Report on the Progress of the Acid Deposition Monitoring Network in East Asia (EANET) since the Eighteenth Session of the Scientific Advisory Committee (SAC18) on the EANET

I. INTRODUCTION

- 1. This document is prepared to report the progress of the Acid Deposition Monitoring Network in East Asia (EANET) activities since the Eighteenth Session of the Scientific Advisory Committee (SAC18) on the EANET held on 9 to 11 October 2018 in Hanoi, Viet Nam.
- 2. In general, the activities of the EANET implemented during this period were guided by the Medium-Term Plan for the EANET (2016-2020), adopted at the Seventeenth Session of the Intergovernmental Meeting (IG17) on the EANET held in November 2015 in Bangkok, Thailand. The activities were also in accordance with the Work Programme and Budget of the EANET in 2018 adopted at the Nineteenth Session of the Intergovernmental Meeting (IG19) on the EANET in November 2017 in Siem Reap, Cambodia and the Work Programme and Budget of the EANET in 2019 adopted at the Twentieth Session of the Intergovernmental Meeting (IG20) on the EANET in November 2018 in Bangkok, Thailand, respectively.

II. INSTITUTIONAL AND ADMINISTRATIVE ARRANGEMENT

II-1 Voluntary Financial Contribution from the Participating Countries and Contractual Arrangement

- 3. The Secretariat sent the request for the transfer of voluntary financial contribution to the budget of the Secretariat in 2019 to all EANET participating countries in December 2018. The voluntary financial contribution expected from each participating country in 2019 is shown in Table 1 of Annex 1.
- 4. According to the decision made at the IG17 to select the option 2 of the Scale of Voluntary Contributions to the Secretariat of the EANET (EANET/17/9/1), the scale of voluntary contribution to the EANET Secretariat for the period from 2017 to 2020 is calculated based on the UN scale of assessments for the period from 2016 to 2018. In June 2016, Secretariat sent the estimated voluntary financial contribution of participating countries to the Secretariat of the EANET from 2017 to 2020. The voluntary financial contribution expected from each participating country from 2017 to 2020 is shown in Table 2 of Annex 1.

- 5. The IG20 approved Secretariat budget in 2019 as much as US\$ 723,200, by referring to the MTP (2016-2020). As of September 2019, China (May 2019), Japan (August 2019), Mongolia (May 2019), Myanmar (May 2019), Philippines (June 2018), Republic of Korea (September 2019), Russia (January 2019), Thailand (February 2019) and Viet Nam (May 2019) have made their contributions in 2019 to Secretariat budget.
- 6. In 2019, the Secretariat made a small-scale funding agreement with the Regional Resource Center for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT) to provide support to Secretariat, including convening the Nineteenth Session of the Scientific Advisory Committee (SAC19) in October 2019, in Siem Reap, Cambodia, and the Twenty-First Session of the Intergovernmental Meeting (IG21) on the EANET in November 2019, in Beijing, China. The funding agreement also includes the development and distribution of proceedings for the SAC19 and IG21. Under this SSFA, RRC.AP shall allocate two staff (one programme officer and one administrative assistant) to support Secretariat.
- 7. The Secretariat also made a small-scale funding agreement with the Network Center (NC) to support the implementation of EANET Research Fellowship Programme in 2019. The fellowship aims to enhance research activities on acid deposition related issues by targeting researchers from the participating countries.
- 8. A total contribution of US\$ 500,752 was received at UN Environment Contribution account from the voluntary contribution of the participating countries in 2018. Apart from the voluntary contribution, the Secretariat also received in-kind contributions from the participating countries as well as from UNEP. The total expenditures of the Secretariat in 2018 is US\$ 553,979.
- 9. China provided in kind financial contribution in 2018 as much as US\$ 106,000 to support 1-year technical consultant working at the Secretariat.
- In 2018, the Selection Committee selected two applicants to receive the EANET Fellowship in 2018, from Cambodia and Thailand. The Secretariat provided funds for the fellowship.
- 11. The voluntary financial contribution expected from the participating countries in 2019 to the NC core budget equals to US\$ 414,000 which is in accordance with the Revised Guidelines on Administrative and Financial Management for the Secretariat and the Network Center approved at the Fourteenth

Session of the Intergovernmental Meeting (IG14) on the EANET in November 2012. The voluntary financial contribution expected from each participating country is shown in Table 3 of Annex 1.

- 12. Request letters were sent in December 2018 to inform all National Focal Points (NFPs) of the EANET of the estimated voluntary financial contribution expected from each participating country for the Network Center (NC) core budget in 2019 and requested the participating countries to make voluntary financial contributions accordingly.
- 13. As of September 2019, China (May 2019), Mongolia (May 2019), Myanmar (March 2019), Russia (January 2019), Thailand (February 2019) and Viet Nam (May 2019) made contributions to the NC core budget for the year 2019. In February 2019, Japan made contributions for the budget for implementation of the NC additional budget activities for 2019.
- 14. The IG17 held on 24-25 November 2015 in Bangkok, Thailand approved the MTP for the EANET (2016-2020) and adopted option 2 of the "Scale of Voluntary Financial Contributions to the Core Budget of the Network Center (NC) of the EANET (EANET/IG 17/9/2)". According to the option 2, the scale of a voluntary contribution to the core budget of the NC for the period from 2017 to 2020 will be calculated based on the UN scale of assessments for the period from 2016 to 2018. The voluntary financial contribution expected from each participating country to the NC core budget from 2017 to 2020 is shown in Table 4 of Annex 1.

II-2 Administrative arrangement of the Secretariat and the Network Center

15. The current Deputy Director General (DDG) in charge of the Network Center for the EANET at the Asia Center for Air Pollution Research (ACAP), Dr. Erdenebat Eldev-Ochir, will end his term on 30 September 2019. ACAP sent a vacancy announcement letter to all National Focal Points (NFPs) for the EANET of the EANET participating countries to invite nomination of the candidate for such a DDG position for the next two-years term starting the beginning of October 2019. Upon the deadline of the application on 15 April 2019, ACAP received two applications. The selection result informed to the NFPs of the participating countries. The DDG, Dr. Erdenebat Eldev-Ochir, Mongolia, will start again his work at ACAP from October, 2019.

III. IMPLEMENTED/IMPLEMENTING ACTIVITIES

III-1 Acid Deposition Monitoring including QA/QC Activities

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

- 16. Activities in line with the "Strategy Paper for Future Direction of EANET on Monitoring of Effects on Agricultural Crops, Forest and Inland Water by Acidifying Species and Related Chemical Substances" have been carried out by the members of the Task Force on Soil and Vegetation Monitoring (TFSV) and scientists from the NC and relevant research organizations. The review of the activities and update of the strategy paper will be discussed in the 6th Task Force Meeting (TFSV6), which will be held in Niigata, Japan on 20 November 2019.
- 17. Task Force on Monitoring for Dry Deposition (TFMDD) reported the Progress Report on the Activities of the Task Force on Monitoring for Dry Deposition at SAC16. Because some monitoring criteria and dry deposition estimation methodology do not meet with the current situation, TFMDD proposed the revision of Technical Manuals. The Terms of Reference (TOR) and the Membership of the Expert Group on Revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring were adopted at SAC16. Because of the replacement of SAC and TFMDD membership, the 1st meeting of the Expert Group was postponed in 2018.

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

EANET Inter-laboratory Comparison Projects

(Inter-laboratory Comparison Projects in 2017)

18. The NC published the Report of Inter-laboratory Comparison Project 2017 (the 20th project on wet deposition, the 13th project on dry deposition (filter pack method), the 19th project on soil and the 18th project on inland aquatic environment) and distributed it to the participating laboratories in January 2019.

(Inter-laboratory Comparison Projects in 2018)

19. The NC distributed samples for the 21st Inter-laboratory comparison project on wet deposition, the 14th

project on dry deposition (filter pack method), the 20th project on soil and the 19th project on inland aquatic environment to the participating countries in October 2018. The result of the projects in 2018 was discussed at the Twentieth Senior Technical Managers' Meeting on the EANET (STM20) held on 4-5 September 2019 in Kuala Lumpur, Malaysia as the Agenda item 6 and submitting to the SAC19 for its adoption.

(Inter-laboratory Comparison Projects in 2019)

20. The NC will distribute samples for the 22nd Inter-laboratory comparison project on wet deposition, the 15th project on dry deposition (filter pack method), the 21st project on soil and the 20th project on inland aquatic environment to the participating countries in October 2019.

Other Inter-laboratory Comparison Projects

21. Several EANET laboratories including ACAP participated in the international inter-comparison 2017-2018 organized by the European Monitoring and Evaluation Programme (EMEP), World Meteorological Organization (WMO), United States Geological Survey (USGS), etc.

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

(Data Report 2017/2018)

- 22. The NC published the Data Report 2017 and distributed it to the NFPs, National Centers, SAC members and other relevant organizations in January 2019. Most of the participating countries have already submitted their 2018 monitoring data to the NC. The NC is in the process of checking and verifying the data. The Preliminary Draft Data Report 2018 based on the data and the related information submitted by the participating countries was discussed at the STM20 as the Agenda item 5 and submitting to the SAC19 for its adoption.
- 23. 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 2016 were disclosed outside of the EANET from January 2019. The raw data of 2017 were disclosed to the EANET member countries from January 2019 and will be also disclosed outside of the EANET from January 2020.

(Download System for the EANET raw data)

24. To provide raw data of EANET to data users, the NC developed new system. The system enables the data users to obtain the raw data in a shorter time. To obtain the raw data such as hourly, weekly and bi-weekly data of wet and dry deposition monitoring in CSV file in Excel format, the data user can input registration information and submit it on the website. After approval, identification code (ID) and password (PW) for accessing data archives will be sent by email.

III-3 Information exchange on clean air technologies and regional impact assessment

(The Clean Air Technology Workshop)

25. To introduce the clean air technologies which is a base for improving air pollution not only in particular country but in the whole North-East Asian region, the Clean Air Technology Workshop was held from 4 to 5 November 2018 in Qingdao, Shandong, China. Forty people from nine participating countries of EANET and some related companies participated in the workshop, contributed to study the excellent technology and exchange the useful information with each other.

III-4 Task Forces and Expert Groups established under the SAC

26. 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 2018 are attached as Annex 2.

27. It is planned that the workshop on regional impact assessment will be held back-to-back TFSV6, in November 2019. The workshop will be organized in collaboration with the International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests (ICP Forests) under CLRTAP. The draft plan of the workshop with the possible schedule of TFSV6 was shared with Prof. W.M. Carandang, Chair of the Task Force on Soil and Vegetation Monitoring in May 2018.

III-5 Technical support and capacity building activities

III-5-1 EANET Training

EANET Individual Training at the NC

28. One trainee each from Malaysia, Myanmar, Russia, Viet Nam and two from China participated in the EANET individual training course at the NC from 1 to 19 July 2019. They received training on wet deposition, dry deposition, soil/vegetation and inland aquatic environment monitoring, data management and automatic monitoring of air concentration such as O₃ and PM_{2.5}.

29. Indonesia requested the NC to receive the trainees by their own budget in April. The NC invited four trainees from Indonesia in the EANET individual training course from 1 to 29 October 2019. They are receiving training on wet deposition, dry deposition environment monitoring, data management and automatic monitoring of air concentration such as O₃ and PM_{2.5}.

III-5-2 Support to the Participating Countries

Dispatch of Technical Missions

30. After the SAC18, the NC dispatched technical missions to Philippines (January, 2019), Cambodia and Lao PDR (March, 2019) to exchange information, provide technical advice, repair some parts of monitoring machines, calibrate ozone monitors in particular country and observe operation of 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 SAC18 is attached as Annex 3.

Technical Support for the Participating Countries

31. The NC provided assistance to Viet Nam, Russia and Indonesia in 2018 and 2019 for their monitoring activities in addition to dissemination of the latest information, provision of equipment and its spare parts and consumables such as reagents, filter pack kit etc.

III-6 Research Activities

32. 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 2018)

33. In April 2018, the NC sent a letter to the NFPs and the SAC members inviting applicants for the research fellowship in 2018. In response to the invitation letter, the NC received 11 applications from 5 countries, namely Cambodia, China, Mongolia, Myanmar and Thailand. The Selection Committee of the NC considered the proposed research plans submitted by the applicants and decided to invite 2 researchers; one is from Cambodia and another is from Thailand. Duration of the fellowship research in 2018 in the ACAP was from 21 January to 15 March 2019 (for approximately eight weeks). On the final day of the Fellowship Research, they made the presentation of their research. The title were "Study on the impacts of air pollution transport from many air pollutants Sources in Cambodia and its effects to human health" and "The effects of exposure to fine particulate matter on human health in Bangkok".

(Fellowship Research in 2019)

34. In February 2019, the NC sent a letter to the NFPs and the SAC members inviting applicants for the research fellowship in 2019. In response to the invitation letter, the NC received 7 applications from 5 countries, namely China, Mongolia, R. of Korea, Russia and Viet Nam. The Selection Committee of the NC considered the proposed research plans submitted by the applicants and decided to invite 3 researchers; one is from China and others are from R. of Korea and Viet Nam. Because the applicant from Viet Nam declined the invitation later, 2 research fellowships will do their research in ACAP for eight weeks, from October to December 2019.

III-6-3 Joint Research Project on Catchment Analysis with Thailand, Malaysia and Japan

35. Catchment analysis is one of the issues described in the strategy paper, "Strategy Paper for Future Direction of EANET on Monitoring of Effects on Agricultural Crops, Forest and Inland Water by Acidifying Species and Related Chemical Substances". 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, although the projects in Thailand and Malaysia are stopped due to termination of the external funds. As an output relevant to this issue, a scientific paper on Lake Ijira catchment (EANET catchment monitoring site) has been published in the international journal, *Biogeochemistry*.

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

36. The 10th International Workshop on Atmospheric Modeling Research in East Asia was held in March 2019 at Jinhua, Zhejiang province, China. In this workshop, Final summary reports of MICS-Asia Phase III, including suggestions for next steps were presented by each topic and analysis leader. Also, research works of Southeast Asian group and those outside MICS-Asia were presented. At the final session of the workshop, considerable topics and working groups of MICS-Asia Phase IV such as collecting and evaluating monitoring data, model improvement and development, impact assessment in addition to current topics (air quality model, emission inventory, air quality and climate change, Southeast Asia) were proposed. The detailed work plan will be discussed at the next workshop.

III-7 EANET Meetings

III-7-1 The 20th Session of the Intergovernmental Meeting (IG20)

- 37. The Secretariat organized the Session of the IG20 in Bangkok, Thailand on 27-28 November 2018. Representatives of the participating countries, namely Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Republic of Korea, Russia, Thailand, and Viet Nam (except for Philippines) participated in the Session. Representatives of United Nations Environment Programme (UNEP) Asia and the Pacific Office; the Secretariat and the Network Center (NC) for the EANET; Regional Resource Center for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT); World Health Organization; and Secretariat, Convention on Long-range Transboundary Air Pollution (CLRTAP) Environment Division United Nations Economic Commission for Europe attended the Session through Skype. Major outcomes of the IG20 were as follows:
 - The Session endorsed the following:
 - Report on the Progress of the EANET since the IG19;
 - Financial Report of the Secretariat and the NC in 2017;

- Report on the Outcomes of the Seventeenth Session of the Scientific Advisory Committee (SAC18) on the EANET;
- Mid-Term Review Report on the Implementation of the Medium Term Plan (MTP) for the EANET (2016-2020) from January 2016 to June 2018;
- Draft Report of Elaboration of the Feasibility Study on the Establishment of a New Network Center for the Acid Deposition Monitoring Network in East Asia (EANET).
- The Session approved the following:
 - Final Draft of Fourth Report for Policy makers (RPM4);
 - Draft Work Programme and Budget of the EANET in 2019.

III-7-2 Scientific Advisory Committee (SAC)

The Eighteenth Session of the Scientific Advisory Committee (SAC18) on the EANET

- 38. The Secretariat organized the Session of the SAC18 in Hanoi, Viet Nam on 9-11 October 2018. The SAC18 discussed technical and scientific issues of the EANET. Major decisions/discussions during the SAC18 include:
 - The Session acknowledged the following:
 - Report on the Progress of the EANET since the Seventeenth Session of the Scientific Advisory Committee (SAC17) and the Financial Report of the Secretariat and the NC in 2017.
 - The Session adopted the following:
 - EANET Data Report 2017;
 - Inter-laboratory Comparison Projects 2017 and reanalysis of the evaluation on the results of the project.
 - The Session discussed and made suggestions/recommendations on the following:
 - Updated National Monitoring Plans of the Participating Countries;
 - Progress Report on the Activities of on the Task Force on Monitoring for Dry Deposition;
 - Progress Report on the Activities of the task Force on Soil and Vegetation Monitoring;
 - Draft Report of Elaboration of Feasibility Study on the Establishment of a New Network Center for the EANET;
 - Report on the Progress of the Cooperation with Global Atmosphere Watch of the World Meteorological Organization;

- Mid-Term report on the Implementation of the Medium Term Plan (MTP) for the EANET (2016-2020) from January 2016 to June 2018;
- Final Draft of Fourth Report for Policy Makers (RMP4);
- Consideration of the Draft Work Programme and Budget of the EANET in 2018 from scientific and technical viewpoints.
- The Session was updated on the Relevant Scientific Activities:
 - Air quality Monitoring by GEMS in East Asia and Its Validation Strategy using in-stu Surface Observation;
 - Progress of Acid Rain 2020;
 - Progress of the Joint Research Activities on Model Inter-Comparison Study in Asia (MICS-ASIA);
 - Progress of the Research Activities on Appropriate Measurement Methodology for Elemental Carbon (EC) and Organic Carbon (OC);
 - Progress of the Air Pollution Solutions Report of Asia Pacific Clean Air Partnership (APCAP) Science Panel;
 - Progress of Preparation of the Clean Air Technology Workshop.

III-7-3 The Working Group Meeting on Preparation of Development of the Medium Term Plan for the EANET (2021-2025)

- 39. In order to give an opportunity for the participating countries to provide ideas to be included in the development of the next Medium Term Plan for the EANET (2021-2025), the Secretariat organized the Working Group Meeting on Preparation of Development of the Medium Term Plan for the EANET (2021-2025), held from 20-21 August 2019 in Bangkok, Thailand. Representatives of the participating countries, namely Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Russia, Thailand and Viet Nam (except for Philippines and Republic of Korea) participated in the Meeting. Representatives of United Nations Environment Programme (UNEP) Asia and the Pacific Office; the Secretariat and the Network Center (NC) for the EANET; Regional Resource Center for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT) attended the Meeting.
 - The Meeting discussed the following issues:
 - Recommendations of the Mid-Term Review (MTR) Report on the Implementation of the Medium Term Plan (MTP) for the EANET (2016-2020);
 - 2. Ideas of participating countries for the Next MTP for the EANET (2021-2025);

- 3. Small Group Thematic Discussion, Report from Small Group Thematic Discussion and Wrap-Up and Next Steps.
- Through the discussion above, the Meeting developed one document of "Draft Proposed Ideas of Participating Countries EANET Working Group Meeting on Preparation of Development of the Medium Term Plan for the EANET" for further comments from the participating countries as well as the Report of the Meeting.
- For the promotion of the discussion at the Sessions of the SAC19 and IG21, Synthesis Report summarizing all proposed ideas of the participating countries has been prepared.
- In addition, in order to discuss future potential collaboration with the EANET, following relevant international organizations also attended and presented their idea of future potential collaboration:
 - 1. Asia Pacific Clean Air Partnership (APCAP);
 - 2. Secretariat for the Convention on Long-range Transboundary Air Pollution (CLRTAP);
 - 3. Secretariat for Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia (Malé Declaration);
 - 4. Climate and Clean Air Coalition (CCAC);
 - 5. Integrated Program for Better Air Quality, Clean Air Asia (CAA);
 - 6. North East Asia Clean Air Partnership (NEACAP);
 - 7. Chemical Coordinating Center (CCC), the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP);

III-7-4 Senior Technical Managers' Meeting (STM)

The Twentieth Senior Technical Managers' Meeting (STM20)

- 40. The STM20 was held in Kuala Lumpur, Malaysia on 4-5 September 2019. The major discussion items of the STM20 were as follows:
 - Report on Progress of the EANET since the STM19
 - Overview of the Preliminary Draft Data Report 2018
 - Evaluation for the Results of the Inter-laboratory Comparison Project 2018
 - Consideration of follow-up action on Inter-laboratory Comparison (ILC) project
 - Consideration of the National Monitoring Plans (NMPs), Current Monitoring Activities for the EANET Monitoring and Overall Air Concentration Monitoring Status of the Participating Countries

- Report of the survey on training activities
- Other issues

III-7-5 Publication of Proceedings, Summaries of the EANET Meetings

- 41. The proceedings and summaries of the following meetings were developed and distributed to the participating countries and participants of the Sessions, and they are available online in EANET website for authorized password holders:
 - The Eighteenth Senior Technical Managers' Meeting (STM18);
 - The Eighteenth Session of the Scientific Advisory Committee (SAC18), and
 - The Twentieth Session of the Intergovernmental Meeting (IG20) on the EANET.

III-8 Communication with Participating Countries, etc.

- 42. The Secretariat continued to communicate regularly with the NFPs and SAC Members and share information regarding EANET activities, voluntary financial contribution, and preparation of the EANET meetings.
- 43. The Secretariat maintains communication with relevant organizations and Programmes related to acid deposition and air pollution such as Asia Pacific Clean Air Partnership (APCAP); United Nations Economic Commission for Europe, Convention on Long-range Transboundary Air Pollution (UNECE CLRTAP) and its programme including the Cooperative Programme for Monitoring and Evaluation of the Long Range Transmission of Air Pollutant in Europe (EMEP); Regional Forum on Environment and Health; Climate & Clean Air Coalition, World Meteorological Organization, World Health Organization, North East Clean Air Partnership; Chemical Coordinating Center (CCC), European Monitoring and Evaluation Programme (EMEP); The Integrated Programme for Better Air Quality in Asia (IBAQ), Clean Air Asia (CAA); Secretariat for Male Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary effects for South Asia (Male Declaration), etc.
- 44. The Secretariat continuously informed the NFPs regarding regional and global environment agenda where the EANET has a potential role to play such as for the Fourth United Nations Environment Assembly (UNEA4).

45. The NC also communicated with the participating countries regarding scientific and technical issues to improve monitoring and assessment of acid deposition and related air pollution in the region.

III-9 The Working Group Meeting on Preparation of Development of the Medium Term Plan for the EANET (2021-2025)

46. The Twentieth Session of the Intergovernmental Meeting Meetin (IG20) on the EANET suggested the Secretariat to organize two days meeting for a working group to discuss the framework content of the draft MTP (2021-2025). The Working Group Meeting is a part of the proposed schedule of consultations and discussions leading to the final MTP (2021-2025). To implement the suggestion of IG20, the Secretariat organized two days Working Group Meeting on Preparation of Development of the Medium Term Plan for the EANET (2021-2025) from 20-21 August 2019 in Bangkok, Thailand. The Working Group Meeting attended by the National Focal Points and representatives. Based on inputs received by the Secretariat, the synthesis report summarizing all proposed ideas with a narrative summary was developed by the Secretariat in collaboration with the NC. It will be submitted to the 19th Scientific Advisory Committee (SAC19) Meeting (8-10 October 2019) and the Twenty First Intergovernmental Meeting (IG21) on the EANET (12-13 November 2019). The Working Group Meeting participants will also receive a copy of the synthesis report.

III- 10 Public awareness activities

III-10-1 Awareness Forum on Prevention of Air Pollution in Asia Pacific and National Awareness Workshop

47. The Secretariat in collaboration with the NC and partner organizations, successfully organized the Awareness Forum on Prevention of Air Pollution in Asia Pacific from 25 to 27 June 2019 in Bangkok, Thailand. More than 130 participants from 16 countries, including representatives of government officials, civil society organizations, academicians, international organizations and private sectors, participated in this sharing and learning event. The two-day Forum highlighted that air pollution is currently one of the top priority concerns at the regional and global level which proved that no single country could solve this problem alone. The event was organized as a two-day Forum and one day Site Visit to Automotive Emission Laboratory of Pollution Control Department, Thailand and Bangkok Metropolitan Administration. It provided an opportunity for countries to share experience and at the same time, to gain specific content information that can strengthen their capacity. Various aspects of

the prevention of air pollution were discussed in the Forum.

- 48. To support Thailand in tackling air pollution Problem, Thailand Air Pollution Session was organized on the margins of Regional Forum on Prevention of Air Pollution in Asia Pacific on 25 June 2019. Seventy Thailand provincial officers attended this event. The Thailand Air Pollution Session highlighted the issue of the prevention of air pollution in the national/provincial context. Learning from other countries' experience, a few representatives of EANET participating countries shared their experience in tackling air pollution problem at the city or provincial level.
- 49. EANET National Awareness Workshop will be held in Putrajaya, Malaysia, from 26-28 November 2019.

III-10-2 EANET website, monitoring data site and dissemination of information

- 50. Revamping of EANET website (www.eanet.asia) was completed in April 2019. The current EANET website is available in both desktop and mobile version. The sections in the EANET website is following the sitemap of the previous website with additional features to make the website more informative.
- 51. EANET monitoring data site was renewed during the same time of revamping of the EANET website in April 2019. As a result, it is now publicly available in a much-improved layout at https://monitoring.eanet.asia/document/public/index. EANET monitoring data site provides various information such as EANET Data Reports and Inter-Laboratory Comparison Project Reports in PDF format, while monthly and annual data of wet deposition, dry deposition, soil & vegetation, inland, and catchment are available in Excel format. The new system enables the data users to obtain the raw data in a shorter time. To obtain the raw data such as hourly, weekly and bi-weekly data of wet and dry deposition monitoring in CSV file in Excel format, the data user can input registration information and submit it on the website. After approval, identification code (ID) and password (PW) for accessing data archives will be sent by email.
- 52. New information has been uploaded on the EANET website such as publication (e.g., Data Report 2017 and Inter-laboratory comparison projects 2017), EANET Newsletter (Vol. 23), EANET meeting reports, monitoring site information, and so on.

III-10-3 EANET Newsletter and communication materials for awareness raising

- 53. The Secretariat in collaboration with the NC developed EANET Newsletter volume 22 and 23, summarizing EANET activities in 2018 and 2019. The Newsletters are available online at EANET website at www.eanet.asia
- 54. The Secretariat developed standing banners, posters, and currently in the process of finalizing renewal of factsheets and brochure.
- 55. The Secretariat also provided regular updates of news in EANET website and EANET landing page at UNEP website (https://www.unenvironment.org/asia-and-pacific/restoring-clean-air/eanet).

Annex 1

Table 1 - Voluntary Financial Contributions expected from the Participating Countries to the Secretariat Budget in 2018 and 2019 (as of September 2019) in US\$

G 4:	2018 Budget		2019 Budget	
Countries	Expected	Actual	Expected	Actual
Cambodia	105ª	200	105ª	
China	203,730	97,773	203,730	203,730
Indonesia	12,962		12,962	
Japan	248,974	248,974	248,974	248,974
Lao PDR	74ª		74ª	
Malaysia	8,284	8,284	8,284	
Mongolia	130ª	200	130 ^a	200
Myanmar	260	240	260	238
Philippines	4,244	4,244	4,244	4,244
R. of Korea	52,432	52,432	52,432	49,000
Russia	79,427	79,427	79,427	79,427
Thailand	7,485	7,485	7,485	7,485
Viet Nam	1,493	1,493	1,493	1,493
Total Contribution	619,600	500,752	619,600	594,791

Note: ^a Minimum amount of voluntary financial contribution is US\$ 200.

Table 2 - Estimated Voluntary Financial Contribution of Participating Countries to the Secretariat for the EANET for the period from 2017 to 2020

Country	UN scale of assessment 2016-2018 (%)	Scale of EANET burden sharing (%)	Estimated annual contribution from 2017 to 2020 (USD)
Cambodia*	0.004	0.017	105ª
China	7.921	32.881	203,730
Indonesia	0.504	2.092	12,962
Japan	9.680	40.183	248,974
Lao PDR*	0.003	0.012	74ª
Malaysia	0.322	1.337	8,280
Mongolia*	0.005	0.021	130 ^a
Myanmar	0.010	0.042	260
Philippines	0.165	0.685	4,244
R. of Korea	2.039	8.464	52,432
Russia	3.088	12.819	79,427
Thailand	0.291	1.208	7,485
Viet Nam	0.058	0.241	1,493
Total	24.090	100.000	619,600

Note: ^a Minimum amount for the voluntary financial contribution is USD 200

Table 3 - Contributions from the Participating Countries to the NC Core Budget in 2018/2019(US\$) (As of the end of September 2019)

Countries	2018 Budget		2019 Budget	
Countries	Expected	Actual	Expected	Actual
Cambodia	70*	200	70*	
China	136,127	136,127	136,127	136,127
Indonesia	8,661		8,661	
Japan	166,353	153,145	166,353	161,799
Lao PDR	50*		50*	
Malaysia	5,535		5,535	
Mongolia	87*	200	87*	200
Myanmar	170*	198	170*	201
Philippines	2,836	2,836	2,836	
R. of Korea	35,041		35,041	
Russia	53,071	53,071	53,071	53,071
Thailand	5,001	4,315	5,001	4,315
Viet Nam	998	998	998	998
Total	414,000	351,090	414,000	356,711

^{*} Cambodia, Lao PDR, Mongolia and Myanmar are expected to make a minimum contribution of US\$ 200.00 based on the "Revision of the Revised Guidelines on the Administrative and Financial Management for the Secretariat and the Network Center (EANET/IG 17/9/3)", etc.

^{**} The difference between extected and actual budget of Japan was complemented by contribution for additional budget of Japan.

Table 4 - Estimated Voluntary Financial Contribution of Participating Countries to the NC

Core Budget for the period from 2017 to 2020

Country	UN scale of assessment 2016-2018 (%)	Scale of EANET burden sharing (%)	Estimated annual contribution (US\$)
Cambodia*	0.004	0.017	70*
China	7.921	32.881	136,127
Indonesia	0.504	2.092	8,661
Japan	9.680	40.182	166,353
Lao PDR*	0.003	0.012	50*
Malaysia	0.322	1.337	5,535
Mongolia*	0.005	0.021	87*
Myanmar*	0.010	0.041	170*
Philippines	0.165	0.685	2,836
R. of Korea	2.039	8.464	35,041
Russia	3.088	12.819	53,071
Thailand	0.291	1.208	5,001
Viet Nam	0.058	0.241	998
Total	24.090	100	414,000**

^{*} Minimum amount for the yearly financial contribution is US\$ 200.

^{**} Estimated 5-year flat amount of annual voluntary contribution based on the MTP for the EANET (2016-2020)

Annex 2

Members of the Task Forces and Expert Groups under the SAC and Meeting Plan in 2019

Name	Members	Meeting plan in 2019
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. Patcharawadee Suwanathada (Thailand) Dr. Duong Hong Son (Viet Nam)	
Task Force on Soil and Vegetation Monitoring	and Vegetation Prof. Nik Muhamad Majid (Malaysia)	

Task Force on Monitoring Instrumentation	Vacancy - 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) Mr. Pichaid Atipakya (Thailand) Mr. Tran Son (Viet Nam)	
Task Force on Research Coordination	Dr. Sergey Gromov (Russia) - Chairperson Dr. Meng Fan Dr. Toshimasa Ohara (Japan) Prof. Katsunori Suzuki (Japan) Dr. Elizabeth Phillip (Malaysia) Dr. Wilfredo M. Carandang (Philippines) Dr. Cho Seog-Yeon (R. of Korea) Dr. Tamara Khodzher (Russia) Dr. Hathairatana Garivait (Thailand) Dr. Duong Hong Son (Viet Nam) Dr. Kazuhiko Sakamoto (ACAP)	
Expert Group on Revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring	Prof.Cho Seog-Yeon (Republic of Korea) – Chairperson Prof. Min Hu (China) Dr. Kazuhide Matsuda (Japan) Engr. Jean N. Rosete (Philippines) Dr. Patcharawadee Suwanathada (Thailand) Dr. Duong Hong Son (Viet Nam)	

Annex 3
Summary of the Technical Missions of the NC after the STM19

Country	Duration	Major Activities/Outcomes of the Mission
Philippines	27 - 31 January 2019	The mission visited the Environmental Management Bureau (EMB), the national center of the Philippines, to discuss implementation of the regular catchment monitoring in the La Mesa Watershed and technical matters on deposition monitoring and PM monitoring. They also visited Metro Manila deposition monitoring site and La Mesa Watershed and discuss technical/scientific subjects to implement the monitoring activities effectively.
Cambodia/ Lao PDR	10 - 17 March 2019	In Cambodia, this mission visited the General Directorate of Environmental Protection. At Phnom Penh station this mission checked the candidate location for new Ozone monitor and performance of PM _{2.5} monitor and repaired the rain sensor of wet-only sampler and checked the condition of the laboratory. At Siem Reap station this mission replaced the rain sensor of wet-only sampler. In Lao PDR this mission visited the Natural Resource and Environment Research Institute. Checked the condition of Ozone analyzer in the mobile station and replaced the suppressor of ion chromatography in the laboratory.