MINUTES OF THE MEETING

1. The First Lead Authors' Meeting of the Drafting Committee (DC) for the Second Periodic Report on the State of Acid Deposition in East Asia (PRSAD2) was held on 28-29 June, 2010 in ADORC, Niigata, Japan. The meeting was attended by the Lead author members and contributors from participating countries, namely, China, Japan, Malaysia, Philippines, Russia, Thailand, and Vietnam, resource persons from Japan and China, and the Network Center (NC) for EANET. The list of participants is attached as ANNEX 1.

2. Dr. Hajime Akimoto, Director General of ADORC delivered the welcome remarks.

3. Dr. Duong Hong Son, Chairperson of the DC opened the meeting. The meeting started with introduction of the Lead Author members and the NC officers of the meeting.

4. The document materials of the Lead Authors were prepared by the NC. Provisional agenda was adopted as proposed by the NC.

5. The Lead authors presented the details of each chapter for the PRSAD2 (EANET/DC2/LAM 1/3/1-6). The participants made comments for improvement of the contents of each chapter. The details of each chapter are attached as ANNEX 2.

6. The Agenda Item 4, Consideration on further process of report preparation of the PRSAD2 was presented by the NC (ANNEX 3). The NC will prepare all the data set as a CD or via Internet-disk by the end of July 2010.

7. The Minutes of the Meeting (EANET/DC2/LAM 1/5) was considered and adopted.

8. The second day of the meeting, the resource persons presented the research papers of the results of EANET data which were concentrated on modeling.

9. The Chairperson, Dr. Doung Hong Son followed-up the National Assessment Report which is the Part II of the PRSAD2. The Table of the Contents is attached as ANNEX 4. The NC reported that it was already sent to the NFPs, NCs and SAC members after the First DC Meeting (DC1) in April 2010 and notified them to send the developed report from each country back to the NC by the end of February 2011.

10. The meeting was closed by the chairperson.

ANNEX 2

Structure and contents in PRSAD2 (max 230 pages)

Chapter 1: Introduction (20-30 pages)

1.1 Background

- General overview of principles and their correspondence to the highlighted chapter 1 through the last chapter of PRSAD2
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Lead Author:	Dr. Jesada Luangjame
Contributors:	Prof. Dr. T.M. Sutamihardja (Indonesia), Prof. Dr. Nik Muhamad Majid (Malaysia), Mr. J. Sato, Dr. K. Yamashita

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Integrated sets of observations; possibility to find AD effects out from on-going measurements;

Major gaps and needs

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Evaluation of progress in QA/QC for last 5-10 years; proposed studies /activities related to improvement of data quality, for example, in MTP or in-kind research; further research needs

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Chapter 3: Wet deposition in East Asia (30-40 pages)

3.1 Introduction

3.2 Precipitation

3.3 pH and Concentrations of Major Ions

pH/H^+, nss-SO_4^{2-}, NO_3^-, NH_4^+, nss-Ca^{2+}, (HCO_3^-), Na^+, Cl^-, Mg^{2+}, K^+, (NH_4^+ plus NO_3^-), (H^+ plus 2 x NH_4^+), pH vs pA_i

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Chapter 4: Dry and overall deposition in East Asia (30-40 pages)

4.1 Introduction

4.2 Dry deposition assessment methodology

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Lead Author: Dr. Pojanie Khummongkol

Contributors: Prof. Dr. Cho, Dr. Ruibin Wang, Dr. Azzaya, Mr. Luong, Prof. Dr. Nik Muhamad Majid, Dr. K. Sato

Chapter 5 Impacts on Ecosystems in East Asia (30-40 pages)

5.1. Introduction **Dr. W. Carandang**

Brief introduction about items/procedures of EANET monitoring on soil, forest vegetation, and inland aquatic environment will be described with explanation of the contents.

5.2. Soil Features and Trend **Dr. W. Carandang**

The data on EANET soil monitoring will be analyzed.

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5.4.1. Features on Inland Aquatic Environment in EANET sites **S. Brahmana** and **Dr. V.T. Vu**

Characteristics of lakes and rivers monitored in the EANET sites will be introduced.

5.4.2. Trend of Inland Water **S. Brahmana** and **R. Kobayashi**

Seasonal and/or temporal trends of inland water chemistry will be analyzed and discussed. On monitoring sites where clear acidification trends have been observed, the analysis and discussion will be made in relation to the acid deposition monitoring data generated on said sites.

5.5. Catchment-scale Analysis in EANET countries **Dr. H. Sase**

Outcomes from the catchment research projects with Japan, Thailand and Malaysia will be highlighted.

5.6. Conclusions **Dr. W. Carandang) and all the contributors**

Recommendations suggested by the contributors above will be introduced. The recommendations will be considered by the Task Force on Soil and Vegetation Monitoring and/or relevant bodies for detailed steps towards their targets.

Note: Information on additional contributors

Dr. V.T. Vu: Hydrologist, the member of Expert Group on Revision of Technical Manual on Inland Aquatic Environment Monitoring

Mr. Ryo Kobayashi: NC researcher, who is in charge of data compilation of Inland Aquatic Environment Monitoring

Chapter 6: Other Related Studies (40-50 pages)

6.1 Introduction **Dr. H. Akimoto)**

6.2 Observational Studies **Dr. H. Sase**

Observational studies for atmospheric deposition and ecological impacts in the East Asian region will be introduced.

6.2.1 Intensive field measurements for acid deposition / regional air quality **Dr. K. Sato**

Intensive field measurements conducted in China, Japan, Korea, and Thailand will be introduced. This

section mainly focuses on short term observations.

6.2.2 Possible impacts of aerosols on plant **Dr. T. Izuta**

Studies on possible impacts of aerosols on plants will be focused on, which are conducted in Japan, Thailand, and Mongolia under the research project, “Impacts of Aerosols in East Asia on Plants and Human Health”.

6.3 Emission Inventories **Dr. H. Akimoto**

6.3.1 Global scale inventories **Dr. T. Ohara**

6.3.2 Regional scale inventories in Asia **Dr. T. Ohara**

6.3.3 National scale inventories for EANET countries **Dr. D.H. Son**

6.4 Chemical Transport Modeling Studies **Dr. H. Akimoto**

6.4.1 Long-range transport and deposition of sulfur, nitrogen, and acids

Dr. H. Akimoto, Dr. C.H. Kim

6.4.2 Long-range transport of ozone **Dr. H. Akimoto**

6.5 Ecosystem Impact Assessment Studies **Dr. H. Sase**

Studies on risk assessment for ecosystem impacts in the East Asian region, including model simulation of ecosystems and regional assessments, will be introduced.

6.5.1 Biogeochemical models **Dr. J. Shindo**

A catchment-scale biogeochemical model, which has been developed based on the joint research projects with Japan, Thailand and Malaysia, will be focused on.

6.5.2 Regional assessment of ecological impacts

Studies on regional assessments and their mapping of ecological impacts will be focused on.

6.5.2.1 Acidification and Eutrophication risk **Dr. M. Takahashi and Dr. N. Yamashita**

Discussion on “Identification of the area susceptible to acid deposition” in the Task Force on Soil and Vegetation Monitoring of EANET will be introduced. In particular, mapping of ecological sensitivities to acidification will be focused on.

6.5.2.2 Ozone and PM risk **Dr. K. Yamashita**

Studies on risk assessment of ozone and PM for crops and/or human health will mainly be focused on, which have been conducted under the Project S-7 of Global Environment Research Fund, MOEJ, Japan.

6.6 Conclusion

Note: Information on additional contributors

Dr. T. Izuta: The team leader for effects on plants in the Project, “lmpacts of Aerosols in East Asia on Plants and Human Health”, Grant-in-Aid for Scientific Research on lnnovative Areas, MEXT, Japan.

Dr. J. Shindo: The scientist who has developed the model based on the catchment analysis in the EANET countries

Dr. M. Takahashi: The member of Task Force on Soil and Vegetation Monitoring of EANET, who is leading the work, “identification of the area susceptible to acid deposition”.

Chapter 7: Conclusion (5 pages) Dr. H. Akimoto

This chapter will be discussed in the next DC and LAM, after preparing the first draft of PRSAD2.

ANNEX 4

Table of the Contents of the National Report of the Second Periodic Report on the State of Acid Deposition in East Asia (PRSAD2)

PART II: National Assessment

Participating countries:

Cambodia,
China,
Indonesia,
Japan,
Lao PDR,
Malaysia,
Mongolia,
Myanmar,
Philippines,
Republic of Korea,
Russia,
Thailand,
Vietnam.

Chapter 1. Basic Information on National Monitoring Activities

1.1.Outline of the activities on acid deposition and National Monitoring Plan
1.2.Monitoring program from 2005 to 2009
1.3.Monitoring Stations
1.4.Sampling and Measurements

Chapter 2. State of Acid Deposition in each participating country

2.1 Atmospheric deposition
  2.1.1 State of wet deposition
  2.1.2 State of dry deposition
2.2 State of inland aquatic environment
2.3 State of soil and vegetation
2.4 Overall analysis

Chapter 3. Review of National Measures against Acid Deposition

The EANET participating countries:

Note: This ANNEX 4 was developed in accordance with the contents of the document of the First Meeting of the Drafting Committee for PRSAD2, “Draft Contents of the Second Periodic Report on the State of Acid Deposition in East Asia (EANET/DC2 1/5/2/rev.1)”.