental meeting (IG) on the EANET will nominate a senior representative to participate in the Policy Advisory Committee of UNEP RRC.AP.

11. It was agreed by the previous Sessions of the Intergovernmental Meeting (IGs) on the EANET that there will be a representative of the EANET in the RRC.AP Advisory Committee and a representative from Thailand would be most appropriate and convenient to represent EANET since RRC.AP is located in Thailand. Since April 2012, Dr. Pornsook Chongprasith, Director of Air Quality and Noise Management Bureau as the National Focal Point of Thailand had been the representative of the EANET in the RRC.AP Advisory Committee. However, the Pollution Control Department of Thailand has recently designated Ms. Jongjit Niranathmateekul, the new Director of Air Quality and Noise Management Bureau, as the new NFP of Thailand.
12. According to the Memorandum of Understanding (MoU) between the United Nations Environment Programme (UNEP) and the Asian Institute of Technology (AIT) signed in 2011, an Advisory Committee shall oversee the partnership between UNEP and AIT. The Committee shall provide technical/programmatic advice/guidance to AIT for the implementation of collaborative projects of UNEP and AIT, including the activities thereto undertaken by RRC.AP. The Committee shall consist of: Regional Advisory Group - eminent persons in the environment field; senior donor representative(s); a senior representative of Asian Development Bank; President of AIT; Director, UNEP Regional Office for Asia and Pacific; and Director, UNEP Division of Regional Cooperation. The Committee shall meet at least once per year. The Committee may appoint new members to the Committee.
13. The IG on the EANET may wish to make a request to the Advisory Committee under the MoU between UNEP and AIT in 2011 to invite a senior representative of the EANET to the Advisory Committee and subsequently nominate a senior representative to participate in the Advisory Committee.

II-4 Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET)

14. At the IG12, seven participating countries, namely Cambodia, Japan, Mongolia, Myanmar, Philippines, Republic of Korea, and Thailand signed the Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET) during the High Level Segment. Since then the Secretariat made a follow-up with the remaining countries on the signing of the Instrument. Vietnam and China signed the Instrument in 2011 before the IG13 whereas Lao PDR, Malaysia, and Russia signed the Instrument in 2012 after the IG13. Russia is the latest participating country signing the Instrument on 1 September 2012. As of this date, there are a total of 12 participating countries out of 13 countries signed the Instrument. Indonesia is the remaining participating country not yet signing the Instrument.
15. Although not all participating countries of the EANET signed the Instrument, the Instrument was operational since 1 January 2012 in accordance with the Decision 1/IG.12 which decided

that “the Instrument will become operational on the date on which all participating countries have signed it, or on 1st January 2012, whichever is earlier”.

16. At the IG14 on the EANET held in Yangon, Myanmar, on 26-27 November 2012, the Session adopted the Resolution on the Encouragement of the Participating Countries of the EANET to effectively implement the Instrument for Strengthening the EANET. The resolution encourages all the participating countries of the EANET to sign the Instrument as soon as possible, if not done so, and to fulfill the commitment contained in the Instrument.
17. The Secretariat has communicated regularly with the National Focal Point of Indonesia on the progress of its internal discussion on the signing of the Instrument. The Secretariat was informed that the internal discussion is ongoing by the inter-ministerial team for ratification of international agreement.

II-5 Mid-Term Report on the Implementation of the Medium Term Plan (MTP) for the EANET (2011-2015)

18. In line with the Implementation Plan of the MTP for the EANET (2011-2015) adopted at the IG12 in November 2010 as a part of the MTP for the EANET (2011-2015) and the Work Program and Budget of the EANET in 2013 approved at the IG14 in November 2012, the Preliminary Final Draft of the Mid-Term Report on the Implementation of the Medium Term Plan (MTP) for the EANET (2011-2015) from January 2011 to June 2013 was drafted by the consultant in collaboration with the EANET Secretariat, the NC and the EANET participating countries. The Preliminary Final Draft of the Mid-Term Report will be submitted for review at the Thirteenth Session of the Scientific Advisory Committee (SAC13), the Twelfth Session of the Working Group on Future Development of the EANET (WGFD12) and ultimately for endorsement by the Fifteenth Session of the Intergovernmental Meeting (IG15) on the EANET at the end of 2013.

III. IMPLEMENTED/IMPLEMENTING ACTIVITIES

III-1 Acid Deposition Monitoring including QA/QC Activities

III-1-1 Development/Review of Monitoring Guidelines, Technical Manuals

19. Technical Manual on Dry Deposition Flux Estimation (EANET/SAC 10/8/3/1), Technical Manual for Wet Deposition Monitoring in East Asia-2010 (EANET/SAC 10/8/4/1), and Technical Manual for Inland Aquatic Environment Monitoring in East Asia-2010 (EANET/SAC 10/8/5/1) were adopted at the IG12. These manuals were uploaded on the EANET website in July 2012 and were printed and distributed to the relevant organizations in the participating countries.

20. Preparation of the Technical Manual for Air Concentration Monitoring was started at the First Meeting of the Expert Group on Preparation of the Technical Manual for Air Concentration Monitoring in August 2011 and the Second Meeting was held on 23-24 August 2012 in Niigata, Japan. The Third Meeting will be held on 4-5 September 2013 in Niigata, Japan.

III-1-2 Implementation and Coordination of QA/QC Activities

EANET Inter-laboratory Comparison Projects

(Inter-laboratory Comparison Projects in 2011)

21. The NC published the Report of Inter-laboratory Comparison Project 2011 (the 14th project on wet deposition, the 7th project on dry deposition (filter pack method), the 13th project on soil and the 12th project on inland aquatic environment), and distributed it to the participating laboratories in January 2013.

(Inter-laboratory Comparison Projects in 2012)

22. The NC distributed samples for the 15th Inter-laboratory comparison project on wet deposition, the 8th project on dry deposition (filter pack method), the 14th project on soil and the 13th project on inland aquatic environment to the participating countries in October 2012. The result of the projects in 2012 was discussed at the Fourteenth Senior Technical Managers' Meeting on the EANET (STM14) held on 26-28 August 2013 and will be submitted to the Thirteenth Session of the Scientific Advisory Committee (SAC13) on 25-27 September 2013.

(Inter-laboratory Comparison Projects in 2013)

23. The NC distributed samples for the 16th Inter-laboratory comparison project on wet deposition, the 9th project on dry deposition (filter pack method), the 15th project on soil and the 14th project on inland aquatic environment to the participating countries in October 2013.

Other Inter-laboratory Comparison Projects

24. Several EANET laboratories in Japan, Philippines, Russia, Thailand and Vietnam also participated in the international inter-comparison 2012-2013 organized by the Convention on Long-range Transboundary Air Pollution (CLRTAP), the International Cooperative Programme on Assessment and Monitoring of Acidification in Rivers and Lakes (ICP-Waters), and etc.

III-2 Compilation, Verification, Evaluation, Storage & Provision of Data and Relevant Information

(Data Report 2011/2012)

25. The NC published the Data Report 2011 and distributed it to the NFPs, National Centers, SAC members and other relevant organizations in January 2013. Most of the participating countries

have already submitted their 2012 monitoring data to the NC. The NC is in the process of checking and verifying the data.

26. In accordance with the Detailed Mechanism of Article 4 of the Procedures on Data and Information Disclosure for EANET, all the EANET monitoring data up to 2010 were disclosed outside of the EANET from January 2013. The raw data of 2011 will be disclosed in January 2014.
27. The Data Report 2012 will be discussed at the STM14 and will be submitted to the SAC13.

III-3 EANET Meetings

III-3-1 Intergovernmental Meeting (IG)

28. The IG on the EANET held its Fourteenth Session (IG14) in Yangon, Myanmar on 26-27 November 2012. Major outcomes of the IG14 are as follows:

- The Session endorsed the following,
 - Progress Report of the EANET since the Thirteenth Session of Intergovernmental Meeting (IG13) on the EANET,
 - Financial Report of the Secretariat and the NC in 2011,
 - Report on the Review of the Performance of the Secretariat and the Network Center (2010-2011),
 - Report on the Outcomes of the Twelfth Session of the Scientific Advisory Committee (SAC12),
 - Resolution on the Encouragement of the Participating Countries of the EANET to Effectively Implement the Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET) which was changed from the Resolution on the Encouragement of the Participating Countries of the EANET to sign the Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET) decided by the IG13, and
 - Terms of Reference for the Working Group on Future Development (WGFD) of the EANET (2013-2015).
- The Session approved the following,
 - Revised Guidelines on Administrative and Financial Management for the Secretariat and the Network Center
 - Work Program and Budget of the EANET in 2013

29. Other major discussions and decisions during the Session also include the following:

- Indonesia stressed that it stands ready to continue working for the EANET as a participating country and that the necessary national processes for possible signing are undertaken and Indonesia will inform the outcome of Indonesia's consideration to the Secretariat in due course.
- China is considering increasing the amount of financial contribution to the EANET and in-kind contribution, such as hosting the EANET technical meetings.
- It was highlighted that sharing the status of readiness for financial contribution for the Secretariat and the NC from each country is useful for the Secretariat and the NC to plan the implementation of the approved Work Program.
- It was suggested that saving of the Secretariat should be used for emergency purposes.
- It was suggested that the nature of involvement of the countries that are unable to sign the Instrument may be discussed at the next IG Session, as appropriate.
- It was decided that the numbering of the Sessions of the Intergovernmental Meeting (IG), the Scientific Advisory Committee (SAC), the Working Group on Future Development of the EANET (WGFD) and the Senior Technical Managers' Meeting (STM), should continue from their previous Sessions.
- It was pointed out that there is a missing link on the arrangement of the EANET Secretariat at RRC.AP between UNEP and AIT, which should be taken care of by a supplementary arrangement on a temporary basis by them under the new MoU between UNEP and AIT in 2011.
- It was reconfirmed that UNEP is the Secretariat of the EANET as designated by the IG2 on the EANET in 2000 and accepted by the UNEP Executive Director and it was noted that UNEP expressed its willingness to cooperate with participating countries at the WGFD11.
- The Secretariat was tasked to prepare a review report on the future arrangement of the Secretariat taking into account the new MoU between UNEP and AIT in 2011 for the review and discussion of the Twelfth Session of the Working Group on Future Development of the EANET (WGFD12) and subsequent consideration and decision of the Fifteenth Session of the Intergovernmental Meeting (IG15) on the EANET in 2013. The elements in the review report should include financial, administrative, and legal arrangements; implication and impacts that may arise; efficiency; advantage; and disadvantage of different options. The Session also suggested that the review report should focus on Option 1 (UNEP as the EANET Secretariat with the arrangement at RRC.AP/AIT) and Option 2 (UNEP as the EANET Secretariat (without RRC.AP))with the consideration of Option 3 (Designate/request another entity as the EANET Secretariat) if it deems necessary.
- Discussion on the future expansion of the scope of the EANET included the followings,
 - It was reconfirmed that the enhanced activities within the present scope and the future expansion of the scope of the EANET should be done in a stepwise manner.

- It was pointed out that monitoring of ozone and PM_{2.5} is important to improve understanding of acid deposition and human health impacts.
- One country suggested that impacts of air pollutants on climate change should be also considered as the future activities of the EANET.
- It was also noted that it is important to distinguish the activities which can be implemented within the present scope and the activities which require scope expansion in the discussion of this issue.
- Some countries supported the inclusion of monitoring of some additional air pollutants, i.e. ozone and particulate matter (PM), while others pointed out there will be technical and financial difficulties in monitoring of such pollutants in the near future.
- Some countries expressed their concern that expansion of the scope will increase the financial burden of the participating countries and the EANET should still focus on monitoring of acid deposition and its capacity building.
- One country expressed its views that the following points should be included in the future document on the future expansion of the scope of the EANET,
 - In order to make sure that participating countries could seek tangible supports from the network, efforts should be made to implement the activities within the present scope.
 - The direction of the expansion could be discussed based on the common beneficial principle considering the different stages of development of the participating countries in order to achieve major objectives of the EANET to contribute to avail acid deposition issues in East Asia.
 - The promotion of technology cooperation, information exchange, and experiences sharing on air pollution control in the region utilizing the network for such a platform, will be considered as one of the options on the future expansion of the scope.
- It was suggested that the collaboration with other networks might lead to an enhanced value of the EANET activities and the attraction of external supports from outside the EANET.
- Discussions were also made on the important of Short-Lived Climate Forcers/Pollutants (SLCFs/SLCPs), the proposal on an Asia Science Panel on Air Quality (ASPAQ), and Asian Co-benefit Partnership (ACP).
- The Secretariat was tasks to develop a proposal on the Presentation of the EANET Plaques of Recognition to the Experts, Scientists, and Resource Persons for their Contribution to the EANET to be reviewed and discussed by the WGFD12 and subsequent consideration and decision of the IG15.

III-3-2 Scientific Advisory Committee (SAC)

30. The SAC12 was held on 22-24 November 2012 in Yangon, Myanmar in order to discuss all of important technical and scientific issues of the EANET. Major decisions/discussions during the SAC12 include the following:

- Review on the Report on the Progress of the Acid Deposition Monitoring Network in East Asia (EANET) since the Eleventh Session of the Scientific Advisory Committee (SAC11) and the Financial Report in 2011

It was clarified by the Secretariat that expected contributions from the participating countries have been calculated based on the proposed budget for each year and UN assessment scale burden sharing percentage. And the NC informed that the NC core budget was estimated based on the Medium Term Plan (MTP) for the EANET (2011-2015) adopted at the IG12 in 2010 and the Procedures and Guidelines for Voluntary Financial Contribution to the EANET for 2011-2013 adopted at the IG12, and 3-year average was used without any changes for 3 years

- Adoption of the EANET Data Report 2011

The Session adopted the Data Report 2011 with minor revisions. The data to be submitted after SAC12 will be included the report of the next year.

- Adoption of the Report on the Inter-laboratory Comparison Projects 2011

The Session adopted the Report on the Inter-laboratory Comparison Projects 2011.

- Overview of the Updated National Monitoring Plans of the Participating Countries

The participating countries were requested to review their National Monitoring Plans (NMPs) and to submit the reviewed NMPs to the NC by the end of July 2013, even if the present NMP has not been changed. The draft electronic template for preparation of the NMP will be newly provided for trial.

- Consideration of the Reports from the Chairpersons of the Task Force and Expert Group of the Scientific Advisory Committee (SAC)

The Chairperson of the Task Force on the Research Coordination (TRFC) and the NC on behalf of the Chairperson of the Expert Group on Preparation of Technical Manual for Air Concentration Monitoring (EGACM) presented the Progress Report on the Activities respectively.

- Proposal of the Trial of Preparing National Monitoring Plan using Draft Revised Template and Consideration on the Common Implementation of Sites and Laboratory Inspections

The submission procedures of the NMP were clarified. The NMP should be submitted by the end of July. If some significant changes in the NMP are made after the Senior Technical Managers' Meeting (STM) or the Session of the SAC, the revised version should be submitted again by the end of the year.

- Consideration on Future Development of the EANET

It was clarified that the Third Report for Policy Makers (RPM3) will be developed in 2013. It was also confirmed that the Third Periodic Report on the State of Acid Deposition in East Asia (PRSAD3) will be developed and published after 5 years of the Second Periodic Report on the State of Acid Deposition in East Asia (PRSAD2). Following a presentation on Future Expansion of the Scope of the EANET made by the NC, which included review of the present scope of the EANET, recommendations in the PRSAD2 such as monitoring of ozone and PM, assessment of those impacts and review on the status of air pollution in East Asia, it was pointed out that expansion of the scope is a right direction to understand air pollution in this region. It was also clarified that the discussion on expansion of the scope was included in the Medium Term Plan (MTP) and approved by the SAC11 and the IG13 to provide a Review on the Status of Air Pollution in East Asia under the TFRC. The information obtained from the Review within the next two years could be useful for consideration on expansion of the scope by the IG. It was also clarified that some information such as health impacts will be collected by the Reviewing Committee.

- Consideration of the Relevant Scientific Activities

The NC made presentations on the Harmonization of Monitoring Methodology to be defined in the Technical Manual for Air Concentration Monitoring, Work Plan for Model Inter-Comparison Study in Asia, Phase III (MICS-Asia III), Monitoring and QA/QC System of Ozone and the Joint Research Project on Sulfur Dynamics in Forest Ecosystems in Thailand, Malaysia and Japan.

- Consideration of the Draft Work Program and Budget of the EANET in 2013 from Scientific and Technical Viewpoints

The Secretariat and the NC were requested to amend descriptions in the Work Program and Budget in 2013 in accordance with the latest discussion in the relevant recent Sessions of the EANET such as the WGFD, the TFRC and the SAC.

- Updates on the Activities of Other Regional and International Initiatives related to Acid Deposition and Transboundary Air Pollution

Dr Kjetil Tørseth (NILU), Head of the EMEP Chemical Coordinating Centre (EMEP-CCC) presented activities ongoing under the Convention on Long-range Transboundary Air Pollution (CLRTAP) of relevance for the EANET. In particular, he presented results of a recent trend analysis for 40 years of monitoring and ongoing activities of the EMEP and the Task Force on Hemispheric Transport of Air Pollutants (TF HTAP). A number of initiatives are currently contributing to the assessment to be finalized by December 2014. It was acknowledged that several of these activities will benefit from the involvement of the EANET, and specific ideas on joint activities were introduced.

- Other Issues

The Proposal for an Asia Science Panel on Air Quality (ASPAQ) was presented by Dr. Hajime Akimoto, Director General, ACAP. The idea on the ASPAQ was proposed as a

Japanese research team to establish an epistemic community of Asian scientists, to reach a common understanding among scientists and policy makers, and to develop an international initiative for an integrated approach to air pollution and climate change reflecting the views of Asian scientists. Following Dr. Akimoto's presentation, Ms. Ding Junnan, Assistant Engineer, CNEMC, China made a presentation on Introduction of Ambient Air Quality Monitoring in China. In her presentation, the framework on air monitoring network in China was introduced and trends on ambient air quality and acid rain were summarized.

III-3-3 Task Forces and Expert Groups established under the SAC

31. The NC has continued its tasks as the secretariat of the Task Forces and Expert Groups (TFs/EGs) established under the SAC. The NC contacted the Chairpersons of the TFs/EGs to discuss on dates, agenda of the TFs/EGs meetings and also membership of TFs/EGs accordingly. The latest Chairpersons and members of the TFs/EGs, and schedule of their meetings in 2013 are attached as Annex 3.
32. After the STM13, the following TFs/EGs meetings were held to discuss the important issues of each TF or EG in accordance with the TOR, future plan, etc..
 - Fifth Meeting of the Task Force on Research Coordination (TFRC5) (21 November 2012, Yangon, Myanmar)
Establishment of the Reviewing Committee including candidates of committee member and preliminary draft contents of the Review on the state of air pollution in East Asia was discussed. Reports of the Research Fellowship in 2011, current research projects of the NC, and future research areas of the EANET, EANET Science Bulletin Vol. III and etc. were also discussed.
33. Based on the discussion at the SAC12, the TFRC is preparing the "Review on the State of Air Pollution in East Asia". The Reviewing Committee (RC) that consists of several experts on atmospheric environment and ecological impact assessment were established under the TFRC in February 2013 and two meetings were held in February and August 2013. The NC was delegated as the secretariat for the RC.
 - The First meeting of the RC was held on 4 February 2013 in Niigata, Japan. The preliminary table of contents and possible lead authors and contributors to draft the first manuscripts were discussed.
 - The Second meeting of the RC was held on 2-3 August 2013 in Niigata, Japan. The status of submission of the first draft manuscripts from the lead authors and contributors were confirmed. The meeting confirmed action plans towards submission of the preliminary draft report of the Review to TFRC6 and SAC13.

III-3-4 Publication of Proceedings, Summaries of the EANET Meetings

34. After the STM13, publications of the proceedings and summaries of the following meetings were completed and distributed to the participating countries and participants of the Sessions:
- The Fourteenth Session of the Intergovernmental Meeting (IG14) on the EANET
 - The Twelfth Session of the Scientific Advisory Committee (SAC12)
 - The Eleventh Session of the Working Group on Future Development (WGFD11) of the EANET
 - The Thirteenth Senior Technical Managers' Meeting (STM13)

III-4 Communication with Participating Countries, etc.

35. In January 2013, the Secretariat circulated the request to the NFPs on the updates of the NFPs, the National Centers, the SAC Members, and the QA/QC Managers. The Secretariat received communications from some NFPs regarding a few changes on designated officials for the EANET in their respective countries, e.g. NFPs, SAC members, etc. from time to time and circulated this information to all concerned.
36. The Secretariat and the NC maintained close communication with the participating countries in all related activities of the EANET as well as relevant international organizations, resource institutions and programs such as the United Nations Environment Programme (UNEP-Nairobi); United Nations Economic and Social Commission for the Asia and the Pacific (UNESCAP); United Nations Economic Commission for Europe, Convention on Long-range Transboundary Air Pollution (UNECE CLRTAP) and its programmes including the Cooperative Programme for Monitoring and Evaluation of the Long Range Transmission of Air Pollutant in Europe (EMEP); Kanazawa University; Stockholm Environment Institute (SEI); Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants Initiative (CCAC); Clean Air Asia; International Cryosphere Climate Initiative (ICCI); Governmental Meeting on Urban Air Quality in Asia; Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia (Malé Declaration); Joint Forum on Atmospheric Environment in Asia and the Pacific (Joint Forum); Atmospheric Brown Cloud (ABC) Project; North-East Asian Sub-regional Programme for Environmental Cooperation (NEASPEC); the Long-range Transboundary Pollutants (LTP) in Northeast Asia; Asian Co-benefits Partnership (ACP); German International Cooperation (GIZ); Institute for Global Environmental Strategies (IGES); etc.
37. The NC also communicated with participating countries regarding scientific and technical issues to improve monitoring and assessment of acid deposition in the region.

III-5 Technical support and capacity building activities

III-5-1 EANET Training

EANET Individual Training at the NC

38. One trainee each from Malaysia, Mongolia, Russia and Vietnam participated in the EANET individual training course at the NC from 10 through 21 December 2012. They received training on wet deposition, dry deposition, soil/vegetation and inland aquatic environment monitoring, and data management.

Questionnaire Survey for Training Activities in 2012

39. In June 2013, the NC implemented the Annual Questionnaire Survey on Training Activities in 2012 carried out by the participating countries. The information gathered from the questionnaire on training requirements and suggestions on new training areas are useful for planning of the future training activities of the EANET. Nine participating countries replied their national training activities in 2012. The results including the requests from the participating countries were summarized as Annex 4.

III-5-2 Support to Participating Countries

Dispatch of Technical Missions

40. After the STM13, the NC dispatched technical missions to the Philippines (September 2012), Myanmar (November 2012), Malaysia (February 2013) and Russia (July 2013) to exchange information, provide technical advice and assess the suitability of proposed EANET monitoring sites. The mission members also checked the condition of the instruments provided to countries. The summary of the technical missions of the NC to the participating countries after the STM13 is attached as Annex 5.

Technical Support for the Participating Countries

41. The NC provided assistance to China, Indonesia, Lao PDR, Mongolia, Myanmar, Philippines, and Russia in 2012 and/or 2013 for their monitoring activities in addition to dissemination of the latest information, provision of consumable, equipment such as filter pack kit, spare parts for equipment etc.

III-6 Research Activities

42. The research activities of the EANET are important and crucial for the evaluation of the environmental impacts of acid deposition on the region's diverse ecosystem, the improvement of the monitoring methodologies, and the development of analytical methods suitable for East Asia. The NC performed research activities with consideration of the regional characteristics.

III-6-1 EANET Research Fellowship Program

(Fellowship Research in 2012)

43. In June 2012, the NC sent a letter to the NFPs and the SAC members inviting applicants for the research fellowship in 2011. The NC received 7 applications from 7 countries namely Cambodia, China, Lao PDR, Mongolia, Myanmar, Russia and Thailand. The Selection Committee of the NC decided to invite two researchers from China and Thailand. The research topic of the researcher from China was “ Characterization of particulate matter (PM₁₀, PM_{2.5}) from EANET and comparison of PM air quality standards between Japan and China”, and the research topic of the researcher from Thailand was “Identifying of acid deposition potential sources in Thailand using PMF model and PCA analysis”. However, due to unexpected situation, namely unavailability of entry visa, the selected researcher from China became unable to visit Japan and had to decline conducting research at ACAP under the fellowship program in 2012. The fellowship research by the researcher from Thailand was carried out successfully from 15 October to 7 December 2012. The research report was submitted to the NC in April and currently under review by the supervisor at ACAP.

(Fellowship Research in 2013)

44. In June 2013, the NC sent a letter to the NFPs and the SAC members inviting applicants for the research fellowship in 2013. The deadline of the application was 20 July 2013. In response to the invitation letter, the NC received 7 applications from 3 countries namely Mongolia, Myanmar and Thailand. The Selection Committee of the NC considered the proposed research plans submitted by the applicants and decided to invite two researchers from Mongolia and Thailand. Duration of the fellowship research in 2013 in the ACAP is for approximately eight weeks, since the middle of October to the middle of December 2013. The draft research topic of the researcher from Mongolia is “ Intercontinental transport of air pollution (trace gases) related with meteorological process in Asia” and one of the researcher from Thailand is “ Atmospheric dry and wet deposition in South East Asia: Trend and Identified long ranged and local sources (biomass burning source)”.

III-6-2 Joint Research Project on Catchment Analysis with Thailand, Malaysia and Japan

45. Catchment analysis is one of the issues described in the Strategy Paper for Future Direction of Soil, Vegetation and related Ecosystems Monitoring of the EANET (2009-2014). The NC has been conducting the joint research projects on the catchment analysis with the Royal Forest Department (RFD) and the Environmental Research and Training Center (ERTC) in Thailand, with the Universiti Putra Malaysia (UPM) and the Malaysian Meteorological Department (MMD) in Malaysia, and with Niigata Prefecture and Niigata University in Japan. Currently, as the new project supported by Asia-Pacific Network for Global Change Research (APN, ARCP2012-18NMY-Sase), dynamics of sulfur derived from atmospheric deposition are studied in forest catchments in the countries above. The APN Workshop 2013 on Sulfur Dynamics in

East Asian Forests was held in Selangor, Malaysia on 24-25 June 2013 to share progress of the research project and discuss future direction of the study.

III-6-3 Joint Research Project on Comparison Study for Filter-Pack Method with Republic of Korea

46. The 2nd phase project has been carried out with the aim of comparing the 3-stage filter pack method, and the 4-stage filter pack method in the Republic of Korea and Japan, etc. Intensive monitoring was conducted from October 2010 to April 2012. The 2nd phase focused on carbonaceous components in addition to priority chemical species of EANET. Now data are under compilation, and then the data will be exchanged between the National Institute of Environmental Research (NIER), Republic of Korea and the NC in line with the agreement. Subsequently, monitoring results and feasibility of filter pack will be discussed.

III-6-4 International Workshop on Atmospheric Modeling Research in East Asia

47. The 4th International Workshop on Atmospheric Modeling Research in East Asia was held in March 2013 in Kunming, China. In this workshop, progress of research activities in MICA-Asia III in 2012 were reported by leaders of each topic and detailed schedule for activities in 2013 was discussed. Development of anthropogenic and natural emission datasets and WRF meteorological fields has been finished. After boundary conditions from global models become available, simulations by regional chemical transport models for the year 2010 will be started. The simulated results will be reported and discussed at the 5th workshop although schedule and venue have not been determined yet.

III-7 Public Awareness Activities

III-7-1 National Public Awareness Workshops

48. The Secretariat in collaboration with the NC organized two National Public Awareness Workshops on acid deposition and other related atmospheric pollutions in two participating countries, namely Myanmar and Thailand, which had expressed their interests to host the Workshops.
49. The National Public Awareness Workshop in Myanmar was held in Nay Pyi Taw on 13 June 2013. The participants were from governmental agencies, local governments, teachers from high, middle and basic level educations, students from high level education. The participants were given information on the EANET and its monitoring activities, the state of acid deposition and air pollution in East Asia, the EANET activities and other related activities in Myanmar, i.e. pollution monitoring, water quality monitoring, environment conservation policy of Myanmar. The participants were also given the opportunity to discuss the ways forward for Myanmar to address acid deposition and air pollution issues in Myanmar and in the region.

50. The National Public Awareness Workshop in Thailand which was held in Bangkok on 16-17 July 2013 focusing on particulate matter (PM) which is one of the most significant air pollutants at the present time in Thailand. The Workshop was a kind of multi-layers stakeholder workshop, of which the participants were from governmental agencies, local government agencies, private sectors, academia, and Non-Governmental Organizations (NGOs). The participants were given information on the EANET and its monitoring activities, the state of acid deposition and air pollution in East Asia, national monitoring activities, current status of air quality in Thailand, effects of air pollution on the health of Thai people. The participants also had the opportunity to discuss and share experience on public communication and raising awareness on air pollution in Thailand..

III-7-2 Dissemination of Information through EANET Website

51. New information has been uploaded on the EANET website such as publication (e.g. Data Report 2011 and Inter-laboratory comparison projects 2011), EANET Newsletter (Vol. 13), EANET meeting reports, monitoring site information, and so on.
52. In accordance with “Criteria for uploading priority documents to the EANET website” as a part of the “Revised Guideline on Administrative and Financial Management for the Secretariat and the Network Center” (EANET/IG 14/14 Annex 4) approved at IG14, the NC has engaged a system integrator to develop security control system which will allow only authorized password holders to access uploaded priority documents. The system development is scheduled to complete in September 2013 and the NC plans to begin uploading priority documents such as meeting documents of the past Sessions of the IG, the SAC, the WGFD and the STM in September-October 2013. In parallel, the Secretariat is communicating with NFPs of the participating countries to list up relevant people who will be authorized to access the uploaded documents.

III-7-3 Publication of Newsletters

53. The EANET Newsletters on the activities of the EANET during the period of July-December 2012 (Vol. 13) and January-June 2013 (Vol. 14) were published by the Secretariat in collaboration with the NC and distributed to the participating countries.

III-7-4 Third Report for Policy Maker (RPM3)

54. In accordance with the Work Program and Budget of the EANET in 2013 approved at the IG14, the Secretariat has engaged a consultant to develop the Preliminary Final Draft of the Third Report for Policy Maker in collaboration with the Secretariat and the NC, and in consultation with the participating countries. It will be presented to the SAC13 for comments, suggestions and/or recommendations from scientific and technical viewpoints for consideration

and approval at the IG15.

III-8 International Cooperation

III-8-1 Long-Range Transboundary Air Pollutants in Northeast Asia (LTP)

55. The NC has been participating in the International Joint Research of LTP between the Republic of Korea, China, and Japan. The NC representatives attended the 15th Expert Meeting and the Task Force Meeting for discussing the activities in the 4th stage for the LTP project, organized by the NIER, Republic of Korea, and held in Busan, Republic of Korea on November 14-16, 2012. Assessment report for the LTP project was drafted and its executive summary was mainly discussed in the Task Force Meeting. The annual reports on monitoring and modeling activities in each country were presented by the experts of three countries in the Expert Meeting. Achievements of the LTP project and the activities in 2012 were also reported by the secretariat in the meeting. The 4th stage research plan as well as the contents of the proposal for the future development of the LTP project were discussed in the working and sub-working groups. Based on the decision in the meeting, the 13th Annual Report was submitted to the secretariat in the end of February 2013.
56. The 16th Expert Meeting for LTP project was held in Seoul on May 14, 2013. Each party generally agreed on the draft roadmap of the 4th stage research plan of the project, including; 1) developing guideline for monitoring and modeling for PM_{2.5} and its precursors; 2) submitting long-term monitoring data of PM_{2.5} and its precursors; 3) quantifying the long-range transport of PM_{2.5}; and 4) submitting a summary report for policy makers. However, they also acknowledge that each country has different conditions and capacities which need to be considered when implementing the roadmap. Each party tentatively agreed that the 17th LTP Expert Meeting will be held in Korea in November, 2014.

III-8-2 Cooperation with Other Networks/Initiatives/Forums in Asia

57. The Secretariat and the NC cooperated with other networks/initiatives in Asia as follows,
- The Secretariat and the NC attended, made a presentations and exchanged information and views at the Better Air Quality (BAQ) 2012 Conference organized by Clean Air Asia (former Clean Air Initiative for Asian Cities – CAI-Asia) in December 2012 in Hong Kong.
 - The Secretariat attended the Seventeenth Senior Official Meeting (SOM) of North-East Asian Sub-regional Programme for Environmental Cooperation (NEASPEC) organized by UNESCAP (Secretariat of NEASPEC) in December 2012 in Chengdu, China.
 - The Secretariat attended the Regional Intergovernmental Consultation on Near-Term Climate Protection and Clean Air Benefits in Asia and the Pacific organized by Climate

and Clean Air Coalition (CCAC) to Reduce Short-Lived Climate Pollutants on 4-5 February 2013 in Bangkok, Thailand.

- The Secretariat attended the Fourth Governmental Meeting on Urban Air Quality in Asia organized by UNEP and Clean Air Asia on 6 February 2013 in Bangkok, Thailand.
- The Secretariat attended and made a presentation at the International Workshop on Strengthening the International Cooperation Framework and Science-Policy Interface to Promote Air Pollution Control in East Asia 2013 organized by Institute for Global Environmental Strategies (IGES) in February 2013 in Tokyo, Japan.
- The Secretariat attended and made a presentation at the Thirteenth Session of the Intergovernmental Meeting (IG13) of Malé Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effect for South Asia including its Seventh Regional Stakeholders cum Coordination Meeting (RSC7) in May 2013 in Dhaka, Bangladesh.
- The Secretariat attended and made a presentation at the International Workshop on Air Quality in Asia organized by Toyota Motor Asia and Pacific in May 2013 in Singapore.
- The Secretariat attended and made a presentation at the International Forum for Sustainable Asia and the Pacific (ISAP 2013) organized by Institute for Global Environmental Strategies (IGES) on 23-24 July 2013 in Yokohama, Japan.
- The Secretariat co-chaired the Advisory Group Meeting of Asian Co-benefit Partnership on 23 July 2013 in Yokohama, Japan.
- The Secretariat collaborated with German International Cooperation (GIZ) in a project on Clean Air for Smaller Cities in the ASEAN region and visited Myanmar to provide training and technical advice for the development of air quality monitoring plan in Yangon, Myanmar by Yangon City Development Committee during 29 July – 2 August 2013.

IV. CHALLENGES/PROBLEMS/SOLUTIONS IN EANET IMPLEMENTATION

58. The total financial contributions (revenues) that the Secretariat and the NC (core budget) received in 2012 from the participating countries to implement their EANET activities in 2012 were less than the budgets of the Secretariat and the NC (core budget) under the Work Program and Budget of the EANET in 2012 approved by the IG13. This is because some participating countries either did not make the contributions or made the contributions less than the estimated amounts. In 2012, the Secretariat and the NC also encountered cash flow problem during the beginning of the year since most participating countries made their financial contributions late in the year or in the following year. The situation in 2012 was the same as in 2011 which was also reported in the EANET meetings. Nonetheless, the Secretariat and the NC were able to manage to implement activities under the Work Program and Budget of the EANET in 2012 within the available revenues through their cost saving efforts.

59. Therefore, the participating countries of the EANET are encouraged to make voluntary financial contribution to the EANET according to the estimated amounts for each participating country since the estimated annual financial contributions for each participating country is calculated based on the adopted Work Program and Budget of each year and burden sharing as correspondent to the latest UN assessment scale. The financial contribution should also be made as early in the year as possible to prevent cash flow problem.
60. The status of Regional Resource Centre for Asia and the Pacific (RRC.AP) in which the Secretariat has been housed since 2002 has been unstable and uncertain due to the new arrangement between UNEP and Asian Institute of Technology (AIT) on RRC.AP. Besides, RRC.AP has continued to operate without a Director for several years. In addition, AIT, the mother organization of RRC.AP is also facing management and financial crisis. Therefore, there is an urgent need to review the institutional arrangement of the Secretariat as soon as possible.
61. The Secretariat and the NC recognized that the participating countries are in consensus of a step-by-step approach regarding the EANET activities and all countries have different situations and conditions. Nonetheless, the major challenges of the EANET are the future development of the EANET with regard to the institutional arrangement of the Secretariat and the expansion of the scope of the EANET.
62. One participating country has still not signed the Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET) although the Resolution on the Encouragement of the participating countries of the EANET to effectively implement the Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET) was issued by the IG14 in November 2012. For the effective implementation of the Instrument, the remaining participating country is encouraged to expedite its internal process for the signing of the Instrument.
63. No other serious problems have been encountered by the Secretariat and the NC in the implementation of the activities of the EANET during this period.

Annex 1

Table 1 - Voluntary Financial Contributions from the Participating Countries to the Secretariat in 2012 and 2013 (US\$) as of 23 August 2013

Countries	2012 Budget		2013 Budget	
	Expected	Actual	Expected	Actual
Cambodia	66.30	66.30	71.00	71.00
China	69,027.00	15,000.00	73,942.00	---
Indonesia	5,152.70	---	5,519.00	---
Japan	271,216.00	271,216.00	290,526.00	290,526.00
Lao PDR	(22) 50.00*	50.00	(24) 50.00*	---
Malaysia	5,475.00	5,449.00	5,865.00	5,839.00
Mongolia	(44.2) 50.00*	50.00	(47) 50.00*	50.00
Myanmar	128.00	125.81	137.00	---
Philippines	1,949.00	1,941.50	2,088.00	2,088.00
R.O. Korea	48,920.00	48,920.00	52,403.00	---
Russia	34,677.00	37,146.00	37,146.00	37,146.00
Thailand	4,520.80	4,520.80	4,843.00	4,843.00
Vietnam	716.00	950.00	767.00	---
Total Contribution	441,914.00	385,435.41	441,914.00	340,563.00

* Lao PDR and Mongolia are expected to make a minimum contribution of US\$ 50.00 based on the IG9 decision. (Ref. EANET/IG 9/7.rev1 Revised Procedures and Guidelines for Voluntary Financial Contributions to EANET).

**Table 2 - Contributions from the Participating Countries to the NC
Core Budget in 2012/2013(US\$) (As of the end of July 2013)**

Countries	2012 Budget		2013 Budget	
	Expected	Actual	Expected	Actual
Cambodia	59	59	59	59
China	61,855	---	61,855	
Indonesia	4,617	---	4,617	
Japan	525,037	355,680	243,037	126,559
Lao PDR	20*	50	20*	
Malaysia	4,907	---	4,907	
Mongolia	40*	47.50**	40*	50
Myanmar	115	---	115	
Philippines	1,746	---	1,746	1,746
R. of Korea	43,837	---	43,837	
Russia	31,074	31,074	31,074	31,074
Thailand	4,051	4,051	4,051	4,051
Vietnam	642	1,450	642	
Total	678,000	392,526.50	396,000	163,539

* Lao PDR and Mongolia are expected to make a minimum contribution of US\$ 50.00 based on the IG9 decision. (Ref. EANET/IG 9/7.rev1 Revised Procedures and Guidelines for Voluntary Financial Contributions to EANET).

** These figures are after deduction of the overhead charge of 5% (US\$2.50) by Asian Institute of Technology (AIT).

Annex 2

**Schedule for the Recruitment of the Coordinator of the Secretariat for the EANET
(2014-2016)**

Dates	Activities
1 October 2013	Issuing vacancy announcement to the NFPs of the participating countries and websites
1-31 October 2013	The EANET Secretariat establishes a Selection Committee composed of a representative of the EANET as agreed by the NFPs, the Director of RRC.AP, and a representative from UNEP ROAP. The EANET Secretariat will serve as the Secretariat for the Selection Committee.
20 November 2013	Deadline for submitting application to the Secretariat.
29 November 2013	Distributing a long list of all applicants to the NFPs, the NC and the Selection Committee.
2-13 December 2013	The Selection Committee will review application forms of all applicants and selects a short list of candidates.
20 December 2013 – 20 January 2014	Sending the short list of candidates selected by the Selection Committee to the NFPs and the NC for view, comment, and recommendation to be sent back to the EANET Secretariat In one month.
27 January – 14 February 2014	The Selection Committee will interview the short-listed candidates, and select at least two final candidates by order of priority, taking account of the comments by the participating countries and the NC with special attention to the recommended candidates from the participating countries.
17–28 February 2014	The EANET Secretariat will inform the NFPs of at least two selected final candidates by order of priority.
1 April 2014	RRC.AP will appoint the new Coordinator of the Secretariat for the EANET for two years.

Annex 3

Members of the Task Forces and Expert Groups under the SAC and Meeting Plan in 2013

Name	Members	Meeting plan in 2013
Task Force on Monitoring for Dry Deposition	Dr. Cho Seog-Yeon (R. of Korea) - Chairperson Mr. Chhek Roth/ Mr. Kong Savuth (Cambodia) Dr. Li Jianjun (China) Ms. Rina Aprishanty (Indonesia) Dr. Shiro Hatakeyama (Japan) Ms. Setouvanh Phanthavongsa (Lao PDR) Ms. Maznorizan Mohamad (Malaysia) Ms. B. Altantuya (Mongolia) Ms. Htwe Htwe Win (Myanmar) Engr. Jean N. Rosete (Philippines) Dr. Chang Lim-Seok (Republic of Korea) Dr. Tamara V. Khodzher (Russia) Dr. Pojanie Khummongkol (Thailand) Dr. Duong Hong Son (Vietnam)	-
Task Force on Soil and Vegetation Monitoring	Dr. Wilfredo M. Carandang (Philippines) - Chairperson Mr. Haijiang Liu (China) Dr. Masamichi Takahashi (Japan) Dr. Nik Abdul Majid/Dr. Ahmad Makmum Abdullah (Malaysia) Dr. Apolonio M. Ocampo (Philippines) Dr. Kim Hye-Jin (Republic of Korea) Dr. Tatiana A. Mikhailova (Russia) Mr. Bopit Kietvuttinon (Thailand) Dr. Hiroyuki Sase (ACAP)	-
Task Force on Monitoring Instrumentation	Prof. Wang Ruibin (China) - Chairperson Mr. Chhek Roth (Cambodia) Mr. Zheng Haohao (China) Ms. Novy Farhani (Indonesia) Dr. Tsuyoshi Ohizumi (Japan) Ms. Setouvanh Phanthavongsa (Lao PDR) Ms. Ying Ying Toh (Malaysia) Mr. Barkhasragchaa Baldorj (Mongolia) Ms. Htwe Htwe Win (Myanmar) Engr. Arturo Bongco /Engr. Robert Co (Philippines) Dr. Ahn Joon-Young (Republic of Korea) Dr. Sergey Paramonov (Russia) Ms. Wassana Toruksa (Thailand) Mr. Tran Son (Vietnam)	-

Name	Members	Meeting plan in 2012
Task Force on Research Coordination	Dr. Sergey Gromov (Russia) - Chairperson Prof. Wang Ruibin (China) Dr. Hiroshi Hara (Japan) Prof. Katsunori Suzuki (Japan) Dr. Elizabeth Phillip (Malaysia) Dr. Cho Seog-Yeon (R. of Korea) Dr. Wilfredo M. Carandang (Philippines) Dr. Tamara Khodzher (Russia) Dr. Pojanie Khummongkol (Thailand) Dr. Duong Hong Son (Vietnam) Dr. Hajime Akimoto (ACAP)	6 th Meeting on 24 September 2013 in Xiamen, China (back to back with SAC13)
Expert Group on Dry Deposition Flux Estimation	Dr. Pojanie Khummongkol (Thailand) - Chairperson Dr. Kazuhide Matsuda (Japan) Dr. Kentaro Hayashi (Japan) Dr. Akira Takahashi (Japan) Dr. Hiromasa Ueda (Japan) Dr. Chang Lim-Seok (R. of Korea)	Dissolution of this Expert Group will be proposed at SAC13
Expert Group on Revision of Technical Manual on Wet Deposition Monitoring	Dr. Hiroshi Hara (Japan) - Chairperson Dr. Tsuyoshi Ohizumi (Japan) Mr. Izumi Noguchi (Japan) Ms. Leong Chow Peng (Malaysia) Ms. Bulgan Tumendemberel (Mongolia) Dr. Ahn Joon-Young (R. of Korea) Dr. Hathairatana Garivait (Thailand) Dr. Dave Mactavish (WMO/Canada)	Dissolution of this Expert Group will be proposed at SAC13
Expert Group on Revision of Technical Manual on Inland Aquatic Environment Monitoring	Dr. Tamara Khodzher (Russia) - Chairperson Dr. Simon S. Brahmana (Indonesia) Dr. Senichi Ebise (Japan) Dr. Haruo Fukuhara (Japan) Dr. Vu Van Tuan (Vietnam) Prof. Seiichi Ohta (Japan) Prof. Tomonori Kawakami (Japan) Dr. Hiroyuki Sase (ACAP)	Dissolution of this Expert Group will be proposed at SAC13
Expert Group on Preparation of Technical Manual for Air Concentration Monitoring	Dr. Duong Hong Son (Vietnam) – Chairperson Prof. Min Hu (China) Dr. Masahide Aikawa (Japan) Mr. Hajime Mikasa (Japan) Dr. Akinori Takami (Japan) Prof. Kihong Park (Republic of Korea) Mr. Phunsak Theramongkol (Thailand)	3 rd Meeting on 4-5 September 2013 in Niigata, Japan

Annex 4

National Training Activities in the Participating Countries of EANET in 2012

Country	Title of Training Course	Duration	No. of Participants	Major Topics
Cambodia	None	-	-	-
China				
Indonesia				
Japan	Training of atmospheric monitoring and management of data and analysis	3- 7 September 2012 5 days	50	1) Atmospheric environment monitoring issues 2) Water quality management
	Training of atmospheric and traffic environment monitoring	18-21 September 2012 4 days	89	Preservation of atmospheric environment
	Training of equipment operation	14-29 June 2012 12 days	42	Sampling/analytical methods for atmospheric monitoring
	Audit (inspection and guidance) of national monitoring sites, including EANET monitoring sites	26 days	70	Site and laboratory audit
Lao PDR	None	-	-	-

Country	Title of Training Course	Duration	No. of Participants	Major Topics
Malaysia	Training course on Meteorological Aspect of Air Pollution Observation	17-23 June 2012 7 days	30	Air pollution - Acid deposition - Instruments troubleshooting - Calibration - QA/QC - Aerosol monitoring
Mongolia	Acid Deposition Monitoring, Water quality & Air quality monitoring, Soil monitoring	19-30 March 2012 10 days	9	- pure knowledge for Environmental pollution, urban air pollution, transboundary air pollution, acid deposition; - theory with practice for measurement and analysis of atmospheric air pollution, surface water, soil monitoring,
	Soil Monitoring, Desertification, Evaluation of Desertification	14-31 May 2012 14 days	25	- sampling techniques - soil monitoring - data processing
	Emission Source Inventory and Simulation	14-17 Sep 2012; 20-23 Nov 2011 3 days, 2 times	15	- making of air pollutant emission inventory - monitoring of air pollutant emission source - air pollution simulation - reduction of air pollutant emission - air quality monitoring
	Seminar for Air Pollution and Environmental Degradation	2 days	100	Effect and consequences of air pollution for human disease
	Follow up Seminar for Air pollution	1 day	20	Reduction and elimination of air pollution

Country	Title of Training Course	Duration	No. of Participants	Major Topics
Myanmar	Information on the Data Quality on the Acid Deposition Monitoring	13-15 May 2012 3 days	6	<ul style="list-style-type: none"> - To exchange views and information on the data quality on the acid deposition monitoring of EANET in Myanmar - To exchange views and information on the soil and vegetation monitoring in Myanmar as future activities of EANET - To confirm the implementation of Filter Pack Sampling and - Others
	Training on Acid Deposition Monitoring and Air Pollution Monitoring	1-7 January 2012 7 days	13	Acid Deposition Monitoring, Mechanism of Acid Deposition, the Effects and Problem of Acid Rain, knowledge of Air Pollution
	Wet & Dry Deposition Monitoring, Sampling and Analysis	21 November 2012 1/2 day	6	<ul style="list-style-type: none"> - To information on including check on condition of analytical instruments - To discuss the maintenance of sampling instruments for dry deposition
	Training on Atmospheric Air Pollution	10-13 December 2012 4 days	40	Air Pollution, source of Air Pollutants, Impact of Air Pollution

Country	Title of Training Course	Duration	No. of Participants	Major Topics
Philippines	Training on Spatial Distribution to Emission Inventory using GIS/Map Window	1-3 September 2012 3 days	55	Spatial Distribution
	Hands-on training on dispersion and noise modeling	4-6 September 2013	55	Program/logic structure of the Gaussian Model (Air dispersion) AERMOD
	2011 Inter-comparison exercises for DENR-EMB Laboratory Analysts	3-12 October 2012 8 days	45	Inter-comparison exercises on the analyses of parameters pH, BOD5, chloride, COD, TSS, Oil and Grease and metals in water/wastewater, and ambient SO ₂ .
	Lecture forum/workshop on Air Quality Assessment, Control and Management	4 days	25	Control of particulate matter, gases and vapor from stationary sources, air quality standards and regulations in US, health and environmental effects
	Lectures on UNEP dioxin and furans emission inventories	3 days	30	Conduct of emission inventories in open dumpsite, agricultural and industrial
	Training/Workshop on GHG Inventory Process	5 days	40	Training on Greenhouse Gas Inventories
	National GHG Inventory Workshop	4 days	40	Conduct of emission inventories
	Training on Spatial Distribution to Emission Inventory using GIS/Map Window	1-3 September 2012 3 days	55	Spatial Distribution
	Hands-on training on dispersion and noise modeling	4-6 September 2012 3 days	55	Program/logic structure of the Gaussian Model (Air dispersion) AERMOD
2011 Inter-comparison exercises for DENR-EMB Laboratory Analysts	3-12 October 2012 10 days	8	Inter-comparison exercises on the analyses of parameters pH, BOD5, chloride, COD, TSS, Oil and Grease and metals in water/wastewater, and ambient SO ₂ .	

Country	Title of Training Course	Duration	No. of Participants	Major Topics
Philippines	Lecture forum/workshop on Air Quality Assessment, Control and Management	4 days	25	Control of particulate matter, gases and vapor from stationary sources, air quality standards and regulations in US, health and environmental effects
	Lectures on UNEP dioxin and furans emission inventories	3 days	30	Conduct of emission inventories in open dumpsite, agricultural and industrial
	Training/Workshop on GHG Inventory Process	5 days	40	Training on Greenhouse Gas Inventories
	National GHG Inventory Workshop	4 days	40	Conduct of Emission inventories
R. of Korea	Annual training course on the wet and dry deposition monitoring and analysis	January 2 days	5	- confirm the sampling schedules and report format - develop executing organization person's abilities for acid deposition monitoring and analysis
	Exploring Collaboration on AMS Research over the Northeast Asia	2 days	12	- discuss and promote the collaboration on future AMS studies among three countries
Russia				
Thailand	Training on operation and maintenance of automatic air monitoring instruments	29 November - 1 December 2012 3 days	20	Theory and general information of instruments, operating and maintenance procedure of the instruments
Vietnam	“Acid Deposition Monitoring and QA/QC in Environmental monitoring” In Ha Noi City	20 -21 November, 2012 (2days)	6	Introduction on Acid Deposition Monitoring, EANET, Wet deposition monitoring, Dry deposition monitoring, Inland aquatic environment, Soil and vegetation; QA/QC in Environmental monitoring

Training Requirements

Country	Requirements
Cambodia	Basic training on acid deposition monitoring
China	
Indonesia	
Japan	None
Lao PDR	Basic training on acid deposition Specific topics
Malaysia	Basic training on acid deposition monitoring Specific topics: i. Modeling Training Workshop ii. Data analysis and interpretation training iii. EANET Individual Training Programme
Mongolia	Basic training on acid deposition monitoring Specific topics: Training on chemical analysis for dry deposition, soil& vegetation and QA/QC activities, data analysis& interpretation, data quality
Myanmar	Basic Training on acid deposition monitoring Training on Dry Deposition Monitoring Training on Chemical Analysis and QA/QC activities for new technical staff (The training will help to improve the national EANET activities.)
Philippines	Basic training for new personnel.
R. of Korea	
Russia	
Thailand	Specific Topics on integrated data analysis of wet deposition, dry deposition, soil and vegetation and inland aquatic to assess the status of acidification in the ecosystem
Vietnam	Basic training on acid deposition monitoring for new site and new laboratory Specific Topics: Wet Deposition Monitoring: The training should help to improve the national EANET activities.

Suggestions in EANET Training Activities

1. We need basic training course on Acid Deposition Monitoring because of new staffs
2. Should be long term training because short term training is not enough to capture the course for our staffs and duration of Individual Training Course should be extended
3. Should be extended duration of Individual Training Course
4. Dispersion Modeling Training Workshop
5. Data evaluation and assessment training
6. Training on the conduct of modeling validation for example actual monitoring using passive and active monitors/samplers
7. Training on data assimilation and scenarios for long-term planning
8. Provide the basic information on acid deposition monitoring and practices.

i) Use of EANET Printed Materials

Mongolia

EANET publications /brochures, bulletin, guidelines, report, technical documents... /, publications of projects, programs /RAINS ASIA, EMEP and so on/, ACAP publications /papers.../These publications will be very useful to exchange information and experience for training, seminars, workshops, public awareness and education etc.

Philippines

No	Event	Characteristics of the participants (scientists, government administrative officers, general citizens, students, etc.)	Purpose of Fact Sheets
1	Clean Air Month promotional activities	Scientist, non-government organization, local officials, general citizens	For information on acid deposition status and awareness
2	National Workshop on Air Quality Management	Government officials	For awareness
3	Airshed Workshop	National government, private organization, non-government organization, local officials	For planning, policy formulations

**ii) What kind of materials will help your training/public awareness needs?
(brochures, pamphlets_, flyers, manuals on acid deposition, effects and sources of acid deposition)**

Thailand

- Periodic Report on the State of Acid Deposition in East Asia
- Technical Manuals
- Annual Data Reports
- Others: Materials on general information of acid deposition and/or EANET such as poster, roll up, etc.

Annex 5

Summary of the Technical Missions of the NC after the SAC12

Country	Duration	Major Activities/Outcomes of the Mission
Philippines	24-27 September. 2012	The mission exchanged views and information on the data quality on the acid deposition monitoring of the EANET in the Philippines, in particular, high missing data rate as the most serious issue to be addressed. The mission visited three monitoring sites in the Philippines (Mt. Sto. Tomas, Los Baños and Metro Manila), and confirmed that monitoring of these three sites were performed correctly but with some problems on sample collection equipment. The mission provided several parts which may solve some of the problems. The mission also visited two laboratories in the Philippines and verified the state of sample analysis.
Myanmar	21 November 2012	The mission repaired a wet only sampler and a filterpack instrument at the Yangon site and provided necessary consumables for EANET monitoring in Myanmar. The mission also exchanged information on monitoring data and laboratory equipment with DMH staffs.
Malaysia	18-22 February 2013	The mission exchanged views and information on ozone monitoring, and specifically discussed establishment of traceability of ozone monitoring. The mission visited both Danum Valley site and Tanah Rata site and calibrated the installed ozone monitors. The mission also had a meeting with MMD, provided leak-checker devices for filter-pack and demonstrated their operation.
Russia	14-19 July 2013	The mission visited the Limnological Institute, Russian Academy of Sciences, Siberian Branch (LI/RAS/SB), Primorsky Center for Environmental Monitoring (PCEM) and Primorsky Administration for Hydrometeorology and Environmental Monitoring (PRIMGIDROMET) and exchanged views and information on EANET activities in Russia and discussed on monitoring data from Russia. The mission also visited atmospheric monitoring site "Irkutsk", inland aquatic monitoring site "Pereyemnaya River", and three candidate atmospheric monitoring sites in "Lazovsky" district and made recommendation for the selection of the site.