



The Network Center for the Acid Deposition Monitoring Network in East Asia

REPORT ON THE PROGRESS OF THE EANET SINCE THE IG22

The 23th session of the Intergovernmental Meeting of the EANET (IG23),
24-25 November, 2021, Virtual Meeting

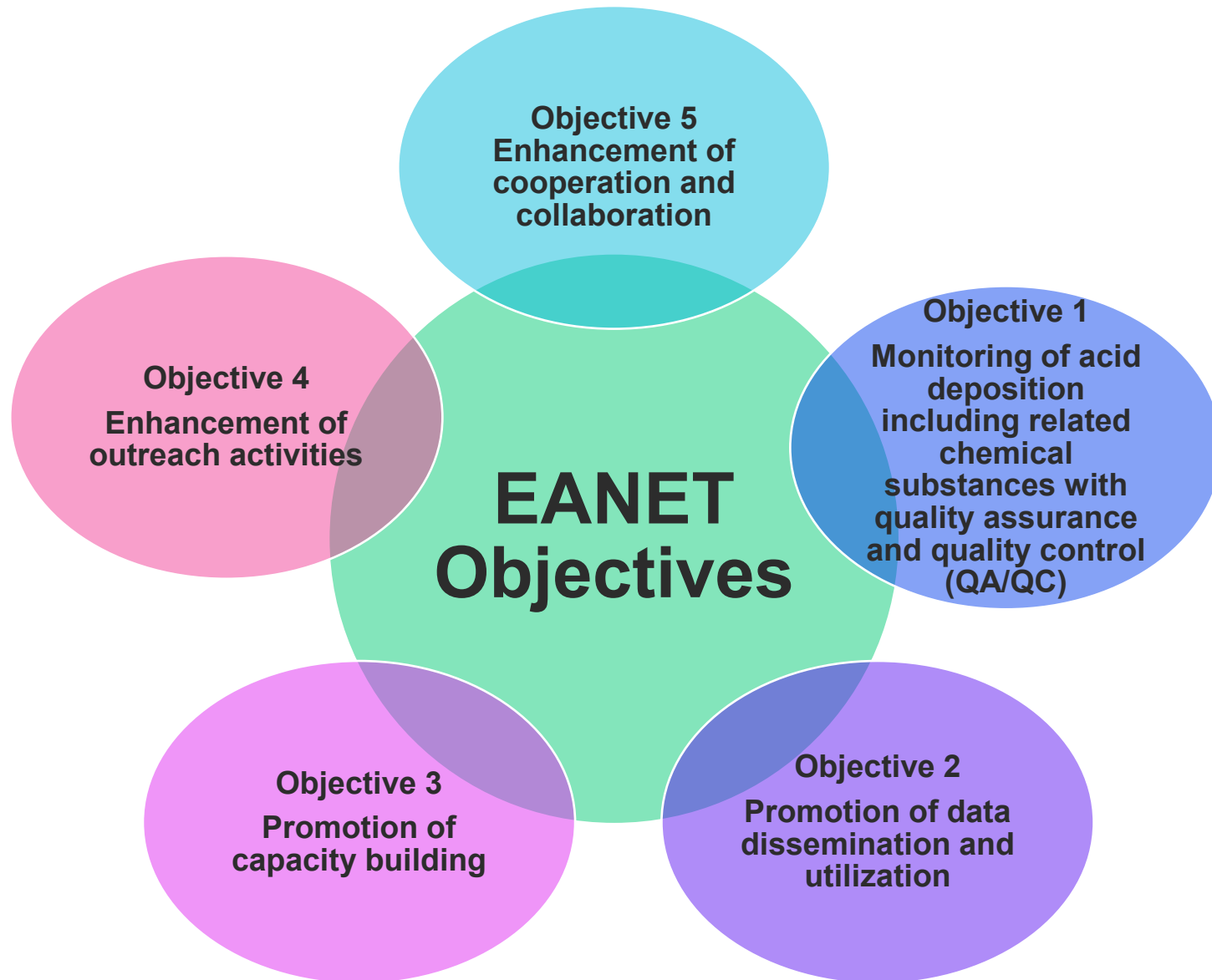


OUTLINE

- Brief introduction of EANET objectives in the 4th MTP (2021-2025)
- Accomplished or expected outputs through conduction of activities
- Self-evaluation of EANET activities in 2020



The Network Center for the Acid Deposition Monitoring Network in East Asia





OBJECTIVE-1

MONITORING OF ACID DEPOSITION INCLUDING RELATED CHEMICAL SUBSTANCES WITH QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

CORE ACTIVITY	OUTPUTS
<u>Activity 1:</u> Monitoring of acid deposition (acidifying species and related chemical substances such as ozone and PM), including an increase of EANET monitoring sites, improvement in monitoring methodologies, and better instrument maintenance	<ol style="list-style-type: none">1. Provision of support for solving technical problems of PC of wet and dry deposition.2. Consideration of applying less expensive monitoring methods with limited resources.3. Development of a set of Standard Operating Procedures (SOPs) for operational monitoring.4. Compilation of NMPs in all member countries and request registration of new monitoring sites at Technical Missions and email communications.
<u>Activity 2:</u> Development/revision of (technical) guidelines, technical manuals, and documents, as necessary	<ol style="list-style-type: none">1. Revision of Technical Manuals on Air Concentration Monitoring and Dry Deposition Flux Estimation
<u>Activity 3:</u> Development/ update of strategy papers for guidance on the future direction of the monitoring, as necessary	<ol style="list-style-type: none">1. Promotion of the activities described in Strategy Paper on Future Direction of Monitoring for Dry Deposition2. Sharing the latest scientific knowledge (such as scientific publications) informative for the Strategy Paper activities on ecological effects.



OBJECTIVE-1 (CONTINUED)

MONITORING OF ACID DEPOSITION INCLUDING RELATED CHEMICAL SUBSTANCES WITH QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

CORE ACTIVITY	OUTPUTS
Activity 4: Implementation of quality assurance and quality control (QA/QC) activities on acid deposition	<ol style="list-style-type: none">1. Distribution of the samples for the Inter-laboratory Comparison (ILC) surveys 2021 (the 24th project on wet deposition, the 17th project on dry deposition (filter-pack method), the 23rd project on soil, and the 22st project on artificial surface water) to the participating countries.2. Prepare Reports on the ILC survey in 2020 based on the submitted data for review and adoption at the SAC21 in 2021.3. Publish Reports on the ILC surveys in 2019 at the end of 2020 after accommodating reviews and comments from the Session of the SAC20 in September 2020.
Activity 5: Routine compilation, verification, evaluation, storage, and provision of data and maintenance of database	<ol style="list-style-type: none">1. Compile and validate 2020 monitoring data submitted by participating countries and prepare the draft Data Report. After the adoption of the 2020 data by SAC21, editing, and publication of the Data Report will be implemented.2. Disseminate the EANET data and information in accordance with the “Procedures on Data and Information Disclosure for the EANET” (Annex 2 of the Guidelines on the Administrative and Financial Management for the Secretariat and the Network Center (2017)), and relevant scientific and technical information to the participating countries, organizations, and individuals through the EANET website or using other means of communication as well as at regional/international meetings.3. Maintain the EANET monitoring database, enter new data into the database, discuss data sharing with the World Meteorological Organization, follow the signed Letter of Arrangement, and participate in online meetings organized by WMO.



OBJECTIVE-1 (CONTINUED)

MONITORING OF ACID DEPOSITION INCLUDING RELATED CHEMICAL SUBSTANCES WITH QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

NON-CORE ACTIVITY	OUTPUTS
<u>Activity 4:</u> Research on analysis on the relation of air pollution and acid deposition, including related chemical substances	<ol style="list-style-type: none">1. Evaluation of 20 years monitoring data for air pollution and wet and dry deposition components in East Asia.
<u>Activity 6:</u> Promotion of studies on the effects of acid deposition, including other priority chemical species on plants and ecosystems, especially on biogeochemical cycles on a catchment scale as well as regional impact assessment	<ol style="list-style-type: none">1. Publication of the paper on KJK in Atmospheric Environment (AO).2. Online publication of the paper on IJR in Geoderma (AO).3. Online publication of the review paper on nitrogen saturation in Soil Science and Plant Nutrition (AO).

Russia has provided an in-kind contribution to the non-core activity 6: Promotion of studies on the effects of acid deposition, including other priority chemical species on plants and ecosystems, especially on biogeochemical cycles on a catchment scale as well as regional impact assessment. Specifically, Russia provided monitoring data and experts and conducted regional ecosystems impact assessments with the NC.

Overall, the accomplished outputs have almost met the expected goals under objective 1 through this year's activities.



OBJECTIVE-2 PROMOTION OF DATA DISSEMINATION AND UTILIZATION

CORE ACTIVITY	OUTPUT
Activity 6: Conduct an annual assessment of the state of acid deposition using trend analysis, numerical models	1. Annual assessment of atmospheric and ecological data in 2020 was presented at SAC21.
Activity 7: Development of Periodic Report on the State of Acid Deposition in East Asia	1. Support the SAC to develop the PRSAD4 based on the Drafting Committee (DC) discussion for the PRSAD4 on the Web. 2. Hold Second Lead Authors' Meeting (LA2) and Drafting Committee Meeting (DC2) on the Web. 3. Hold Third Lead Authors' Meeting (LA3) and Drafting Committee (DC3) on the Web.

All participating countries have provided their experts as an in-kind contribution to the core activity 7. Among others, SAC members from Russia, Viet Nam, R. of Korea, China, Japan have contributed as the lead authors.

Overall, the accomplished outputs have almost met the expected goals under objective 2 through this year's activities.



OBJECTIVE-3 PROMOTION OF CAPACITY BUILDING

NON-CORE ACTIVITY	OUTPUT
Activity 15: Promotion of capacity building for personnel of the participating countries, including training courses, capacity building workshops, etc. for monitoring	<ol style="list-style-type: none"> 15 trainees from 6 participating countries have received individual training from 4 to 19 November 2021. Through this training, trainees have deepened the knowledge closely related to their laboratory work, data evaluation, and reporting.
Activity 16: Promotion of technical support to Participating Countries by the provision of advice, technical information, and equipment	<ol style="list-style-type: none"> Collecting information from EANET member countries. Technical support for EANET monitoring. Technical mission to EANET countries. (Visiting or Web) Meeting on PM2.5 countermeasures in Thailand.
Activity 18: Promotion of research and technical cooperation on emission inventory to support the capacity building	<ol style="list-style-type: none"> Forty-six participants from 9 countries registered for the Emission Inventory Workshop. One participant from each country was nominated to make a short presentation about issues related to national emission inventory. Five lecture presentations from experts on the development and application of emission inventory were included in the program. The workshop will be held on 18 October in virtual with presentations from lecturers and participants and following discussions among them.
Activity 20: Conduct fellowship research program	<ol style="list-style-type: none"> A researcher from Myanmar was selected for the program. Regarding the research theme, the researcher will receive necessary advice and instructions from the supervisor of NC.

China has provided an in-kind contribution to the NC. Specifically delivered two lectures for the individual training program.

The activities for capacity building, including the emission inventory workshop, individual training have been successfully done. Other than these activities, for instance, fellowship program will be conducted from the beginning of November.



OBJECTIVE-4 ENHANCEMENT OF OUTREACH ACTIVITIES

CORE ACTIVITY	OUTPUT
Activity 10: Promotion of public awareness on acid deposition, including other priority chemical species, etc.	<ol style="list-style-type: none"> 1. Provide technical/scientific support for public awareness activities of participating countries. 2. Support timely the Secretariat in developing the various contents of articles for the EANET website for public awareness.
	<ol style="list-style-type: none"> 1. Public awareness activities in collaboration with the Participating Countries to support environmental activities in regard to acid deposition and air pollution issues, such as organizing EANET webinars and awareness workshops. 2. Media and communication plans of EANET and implement monitoring and evaluation of communication activities. 3. Communication materials to support awareness activities: Video promotional of EANET. 4. Publish regular email blurb to communicate updated information to EANET Participating Countries. 5. Developing EANET promotional video. 6. Maintain photo archives of EANET. 7. Develop the biannual issue of the EANET Newsletter with the NC.

Non-core Activity	Accomplished Output (AO) (as of Sept 2021)/ Expected output (EO) (as of Dec 2021)	Implementation Status (as of Sept 2021)
Activity 24: Publication of EANET Science Bulletin	<ol style="list-style-type: none"> 1. (AO) The NC supported the Secretariat to develop the Research Portal in the EANET website. 	<ol style="list-style-type: none"> 1. The scientific reports (as contents of the former Science Bulletin) were uploaded in the Research portal.

Overall, the accomplished outputs have partly met the expected goals under objective 4 through this year's activities. Some activities, such as regular updating of research portal, issuing newsletters will be continuously conducted until the end of this year.



OBJECTIVE-5

ENHANCEMENT OF COOPERATION AND COLLABORATION

Core Activity	Accomplished Output (AO) (as of Sept 2021)/ Expected output (EO) (as of Dec 2021)	Implementation Status (as of Sept 2021)
Activity 11: Arrangements for the EANET Sessions agreed to by the IG, SAC, and STM meetings	1. (EO) Organized IG22 Meeting on 24-25 November 2021; SAC21 Meeting on 26	1. SAC21 has been, and IG22 will be held virtually due to the COVID-19 pandemic.
	2. (EO) Preparation of Meeting documents	2. The meeting documents were prepared and shared with meeting participants before the meeting.
	1. (AO) Organized STM22 Meeting	1. The STM21 meeting was held on 1-2 Sept. virtually, and 26 participants joined the meeting.
	2. (AO) Provide support to the NC for the arrangement, facilitation, and report the development of the Twenty-second Senior Technical Managers' Meeting (STM22)	2. There were ten agendas provided for the discussion. The main agendas include 1)the progress of EANET activities, 2)overview of the preliminary draft data report 2020, 3)evaluation for the results of inter-laboratory comparison project 2020, 4)consideration of the national monitoring plans 2021, 5)progress on the revision o the technical manuals for dry deposition flux estimation, and air concentration monitoring.
	1. (AO) TOR of New Task Forces developed	Nothing to report
1. Maintain regular communication with the SAC members, the participating countries, and the Secretariat.	NC keeps communication with the SAC members, the participating countries, and the Secretariat.	



OBJECTIVE-5 (CONTINUED) ENHANCEMENT OF COOPERATION AND COLLABORATION

Core Activity	Accomplished Output (AO) (as of Sept 2021)/ Expected output (EO) (as of Dec 2021)	Implementation Status (as of Sept 2021)
Activity 14: Revision of Guidelines on Administrative and Financial Management for the Secretariat and NC taking account of the new decisions of the IG	(EA) Revision of the Guidelines on Administrative and Financial Management for the Secretariat and NC in collaboration with the Secretariat taking account of the new arrangement of Project Fund to submit relevant documents to the IG, etc.	1. Revision of the Guidelines on Administrative and Financial Management for the Secretariat and NC in collaboration with the Secretariat taking account of the new arrangement of Project Fund to submit relevant documents to the IG were discussed and reviewed at the WG2021-1 will be brought to the SAC21 and IG23.
Activity 15: Review of the MTP (2016-2020), revision of the MTP (2021-2025) if necessary, and development of the next MTP for the EANET (2026-2030)	(EA) Conduct a terminal review of the MTP (2016-2020) and consider revision of the MTP (2021-2025) if necessary, in collaboration with the Secretariat for submission of IG23	1. The TR of EANET MTP was implemented in the second half of 2021 by an independent evaluator. 2. The draft report was shared with all NFPs and will be submitted and presented at the SAC21 and IG23



OBJECTIVE-5 (CONTINUED)

ENHANCEMENT OF COOPERATION AND COLLABORATION

Core Activity	Accomplished Output (AO) (as of Sept 2021)/ Expected output (EO) (as of Dec 2021)	Implementation Status (as of Sept 2021)
Activity 16: Sharing a common understanding on atmospheric environment issues among the scientific community, such as the APCAP Science Panel	Communicate with the participating countries and relevant organizations (such as APCAP, Convention on Long-range Transboundary Air Pollution (UNECE CLRTAP) and its program 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 (CCAC), WMO, WHO; European Monitoring and Evaluation Programme (EMEP); Better Air Quality in Asia (IBAQ), Clean Air Asia (CAA) taking the opportunity of relevant activities and meetings.	The NC attends the meeting of WMO to discuss metadata exchange. The NC attended the Working Group of APCAP and APCAP Science Panel Meeting. The NC attended meetings of IBAQ.
	1. (AO) (EO) Provision of information related to relevant regional and global agenda, such as preparation of the Fifth Session of the UN Environment Assembly linking with the contribution of EANET, updates on Fourth Forum of Ministers and Environment Authorities in the Asia Pacific in October 2021; and updates/information regarding EANET	1. Provided information related to the implementation of the Fourth Forum of Ministers and Environment Authorities in the Asia Pacific, events of partners such as APCAP Joint Forum, UNESCAP RRCAP, OECC, etc.
	(EA) (AO) Facilitate sharing a common understanding on atmospheric environment issues among the scientific community	1. Provision of information shared during the EANET Awareness Workshop in 2021 in September 2021 2. Provision of information shared during the Science and Policy Dialogue



OBJECTIVE-5 (CONTINUED) ENHANCEMENT OF COOPERATION AND COLLABORATION

NON-Activity	Accomplished Output (AO) (as of Sept 2021)/ Expected output (EO) (as of Dec 2021)	Implementation Status (as of Sept 2021)
Activity 26: Providing information and policy recommendations to policymakers based on sound science and assessment	<ol style="list-style-type: none"> (EO) Science and Policy Dialogue (SPD) will be organized on 26 November 2021 in collaboration between the Secretariat and the NC. (funded by Japan) The event will be open to public 	<ol style="list-style-type: none"> The Concept Note of the SPD has been developed Due to COVID19, the event has been changed from initially planned to be organized offline to be organized online.
Activity 27: Promotion of communication, collaboration, and cooperation with other relevant international organizations, initiatives, and programs	<ol style="list-style-type: none"> (AO)The NC attended the GAW Symposium of WMO. 	<ol style="list-style-type: none"> The meetings of CLRTAP were considered to participate.
	<ol style="list-style-type: none"> (AO) The Secretariat continues to support the engagement with other partner organizations through various activities. 	<ol style="list-style-type: none"> Sharing the information with PCs

Overall, the accomplished outputs have partly met the expected goals under objective 5 through this year’s activities. Some of activities (IG23, C-WG2, SPD) need to be continued until the end of this year.



SELF-EVALUATION OF EANET ACTIVITIES IN 2020

Total: 17 Core Activities and 9 Non-core Activities

Monitoring of acid deposition including related chemical substances with quality assurance and quality control (QA/QC)

- 5 core activities
- 2 no-core activities

Almost Achieved

Promotion of data dissemination and utilization

- 4 core activities

Almost Achieved

Promotion of capacity building

- 4 no-core activities

Almost Achieved

Enhancement of outreach activities

- 1 core activity
- 1 no-core activity

Partly Achieved

To Be Continued

Enhancement of cooperation and collaboration

- 7 core activities
- 2 no-core activities

Partly Achieved

To Be Continued

Remarkable outputs in the year of 2021

- ✓ The EANET Data report 2020
- ✓ The report on the inter-laboratory comparison projects 2020
- ✓ The fourth periodic report on the state of acid deposition in East Asia (PR SAD4)
- ✓ Revised Technical Manuals and Strategy Paper in 2021, and will be finalized in next year.
- ✓ Individual training has been done to 15 trainees.

HP Updating, Newsletter, etc.

IG23, Science and Policy Dialogue etc.