

The Twentieth Session of the Intergovernmental Meeting  
on the Acid Deposition Monitoring Network in East Asia  
27-28 November 2018, Bangkok, Thailand

## **REPORT OF THE SESSION**

### **I. INTRODUCTION**

1. The Intergovernmental Meeting (IG) on the Acid Deposition Monitoring Network in East Asia (EANET) held its Twentieth Session (IG20) in Bangkok, Thailand on 27-28 November 2018.
2. Representatives of the participating countries, namely Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Republic of Korea, Russia, Thailand, and Viet Nam participated in the Session. Representatives of United Nations Environment Programme (UNEP) Asia & the Pacific; the Secretariat and Asia Center for Air Pollution Research (ACAP), the Network Center (NC) for the EANET; Regional Resource Centre for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT); World Health Organization (WHO); and Secretariat, Convention on Long-range Transboundary Air Pollution Environment Division United Nations Economic Commission for Europe (CLRTAP) through Skype attended the Session. The List of Participants is attached as Annex.

### **II. OPENING OF THE SESSION (AGENDA ITEM 1)**

3. Mr. Thalearnsak Petchsuwan, Deputy Director General of Pollution Control Department, Ministry of Natural Resources and Environment, Thailand, delivered the Welcome Remarks. He warmly welcomed all participants from the EANET participating countries. He noted that the Ministry of Natural Resources and Environment reaffirmed Thailand's commitment towards sustainable development and regional cooperation. Green growth concept to create growth on the basis of the quality of life that is friendly to the environment has been integrated into Thailand's "20-Year National Strategic Plan (2017-2036)". Various efforts and measures have been implemented to reduce emissions to the atmosphere of air pollutants including acid precursors. These measures include cleaner fuel, cleaner vehicles, cleaner technologies, energy conservation, promotion of renewable energy, law enforcement, building public consciousness, public participation and partnership. Thailand also put more attention on fine particulate matter and Short-Lived Climate Pollutants (SLCPs).
4. He updated the Session on current Thailand activities such as continuously maintaining nine acid deposition monitoring sites which six of them are EANET sites, expansion of PM<sub>2.5</sub> monitoring all over the country, within 2019 current ambient air quality monitoring network of the Pollution Control Department will be completely equipped with the PM<sub>2.5</sub> monitoring and cooperation with neighboring countries, in particular, Greater Mekong Sub-region

(GMS) on technical support and experience exchange, with aim to build up capacity on air quality management.

5. Dr. Dechen Tsering, Regional Director and Representative for Asia and the Pacific, UNEP delivered the Opening Remarks. She mentioned for nearly twenty years, EANET has been in the very forefront of science on air pollution. The network has greatly enhanced our understanding of acid deposition as well as air pollution issues in East Asia. Through its various activities, EANET's tireless efforts have been well aligned with the implementation of this resolution. These efforts include monitoring data and analysis of acid deposition in thirteen participating countries, development of key reports such as the Third Periodic Report on the State of Acid Deposition in the East Asia region, capacity building and awareness raising activities, and many other forms of contribution.
6. Dr. Tsering informed the Session that from 23-25 January 2019, the Government of Singapore would host the Third Forum of Ministers and Environment Authorities of Asia Pacific, an intergovernmental environmental space for which UNEP acts as Secretariat and that is preparatory to the next United Nations Environment Programme Assembly taking place in March 2019 in Nairobi. UNEP would be proud to share with the Forum of Ministers the progress and achievements of EANET and the contribution it has made to the region and the UNEA resolution.

### **III. ELECTION OF OFFICERS (AGENDA ITEM 2)**

7. The Session elected Mr. Thalearnsak Petchsuwan, Deputy Director General of Pollution Control Department, Ministry of Natural Resources and Environment, Thailand, as Chairperson, and Mr. Heng Nareth, Director General, General Directorate of Environmental Protection, Ministry of Environment, Cambodia along with Assoc. Prof. Dr. Huynh Thi Lan Huong, Deputy Director General, Viet Nam Institute of Meteorology, Hydrology and Climate Change, Ministry of Natural Resources and Environment, Viet Nam, as the Vice-Chairperson, and Mr. Mohd Azuwan bin Abdullah, Assistant Secretary, Environmental Management & Climate Change Division, Ministry of Energy, Science, Technology, Environment and Climate Change, Malaysia as the Rapporteur.

### **IV. ADOPTION OF THE AGENDA (AGENDA ITEM 3)**

8. The Session considered and adopted the Provisional Agenda (EANET/IG 20/3/1), Annotated Provisional Agenda (EANET/IG 20/3/2) and Draft Program (EANET/IG 20/3/3) proposed by the Secretariat and the NC.

**V. CONSIDERATION ON THE REPORT ON THE PROGRESS OF ACID DEPOSITION MONITORING NETWORK IN EAST ASIA (EANET) SINCE THE NINETEENTH SESSION OF THE INTERGOVERNMENTAL MEETING (IG19) ON THE EANET AND THE FINANCIAL REPORT OF THE SECRETARIAT AND THE NETWORK CENTER IN 2017 (AGENDA ITEM 4)**

9. The Secretariat and the NC presented the Report on the Progress of the EANET since the Nineteenth Session of the Intergovernmental Meeting (IG19) on the EANET (EANET/IG 20/4/1) and the Financial Report of the Secretariat and the Network Center in 2017 (EANET/IG 20/4/2). The Session was invited to review, discuss, make comments and suggestions, provide guidance, and endorse the reports, as appropriate.

10. Major points of discussion were as follows:

- i. The Secretariat explained a significant amount of surplus of the Secretariat budget due to various factors: savings transferred from RRC.AP to UNEP, transitional period of the Secretariat from RRC.AP/AIT to UNEP where UNEP provided in-kind contribution by covering most staff time of UNEP staff during 2015 and 2016, and increased contributions from the participating countries.
- ii. A question was raised regarding underspending the budget and expenditure of the Secretariat. The Secretariat explained that EANET Secretariat was fully operational in 2017 under the provision of the Framework signed between UNEP and EANET. However, during that year, EANET administration and management had to be adjusted to follow UN rules and regulations. In addition, in 2017, all SSFAs with implementing partners, RRC.AP and ACAP were only developed towards the middle of the year.
- iii. It was explained that SSFA between UNEP and RRC.AP/AIT covered the personal costs of two full-time staff of RRC.AP, a Programme Officer and an Administrative Assistant to support Secretariat and to cover the costs of organizing SAC and IG meeting.
- iv. The Secretariat explained that the surplus of EANET budget would be considered to accommodate activities to enhance the capacity of participating countries which will be included in the next MTP. Since EANET Secretariat and the NC operate by following the current MTP (2016-2020), implementation will be guided according to the MTP and adjustments may be made in the next MTP.
- v. In response to a query regarding the term ‘in-kind cash contribution’, it was explained that in-kind cash contribution is a term used in the EANET document to indicate funds provided to Secretariat in the form of cash, but it is not part of the annual contribution of the countries.
- vi. Japan appreciated the implementation of the Clean Air Technology Workshop in Qingdao, China, from 4-5 November 2018, and suggested that similar themes of the

- workshop can be organized in the future. Secretariat responded that the suggestions could be accommodated in the awareness-raising activities of the Secretariat in 2019.
- vii. In response to a query regarding the unspent budget of the fellowship programme, it was suggested to add a third participant to the fellowship programme in 2019.
  - viii. China informed Session that with the commitment to building up ecological civilization, China has been worked diligently to address air pollution at home by implementing the Air Pollution Prevention and Control Action Plan since 2013. After five years of hard work, there has been 48.6 percent decrease in the mean concentration of sulphur dioxide in key areas of China. The area of acid rain has been reduced by 390,000 square kilometers on average.
  - ix. Cambodia clarified that due to the slow response of the administrative procedure, the financial contribution of Cambodia to Secretariat had been delayed. The Secretariat and Cambodia will work together to get the contribution after IG20. Cambodia verified that contribution received by NC in 2018 was meant to be submitted as a contribution for 2017.
  - x. Malaysia informed that due to a new arrangement of the Ministry, there were some delays in the submission of Malaysia's contribution in 2018. Malaysia was able to submit the contribution to the Secretariat in 2018 but not yet to the NC.
  - xi. Lao PDR informed that the contribution to EANET has been submitted to the Ministry of Foreign Affairs (MOFA). However, due to the ongoing evaluation process of the institution, the submission of the contribution has been delayed. During the upcoming meeting between MOFA, Ministry of Finance and the Prime Minister's Office, this issue will be discussed.

11. The Session endorsed the Report on the Progress of the EANET since the IG19 and the Financial Report of the Secretariat and the Network Center in 2017.

**VI. CONSIDERATION ON THE REPORT ON THE OUTCOMES OF THE EIGHTEENTH SESSION OF THE SCIENTIFIC ADVISORY COMMITTEE (SAC18) (AGENDA ITEM 5)**

12. Dr. Le Ngoc Cau, Chairperson of the SAC18, presented the Report on the Outcomes of the Eighteenth Session of the Scientific Advisory Committee (SAC18) (EANET/IG 20/5). The Session was invited to review, discuss, provide guidance for further development of the activities of the Scientific Advisory Committee (SAC) and endorse the Report, as appropriate.

13. Major points of discussion were as follows:

- i. Japan appreciated efforts made by the SAC and encouraged the participating countries to leverage the scientific knowledge of the SAC members. The Chair of the

SAC18 fully agreed with the suggestion and welcomed countries to make use of the reports that have discussed and agreed at the SAC meetings.

- ii. Malaysia mentioned that inland aquatic environment monitoring at Danum Valley station has been put on hold until 2019. Malaysia suggested another site and looked forward to any assistance from the NC in assessing the proposed site.

14. The Session endorsed the Report on the Outcomes of the Eighteenth Session of the Scientific Advisory Committee (SAC18).

**VII. CONSIDERATION ON THE DRAFT REPORT OF THE MID-TERM REVIEW ON THE IMPLEMENTATION OF THE MEDIUM TERM PLAN (MTP) FOR THE EANET (2016-2020) (AGENDA ITEM 6)**

15. The external reviewer commissioned by the Secretariat presented the Draft Report of Mid-Term Review of the MTP for the EANET (2016-2020) (EANET/IG 20/6). The Session was invited to review, discuss, make any comments and suggestions, and provide guidance, as appropriate.

16. Major points of discussion were as follows:

- i. It was clarified that the Secretariat only provided participants with the objective of the survey of the Mid-Term Review of the MTP (2016-2020) and relevant background information to get a balanced opinion from the countries on the implementation of EANET activities.
- ii. It was suggested to consider the next MTP should be output-based to assess the impact of the activities.
- iii. It was suggested to the NC and Secretariat to compile follow up actions to the recommendations of the Report.

17. The Session endorsed the Draft Report of the Mid-Term Review of the MTP for the EANET (2016-2020), with modifications to include responses to the recommendations made by the MTP.

**VIII. CONSIDERATION ON THE DRAFT REPORT OF ELABORATION OF THE FEASIBILITY STUDY ON THE ESTABLISHMENT OF A NEW NETWORK CENTER FOR THE EANET (AGENDA ITEM 7)**

18. The Secretariat presented the Draft Report of Elaboration of the Feasibility Study on the Establishment of a New Network Center for the EANET (EANET/IG 20/7). The Session was invited to review, discuss, make comments, provide guidance, and endorse the Draft Report, as appropriate.

19. Major points of discussion were as follows:

- i. It was suggested that EANET should focus on strengthening the current NC and not on the establishment of a new NC. Concerns were raised on the potential burden to be shouldered on the participating countries if a new NC is established. Participating countries should assess the proposals, including legal review.
- ii. The Secretariat reiterated that the Feasibility Study was conducted by the decisions of IG to provide references and any related actions have to be approved by IG.
- iii. It was suggested to conclude the discussion on the establishment of new NC at IG20 and complete the Feasibility study as recommended by SAC18. It was suggested that EANET should focus the discussion on the enhancement of the current NC.
- iv. China informed that, although the result has not been finalized yet, there was an internal process to submit a proposal to obtain funds from Ministry of Science and Technology, China to conduct a feasibility study to support the establishment of Open Laboratory to support EANET.
- v. The Secretariat stressed that all proposals made to support EANET must be submitted to the IG to get a decision.
- vi. Japan welcomed support from participating countries to raise external funds to support EANET. However, it was emphasized that the decision of all proposals had to be decided by the IG.
- vii. Participating countries suggested that instead of establishing a new NC, it would be better to strengthen the current NC and to expand the scope of activities.
- viii. It was clarified by the NC that the Feasibility Study report in 2017 did not include the strengthening of the current NC. At the IG19, the participating countries recognized that the current NC could manage all activities as mandated by the current MTP (2016-2020).
- ix. The result of the survey on the Feasibility Study conducted in 2017 revealed that the participating countries recommended new activities such as monitoring new items, new methods, emission inventory, modeling and clean air technology, which the current NC can handle if receive additional financial resources.
- x. The Session agreed to make modification on the Report on pages 6, 33, and 34 to replace “In this regard, even if the EANET decides to establish Open Laboratory, it could be one of the functions of the current NC after detailed consideration and discussion on its purposes, focused activities, actual relationship with the NC and so on in the future” with “If there is a proposal to establish an open laboratory, it should be considered after detailed discussion on its purposes, focused activities, actual relationship with the current NC and so on in the future, decided by IG”.
- xi. The Session agreed to add “whether or not” on page 25.

20. The Session endorsed Draft Report of Elaboration of the Feasibility Study on the Establishment of a New Network Center for the EANET (EANET/IG 20/7) with modification as stated above.

**IX. CONSIDERATION ON THE DRAFT OF FOURTH REPORT FOR POLICY MAKERS (RPM4) (AGENDA ITEM 8)**

21. The Secretariat presented the Draft of Fourth Report for Policy Makers (RPM4) (EANET/IG 20/8). The Session was invited to review, discuss, make comments and suggestions, provide guidance and approve as appropriate.

22. Major points of discussion were as follows:

- i. It was suggested to improve the design of the report.
- ii. Several comments were focused to the proposed deletion of the sections introducing a scientific research analysis on attribution of the source of pollutants in geographical areas. Some participating countries proposed to keep the content as an example in a column separated from the main text, to avoid the confusion, considering the importance of the attribution of the analysis as a basis for considering control measures. After the discussion, proposed deletion was accepted to avoid raising sensitive matters. In the future, it is suggested that scientific judgement could be discussed in SAC before IG.
- iii. The Session agreed to accommodate comments of participating countries in the modification of the report.

23. The Session approved Draft of Fourth Report for Policy Makers (RPM4) (EANET/IG 20/8) with modifications.

**X. CONSIDERATION ON THE DRAFT WORK PROGRAMME AND BUDGET OF THE EANET IN 2019 (AGENDA ITEM 9)**

24. The Secretariat and the NC presented the Draft Work Programme and Budget of the EANET in 2019 (EANET/IG 20/9). The Session was invited to review, discuss, make comments and suggestions, provide guidance and approve as appropriate.

25. Major points of discussion were as follows:

- i. It was clarified that monitoring of PM<sub>2.5</sub>, PM<sub>10</sub>, and Ozone is included in the MTP (2016-2020) and the Strategy Paper on Future Direction of Monitoring for Dry Deposition of EANET (2016-2020).
- ii. It was clarified the PRSAD4 would be finalized for approval at the SAC21 and endorsed by the IG23 in 2021.

- iii. It was clarified that the Secretariat budget for the consultant would be utilized to revamp the EANET website and the design of the RPM4. This budget is part of the EANET Work Programme and Budget in 2019.
- iv. It was suggested to organize two days meeting for a working group to discuss the framework content of the draft MTP (2021-2025) and the Revision of the Revised Guidelines for Secretariat and the NC. The working group will be comprised of representatives of the participating countries.
- v. The Secretariat and NC were requested to send the letter requesting a financial contribution for 2019 soon after the IG20.
- vi. Cambodia expressed its interest to host the SAC19 in 2019.
- vii. China expressed its intention to host IG21 in 2019 and informed to host an awareness-raising workshop, back to back with the IG21.
- viii. China expressed its intention to continue to provide its contribution to EANET Secretariat and the NC, at least, the same amount as the previous year and informed its intention to add two more monitoring sites in two new cities, Lijiang, Yunnan and Wuzhishan, Hainan.
- ix. The Secretariat clarified that an in-kind cash contribution to support 1-year technical consultant to support the Secretariat is not included in the budget of Secretariat in 2019. It will be used to support awareness raising activities of the Secretariat.
- x. IG20 agreed and approved that the Secretariat and the NC modify the Work Programme and Budget for 2019, as necessary to include one more additional Research Fellow and organize one working group meeting for development of the framework content of the draft MTP (2021-2025) and discussion of the Revision of the Revised Guidelines for Secretariat and the NC.

26. The Session approved the Draft Work Programme and Budget of the EANET in 2019 (EANET/IG 20/9), with modification as stated above.

## **XI. UPDATES ON ACTIVITIES OF OTHER INTERNATIONAL PROGRAMMES RELATED TO ACID DEPOSITION AND AIR QUALITY (AGENDA ITEM 10)**

### **PROGRESS OF THE AIR POLLUTION SOLUTIONS REPORT OF ASIA PACIFIC CLEAN AIR PARTNERSHIP (APCAP)**

27. Ms. Maria Katherina Patdu, UN Environment, presented the progress of the development of the Air Pollution Solutions Report jointly developed by the Asia Pacific Clean Air Partnership (APCAP) (EANET/IG 20/10/1).

28. Major points of discussions are as follows:



- i. It was explained that the “Air Pollution in Asia and the Pacific: Science-Based Solution” is the product developed by the APCAP Science Panel.
- ii. The implementation of the 25 clean air measures for the Asia Pacific was identified as one of the elements of the Geneva Action Agenda to Combat Air Pollution which will help achieve the aspirational goal of reducing air pollution impact by two-thirds by 2030.

#### ACTIVITIES OF THE SECRETARIAT OF THE CONVENTION ON THE LONG-RANGE TRANSBOUNDARY AIR POLLUTION (CLRTAP).

29. Mr. Krzysztof Olendrzynski, Secretariat of the CLRTAP, presented the activities of the Secretariat of CLRTAP (EANET/IG 20/10/2).

30. Major points of discussions are as follows:

- i. It was explained that the capacity building programme planned by CLRTAP was developed on needs basis. It is focusing on national emission inventory and will invite the representatives from different CLRTAP participating countries. It was mentioned that the intention to include participants from the outside the region, such as EANET countries. It may include some of the financial support for participants where available.

#### AIR POLLUTION AND HEALTH INITIATIVES IN SOUTHEAST ASIA AND WESTERN PACIFIC REGIONS OF WORLD HEALTH ORGANIZATIONS (WHO)

31. Dr. Liviu Vedrasco, WHO Thailand, presented “Air Pollution and Health Initiatives in South East Asia and Western Pacific Regions of WHO (EANET/IG 20/10/3).

32. Major points of discussions are as follows:

- i. It was mentioned that the aspect of health in relation to air quality is important for EANET and we may need to consider potential collaboration with WHO in the future.
- ii. WHO rarely conduct its own research and therefore there are no research is being conducted by WHO linked between acid deposition and health.
- iii. The review of the WHO Air Quality Guidelines is ongoing. One of the objectives of the review is whether to develop recommendations for PM components and ultrafine particulates.
- iv. It was informed that UNEP is working with Mongolia, Sri Lanka and Thailand on air quality and health assessment for evidence-based policies.

#### PLAN FOR ACID RAIN 2020

33. Dr. Ken Yamashita, Asia Center for Air Pollution Research, presented the progress of the Plan for Acid Rain 2020 (EANET/IG 20/10/4).
34. Major points of discussions are as follows:
- i. The Secretariat appreciated the intention of Japanese Government to host the IG22 in Niigata, Japan.

#### MALE DECLARATION ON CONTROL AND PREVENTION OF AIR POLLUTION FOR SOUTH ASIA: PROGRESS AND OPPORTUNITIES

35. Ms. Adelaida Roman, RRC.AP, presented the progress of the development of Male Declaration on Control and Prevention of Air Pollution for South Asia: Progress and Opportunities (EANET/IG 20/10/5).
36. Major points of discussions are as follows:
- i. Main activities of Male Declaration include air pollution monitoring, emission inventory, impact assessment and decision support for policy formulation.
  - ii. A question was raised on the implementation of the network. It was clarified that the monitoring activities and capacity building are necessary to enhance and seeking support from international development agencies, developed countries and potential donors.
  - iii. It was suggested to consider phased approach as well as an impact based assessment in program development of EANET and to link with achievement of the Sustainable Development Goals (SDGs).

#### **XII. OTHER ISSUES (AGENDA ITEM 11)**

37. The Session was invited to discuss and consider other issues to be raised by the participants, the Secretariat and/or the NC, if any.
38. Major points of discussion were as follows:

No discussion under this Agenda Item.

#### **XIII. ADOPTION OF THE REPORT OF THE SESSION (AGENDA ITEM 12)**

39. The Report of the Session (EANET/IG 20/12) was considered and adopted.

**XIV. CLOSING OF THE SESSION (AGENDA ITEM 13)**

40. The Session expressed its gratitude to the Chairperson, Vice-Chairpersons, the Rapporteur, the participants, the representatives from international organizations, and resource persons for their efforts, cooperation, and contribution to the Session.
41. The Chairperson, appreciating the participants, the Secretariat and the NC for their contributions, declared the Twentieth Session of the Intergovernmental Meeting on the Acid Deposition Monitoring Network in East Asia officially closed.

## LIST OF PARTICIPANTS

### CAMBODIA

Mr. Heng Nareth  
Director General  
General Directorate of Environmental  
Protection  
Ministry of Environment  
Morodoc Techo Building, Lot #503  
Tonle Basac, Chamkarmorn  
Phnom Penh  
Cambodia  
Tel: +855-12-926-108  
Email: [heng.nareth@online.com.kh](mailto:heng.nareth@online.com.kh)

Mr. Thiv Sophearith  
Director  
Department of Air Quality and Noise  
Management  
General Directorate of Environmental  
Protection  
Ministry of Environment  
Morodoc Techo Building, Lot #503  
Tonle Bassac District, Khan Chamkarmon  
Phnom Penh  
Cambodia  
Tel: +855-12-858-509  
Email: [rith72@yahoo.com](mailto:rith72@yahoo.com)

### CHINA

Mr. Bai Qiuyong  
Director  
Department of Ecological Environment  
Monitoring  
Ministry of Ecology and Environment of  
People's Republic of China  
No. 115, Xizhimennei Nanxiaojie  
Beijing 100035  
People's Republic of China  
Tel: +86-10-6655-6812  
Fax: +86-10-6655-6808  
Email: [jcyc@mee.gov.cn](mailto:jcyc@mee.gov.cn)

Mr. Xiao Jianjun  
Director  
Department of Ecological Environment  
Monitoring  
Ministry of Ecology and Environment of  
People's Republic of China  
No. 115, Xizhimennei Nanxiaojie  
Beijing 100035  
People's Republic of China  
Tel: +86-10-6655-6628  
Fax: +86-10-6655-6808  
Email: [xiao.jianjun@mee.gov.cn](mailto:xiao.jianjun@mee.gov.cn)

Mr. Wang Ying  
Deputy Director  
Division of Asian Affairs  
Department of International Cooperation  
Ministry of Ecology and Environment of  
People's Republic of China  
No. 115, Xizhimennei Nanxiaojie  
Beijing 100035  
People's Republic of China  
Tel: +86-10-6655-6516  
Fax: +86-10-6655-6534  
Email: [wang.ying@mee.gov.cn](mailto:wang.ying@mee.gov.cn)

Mr. Tian Fang  
Programme Manager  
China-ASEAN Environmental Cooperation  
Center  
Ministry of Ecology and Environment of  
People's Republic of China  
No. 5 Houyingfang Hutong  
Xicheng District  
Beijing 100035  
People's Republic of China  
Tel: +86-10-8226-8236  
Fax: +86-10-8220-0574  
Email: [tian.fang@chinaaseanenv.org](mailto:tian.fang@chinaaseanenv.org)

Ms. Wang Xiaofei  
Senior Engineer  
Department of Ambient Air Quality  
Monitoring  
China National Environmental Monitoring  
Center (CNEMC)  
No. 8B Dayangfang, Anwai  
Chaoyang District, Beijing 100012  
People's Republic of China  
Tel: +86-10-8494-3080  
Fax: +86-10-8465-0863  
Email: [wangxf@cnemc.cn](mailto:wangxf@cnemc.cn)

Mr. He Youjiang  
Associate Research Fellow  
Urban and Regional Atmospheric  
Environment  
Atmospheric Environment Institute  
Chinese Research Academy of Environmental  
Sciences  
No. 8, Dayangfang, Beiyuan, Anwai  
Chaoyang District, Beijing 100012  
People's Republic of China  
Tel: +86-10-8491-8049  
Fax: +86-10-8491-5163  
Email: [heyj@craes.org.cn](mailto:heyj@craes.org.cn)

#### INDONESIA

Mr. Djurit Teguh Prakoso  
Head of Sub Directorate for Air Pollution  
Monitoring  
Directorate of Air Pollution Control  
Directorate General for Pollution Control  
Ministry of Environment and Forestry  
KLHK Office, Building B, 3<sup>rd</sup> Floor  
Jl. DI Panjaitan Kav 24 Kebon Nanas  
Jakarta 13410  
Indonesia  
Tel: +62-21-8591-1207  
Fax: +62-21-8591-1207  
Email: [prakoso\\_ray@yahoo.com](mailto:prakoso_ray@yahoo.com)

Ms. Eti Purwati  
Head, Section of Indoor Air Quality  
Monitoring and Noise  
Directorate of Air Pollution Control  
Directorate General for Pollution Control  
Ministry of Environment and Forestry  
KLHK Office, Building B, 3<sup>rd</sup> Floor  
Jl. DI Panjaitan Kav 24 Kebon Nanas  
Jakarta 13410  
Indonesia  
Tel: +62-21-8591-1207  
Fax: +62-21-8591-1207  
Email: [eti10p@yahoo.co.id](mailto:eti10p@yahoo.co.id)

#### JAPAN

Mr. Takashi Ohmura  
Counsellor for Transboundary Pollution  
Analysis  
General Affairs Division  
Environmental Management Bureau  
Ministry of Environment, Japan  
1-2-2, Kasumigaseki, Chiyoda-ku  
Tokyo 100-8975  
Japan  
Tel: +81-3-3581-3351 ext.6532  
Fax: +81-3-3580-7173  
Email: [takashi\\_ohmura@env.go.jp](mailto:takashi_ohmura@env.go.jp)

#### LAO PDR

Mr. Virasack Chundara  
Acting Director General  
Natural Resources and Environment Research  
Institute  
Ministry of Natural Resources and  
Environment  
Nahaideo Road  
P.O. Box 7864, Nahaido Rd., Chanthabouly  
Dist.  
Vientiane Capital  
Lao PDR  
Tel: +856-20-220-30897  
Fax: +856-21-263-799  
Email: [sack\\_4369@yahoo.com](mailto:sack_4369@yahoo.com)

Ms. Setouvanh Phanthavongsa  
Director  
Environment Quality Monitoring and Analysis  
Division  
Natural Resources and Environment Institute  
Ministry of Natural Resources and  
Environment  
P.O. Box 7864, Nahaideo Road, Chanthabouly  
Dist.  
Vientiane Capital  
Lao PDR  
Tel: +856-20-5556-4153  
Fax: +856-21-263-799  
Email: [setouvanh@yahoo.com](mailto:setouvanh@yahoo.com)

#### MALAYSIA

Mr. Mohd Azuwan Bin Abdullah  
Assistant Secretary  
Environment Management & Climate Change  
Division  
Ministry of Energy, Science, Technology,  
Environment and Climate Change  
(MESTECC)  
Level 5, Block C7, Complex C  
Federal Government Administrative Centre  
62662, Putrajaya  
Malaysia  
Tel: +60-3-8885-8788  
Fax: +60-3-8888-4473  
Email: [azuwan@mestecc.gov.my](mailto:azuwan@mestecc.gov.my)

Ms. Maznorizan Mohamad  
Director  
Atmospheric Science and Cloud Seeding  
Division  
Malaysian Meteorological Department  
Ministry of Energy, Science, Technology,  
Environment and Climate Change  
(MESTECC)  
Jalan Sultan, 46667 Petaling Jaya  
Selangor, Malaysia  
Tel: +60-3-7967-8067  
Fax: +60-3-7955-0964  
Email: [maz@met.gov.my](mailto:maz@met.gov.my)

#### MONGOLIA

Mr. Battulga Bataa  
Deputy Director General  
National Agency for Meteorology and  
Environmental Monitoring  
Juilchny Street-5  
Ulaanbaatar 15160  
Mongolia  
Tel: +976-51-265-896  
Fax: +976-11-326-611  
Email: [battulga@namem.gov.mn](mailto:battulga@namem.gov.mn)

Dr. Batbayar Jadamba  
Director  
Environmental Monitoring Division  
National Agency for Meteorology and  
Environmental Monitoring  
Juilchny Street-5  
Ulaanbaatar 15160  
Mongolia  
Tel: +976-51-266-148  
Fax: +976-11-326-611  
Email: [batbayar@namem.gov.mn](mailto:batbayar@namem.gov.mn) /  
[bt.bayar@yahoo.com](mailto:bt.bayar@yahoo.com)

#### MYANMAR

Ms. Tin Yi  
Director  
Administration Division  
Department of Meteorology and Hydrology  
Ministry of Transport and Communications  
Office No. 5, Nay Pyi Taw  
Myanmar  
Tel: +95-67-3411-446 / +95-925-0954-  
639  
Fax: +95-67-3411-449  
Email: [tinyisw@gmail.com](mailto:tinyisw@gmail.com)

Ms. Htwe Htwe Win  
Assistant Director  
Hydrology Division  
Department of Meteorology and Hydrology  
Ministry of Transport and Communication  
Office No. 5, Nay Pyi Taw  
Myanmar  
Tel: +95-67-411-031 / 411-446  
Fax: +95-67-411-449 / 411-528  
Email: [htwehtwewin12@gmail.com](mailto:htwehtwewin12@gmail.com)

REPUBLIC OF KOREA

Mr. Jae Hyun Lim  
Director  
Global Environment Research Division  
Climate and Air Quality Research Department,  
National Institute of Environmental Research  
Ministry of Environment of Republic of Korea  
Building #6, Government Complex-Sejong  
11 Doum 6-ro  
Sejong Special Governing City 339-012  
Republic of Korea  
Tel: +82-32-560-7300  
Fax: +82-32-568-2042  
Email: [dr4earth@korea.kr](mailto:dr4earth@korea.kr)

Ms. You Sojung  
International Cooperation Advisor  
Clean Air Planning Division  
Air Quality Policy Bureau  
Ministry of Environment  
Building #6, Government Complex-Sejong  
11 Doum 6-ro  
Sejong Special Governing City 339-012  
Republic of Korea  
Tel: +82-44-201-6868  
Fax: +82-44-201-6873  
Email: [sojungyou@korea.kr](mailto:sojungyou@korea.kr)

RUSSIA

Mr. Yury Peshkov  
Head of Department  
Environmental Pollution Monitoring  
Department  
Federal Service for Hydrometeorology and  
Environmental Monitoring (Roshydromet)  
Novovagankovsky Street, 12  
Moscow, 125993  
Russia  
Tel: +7-499-255-1369  
Fax: +7-499-795-2004  
Email: [y.peshkov@meteof.ru](mailto:y.peshkov@meteof.ru)

Dr. Sergey Gromov  
Deputy Director  
Institute of Global Climate and Ecology  
(IGCE) Roshydromet and RAS  
Glebovskaya Street, 20-B  
Moscow, 107258  
Russia  
Tel: +7-499-160-5836  
Fax: +7-499-160-0831  
Email: [gromov.eanet@gmail.com](mailto:gromov.eanet@gmail.com)/  
[sergey.gromov@igce.ru](mailto:sergey.gromov@igce.ru)

THAILAND

Mr. Thalearnsak Petchsuwan  
Deputy Director General  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2153  
Fax: +66-2-298-5379  
Email: [thalearnsak.p@pcd.go.th](mailto:thalearnsak.p@pcd.go.th)

Mr. Phunsak Theramongkol  
Director  
Air Quality and Noise Management Bureau  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2253  
Fax: +66-2-298-5385  
Email: [phunsak.t@pcd.go.th](mailto:phunsak.t@pcd.go.th)

Dr. Patcharawadee Suwanathada  
Director  
Air Quality Division  
Air Quality and Noise Management Bureau  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7  
Samsen Nai, Phayathai, Bangkok 10400  
Thailand  
Tel: +66-2-298-2349  
Fax: +66-2-298-5389  
Email: [patcharawadee.s@gmail.com](mailto:patcharawadee.s@gmail.com)

Dr. Hathairatana Garivait  
Director  
Air Noise and Vibration Research Group  
Environmental Research and Training Center  
(ERTC)  
Department of Environmental Quality  
Promotion (DEQP)  
Ministry of Natural Resources and  
Environment  
Technopolis, Klong 5, Klong Luang,  
Pathumthani 12120  
Thailand  
Tel: +66-2-577-4182-9  
Fax: +66-2-577-1138  
Email: [hathairatana@gmail.com](mailto:hathairatana@gmail.com)

Ms. Siwaporn Rungsiyanon  
Environmentalist, Senior Professional Level  
Air Quality and Noise Management Bureau  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2309  
Fax: +66-2-298-5389  
Email: [rungsiyanons@gmail.com](mailto:rungsiyanons@gmail.com)

Ms. Sujitra Kiatsutthakorn  
Environmentalist, Senior Professional Level  
Division of Foreign Affairs  
Office of Permanent Secretary  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-278-8627  
Fax: +66-2-265-6692  
Email: [sujitra\\_sc@yahoo.com](mailto:sujitra_sc@yahoo.com)

Mr. Pichaid Atipakya  
Environmentalist, Professional Level  
Ambient Air Quality Division  
Air Quality and Noise Management Bureau  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2355  
Fax: +66-2-298-5389  
Email: [pichaid\\_a@hotmail.com](mailto:pichaid_a@hotmail.com)

Ms. Sirirat Yensong  
Environmentalist, Practitioner Level  
Transboundary Air Pollution Division  
Air Quality and Noise Management Bureau  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2319  
Fax: +66-2-298-5389  
Email: [sirirat\\_yen@hotmail.com](mailto:sirirat_yen@hotmail.com)

Ms. Natthineepon Soisungnoen  
Environmentalist  
Strategy and Planning Division  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2116  
Fax: +66-2-298-5389  
Email:



Mr. Tharawat Klinsirimongkhon  
Environmentalist  
Air Quality and Noise Management Bureau  
Pollution Control Department  
Ministry of Natural Resources and  
Environment  
92 Soi Phahonyothin 7, Phahonyothin Road  
Sam Sen Nai, Phayathai  
Bangkok 10400  
Thailand  
Tel: +66-2-298-2314  
Fax: +66-2-298-5389  
Email:

Mr. Jessada Koo-ngammak  
Meteorologist  
Ozone and Radiation Center, Meteorological  
Digital Services Division  
Thai Meteorological Department  
4353 Sukhumvit Road Bangna  
Bangkok 10260  
Thailand  
Tel: +66-2-399-4568 ext. 6182  
Fax: +66-2-399-4563  
Email: [ozone.jessada@gmail.com](mailto:ozone.jessada@gmail.com)

#### VIETNAM

Assoc. Prof. Dr. Huynh Thi Lan Huong  
Deputy Director General  
Vietnam Institute of Meteorology, Hydrology  
and  
Climate Change  
No. 23, Lane 62, Nguyen Chi Thanh street,  
Dong Da district, Hanoi, Viet Nam  
Tel: +84-91-211-9740  
Fax: +84-4-3835-5993  
Email: [huong.huynhlan@imh.ac.vn/](mailto:huong.huynhlan@imh.ac.vn/)  
[huynhlanhuong@gmail.com](mailto:huynhlanhuong@gmail.com)

Dr. Le Ngoc Cau  
Director  
Center of Environmental Research  
Institute of Meteorology, Hydrology and  
Climate Change  
No. 23, Lane 62, Nguyen Chi Thanh Street  
Dong Da District, Hanoi  
Vietnam  
Tel: +84-4-3773-3159  
Fax: +84-4-3835-5993  
Email: [caukttv@gmail.com](mailto:caukttv@gmail.com)

#### RESOURCE PERSONS

Dr. Liviu Vedrasco  
Programme Officer  
World Health Organization Thailand  
Tel: +66 2 547-0105; +66 (81) 921-  
5486  
Email: [vedrascol@who.int](mailto:vedrascol@who.int)

Mr. Krzysztof Olendrzynski  
Secretariat, Convention on Long-range  
Transboundary Air Pollution Environment  
Division United Nations Economic  
Commission for Europe  
Office S-323, Palais des Nations  
8-14 avenue de la Paix  
CH - 1211 Geneva 10, Switzerland  
Tel: +41 (0) 22 917 27 22  
Email: [krzysztof.olendrzynski@un.org](mailto:krzysztof.olendrzynski@un.org)

#### NETWORK CENTER FOR THE EANET

Asia Center for Air Pollution Research  
(ACAP)  
1182 Sowa, Nishi-ku  
Niigata-shi, 950-2144  
Japan  
Fax: +81-25-263-0566

Dr. Kazuhiko Sakamoto  
Director General  
Tel: +81-25-263-0551  
Email: [sakamoto@acap.asia](mailto:sakamoto@acap.asia)

Dr. Erdenebat Eldev-Ochir  
Deputy Director General  
Tel: +81-25-263-0552  
Email: [erdenebat@acap.asia](mailto:erdenebat@acap.asia)

Dr. Ken Yamashita  
Head  
Planning and Training Department  
Tel: +81-25-263-0561  
Email: [kyamashita@acap.asia](mailto:kyamashita@acap.asia)

Mr. Jiro Sato  
Senior Fellow  
Tel: +81-25-263-0555  
Email: [jsato@acap.asia](mailto:jsato@acap.asia)

SECRETARIAT FOR THE EANET

United Nations Environment Programme  
Asia and Pacific Office  
2<sup>nd</sup> Floor, UN Building  
Rajdamnern Nok Avenue  
Bangkok 10200  
Thailand  
Fax: +62-2-280-3829

Mr. Tomi Haryadi  
Coordinator, Secretariat for the EANET  
Tel: +66-2-288-1627  
Email: [haryadi@un.org](mailto:haryadi@un.org)

Ms. Jia Haiping  
EANET Consultant  
Tel: +66-2-288-2605  
Email: [haiping.jia@un.org](mailto:haiping.jia@un.org)

Mr. Terrence Thompson  
Consultant  
Tel: +63 998 560 7454  
Email: [terrence.thompson.2015@gmail.com](mailto:terrence.thompson.2015@gmail.com)

UNEP

United Nations Environment Programme  
Asia and Pacific Office  
2<sup>nd</sup> Floor, UN Building  
Rajdamnern Nok Avenue  
Bangkok 10200  
Thailand  
Fax: +62-2-280-3829

Dr. Dechen Tsering  
Regional Director and Representative  
Tel: +66-2-288-2901  
Email: [dechen.tsering@un.org](mailto:dechen.tsering@un.org)

Dr. Isabelle Louis  
Deputy Regional Director  
Tel: +66-2-288-1604  
Email: [louisi@un.org](mailto:louisi@un.org)

Mr. Ahmed Iftekhar Kan  
Finance Unit  
Tel: +66-2-288-1133  
Email: [khan129@un.org](mailto:khan129@un.org)

Ms. Kakuko Nagatani Yoshida  
Coordinator, Chemical, Waste and Air Quality  
Tel: +66-2-288-1679  
Email: [nagatani-yoshida@un.org](mailto:nagatani-yoshida@un.org)

Maria Katherina Patdu  
Coordinator, Asia Pacific Clean Air  
Partnership  
Tel: +66-2-288-2807  
Email: [mariakatherina.patdu@un.org](mailto:mariakatherina.patdu@un.org)

Ms. Sirinart Suanyam  
Programme Assistant  
Tel: +66-2-288-2025  
Email: [suanyam@un.org](mailto:suanyam@un.org)

RRC.AP

Regional Resource Centre for Asia and the  
Pacific (RRC.AP)  
3<sup>rd</sup> Floor, Outreach Building  
Asian Institute of Technology (AIT)  
P.O. Box 4, Klongluang  
Pathumthani 12120  
Thailand  
Fax: +66-2-516-2125

Ms. Adelaida B. Roman  
Senior Programme Specialist  
Tel: +66-2-524-5366  
Email: [Adelaida.Roman@rrcap.ait.asia](mailto:Adelaida.Roman@rrcap.ait.asia)

Dr. Ram Lal Verma  
Programme Specialist  
Tel: +66-2-524-6163  
Email: [Ramlal.Verma@rrcap.ait.asia](mailto:Ramlal.Verma@rrcap.ait.asia)

Ms. Charina May Lepiten  
Programme Specialist  
Tel: +66-2-524-5365  
Email: [pinky@rrcap.ait.asia](mailto:pinky@rrcap.ait.asia)