Regional Air Pollution Monitoring Networks

NADP – National Atmospheric Deposition Program
CAPMoN – Canadian Air Pollution Monitoring Network
EMEP – European Monitoring and Evaluation Programme
LBA - Large-scale Biosphere-Atmosphere Experiment in Amazonia
IDAF - IGAC/DEBITS/Africa
REAP: Framework Convention on Environmental Protection for Sustainable Development in Central Asia
EANET
NEASPEC
LTP
HAZE
Institutional Framework for EANET (Tentative Design)

Intergovernmental Meeting

Scientific Advisory Committee

Task Force on Dry Deposition Monitoring
Task Force on Soil and Vegetation Monitoring
Task Force on Monitoring Instrumentation
Task Force on Research Coordination

Secretariat for EANET (UNEP RRC. AP)

Network Center for EANET (ACAP)

Network QA/QC Manager

National Focal Point

Participating Country

National Center

National QA/QC Manager

Dry Dep. Flux

Wet Dep. Manual

Air Conc. Manual

Inland Aqua. Manual
Location of wet and dry deposition monitoring
Location of Soil and Vegetation, Inland Aquatic Environmental monitoring
Major activities of EANET (tentative design)

- Promotion of acid deposition monitoring (national monitoring plan)
  - wet deposition, dry deposition, soil, vegetation and inland aquatic environment
- Compilation, evaluation, storage and provision of data
  - development of periodic reports
- Promotion of quality assurance and quality control (QA/QC)
  - inter laboratory comparison project
- Technical support and capacity building
  - dispatch of technical missions
  - training activities, technical assistance
- Research activities
  - directions of research activities by SAC
  - joint researches with participating countries
- Promotion of public awareness
- Cooperation with other international bodies
An integrated approach to air quality management for a better environment in East Asia
Development of EANET

Preparatory phase
(10 countries)

Regular phase
(13 countries)

Cambodia
Lao PDR
Myanmar

WG on further financial arrangement for EANET
Rules of Procedure for EANET
Procedures on Data and Information Disclosure
Disclosure of raw data

Instrument
1. Adopts the “Instrument for the Strengthening the Acid Deposition Monitoring Network in East Asia (EANET)” for signing in the High Level Segment during IG12 and thereafter, (attached to this decision);

2. Decides 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;

3. Encourages participating countries that will not be able to sign the Instrument by the specified date to communicate in writing with the EANET Secretariat before IG13 expressing their willingness to continue their EANET activities;

4. Decides that IG13 will consider the nature of involvement of the countries that are unable to sign by the specified date.
## Institutional and Administrative Arrangement

### Instrument for Strengthening EANET

Summary of Signatures on the Instrument for Strengthening EANET

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Nov. 23, 2010</td>
</tr>
<tr>
<td>China</td>
<td>Jun. 15, 2011</td>
</tr>
<tr>
<td>Japan</td>
<td>Nov. 23 &amp; 25, 2010</td>
</tr>
<tr>
<td>Mongolia</td>
<td>Nov. 23, 2010</td>
</tr>
<tr>
<td>Myanmar</td>
<td>Nov. 23, 2010</td>
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<tr>
<td>Philippines</td>
<td>Nov. 23, 2010</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Nov. 23, 2010</td>
</tr>
<tr>
<td>Thailand</td>
<td>Nov. 23, 2010</td>
</tr>
<tr>
<td>Vietnam</td>
<td>May. 30, 2011</td>
</tr>
</tbody>
</table>
Implemented/Implementing Activities

**International Cooperation**

- First meeting of the Asian Co-benefits Partnership (ACP) Advisory Group
- The Secretariat of EANET presented the progress of the regional and sub-regional networks/programs on atmospheric issues in Asia and the Pacific including EANET.
Implemented/Implementing Activities

- **International Cooperation**

  - Joint Forum on Atmospheric Environment in Asia and the Pacific
  - Capacity Building Workshop

  - Patumthani, Thailand
  - Jul. 21-22, 2011
  - Participants: some participating countries of EANET and Male Declaration
  - Topics: International agreements, good practices
1. Vacancy announcement for the Deputy Director General (DDG) of ACAP in charge of the NC:
   Circulated to all NFPs on 31 March 2011 and issued on ACAP website.

2. Only **Dr. Jesada Luangjame**, the current DDG submitted the application through the NFP of Thailand by the deadline.

3. Secretariat sent the information of application to NFPs and asked comments on 30 May 2011. Philippines sent their comment.

4. President of JESC decided Dr. Jesada to be the next DDG on 4 July 2011.

5. Term of Dr. Jesada as the DDG was effective on 1 October 2011.
Institutional and Administrative Arrangement

“Review of the Status of the EANET Secretariat (EANET/IG 6/11)”
-One term for period of 2 years;
-Maximum 2 terms.

Dec. 31, 2011 => End of 2nd Term
Aug. 8, 2011 => Circulated Vacancy Announcement
Sep. 30, 2011 => Deadline of Applications
1. **Three Technical Manuals**

   Adopted at the IG12:
   - **Dry Deposition Flux Estimation**
   - **Wet Deposition Monitoring (revised)**
   - **Inland Aquatic Environment Monitoring (revised)**

   Will be issued on the EANET website soon.

2. **Expert Group on Preparation of Technical Manual for Air Concentration Monitoring (EG/MAC):**

   - First meeting was held on 11-12 August 2011, in Niigata.
   - Discussed Table of contents, author(s) of each chapter and future schedule.

1st Meeting of EG/MAC
1. **Inter-lab comparison projects**
   - **2009:** Published the report in Jan. 2011.
   - **2010:** Distributed samples in Oct. 2010.
     The report is now being developed.

2. **Inter-comparison by ICP-Waters, etc.**
   NC and several national centers and EANET laboratories took part.
1. Data Report

2009:
- Finalized following the comments at SAC10.
- Distributed in January 2011.

2010:
- NC developed Preliminary Draft for STM12.

2. EANET raw data

2000-2008:
- Have been disclosed outside through website in accordance with the “Detailed Mechanism of Article 4 of the Procedures on Data and Information Disclosure for EANET” endorsed/adopted by SAC3/IG5.

2009:
- Will be disclosed outside in January 2012.
 Enhancement of data analysis and assessment
(Drafting Committee (DC) for PRSAD2)

(1) 2\textsuperscript{nd} Meeting of DC2 for the Second Periodic Report on the
State of Acid Deposition in East Asia (PRSAD2):
- Attended by DC members or alternates from 13 participating
countries.

(2) DC2:
- Discussed contents of
  Part I (Regional Report).
- Revised schedule to
  finalize the PRSAD2
  within this year, if
  possible.
- Decided to submit Part
  I/II and Executive
  Summary to IG13 for
  endorsement.
12th Senior Technical Managers’ Meeting (STM12)

Held on 21-22 Sep. 2011
In Kuala Lumpur, Malaysia.

[Discussion issues]
(1) Progress of EANET after STM11
(2) Data Report 2010
(3) Updated National Monitoring Plans
(4) Inter-laboratory comparison projects 2010
(5) Quality Control procedures in the participating laboratories
    NC will start to discuss preparation of the technical document on Quality Management of EANET including QA/QC program as appropriate.
(6) Proposals for the technical and instrumental innovation of the laboratory
(7) Progress report on the technical activities of EANET
    Developed (Revised) Technical Manuals of EANET were introduced.
(5) “Progress of the PRSAD2
TF and EG Meetings

(1) TF on Research Coordination
- 4th Meeting was held on 11 Oct. 2011 in Ho Chi Minh City, Vietnam.
- The procedure of application be revised to be more effective program, new high priority project be recommended by other task forces, development of document for fund raising.

(2) EG on Preparation of Technical Manual for Air Concentration Monitoring
- First Meeting was held on 11-12 Aug. 2011 in Niigata, Japan.

Report of TF/RC
2. JICA Third Country Training Course
Training of the trainers will be planned in 2012.

3. NC Individual Training Course
Implemented taking into account situations in the participating countries.
(1) Duration: 14 February-11 March 2011 (1 month)
(2) Trainees: China, Malaysia, Russia (Totally 3)
(3) Contents
  - Wet, dry deposition monitoring
  - Soil/vegetation monitoring
  - Inland aquatic environment monitoring
  - Data management, etc.

4. Questionnaire Survey for National Training Activities
Various national training activities were implemented in 2010.
1. **NC technical mission**
   - Russia (Aug 2011)
   - Lao PDR (Sep 2011)
   - Cambodia (Oct 2011)
   - Myanmar (Nov 2011)

2. **Technical support**
   Provided consumables and/or equipment (filter pack sampling kits, etc.).
   - To: Cambodia, China, Lao PDR, Mongolia, Myanmar, Vietnam

- Discussion with Cambodian Staff
- Monitoring site in Malaysia
- Technical support to staff of China (Chongqing)
EANET Science Bulletin (Vol. 2)

(1) Purpose: To share research findings among the participating countries.
(2) Published in January 2011, and distributed to the contributors, the NFPs, SAC members, Heads of National Centers, and other relevant experts in April 2011.
(3) Also issued on EANET website.
In 2011

Application: Among 7 Application from 5 countries (China, Indonesia, Malaysia, Mongolia, Thailand), China and Malaysia were selected.

**China:** Improvement of sampling methodologies for wet and dry deposition, including QA/QC

**Malaysia:** Potential effect of acid deposition on carbon, nitrogen, phosphorus and sulfur turnover in forest soils, and the effect on selected plants growth
EANET high priority research projects
Projects have been implemented using EANET budget.
1. Aerosol Deposition Studies in Forests for Improvement of Estimation Method for Dry Deposition (Leader: Dr. Pojanie, Thailand)
2. Feasibility Study on Low Cost Methodologies for Monitoring Air Concentrations (Leader: Prof. Wang, China)
1. Joint research projects with Thailand/Malaysia/Japan (catchment monitoring)
   Although the financial support from the MOE Fund was finished, the some parts of the project have being implemented among the relevant organizations after April 2011.

2. Joint research projects with R. of Korea
   The project has been carried out with the aim of comparison of the 3-stage filter pack method in R. of Korea and 4-stage filter pack method in Japan.

3. International Workshop on Atmospheric Modeling Research in East Asia
   International Workshop on Atmospheric Modeling Research in East Asia was held in September 2011 in Chengdu, China. Research plan on MICS-Asia, Phase 3 activities were developed: (i) Multi-scale integrated models of global, regional and urban scales, and model inter-comparison, source/receptor analysis, and collaboration among MICS-Asia activity members, (II) Inter- comparison of emission inventories, etc.
Joint project with Indonesia to support their environmental study activities

In 2011, NC has started to implement joint project on environmental study with Indonesia to understand problems of acid deposition and think over actions by school children.
Acid Rain 2011

1) Held on 16-18 June 2011 in Beijing, China as an International scientific conference.
2) Participants: Around 350 experts.
3) Secretariat and NC also participated in the conference and made their respective presentations, and exchanged information and views on the current status and future perspective of the air quality issues including future development of EANET.
4) Next conference will be held after four or five years.
Regional Air Pollution Monitoring Networks

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EMEP – European Monitoring and Evaluation Programme
LBA - Large-scale Biosphere-Atmosphere Experiment in Amazonia
IDAF - IGAC/DEBITS/Africa
REAP: Framework Convention on Environmental Protection for Sustainable Development in Central Asia

EANET
NEASPEC
LTP
HAZE
MALÉ
WMO/GAW
Character of International initiatives 1

- CLRTAP
- Haze

- Individual assessment
- Non-legal binding
- Legal binding
- Integrated assessment

EANE
Male

T
Character of International initiatives 2

- Multi-pollutant, multi-effect
- Single-pollutant, single-effect
- Integrated assessment
- Individual assessment

CLRTAP
EANE
Male
Haze
Thank you for your attention!!
Network Center for EANET

Niigata, Japan