

The Twenty-second Session of the Intergovernmental Meeting
on the Acid Deposition Monitoring Network in East Asia
25-26 November 2020, Virtual Meeting

**REPORT ON THE PROGRESS OF THE ACID DEPOSITION MONITORING
NETWORK IN EAST ASIA (EANET) SINCE THE TWENTY-FIRST SESSION OF
THE INTERGOVERNMENTAL MEETING (IG21) ON THE EANET**

I. INTRODUCTION

1. This Report presents progress implementation of the Acid Deposition Monitoring Network in East Asia (EANET) activities since the Twenty-first Session of the Intergovernmental Meeting (IG21) held on 12 to 13 November 2019 in Beijing, China.

II. ACTIONS REQUIRED

2. The Twenty-second Session of the Intergovernmental Meeting on the EANET (IG22) is invited to review the Report on the Progress of the Acid Deposition Monitoring Network in East Asia (EANET) since the Twenty-first Session of the Intergovernmental Meeting (IG21) on the EANET and may wish to discuss, consider, provide guidance, and endorse the Report, as appropriate.

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I. INTRODUCTION

1. This Report presents progress implementation of the Acid Deposition Monitoring Network in East Asia (EANET) activities since the Twenty-first Session of the Intergovernmental Meeting (IG21) held on 12 to 13 November 2019 in Beijing, China.
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 2019 adopted at the Twentieth Session of the Intergovernmental Meeting (IG20) on the EANET in November 2018 in Bangkok, Thailand and the Work Programme and Budget of the EANET in 2020 adopted at the Twenty-first Session of the Intergovernmental Meeting (IG21) on the EANET in November 2019 in Beijing, China, 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 Secretariat budget in 2020 to all EANET Participating Countries in November 2019. The voluntary financial contribution expected from each Participating Country in 2020 is shown in Table 1 of Annex 1.
4. According to the decision made at the IG17 to select option 2 of the Scale of Voluntary Contributions to the Secretariat of the EANET (EANET/17/9/1), the scale of a 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, the 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 the Secretariat's budget in 2020 as much as US\$ 765,914, by referring to the MTP (2016-2020). As of 31 October 2020, China (October 2020), Japan (August 2020), Malaysia (March 2020), Mongolia (March 2020), Myanmar (February 2020), Philippines (October 2020), Republic of Korea (September 2020), Russia (January 2020), Thailand (March 2020), Viet Nam (September 2020) have made their contributions in 2020 to the Secretariat's budget (see Table 1 of Annex 1).
6. China provided an in-kind financial contribution in 2020 as much as US\$ 106,000 to support a 1-year technical consultant working at the Secretariat. In line with this, after March 2020, Ms. Jia Haiping, EANET consultant funded from the China in-kind financial contribution, decided not to continue her contract for personal reasons. As a follow up, the Secretariat has taken action to prepare a recruitment for her replacement. However, due to COVID-19 pandemic, all recruitments of UNEP international consultants requiring travel to duty stations could not be processed until the travel restriction is lifted. For that reason, the Secretariat could not proceed with the recruitment of the consultant in 2020, and it might continue until further notice from UNEP Headquarters. The National Focal Point (NFP) of China has been informed about the situation. The Secretariat has continuously provided updates to the NFP of China.
7. China informed the Secretariat that the unspent funds provided by China during the period MTP 2016-2020 to support technical consultant working at the Secretariat shall be allocated for the same purpose in the next MTP (2021-2025). In line with this, China will inform this to the IG22 for the approval.
8. In 2020, 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 the Secretariat, including convening the Twentieth Session of the Scientific

Advisory Committee (SAC20), from 23 to 24 September 2020, the Working Group Meetings in 2020 and the Twenty-Second Session of the Intergovernmental Meeting (IG22) on the EANET, from 25 to 26 November 2020. Due to the COVID-19 pandemic, the SAC20 and IG22 have to be organized virtually. Under this SSFA, RRC.AP shall allocate two staff (one programme officer and one administrative assistant) to support the Secretariat.

9. The Secretariat also made a small-scale funding agreement with the Network Center (NC) to support the implementation of the EANET Research Fellowship Programme in 2020 and support the maintenance of the EANET website. The fellowship aims to enhance research activities on acid deposition related issues by targeting researchers from the Participating Countries.
10. A total contribution of US\$ 497,275 was received at the UNEP Contribution account from voluntary contributions of the Participating Countries in 2019. Apart from the voluntary contributions, the Secretariat also received in-kind contributions from the Participating Countries and UNEP. The total expenditure of the Secretariat in 2019 is US\$ 591,139, excluding the expenditure of the technical consultant from China in-kind.
11. China provided an in-kind financial contribution in 2019 as much as US\$ 106,000 to support a 1-year technical consultant working at the Secretariat.
12. The voluntary financial contribution expected from the Participating Countries in 2020 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 NC 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.
13. Request letters were sent on 19 November 2019 to inform all National Focal Points (NFPs) of the EANET of the estimated voluntary financial contribution expected from each Participating Country for the NC core budget in 2020 and requested the Participating Countries to make voluntary financial contributions accordingly.

14. As of 31 October 2020, China (October 2020), Mongolia (March 2020), Myanmar (December 2019), Philippines (October 2020), Russia (December 2019), Thailand (May 2020), and Viet Nam (September 2020) made contributions to the NC's core budget for the year 2020. In March 2020, Japan made contributions to the budget to implement the NC's additional budget activities for 2019.
15. 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 NC of the EANET (EANET/IG 17/9/2)". According to option 2, the scale of a voluntary contribution to the NC's core budget 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 the Participating Countries to the NC core budget from 2017 to 2020 is shown in Table 4 of Annex 1.

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. 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"*, scientific activities have been implemented 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 have been discussed in the 6th Task Force Meeting (TFSV6), which was held in Niigata, Japan on 20 November 2019. The updated strategy paper has been adopted at SAC20.
17. The 1st Meeting of the Expert Group on Revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring was held on 23 April 2020. The current Technical Manuals for Air Concentration Monitoring in East Asia and on Dry

Deposition Flux Estimation in East Asia were reviewed. According to the discussions in the 1st meeting, the NC will revise the Technical Manuals and they will be circulated to the Expert Group members. The final draft of the Technical Manuals will be prepared according to the discussion in the 2nd meeting to be held in April/May 2021 and the 3rd meeting to be held in April/May 2022. It was pointed out that the contents of the Technical Manual should be followed by the Guidelines for Air Deposition Monitoring in East Asia. The Guidelines should be updated because it has not been revised since 2000.

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

EANET Inter-laboratory Comparison Projects

(Inter-laboratory Comparison Projects in 2019)

18. The NC distributed samples for the 22nd Inter-laboratory comparison project on wet deposition, the 15th project on dry deposition (filter pack method), the 21th project on soil and the 20th project on inland aquatic environment to the Participating Countries in October 2019. The result of the projects in 2019 was discussed at the Twenty-first Senior Technical Managers' Meeting on the EANET (STM21) held in 7 August 2020 virtually as the Agenda item 5 and submitted to the SAC20 for its adoption.

(Inter-laboratory Comparison Projects in 2020)

19. The NC distributed samples for the 23rd Inter-laboratory comparison project on wet deposition, the 16th project on dry deposition (filter pack method), the 22th project on soil and the 21th project on inland aquatic environment to the Participating Countries in October 2020.

Other Inter-laboratory Comparison Projects

20. Several EANET laboratories including ACAP participated in the international inter-comparison 2018-2019 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 2018/2019)

21. The NC published the Data Report 2018 and distributed it to the NFPs, National Centers, SAC members and other relevant organizations in December 2019. Most of the Participating Countries have already submitted their 2019 monitoring data to the NC. The NC is in the process of checking and verifying the data. The Preliminary Draft Data Report 2019 based on the data and the related information submitted by the Participating Countries was discussed at the STM21 as the Agenda item 4 and submitted to the SAC20 for its adoption.
22. 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 on the website of the EANET from January 2019. The raw data of 2017 were disclosed to the EANET member countries from January 2019 and were also disclosed on the website of the EANET from January 2020.

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

23. 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 the schedule of their meetings in 2019 are attached as Annex 2.
24. TFSV6 was held to review the activities and discuss update of the strategy paper in November 2019. Back-to-back TFSV6, "Workshop on the regional impact assessment of atmospheric deposition and air pollution on forest ecosystems" was held in collaboration with the International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests (ICP Forests) under CLRTAP. The workshop was attended by experts from Europe and the EANET countries, including the Task Force members. The

information on air pollution effects in East Asia and European experience of regional impact assessments were shared among the participants.

25. The 5th Meeting of the Task Force on Monitoring for Dry Deposition (TFMDD5) was held on 7 July 2020. The progress of the Task Force and the activities of monitoring for dry deposition in EANET during 2015 and 2019 were reviewed. The Task Force also reviewed the draft Strategy Paper on Future Direction of Monitoring for Dry Deposition of EANET (2021-2025). It was suggested that the Strategy Paper should follow the TOR of the Task Force. The NC has revised the Strategy Paper according to the discussions in TFMDD5, and the Strategy paper (2021-2025) has been adopted at SAC20. The Task Force also agreed to propose the recommendation of the revision of the Guidelines for Acid Deposition Monitoring in East Asia after reviewing the current contents.

III-4 Technical Support and Capacity Building Activities

III-4-1 EANET Training

EANET Individual Training at the NC

26. The NC sent the invitation letter (Announcement of the EANET Individual Training Program) to the NFPs (cc: Heads of National Centers, National QA/QC managers) on 10 January 2020. The NC received 9 nominations from 6 countries, namely, Cambodia, China, Lao PDR, Malaysia, Mongolia and Myanmar. A selection committee meeting was held at the NC subsequently and six applicants were selected as the trainees of the EANET Individual Training 2020, whom from each country of Cambodia, China, Lao PDR, Malaysia, Mongolia and Myanmar. While individual training was supposed to conduct at the NC, the NC had to change the training style from face-to-face to online due to the COVID-19 outbreak. The online training was held from 5 to 24 November 2020, and the 4 trainees from Cambodia, Lao PDR, Myanmar have attended. The trainees from China, Malaysia and Mongolia declined the online training since they are unable to secure the time to join the entire training course and balance one's work and training.

III-4-2 Support to the Participating Countries

Dispatch of Technical Missions

27. After the SAC19, the NC dispatched technical missions to Mongolia (September to October 2019), China (October 2019), Indonesia (November 2019), Malaysia (February 2020) to exchange information, provide technical advice, repair some parts of monitoring machines, calibrate ozone monitors in a particular country and observe the 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 SAC19 is attached as Annex 3.

Technical Support for the Participating Countries

28. The NC conducted on-site capacity building with regard to wet and dry monitoring in Malaysia. Lecture and practical training on wet and dry deposition monitoring were conducted, and technical issues related to monitoring methods were discussed. The NC explained that it is important for the operational staff to understand the standard operating procedures (SOPs) and to conduct the monitoring in accordance with the SOPs.
29. The NC conducted the calibration for the automatic ozone monitor to ensure the precision and accuracy of the ozone monitor based on the ozone traceability system in Indonesia. The NC explained that the maintenance record and information sharing were useful to maintain the data quality of the monitoring. Other technical issues related to the wet/dry deposition monitoring activities were also discussed and information about the latest research on the tropospheric ozone concentration were shared.
30. The NC provided the SOPs of the daily and periodic maintenance for the ozone monitor to Cambodia. The periodical maintenance has not been conducted because they do not have the experience about the ozone monitor. The NC also hold the virtual meeting with the staff in Cambodia to explain the contents of SOPs and confirm the results of the maintenance.
31. The NC developed a tool to convert the raw data output from the ozone monitor every 12 seconds to an hourly average, which is the standard for EAENT, and provided it to Cambodia. The NC also gave a virtual lecture to Cambodia on how to use the tool.

32. The NC is on-going about the analytical consumable donation for two Russian laboratories. Currently, these laboratories have run out most filters for filter-pack sampling and passive sampling which are impossibility purchased in Russia, and they also have shortage for most reagents.

III-5 Research Activities

33. 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-5-1 EANET Research Fellowship Program

(Fellowship Research in 2019)

34. In January 2020, 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 five applications from 3 countries, namely China, Mongolia, Russia. The Selection Committee of the NC considered the proposed research plans submitted by the applicants and decided to invite four researchers, two researchers from China, one researcher from Mongolia and Russia respectively. The NC proposed to have the online fellowship program, as it is impossible to get an entry visa to Japan due to the COVID-19 outbreak, however, all researchers did not accept the NC's proposal and expressed their intention that they would reapply the fellowship program next year.

III-5-2 Joint Research Project on Catchment Analysis with Thailand, Malaysia and Japan

35. Catchment analysis has been studied in Thailand, Malaysia, and Japan, as one of the subjects described in 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"*. The joint research projects in Thailand and Malaysia have stopped due to the termination of the external funds. However, the catchment analysis at Kajikawa

site (Niigata Prefecture) and Lake Ijira catchment (Gifu Prefecture) in Japan is still ongoing. The latest data at Kajikawa site suggest recovery from acidification with a decline of atmospheric deposition. A scientific paper on the phenomena and possible mechanisms is under submission to an international journal.

III-5-3 International Workshop on Atmospheric Modeling Research in East Asia

36. Due to the COVID-19 outbreak, the 11th International Workshop on Atmospheric Modeling Research in East Asia was cancelled. Instead, virtual meetings among limited key members of MICS-Asia Phase III were held in March and October 2020. First, scientific issues to be considered in Phase IV were discussed based on review comments and responses to them in major papers of the Special Issue of Phase III. Based on them, targets and research themes of Phase IV were discussed. In addition to major targets listed-up so far (such as monitoring, model improvement and development, impact assessment as well as those of Phase III), it was pointed out that targets for analysis should be more flexible than Phase III. Furthermore, points need to be improved such as progress speed and outreach issues were also assessed to discuss how to manage and operate activities of Phase IV effectively. The 11th International Workshop is planned to be held in virtual to decide core targets and the basic framework of MICS-Asia Phase IV for drafting the work plan for actual activities.

III-6 EANET Meetings

III-6-1 The 21th Session of the Intergovernmental Meeting (IG21)

37. The Secretariat organized the Session of the IG21 in Beijing, China on 12-13 November 2019. Representatives of the Participating Countries, namely Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Russia, Thailand, and Viet Nam participated in the Session. Representatives of United Nations Environment Programme (UNEP); the Secretariat and Asia Center for Air Pollution Research (ACAP), the Network Center (NC) for the EANET; the Regional Resource Centre for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT) attended the Session. Major outcomes of the IG21 were as follows:

- The Session endorsed the following:

- Report on the Progress of the EANET since the IG20;
 - Financial Report of the Secretariat and the NC in 2018;
 - Report on the Outcomes of the Nineteenth Session of the Scientific Advisory Committee (SAC19) on the EANET;
 - The Session was invited to discuss, make comments and decisions on (i) proposed activities of the EANET in the next MTP (2021-2025); (ii) scope expansion of the EANET activities beyond acid deposition to include air quality in the next MTP (2021-2025); (iii) the proposal to rename the EANET and; (iv) the proposal of arrangement of budget of the Secretariat and the NC for the EANET;
 - Japan submitted a proposal on the decision of IG21 to Secretariat on 7th November 2019 and subsequently introduced its proposal at the meeting, such as the schedule of the working groups and the contents of the next MTP, including the scope expansion of the EANET, flexibility of new activities, renaming of the EANET, and the diversification of funds.
- The Session approved the following:
- The Session reviewed the report on the Proposed Ideas of the Participating Countries for the Next MTP (2021-2025). The Session agreed to establish two working groups (The Working Group on Reviewing the Scope of Instrument, The Working Group on Drafting the MTP (2021-2025)) in 2020;
 - Draft Work Programme and Budget of the EANET in 2020.

III-6-2 Scientific Advisory Committee (SAC)

The Twentieth Session of the Scientific Advisory Committee (SAC20) on the EANET

38. Due to COVID19 pandemic, the Secretariat organized the Session of the SAC20 virtually on 23-24 September 2020. The SAC20 discussed technical and scientific matters of the EANET. Major decisions/discussions during the SAC20 included:
- The Session acknowledged the following:
- Report on the Progress of the EANET since the Nineteenth Session of the Scientific Advisory Committee (SAC19) and the Financial Report of the Secretariat and the NC in 2019;

- Findings from the Survey Matrix of Categorization of EANET Activities for Further Development of Medium Term Plan for the EANET (2021-2025);
 - Preliminary 2nd Draft MTP for the EANET (2021-2025);
 - Revision of Task Forces and Expert Groups of the EANET;
 - Consideration of Improvement of the EANET Reports;
 - Consideration of Improvement of the EANET Technical Guidelines and Manuals.
- The Session agreed to attach the “Recommendations from SAC20 to IG22” to the Report of the Session as Annex 2.
- The Session adopted the following:
- EANET Data Report 2019;
 - Inter-laboratory Comparison Projects 2019 and reanalysis of the evaluation on the results of the project.
- The Session acknowledge the following:
- Updated National Monitoring Plans of the Participating Countries;
 - Consideration of the Reports from the Chairpersons on the Task Force on Monitoring for Dry Deposition;
 - Consideration of the Reports from the Chairpersons of the Task Force on Soil and Vegetation Monitoring;
 - Progress of Development the Fourth Periodic Report on the State of Acid Deposition in East Asia (PRPAD4);
 - Consideration of the Draft Work Programme and Budget of the EANET in 2021 from Scientific and Technical Viewpoints.
- The Session acknowledge the Relevant Scientific Activities:
- Progress of the Progress of the Joint Research Activities on Model Inter-Comparison Study in Asia (MICS-Asia);
 - Progress of the Progress of the Catchment Studies in the EANET.

III-6-3 The Working Group Meeting Session 2 (WGS2) on Drafting Medium Term Plan for the EANET (2021-2025) and Reviewing the Scope of Instrument for the EANET

39. The Working Group Meeting Session 2 (WGS2) on Drafting Medium Term Plan for the EANET (2021-2025) and Reviewing the Scope of Instrument for the Acid Deposition

Monitoring Network in East Asia (EANET) was held virtually on 20-22 October 2020 based on the recommendation of the WG Meetings in June-July 2020.

40. The Session acknowledged the discussions and recommendations under the following agenda/sub-agenda items to be brought to the IG22:
 - Summary Discussion at the WG Meeting on Drafting Medium Term Plan (MTP) for the EANET (2021-2025);
 - Summary Discussion at the WG Meeting on Reviewing of the Scope of the Instrument for the EANET;
 - Findings from the Survey Matrix of Categorization of Activities for Further Development of MTP for the EANET (2021-2025);
 - Recommendations of the SAC20 to the 22nd Session of the Intergovernmental Meeting (IG22) regarding the MTP for the EANET (2021-2025);
 - Key Points of the 2nd Draft MTP for the EANET (2021-2025) and Draft Work Programme and Budget for the EANET in 2021;
 - The 2nd Draft Medium Term Plan for the EANET (2021-2025)
 - Revision of the Task Forces and Expert Groups of the EANET
 - Consideration of Improvement of the EANET Reports (EANET/WGS2/6/3);
 - Consideration of Improvement of the Technical Guidelines and Manuals of the EANET;
 - The Draft Revision of Guidelines on the Administrative and Financial Management for the Secretariat and the Network Center;
 - The Draft Work Programme and Budget for the EANET in 2021;
 - The Proposed Next Steps after the Working Group Meeting Session 2 on Drafting Medium Term Plan for the EANET (2021-2025) and Reviewing the Scope of Instrument for the EANET (EANET WGS2/9) and followed by the presentation of the draft "Survey on Participating Countries' Support in Implementing Selected Non-Core Activities of EANET in 2021".

41. The Session adopted the Recommendations of the WGS2 to the IG22 as Annex 2 of the Report of the Session of WGS2.

42. As the follow up from the WGS2 meeting, the Secretariat circulated the Report of the Session of the WGS2 and Survey on Participating Countries' Support in Implementing

Selected Non-Core Activities of EANET in 2021. The Secretariat and the NC also developed the Final Draft MTP for the EANET to be submitted to IG22.

III-6-4 The Working Group Meeting on Drafting Medium Term Plan for the EANET (2021-2025) (WG1) and Reviewing the Scope of Instrument for the EANET (WG2)

43. 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) and to review the first draft of the MTP (2021-2025), the Secretariat organized the Working Group Meeting on Drafting Medium Term Plan for the EANET (2021-2025), and on Reviewing the Scope of Instrument for the Acid Deposition Monitoring Network in East Asia from 29 June-2 July 2020. Due to the COVID-19 pandemic, the meetings were organized virtually. Representatives of the Participating Countries, namely Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Russia, Thailand, and Viet Nam participated in the meeting. The Secretariat and the Network Center (NC) for the EANET also attended the meeting. In addition, representatives of the United Nations Environment Programme (UNEP), Regional Resource Centre for Asia and the Pacific, Asian Institute of Technology (RRC.AP/AIT) and resource persons attended the meeting as well.

44. The Working Group Meeting on Drafting Medium Term Plan for the Acid Deposition Monitoring Network in East Asia (EANET) (2021-2025) was held virtually on 29-30 June 2020 and discussed the First Draft Medium Term Plan (MTP) for the EANET (2021-2025) - Current Scope and Possible Future Scope.

- Prior to the meeting, Japan submitted a presentation on Project-Based Finance Component (PBFC) to the Secretariat and explained the presentation.
- The Session acknowledged the First Draft of Medium Term Plan for the EANET (2021-2025) and recommended the Secretariat and the NC to continue working on revising the draft MTP for the EANET (2021-2025), taking into account the discussion and suggestions at the session, particularly on clearly categorizing activities.
- The Secretariat delivered the presentation on Proposed Next Steps After the Working Group Meeting on Drafting Medium Term Plan (MTP) for the EANET (2021-2025) (EANET WG 1/5). The presentation focused on the timeline of the finalization of the

- draft MTP for the EANET (2021-2025). The session was suggested to reschedule the 20th Session of the SAC (SAC20) and the IG22 to September/October and November 2020 respectively, taking into consideration the results of the WG Meeting on Reviewing the Scope of Instrument for the EANET. Details of Next Steps, including the finalization of Report of the Session of the WG Meeting on Drafting MTP for the EANET (2021-2025) and Reviewing the Scope of Instrument, and the Timeline of Development of draft MTP for the EANET (2021-2025), could be revised by considering the discussion of the WG Meeting on Reviewing the Scope of the Instrument for the EANET (1-2 July 2020).
- The Working Group Meeting (Session 2) was organized from 20-22 October 2020 (virtually) after the SAC20 allowing to refer to comments from the SAC20 and to review the 2nd draft of the MTP before the IG22.
45. The Working Group Meeting on Reviewing the Scope of Instrument for the Acid Deposition Monitoring Network in East Asia (EANET) was held virtually on 1-2 July 2020 and discussed the following issues. (i) Legal Note on Reviewing the Scope of Instrument for Strengthening the Acid Deposition Monitoring Network in East Asia (EANET); (ii) Addressing Air Pollution Within the EANET Framework; (iii) Revision of Guidelines on the Administrative and Financial Management for the Secretariat and the Network Center (draft).
- The Session recommended that the second draft of MTP (2021-2025) would be a merge of the two versions of draft MTP (2021-2025) of current and possible future scope. The Secretariat and the NC would prepare the 2nd draft of the MTP (2021-2025) with inputs received during and after the WG Meetings. In addition, it was suggested to add transition actions/activities to the implementation of the MTP (2021-2025).
 - The Session summarized that no objection was made by the Participating Countries regarding the expansion of the scope of the Instrument. Therefore, the Session requested the Secretariat and the NC to work on necessary preparation to support this.
 - The Secretariat delivered the presentation of the Proposed Next Steps after the Working Group Meeting on Reviewing the Scope of Instrument for the EANET. The presentation focused on the timeline of Finalization of the Report of the Session of the WG Meeting on Drafting MTP for the EANET (2021-2025) (29-30 June 2020) and WG Meeting on Reviewing the Scope of the Instrument for the EANET (1-2 July 2020), Proposed dates of EANET Key Meetings in 2020 and Timeline of Development of the MTP for the

EANET (2021-2025) from the IG21 to the IG22.

- The Session acknowledged the timeline of the finalization of the Report of the Session.
- The matrix proposed by Japan (to which the Secretariat/NC listed all activities from the activities on the draft MTP (2021-2025) and where Participating Countries classified the activities identified in the draft MTP (2021-2025) according to related themes, indicated whether they should be included or not in the current scope of Instrument, the related budget, and the necessity of expansion of the Instrument to achieve them. The matrix was circulated to countries before the 14 August 2020, allowing the SAC members to discuss it. It will also be incorporated into the 2nd draft of the MTP (2021-2025) and be available for discussions by the SAC20.

III-6-4 Senior Technical Managers' Meeting (STM)

The Twenty first Senior Technical Managers' Meeting (STM21)

46. The STM21 was held virtually, on 7 August 2020. The major discussion items of the STM21 were as follows:

- Overview of the Preliminary Draft Data Report 2019
- Evaluation for the Results of the Inter-laboratory Comparison (ILC) Projects 2019
- 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
- Other issues.

III-6-5 Publication of Proceedings, Summaries of the EANET Meetings

47. The proceedings and summaries of the following meetings were developed and are available online in EANET website for authorized password holders:

- The Twentieth Senior Technical Managers' Meeting (STM20);
- The Nineteenth Session of the Scientific Advisory Committee (SAC19), and
- The Twenty-first Session of the Intergovernmental Meeting (IG21) on the EANET.

III-7 Communication with Participating Countries, etc.

48. The Secretariat continues to communicate regularly with the NFPs and SAC Members and to share information regarding the EANET's activities, voluntary financial contribution, and preparation of the EANET meetings.
49. 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 (NEACAP), etc.
50. The NC also communicates 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- 8 Public awareness activities

51. EANET National Awareness Workshop in Putrajaya, Malaysia, from 26 to November 2019. To enhance awareness on air pollution and acid deposition at the national level, the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC), Malaysia, and the Secretariat for the EANET organized a National Awareness Workshop in 2019 in Putrajaya, Malaysia, from 26 to 28 November 2019. The workshop was held to facilitate sharing and learning platforms and to increase understanding of issues related to the prevention of acid deposition and air pollution that contribute to the achievement of EANET objectives. More than 100 national participants from which government officials, academicians, non-government organizations, and representatives of the private sector attended the workshop and learned about the impact of air quality on human health, issues related to air quality efforts, and early warning systems of air pollution. The Activity Report is available at <https://www.eanet.asia/wp-content/uploads/2020/05/National-Awareness-Malaysia-Report-Nov-2019.pdf>.

52. EANET National Awareness Workshop in Myanmar, Nay Pyi Taw, 24-25 February 2020. The Secretariat, in collaboration with the Myanmar Department of Meteorology and Hydrology (DMH) and the Ministry of Transport and Communications (MoTC), organized the EANET National Awareness Workshop in Myanmar from 24-25 February 2020 in Nay Pyi Taw. During the workshop, experts from the EANET and invited participants shared presentations and discussions on the current status and development of acid deposition and air pollution monitoring activities in EANET member countries, effects of climate change on acid deposition and air pollution. They also led group discussions on the current situation, challenges and effective implementation for mitigation of air pollution. The participants had the opportunity to discuss challenges, opportunities and potential solutions on air-pollutions and acid deposition problems from different sectors' point of view. The Activity Report is available at <https://www.eanet.asia/wp-content/uploads/2020/03/EANET-National-Awareness-Workshop-in-Myanmar.pdf>.
53. Due to COVID-19, the EANET Awareness Forum on Prevention of Air Pollution in 2020: "Solutions and Actions to Air Pollution" that was initially planned to be held in Suwon, Gyeonggi Province, Republic of Korea, from 10 to 12 June 2020, was canceled. The Republic of Korea, as the host country, sent an official letter to request the postponement of this event to 2021. However, as per a recent update shared by the National Focal Point, the Republic of Korea could only provide in-kind contribution (ex. souvenirs, brochures, etc.) if it would be organized there, due to a financial division signifying that monetary support is not allowed following an internal rule related to a complex overarching budget system.

III-8-1 EANET Newsletter and communication materials for awareness raising

54. The NC released the latest version of the EANET Science Bulletin Volume 5 in July 2020. The publication aims to share the scientific findings from the research activities within EANET and to provide a platform for scientists from the Participating Countries to publish their scientific and technical research results relevant to the EANET activities. This volume is comprised the Reports of the EANET Fellowship Programme (2016-2018), Joint Projects of the EANET Participating Countries, as well as Scientific and Technological Research papers from Participating Countries. The Publication can be accessed at

<https://www.eanet.asia/wp-content/uploads/2020/07/EANET-Science-Bulletin-Vol5.pdf> .

55. The Secretariat in collaboration with the NC developed the EANET Newsletter volume 24 and 25, summarizing the EANET's activities in 2019 and 2020. The Newsletters are available online on EANET's website at www.eanet.asia/news/
56. The Secretariat also provides regular news updates on the EANET's website and the EANET's landing page on UNEP's website (<https://www.unenvironment.org/asia-and-pacific/restoring-clean-air/eanet>). In addition, the Secretariat has started to circulate an "email blast" to provide latest updates to the mailing list of EANET members on the EANET's latest achievements published on the website.
57. The Secretariat and the NC developed and launched in April 2020 the EANET Fact sheets of thirteen Participating Countries, Summary of the Fact sheet, updated brochure of EANET in electronic and printed version.

Annex 1

Table 1 - Voluntary Financial Contributions Expected from the Participating Countries to the Secretariat Budget in 2019 and 2020 (as of 31 October 2020) in US\$

Countries	2019 Budget		2020 Budget	
	Expected	Actual	Expected	Actual
Cambodia	105 ^a	200	105 ^a	---
China	203,730	97,730	203,730	97,730
Indonesia	12,962	---	12,962	---
Japan	248,974	248,974	248,974	248,974
Lao PDR	74 ^a	---	74 ^a	---
Malaysia	8,284	8,284	8,284	8,284
Mongolia	130 ^a	200	130 ^a	200
Myanmar	260	238	260	260
Philippines	4,244	4,244	4,244	4,244
R. of Korea	52,432	49,000	52,432	50,500
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	497,275	619,600	498,597

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 of 2017 to 2020

Country	UN scale of assessment 2016-2018 (%)	Scale of EANET burden sharing (%)	Estimated annual contribution from 2017 to 2020 (US\$)
Cambodia*	0.004	0.017	105 ^a
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	74 ^a
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 2019/2020(US\$) (As of 31 October 2020)**

Countries	2019 Budget		2020 Budget	
	Expected	Actual	Expected	Actual
Cambodia	70*	200	70*	---
China	136,127	136,127	136,127	102,150
Indonesia	8,661	---	8,661	---
Japan	166,353	199,047	166,353	---
Lao PDR	50*	---	50*	---
Malaysia	5,535	---	5,535	---
Mongolia	87*	200	87*	185
Myanmar	170*	202	170*	200
Philippines	2,836	2,821	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	396,981	414,000	163,755

* 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.

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	40.183	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	0.042	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	Prof. Fan Meng (China) - Chairperson Ms. Loch Sokleang (Cambodia) Dr. Li Jianjun (China) Ms. Rina Aprishanty (Indonesia) Dr. Shiro Hatakeyama (Japan) Mr. Thilakone Sisouphanh (Lao PDR) Dr. Ahmad Fairudz Jamaluddin (Malaysia) Ms. Bold Altantuya (Mongolia) Dr. Kyu Kyu Sein (Myanmar) Engr. Jundy del Socorro (Philippines) Prof. Taehyoung Lee (Republic of Korea) Dr. Sergey A. Gromov (Russia) Dr. Patcharawadee Suwanathada (Thailand) Dr. Le Ngoc Cau (Viet Nam)	5 th meeting 7 July 2020
Task Force on Soil and Vegetation Monitoring	Dr. Wilfredo M. Carandang (Philippines) - Chairperson Prof. Zhaozhong Feng (China) Dr. Sijin LU (China) Dr. Masamichi Takahashi (Japan) Prof. Nik Muhamad Majid/ Dr. Roland Kueh Jui Heng (Malaysia) Dr. Marco A. Galang (Philippines) Dr. Jeong-Ki Yoon/ Ms. Ji-In Kim (Republic of Korea) Dr. Tatiana A. Mikhailova/ Ms. Natalia ZHUCHENKO (Russia) Dr. Hiroyuki Sase (ACAP)	20 November in 2019

<p>Task Force on Monitoring Instrumentation</p>	<p>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)</p>	
<p>Task Force on Research Coordination</p>	<p>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)</p>	
<p>Expert Group on Revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring</p>	<p>Dr. Patcharawadee Suwanathada (Thailand) – Chairperson Prof. Min Hu (China) Dr. Kazuhide Matsuda (Japan) TBD (Philippines) Prof. Cho Seog-Yeon (Republic of Korea) Dr. Le Ngoc Cau (Viet Nam)</p>	<p>1st meeting 23 April 2020</p>

Annex 3

Summary of the Technical Missions of the NC after the STM20

Country	Duration	Major Activities/Outcomes of the Mission
China	20-26 October 2019	The technical mission was dispatched to two new EANET sites and the laboratories in China, Lijiang EANET Station located in high mountain area of Yunnan Province, Lijiang City Environmental Monitoring Station, Wuzhishan EANET Station located in Hainan Island, Wuzhishan City Environmental Monitoring Station, respectively. The mission confirmed the location and monitoring facilities at two new sites; gave advice and support for wet deposition and air concentration monitoring and measurement; and introduced and shared information about EANET activities including QA/QC management and collaboration.
Mongolia	29 September – 3 October 2019	A technical mission was held to hold a workshop and confirm the status of the EANET sites and the laboratories. The workshop was held at the National University of Mongolia under the title of "Workshop on measurement and analysis to elucidate the mechanism of air pollution", and both Japan and Mongolia gave presentations on five themes and exchanged information. The mission visited the NAMEM rooftop site and UB4 in Ulaanbaatar, and the Tereli site, and confirmed the measurement status. The locations of PM2.5 and FP/Wet sampling will be changed as NAMEM moves to a new building. In addition, CREM will also move, and the mission gave advice and support for the new sampling location and chemical analysis environment.
Malaysia	24 - 29 February 2020	The mission visited to the new inland monitoring site in Tembeling River Taman Negara National Park in order to determine suitability of the EANET monitoring. Inland water trial sampling was carried out at one point on the mainstream and three points on the branches of Tembering River. The mission also visited to projected dry deposition monitoring site in Brinchang, Cameron Highlands in order to consider feasibility of the EANET monitoring. Capacity building with regard to wet and dry monitoring including lectures and monitoring practice was conducted for local staffs.
Indonesia	18-21 November 2019	A technical mission was dispatched to the Center for Atmospheric Science and Technology, Indonesia National Institute of Aeronautics and Space (LAPAN) located in Bandung, Indonesia. The mission conducted the calibration of the ozone automatic monitor, and parallel monitoring using the standard and LAPAN ozone monitors to confirm the precision and

		accuracy. In addition, the mission gave the advices about the periodical maintenance of the automatic monitors, and shared information about the QA/QC management on the wet/dry deposition monitoring activities.
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