

The Working Group Meeting in 2021 Session 2
Acid Deposition Monitoring Network in East Asia
18-20 August 2021, Virtual Meeting

DRAFT WORK PROGRAMME AND BUDGET OF THE EANET IN 2022

I. INTRODUCTION

1. The Secretariat and the Network Center (NC) for the Acid Deposition Monitoring Network in East Asia (EANET) prepared the Draft Work Programme and Budget of the EANET in 2022 for consideration at the Working Group Meeting in 2021 Session 2 (WG2021-2) that will be held from 18-20 August 2021. The Draft Work Programme and Budget document will be submitted for consideration and approval at the Twenty-third Session of the Intergovernmental Meeting (IG23) on the EANET to be held on 24-25 November 2021.
2. The Draft Work Programme and Budget in 2021 are in line with the Final Draft MTP for the EANET (2021-2025), and are presented in the Attachment.

II. ACTIONS REQUIRED

3. The Working Group Meeting in 2021 Session 2 (WG2021-2) is invited to review “EANET Project Fund and Project Guideline” and may wish to consider, discuss, provide guidance, and make recommendations to the IG23 for its review, guidance, and approval, as appropriate, particularly on key aspects:
 - a. Core Activities in 2022 and budget;
 - b. Project Activities in 2022 and budget.

Attachment

DRAFT WORK PROGRAMME AND BUDGET OF THE EANET IN 2022

I. Core Activities of the EANET

1. The Core Activities of the EANET in 2022 are in line with the Final Draft Medium Term Plan (MTP) for the EANET (2021-2025). Core Activities consist of activities that all Participating Countries consider indispensable, priority, and essential for achieving the EANET's objectives, and beneficial for all Participating Countries directly and indirectly.
2. Typical examples of core activities include monitoring, development of technical manuals and guidelines, implementation of quality assurance and quality control (QA/QC) activities. They also include managing work of the EANET, such as organizing the meetings of the IG and the SAC, maintaining basic operations of the Secretariat and the NC, and conducting periodical reviews.

II. Non-Core Activities of the EANET

3. The Non-Core Activities' plan will be prepared by a project proponent, such as a Participating Country or a group of Participating Countries, the EANET bodies, and other entities, to be proposed to the Participating Countries for consideration and approval for the implementation.
4. The Non-Core Activities in 2022 will be implemented with the approval of the IG23. The Non-Core Activities are selected based on the Survey on Participating Countries' Support in Implementing Selected Non-Core Activities of the EANET conducted in October/November 2020.

III. Core Budget of the EANET

5. The Core Budget of the EANET will be utilized for the implementation of Core Activities. The Secretariat and NC Core Budget in 2022 will come from the annual voluntary financial contribution from the Participating Countries based on the calculation of the latest UN scale voluntary assessment.
6. The Participating Countries are encouraged to make voluntary financial contributions to the Secretariat and the NC Core Budget in 2022. Additional contributions, both in-kind and in-cash are also welcome.

IV. Budget for Non-Core Activities of the EANET

7. The Non-Core Activities will be implemented to available funds from Non-Core Budget

unless decided differently by the IG. Any partner organization (including an individual Participating Country) could provide their financial or in-kind contributions to a specified project, which is called a co-finance. If no co-finance is available for a certain project, such a project will not be approved nor implemented.

8. The EANET Project Fund and Project Guideline is expected to be reviewed and approved by the IG23 in 2021. If the IG23 approves the document, the Non-Core Activities will be implemented as Project Activities by referring to the EANET Project Fund and Project Guidelines. Otherwise, the Non-Core Activities will be implemented in a similar manner as in 2021.

ANNEX

Annex 1: Core Activities of the EANET in 2022

Annex 2: Non-Core Activities of the EANET in 2022

Annex 3: Core Budget of the EANET in 2022

Annex 4: Budget for Non-Core Activities of the EANET in 2022

Annex 1

Core Activities of the EANET in 2022 (Draft)

Objective 1: Monitoring of acid deposition including related chemical substances with quality assurance and quality control (QA/QC)
 – Assist Participating Countries to conduct qualified monitoring of and acid deposition through providing technical guidance, maintenance of the monitoring instrument, improvements of the methods, guidelines, conducting quality assurance and quality control (QA/QC) activities.

Activity 1: Monitoring of acid deposition (acidifying species and related chemical substances) including an increase of EANET monitoring sites, improvement in monitoring methodologies and better instrument maintenance

Table. Solving technical problems of participating counties (PC)

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Support for solving technical problems of PC of wet and dry deposition	Identification of problem of countries		Discussion with the countries		Implementation of support							
PC	1. Consider applying less expensive monitoring methods with limited resources	Summarize low cost monitoring instruments		4th EGRTM Meeting	Preparation of the revised Technical Manuals including low cost monitoring				Submit the revised Technical Manuals to SAC22 and IG24				
	2. Improve the implementation of all required monitoring items with necessary data completeness as well as accuracy	Trouble shooting and Technical guidance											
	3. Develop a set of Standard Operating Procedures (SOPs) for operational monitoring	Submit status of SOPs										Discussions of SOPs	

Table. National Monitoring Plan (NMP) of participating country (PC)

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Compile NMPs in all member countries and request registration of new monitoring sites at Technical Missions and email communications				Request to submit NMPs		Compile NMP		Submit NMPs to STM23		Submit NMPs to SAC22		Follow-up of NMPs
PC	1. Continue to revise NMPs. The revised plans shall be submitted to the NC				Request to submit NMPs		Preparation of NMP		Discussions of NMPs in STM23		Revision of NMP		
	2. Make best effort to establish new monitoring site(s) especially particulate matter (PM) and ozone and ensure appropriate distribution of monitoring sites	Collect information on new monitoring site			Discussion with the countries		Preparation of NMP	Submission of NMP					
	3. Any changes in regard to nominations of the National Focal Points (NFPs), the SAC members, the National QA/QC Managers, and the National Centers should be informed to the Secretariat in writing	Report on change in NFPs, SAC members, QA/QC managers and NCs											

Table. Dry deposition monitoring and flux estimation

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Provide technical support of dry deposition flux estimation in member countries. Organize the 2nd meeting of Expert Group on revision of the Technical Manuals (EGRTM) to discuss elaborated methods of dry deposition flux estimation.	<pre> graph LR A[4th revisions of the Technical Manuals] --> B[4th EGRTM Meeting] B --> C[Preparation of the final draft of revised Technical Manuals] C --> D[Submit the revised Technical Manual to SAC22 and IG24 for adoption] </pre>											
PC	1. Promote implementation of dry deposition (air concentration) monitoring at respective sites and, as far as possible, to conduct monitoring of PM, in particular PM2.5, and ozone	<pre> graph LR A[Monitoring] --> B[Monitoring Data submission] B --> C[Monitoring] C --> D[Monitoring Data verification] D --> E[Monitoring] </pre>											
	2. Promote implementation of dry deposition monitoring in the participating countries;	<pre> graph LR A[Monitoring] --> B[Monitoring Data submission] B --> C[Monitoring] C --> D[Monitoring Data verification] D --> E[Monitoring] </pre>											

Activity 2: Development/revision of (technical) guidelines, technical manuals and documents, as necessary

Table. Technical manuals for dry deposition flux estimation and air concentration monitoring

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Organize the 2nd meeting of Expert Group (EG) on revision of the Technical Manuals to consider the revised Technical Manuals and discuss elaborated methods of dry deposition flux estimation and air concentration monitoring methods in East Asia												

Table. Revised Guidelines for Acid Deposition Monitoring in East Asia

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Prepare the 1st draft of the revised Guidelines for Acid Deposition Monitoring in East Asia. Email communications or online meeting with SAC members will be implemented to review the 1st draft of the revised Guidelines.												

Activity 3: Development/ update of strategy papers for guidance on the future direction of the monitoring, as necessary

Table. Review and reset of Strategy paper

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Email communications or online meeting with the SAC members and existing Task Force members will be implemented to review the existing strategy paper and reset them as the												

	22 st Project on Inland Aquatic Environment) based on the data submitted from participating laboratories												
PC	The National QA/QC Managers and the National Centers shall continue to implement QA/QC activities and communicate with the national laboratories on data assurance. All national laboratories are encouraged to participate in the Inter-laboratory Comparison Surveys of the EANET. The results of the Inter-laboratory Comparison Surveys in 2021 should be submitted to the NC	Sample Analysis	Data submission										

Table. Reports on Inter-laboratory Comparison Surveys in 2022

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Prepare Reports on the Inter-laboratory Comparison Surveys in 2021 based on the submitted data for review and adoption at the SAC22 in 2022							Report preparation			Submission to SAC23		

Table. Participation to the Inter-laboratory Comparison Surveys organized by international networks

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Analyze artificial precipitation and filter samples and report the data. Evaluation of analytical precision and accuracy.		USGS		USGS	WMO	USGS EMEP		USGS		USGS WMO		USGS

Table. Inter-laboratory comparison surveys in 2021

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Publish Reports on the Inter-laboratory Comparison Surveys in 2020 by early 2022 after accommodating reviews and comments from the Session of the SAC21 in September 2021.	2021 Report publication and distribution											

Activity 5: Routine compilation, verification, evaluation, storage and provision of data and maintenance of database

Table. 2021 Data report

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Compile and validate 2021 monitoring data submitted by participating countries and prepare the draft Data Report. After the adoption of the 2021 data by SAC22, editing and publication of the Data Report will be implemented.				Monitoring Data submission			Compile data	Report to STM23	Verify data	Report to SAC22	Editing and publication of the Data Report 2021	

Table. Disclosure of EANET data

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Disseminate the EANET data and information in accordance with the “Procedures on Data and Information Disclosure for the EANET” (Annex 2 of the Guidelines in 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.		Upload Data Report 2020		Disseminate the EANET data and information								

Table. Maintain EANET monitoring database

	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Maintain the EANET monitoring database, enter new data to the database, discuss data sharing with the World Meteorological Organization followed by the signed Letter of Arrangement, and participate in online meetings organized by WMO.	Update monitoring database		WMO Online meeting	Maintain list of data user		WMO Online meeting			WMO Online meeting			WMO Online meeting

Objective 2: Promotion of data utilization and dissemination – Collect, analyze and evaluate data of monitoring of acid deposition and share the results to relevant stakeholders to encourage them to utilize the results to tackle the acid deposition. The results include policy recommendations. To achieve this objective, research activities on selected subjects can be promoted.

Activity 6: Conduct annual assessment of the state of acid deposition using trend analysis, numerical models

Table. Analysis of 2021 monitoring data

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Conduct analysis of 2021 Monitoring Data and prepare tables/figures of analyzing annual data to be presented at SAC22 and included in Data Report 2021.				Communicate with the countries for data submission		Compile and analyze the annual data for Data Report		Report to STM23	Present the data at SAC22, Adopt Data Report 2021			

Activity 7: Development of Periodic Report on the State of Acid Deposition in East Asia (PRSAD, regional assessment report published every 5 years), including the impact on plants and ecosystems

Table. Support the SAC to develop the PRSAD4

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Support the SAC to develop the PRSAD4 based on the discussion at the Drafting Committee (DC) for the PRSAD4			Edit and publish the report									

Activity 8: Regular updating of the website

Table. Management of EANET website

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Update the EANET website timely in cooperation with Secretariat for the	Update EANET website timely and maintain/improve the monitoring data download system											


	EANET by uploading Data Report, monitoring data base, Inter-laboratory comparison project, scientific reports and important activities results etc., and maintain/improve the monitoring data download system for easy access for data users.	
Sec	Manage EANET website: news content development, uploading publications, necessary adjustments to the website function, maintenance of the web hosting.	

Table. Uploading report of the Session

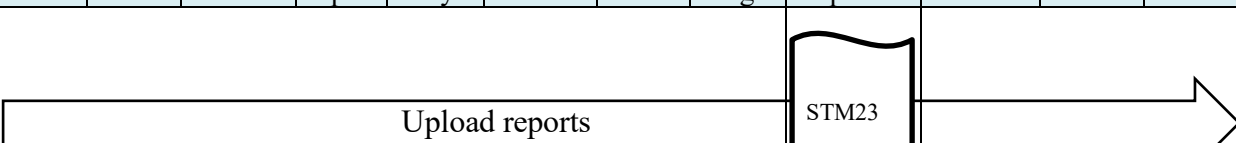




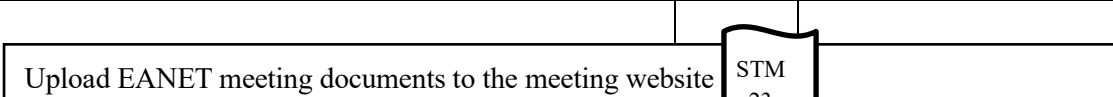

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
NC	Upload the Report of the Sessions of the EANET Meetings and other relevant EANET documents in collaboration with the Secretariat for dissemination of the information of the EANET.													
Sec	Upload the Report of the Sessions of the EANET Meetings and other relevant EANET documents in collaboration with the NC for dissemination of the information of the EANET.													

Table. Upload EANET Meeting documents to the meeting website

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
NC	Upload EANET Meeting documents to the meeting website for the participants of the meeting and NFPs in collaboration with the Secretariat													

	fundamentally one month before the Meeting.				
Sec	Upload EANET Meeting documents to the meeting website for the participants of the meeting and NFPs fundamentally one month before the Meeting in collaboration with the NC.				

Table. Upload EANET meeting documents with authorized password for participating countries

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sec	In accordance with the Annex 3 of the Guidelines on the Administrative and Financial Management for the Secretariat and the Network Center (2017), in collaboration with the NC, the Secretariat will upload the EANET meeting documents (except for Power Point documents, etc.) of the IG, the SAC, the WG and the STM after the Session with authorized password for the participating countries												

Activity 9: Updating of the data management system in the NC to enable easy access by approved users

Objective 3: Promotion of capacity building - Strengthen the capacity of the Participating Countries through various activities, including training, workshops, technical supports to Participating Countries, and fostering mutual capacity building cooperation.

There are no Non-Core Activities under this objective (as its main objective). However, many activities under other objectives are also contributed to achievement of Objective 3.

Objective 4: Enhancement of outreach activities - Enhance outreach to the stakeholders in order to raise their awareness, to encourage them to take appropriate actions and develop collaborative joint activities with EANET.

Activity 10: Promotion of public awareness on acid deposition including other priority chemical species, etc.

Table. Promotion of public awareness

	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	1. Provide technical/scientific support for public awareness activities of participating countries such as providing training materials or joining the technical discussion in activities when the public awareness activities of countries carry out.	Provide technical/scientific support in public awareness											
	2. Support timely the Secretariat in developing the various contents of articles for EANET website for public awareness	Support for public awareness in EANET website											
Sec	1. Organize public awareness activities in collaboration with the Participating Countries to support environmental activities in regard to acid deposition and air pollution issues, such as organize EANET webinar and awareness workshops	Organize public awareness activities											
	2. Develop media and communication plans of EANET and implement monitoring and evaluation of communication activities	Develop media and communication plans											
	3. Develop communication materials to support awareness activities: video promotional of EANET, info briefs, banners, email blurb	Develop communication materials											

	4. Publish regular email blurb to communicate updated information to EANET Participating Countries	Publish regular email blurb
	4. Maintain photo archives of EANET	Maintain photo archives
	6. Develop the biannual issue of the EANET Newsletter with the NC	Develop the EANET Newsletter

Objective 5: Enhancement of cooperation and collaboration - Enhance collaborative and/or joint activities with relevant entities including international and/or regional organizations, acid deposition-related regional frameworks, financial institutions, research institutes, and interested governments of non-participating countries, to tackle acid deposition issues.

Activity 11: Arrangements for the EANET Sessions agreed to by the IG

Table. SAC22 and IG24

Time		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
NC	Support the Secretariat in organizing the EANET Sessions including the IG, SAC											SAC 22	IG 24		
Sec	Make necessary arrangements for two annual meetings of the EANET in 2022, namely the Twenty-fourth Session of the Intergovernmental Meeting (IG24) and the Twenty-second Session of the Scientific Advisory Committee (SAC22)								Invitation of SAC22	Invitation of IG24			SAC 22	IG 24	

Table. STM23


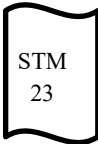

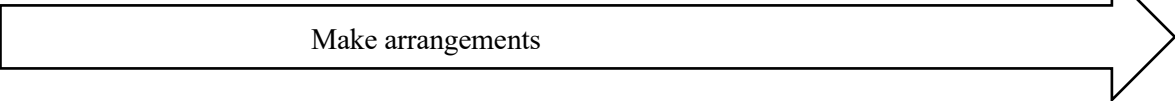
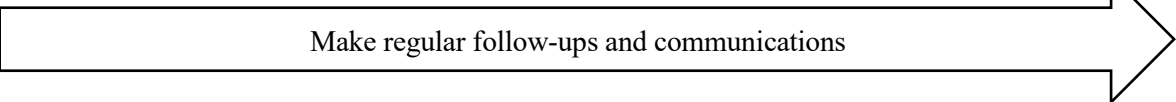
	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Organize the Twentieth-third Senior Technical Managers' Meeting (STM23) in summer or autumn of 2022 hosted by one of the participating countries. The main objectives of the meeting are to exchange information between the NC and the National Center of each participating country, to disseminate latest scientific and technical information, to review the EANET activities of the participating countries, to clarify some important technical issues and to identify potential activities to be implemented by the participating countries.												
Sec	Provide support to the NC for the arrangement, facilitation and report development of the Twenty-third Senior Technical Managers' Meeting (STM23)												

Table. Administrative and financial arrangement

	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Make administrative and financial arrangements for the EANET as appropriate												
Sec	1. Make regular follow-ups with the NFPs regarding the annual financial contribution of the participating countries to the Secretariat budget by the provision of a letter to request the financial contribution to countries												

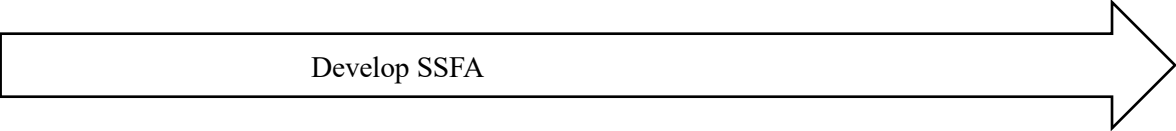
<p>along with the invoice; regular communications with the NFPs on the status of the contribution, provision of the acknowledgment letter once the contribution received at UNEP contribution account</p>	
<p>2. Develop the Small-Scale Funding Agreement (SSFA) with the Regional Resources Center for Asia and the Pacific of Asian Institute of Technology (RRC.AP/AIT) on the provision of support from RRC.AP to Secretariat for the EANET in 2022 by following the Decision of the IG15.</p>	

Table. TOR of new Task Forces

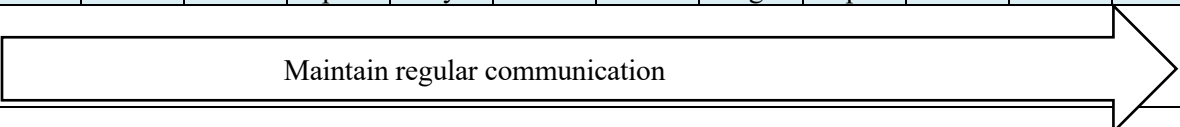
	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	After approval of IG for reformation of Task Forces, Email communications or online meeting with SAC members and existing Task Force members will be implemented before SAC22 during the first half of 2022, in order to draft the Terms of Reference (TOR) and lists of Chairs (and members) to launch the reformed Task Forces. The NC will lead this work.												
		Detailed plan on TF reformation		Draft TORs of new TFs			Revised the TORs			Adopt the TORs at SAC22	Endorse the TORs at IG24		

Table. Progress report

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Prepare the Progress Report and Financial Report in 2021 for												
								Prepare progress and financial report		STM 23	SAC 22	IG 24	
								Prepare progress and financial report					

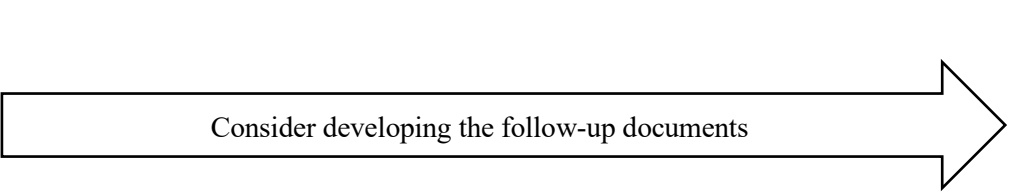
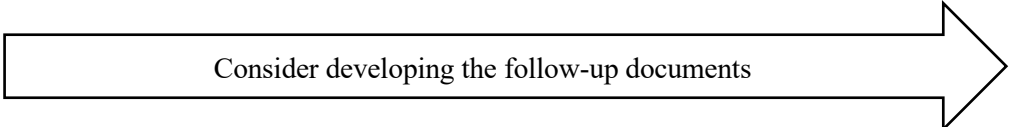
	submission to the EANET Sessions such as STM23, SAC22 and IG24												
Sec	Prepare the Progress Report and Financial Report in 2021 for submission to the EANET Sessions such as STM23, SAC22 and IG24									STM 23	SAC 22	IG 24	

Table. Regular communication with SAC, Participating Countries and Secretariat

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Maintain regular communication with the SAC members, the participating countries and the Secretariat.	Maintain regular communication 											

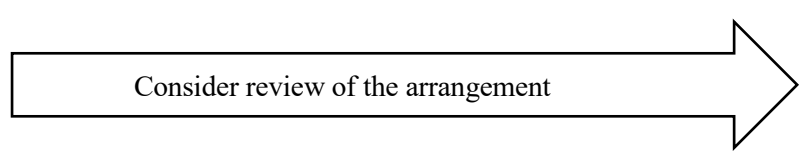

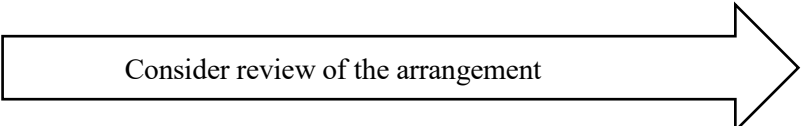

Activity 12: Consideration on future development of the EANET

Table. Documents relevant to expansion of scope

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Consider developing the follow-up documents relevant to expansion of the scope in collaboration with the Secretariat to submit to the IG24 and other meetings in 2022, including developing detail guideline of the project fund, and phase activities	Consider developing the follow-up documents 										IG 24	
Sec	Consider developing the follow-up documents relevant to expansion of the scope in collaboration with the NC to submit to the IG24 and other meetings in 2022, including developing detail guideline of the project fund and phase activities	Consider developing the follow-up documents 										IG 24	

Activity 13: Review of the arrangements of the EANET Secretariat and the NC

Table. Review of the arrangement of EANET Secretariat and the NC

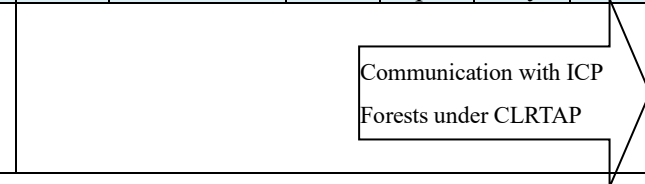
	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Consider review of the arrangement of EANET Secretariat and the NC in collaboration with the Secretariat for the IG24 and other meetings in 2022 as appropriate.												
Sec	Consider review of the arrangements of the EANET Secretariat and the NC as appropriate in collaboration with the NC												

Activity 14: Revision of Guidelines on Administrative and Financial Management for the Secretariat and NC taking account of the new decisions of the IG

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)

Activity 16: Sharing a common understanding on atmospheric environment issues among the scientific community such as the APCAP Science Panel

Table. Communicate with the participating countries and relevant organizations

	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Communicate with the participating countries and relevant organizations (such as APCAP, Convention on Long-range Transboundary Air Pollution (UNECE CLRTAP) and its programs 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 opportunity of relevant activities and meetings.												
Sec	Communicate with the participating countries and relevant organizations on activities as well as on relevant regional and global agenda, such us 5 th UN Environment Assembly in 2022.												

Table. Sharing a common understanding among the scientific community

	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sec	Facilitate sharing a common understanding on atmospheric environment issues among the scientific community												

Activity 17: Administrative works

Table. Administrative arrangement

	Time	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NC	Make necessary administrative arrangement												
Sec	Make necessary administrative arrangement												

Annex 2

Candidates of Non-Core (Project) Activities of the EANET in 2022 (Draft)

Objective 1: Monitoring of acid deposition including related chemical substances with quality assurance and quality control (QA/QC) – Assist Participating Countries to conduct qualified monitoring of acid deposition through providing technical guidance, maintenance of the monitoring instrument, improvements of the methods, guidelines, conducting quality assurance and quality control (QA/QC) activities.

I. Current Scope Activity

Activity 1: Research on analysis of long term trend and acid deposition including related chemical substances by using monitoring data of EANET accumulated so far (continued from 2021)

- Promote analysis of long term monitoring data of wet and dry deposition components in East Asia, and the outcome was reflected in the manuscript of the 4th Periodic Report on the State of Acid Deposition in East Asia (PRSAD4) in 2021.
- Based on the long-term trend analysis in PRSAD4, figures of visual trend information for acid deposition and air pollution will be constructed and introduced in the EANET Data Report continuously from 2022.

[Benefit of the activity]

- The scientific knowledge described in the 4th Periodic Report on the State of Acid Deposition in East Asia provides information on building common understating of the status of acid deposition and related acidic substances in the country.

Activity 2: 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 (continued from 2021)

- Field surveys will be conducted at least monthly (hopefully twice a month in summer) through the year of 2022 in Kajikawa catchment site, Niigata, Japan, to assess the recovery process from acidification, possible progress of nitrogen (N) saturation, and interlinkage between air pollution effects and climate change.
- Data assessments for Lake Ijira catchment and other EANET catchment sites will be conducted in cooperation with the EANET/external scientists.
- Impact assessments of N deposition and ozone in the whole EANET region (using critical load/level approaches) will be promoted in cooperation with the EANET/external scientists and communities. The observational data above will be utilized for the validation of the assessment models.

[Benefit of the activity]

- It is expected to confirm whether the recovery process is smoothly progressing, or disturbance of N cycle is enlarged. In particular, N leaching from forest areas is largely concerned. Climate change and extreme weather, such as sudden heavy rains, may be discussed as additional effective factors in the process above. The scientific knowledge obtained through the project will be informative to assess ecological effects of air pollution and verify contribution of relevant policies/measures to conservation of the environment in the region.
- Visualization of possible impacts by the regional assessments will be informative for the general public and policy makers to identify which parts of the region have higher risks of N saturation and ozone pollution. It is expected that discussion on regional atmospheric management will be promoted.

Activity 3: Sessions to raise awareness of application and quality control and quality assurance of air-pollution monitoring (new proposed activities in 2022)

- Hosting the session focused on the important QA/QC of air quality monitoring and the suitable QA/QC processes according to the human resource and infrastructure in each EANET participating country.
- At the BAQ event, EANET NC and CAA could organize some sessions for practitioners to learn the importance of QA/QC of monitoring and how to design and operate the QA/QC.
- EANET NC could provide lectures and some of CAA participating entities, experts, from public and private sector, can share their idea and activities on QA/QC for dissemination.
- This project could focus on selected PC which has a quite limited capacity of the national monitoring system to assist it in initiating/develop a national monitoring system and share its development of experiences to other PCs and seek other PCs for collaborations.

[Benefit of the activity]

- It will develop monitoring and QA/QC capacity for wet deposition, dry deposition, soil and vegetation and inland aquatic environment in EANET member countries.

Activity 4: Workshop on national air-quality monitoring systems and methodologies with APCAP and other partners (new proposed activities in 2022)

- The experiences of NC, and the network and systems in PCs could be applied to other important monitoring stations in PCs as well as pollutants/substances which are not covered by EANET, with additional resources contributed by partner organizations to improve national monitoring system to address the wide air pollution agenda/substances.
- This (co-financed) workshop is to invite relevant stakeholder in QA/QC for wide range

of monitoring station and/or mobile monitoring units (limited to EANET targeted pollutants) in PCs, to learn the past experiences and provide opportunities to seek possibility of expansion of these services with other stakeholders and pollutants.

[Benefit of the activity]

- It will develop national monitoring system with QA/QC capacity for wide range monitoring station including arrangement of mobile monitoring unit and learn the past experiences for expansion of opportunity for activities in countries.

Activity 5: Expanding the regional air quality monitoring using the low-cost sensor and improving the ability to the monitoring data to policy making (new proposed activities in 2022)

- Considering the advantage, data quality and feasibility of the low-cost sensor system to promote spatial AQ monitoring in IBAQ member countries. According to the outcomes, the toolkit will be developed to promote the expansion of the AQ monitoring and utilize for the pollution control strategy in the city.

[Benefit of the activity]

- It is expected to increase the varieties of the measurement methods according to the objective of the air quality monitoring. The outcomes will support the enhancement of the skills and feasibility for the spatial air quality monitoring using the combination of low-cost monitoring system and high precision monitoring systems

II. Expanded Scope Activity

Activity 6: Promotion of studies on estimation of the source of air pollution of PM2.5 (new proposed activities in 2022)

- promote PM2.5 components monitoring and data analysis in Japan and Thailand. By using the components data and receptor model, source apportionment of PM2.5 will be implemented. This activity will be implemented full year in 2022.

[Benefit of the activity]

- Major sources of PM2.5 will be identified, and the obtained outcomes will be useful for considering PM2.5 reduction strategy.

Activity 7: Promotion of studies on analysis in terms of climate change (e.g., EC/ OC, SLCPs) (new proposed activities in 2022)

- promote analysis of long term monitoring data of EC/OC in Japan and Thailand. This activity will be implemented full year in 2022.

[Benefit of the activity]

- Concentration level of EC/OC and atmospheric removal process of EC/OC will be elucidated. The obtained observation data will be useful for assessment of change in

radiative forcing and precipitations combining with modeling analysis.

- contractor and NC will jointly promote the research and report it at SAC if possible or report the results at a video conference in December 2022.

[Benefit of the activity]

- The scientific outcomes will provide discussions on future direction on investigation and research in East Asia among SAC and academic communities.

Activity 8: Conduct annual assessment of the state of air pollution (except acid deposition) using trend analysis, numerical models (new proposed activities in 2022)

- promote analysis of long term monitoring data of ozone and particulate matter in East Asia, and the outcome will be reflected in the manuscript of the 4th Periodic Report on the State of Acid Deposition in East Asia. This activity will be implemented full year in 2022.

[Benefit of the activity]

- The scientific knowledge described in the 4th Periodic Report on the State of Acid Deposition in East Asia will provide information on building common understating of the status of acid deposition and other air pollution related acidic substances in the country.

- The contractor and NC will jointly promote the research and report it at SAC if possible or report the results at a video conference in December 2022.

[Benefit of the activity]

- The scientific outcomes will provide discussions on the future direction on investigation and research in East Asia among SAC and academic communities.

Objective 2: Promotion of data dissemination and utilization – Collect, analyze and evaluate data of monitoring of acid deposition and share the results to relevant stakeholders to encourage them to utilize the results to tackle the acid deposition. The results include policy recommendations. To achieve this objective, research activities on selected subjects can be promoted.

I. Current Scope Activity

Activity 9: Preparatory work for supporting APCAP Solution Tracker from Monitoring Aspects (new proposed activities in 2022)

- APCAP's Solution Tracker uses selected existing air pollution data, which might be insufficient to track the progress of each country as a whole.

- EANET NC, and selected experts as well as APCAP could work together to identify the ways how such tracking tool could be improved by building capacity in national monitoring, by conducting survey and research with mutually contributing resources.
- This project may cover countries either in APCAP and EANET.

[Benefit of the activity]

- APCAP's Solution Tracker can be used as informative example for EANET countries to enhance the assessment and improvement of the atmospheric environment in countries.

Objective 3: Promotion of capacity building - Strengthen the capacity of the Participating Countries through various activities, including training, workshops, technical supports to Participating Countries, and fostering mutual capacity building cooperation.

I. Current Scope Activity

Activity 10: Promotion of capacity building for personnel of the participating countries including training courses, capacity building workshops, etc. for monitoring (continued from 2021)

- consider and develop the appropriate training materials, technical documents for monitoring wet deposition, dry deposition, soil and vegetation and inland aquatic environment from opportunities of training, monitoring and research activities.

[Benefit of the activity]

- It will develop monitoring and QA/QC capacity for wet deposition, dry deposition, soil and vegetation and inland aquatic environment in EANET member countries.
- assist national training activities by providing technical materials and experts when the activities carried out;

[Benefit of the activity]

- It will develop monitoring and QA/QC capacity and data interpretation for wet deposition, dry deposition, soil and vegetation and inland aquatic environment especially specific for each country.
- A capacity building for six persons including training and lecture for monitoring will be held in Japan for 3 weeks in November/December 2022.

[Benefit of the activity]

- The trainee will acquire knowledge on monitoring wet deposition, dry deposition, soil and vegetation and inland aquatic environment. They will be expected to disseminate their experience to their colleagues in each country.

- make use of the training programmes and technical assistance provided by donor agencies that can support training on acid deposition and related air pollution monitoring targeting the participating countries, if applicable.

[Benefit of the activity]

- It will be expected to enrich the contents of training on acid deposition and related air pollution monitoring.

Activity 11: Promotion of technical support to participating countries by provision of advice, technical information and equipment (continued from 2021)

- coordinate with relevant regional/international initiatives such as CAA and funding agencies such as ADB to maximize the use of available funds taking into account of the availability of the resources and situation of operation/monitoring in the participating countries in order to continue to provide assistance and technical support to individual participating countries;

[Benefit of the activity]

- It is expected that the measurement accuracy will be improved by solving the problems that are current issues in atmospheric monitoring and by directly training the person in charge at the site in charge.
- dispatch technical missions to the participating countries based on the request from the countries to invitation letter in order to exchange information and experiences with National Centers, National QA/QC Managers and local experts, to provide technical advice and disseminate the latest technical information taking into account of availability of funds, and to encourage participating countries to organize in-country technical workshops during NC technical missions. A technical support mission will be held possibly in Myanmar/Cambodia/Indonesia/Vietnam by December 2022 to give advice, technical information and equipment.

[Benefit of the activity]

- It will be expected to develop and improve acid deposition and related air pollution monitoring in Myanmar/Cambodia/Indonesia/Vietnam. The establishment of new EANET monitoring site is also expected.

Activity 12: Promotion of research and technical cooperation on emission inventory to support the capacity building (continued from 2021)

- Emission inventory training workshop/seminar will be held on November 2022 in virtual to promote and support development of national emission inventory for major anthropogenic sources. In addition to introduction of emission inventory such as roles of emission inventory in air quality management and framework for development of national emission inventory, basic methodology for estimation of emissions from major sources will be explained.

- NC has been conducted research projects on study on the development and improvement of emission inventories and their applications for analysis of atmospheric environment in the regions, in collaboration with some experts from selected PCs.

[Benefit of the activity]

- It is expected to provide general information and basic knowledge of methodologies for development of emission inventories to potential developers of the national emission inventories. The results of research projects can be utilized for development of national emission inventory.

Activity 13: Conduct fellowship research program (continued from 2021)

- The selection of fellow will be conducted in early 2022, and the fellowship program will be conducted in the 2nd half of 2022. For the selection of fellow, the candidates in 2020, who could not come to the NC because of COVID-19, will have high priority.

[Benefit of the activity]

- Fellowship research program will strengthen the capacity building of young researchers in the EANET participating countries, especially in the developing countries, and also promote scientific research in those countries.

Activity 14: Intensive training for city government officials of air pollution monitoring and related skills (new proposed activities in 2022)

- The capacity building program on air quality monitoring and related technology and skills in EANET participating countries will be held, possibly through CAA channel. Preparing a peer learning seminar to share air quality monitoring data, challenges in air quality monitoring, and utilization of data for policy and air pollution control strategies

[Benefit of the activity]

- It is expected to provide general information and basic knowledge of methodologies for air quality monitoring skills and technologies and the usage of the monitoring data for the public awareness and air quality monitoring control strategies.

Activity 15: Learning Opportunity of IIASA Study on Urban and Rural Air-pollution Relations (new proposed activities in 2022)

- IIASA is conducting a research on air pollution interactions among rural and urban areas with assistance from APCAP, NC and some countries in the region.
- The research is quite relevant to the priority air pollution agenda in the region, air pollution caused in rural areas also affect urban areas and bring serious high PM2.5

concentration in certain season. The research is to figure out the relations by developing models to quantify the impacts. The research has started in 2020, may be continued if relevant countries are keen to solve the issue.

[Benefit of the activity]

- This co-financed project organizes series of seminars/workshop to learn and discuss the progress and results of the research and would be an opportunity for further work with more participation of interested PCs.

II. Expanded Scope Activity

Activity 16: Promotion of studies on atmospheric simulation models to assess the trend of national and regional acid deposition including other related air pollutants in East Asia through workshops, training courses, etc. (new proposed activities in 2022)

- International workshop on atmospheric modeling research in East Asia (MICS-Asia: Model Intercomparison Study for Asia) will be held on December 2022 in China (in person) to promote research activities on acid deposition and other related air pollutants and strengthen research community of air quality and climate modeling in East Asia.

[Benefit of the activity]

- It is expected to share recent scientific research results related to acid deposition, other related air pollutants and climate change and strengthen the relations between EANET and the MICS-Asia community by exchange opinions for further cooperation.

Activity 17: Organize workshops or seminars for practitioners to learn co-benefits of air pollution measures and how to maximize co-benefits in designing mitigation measures (new proposed activities in 2022)

- A regular set of workshops and seminars on the co-benefits concepts, tools to analyze co-benefits, and good practice policy and institutional changes that can help achieve co-benefits.
- These opportunities could be implemented by Asia Co-benefit Partnership (ACP) and in collaboration with its partners and EANET.

[Benefit of the activity]

- Policymakers would be more aware of the co-benefits from integrating air pollution and climate change planning. Though there is still significant scope before policymakers, the activity can be base decisions on the co-benefits from this integrated planning.

Activity 18: Learning Opportunity on Reducing Emissions from Open Burning (Alternatives to Burning Bans) (new proposed activities in 2022)

- The solution to this problem in air pollution modelling research is broadly labelled bans on burning; however, this solution is difficult to enforce and may further disadvantage the poorest farmers.
- There is sufficient evidence that alternatives to bans, including using crop residues for mulch and fertilizer or growing high-yield crops such as mushrooms, may offer a more sustainable solution.
- This project will consist of a series of learning seminars where policymakers and practitioners can share their experiences with sustainable solutions and also determine how national governments can enable their spread and replication.

[Benefit of the activity]

- The information on one of the key sources of particulate pollution in Southeast Asia, the open burning of biomass is expected to be shared. This practice has increased in frequency with growing pressure to clear fields for more intensive agricultural production.

Activity 19: Learning Opportunity on Reducing Emissions and Capturing Other Co-benefits from High-Efficient Heat Only Boilers or gas-fired one in Mongolia (emphasis on energy audits) (new proposed activities in 2022)

- Switching conventional coal-fired heat only boilers to high-efficient heat only boilers or gas-fired one contribute significantly to air pollution and climate change in Mongolia.
- There are many low-cost technological changes that operators of the boilers can adopt to save energy while cutting pollution and mitigating GHGs.
- Energy audits have been used to demonstrate some of these opportunities for business and building owners that use these boilers.

[Benefit of the activity]

- This project will help those business and building owners to use and refine a tool that can be used for energy audits as well as identifies technological and behavioral reforms that can deliver these benefits, both in Mongolia and other EANET PCs.

Activity 20: Organize Seminars for practitioners and experts of PCs, in collaboration with ADB or other donor agencies, to learn the impacts and effectiveness of their air pollution mitigation related projects (new proposed activities in 2022)

- Pilot projects or leading projects on the ground to solve air pollution issues in selected polluted environment involving policy makers, investors, private sectors and citizens are essential to expand such efforts in other areas by demonstrating its achievements and the co-benefits gained by stakeholders.
- If EANET experts/scientists have been engaged and contributed to such projects

from planning stage to implementation state, and evaluation stage, it could contribute to develop quantification of the impacts of such projects. As ADB and CAA are implementing regional technical assistance for mitigating air pollution, possible collaboration among ADB, CAA and EANET could be examined, possibly as a pilot phase, and would be expanded,

[Benefit of the activity]

- EANET has not enough resources to conduct or implement such demonstration projects but could participate in such projects to learn and disseminate such demonstrated impacts and lessons learnt after/in the course of implementation to encourage EANET PC's policy makers to replicate such model projects.

Activity 21: Learning opportunity on reducing emission from diesel powered vehicles (Emphasis on inspection and maintenance programmes) (new proposed activities in 2022)

- Co-hosting the web seminar focused on the emission reduction from the diesel vehicles, which is conducting with ACP, Japan, Thailand etc.
- Japan has accrued significant experience with reducing emissions from those vehicles.
- This project will set up a peer learning relationship to share how Japan has made progress in this area; much of the focus of the peer learning will be on inspection and maintenance programmes that help to remove so-called super emitters from the vehicle fleet.

[Benefit of the activity]

- It is expected to share the knowledge reducing emissions from diesel powered vehicles, especially freight and logistics vehicles, as one of the key sources of particulate pollution in rapidly growing cities, especially the experience, skill, and knowledge in Japan would be useful to conduct the reduction.

Objective 4: Enhancement of outreach activities - Enhance outreach to the stakeholders in order to raise their awareness, to encourage them to take appropriate actions and develop collaborative joint activities with EANET.

I. Current Scope Activity

Activity 22: Maintain the EANET Research Portal on EANET website (continued from 2021)

- EANET Research Portal started in 2021 will be developed for its contents in the EANET website.

[Benefit of the activity]

- It is expected to enhance the awareness of the research activities on EANET to the public.

II. Expanded Scope Activity

Activity 23: Organizing session(s) in the Better Air Quality conference or other international or regional events, such as events related to International Day of Clean Air for blue skies, to share EANET's new expanded scope and disseminate its new roles and functions as well as potential co-financed projects with stakeholders and potential partners (new proposed activities in 2022)

- EANET has been developing in a rather closed community; as such, its roles, functions and experiences may not be well known.
- The planned session(s) would be opportunities to disseminate EANET's expected new roles and functions, and to seek developing collaborations between EANET and other potential partners and stakeholders in the region.

[Benefit of the activity]

- It is expected to enhance the EANET activities using the opportunity of disseminating the expansion of the scope of EANET.

Activity 24: Learning Opportunity of international activities and scientific knowledge on SLCP/SLCF (new proposed activities in 2022)

- International society increases its recognition of the important roles of short-lived climate pollutants/forces (SLCP/SLCF) in mitigating climate change to achieve its Paris Target under the UNFCCC, based on the recommendation of IPCC, with emerging scientific evidence on SLCPs and SLCFs.
- Responding to such recognition, some leading activities have been initiated to discuss and develop monitoring network and develop workable inventory of SLCP/SLCF, in the IPCC and scientific communities.
- This co-financed project could organize a series of seminars/workshop to provide opportunities for EANET PCs to learn the issues and latest developments in international society as well as scientific communities, and exchange views on how EANET or its PC could contribute to or engage in such efforts.

[Benefit of the activity]

- It is expected to understand the SLCP/SLCF in relation with air pollution and necessary possible action for them.

Objective 5: Enhancement of cooperation and collaboration - Enhance collaborative and/or joint activities with relevant entities including international and/or regional organizations, acid deposition-related regional frameworks, financial institutions, research institutes, and interested governments in Non-Participating Countries, to tackle with the acid deposition issues.

I. Current Scope Activity

Activity 25: Providing information and policy recommendations to policy makers based on sound science and assessment (continued from 2021)

- provide information and policy recommendations to policy makers based on sound science and assessment.

[Benefit of the activity]

- Information and policy recommendations to policy makers based on sound science and assessment will improve the capacity of relevant staff for policy development on air quality management in EANET participating countries.

- provide information and policy recommendations to policy makers based on sound science and assessment on the publication such as PRSAD4 and website in collaboration with Secretariat for EANET.

[Benefit of the activity]

- Information and policy recommendations to policy makers based on sound science and assessment on the publication will improve the capacity of relevant staff for policy development on air quality management in EANET participating countries.

Activity 26: Promotion of communication, collaboration and cooperation with other relevant international organizations, initiatives and programs (continued from 2021)

- promote further communication and cooperation with relevant organizations and programmes working on acid deposition and air pollution, for instance with the UNECE CLRTAP and its programmes including the EMEP Chemical Coordinating Centre, ICP-Forest and their Centers (EMEP/CCC, ICP-Forest/PCC); WMO-GAW; Malé Declaration; Joint Forum; CAA; NADP; CCAC; ABC Project; ACP; etc. taking opportunity of relevant activities and meetings.

[Benefit of the activity]

- Further communication and cooperation with relevant organizations and programmes working on acid deposition and air pollution will contribute to exchange of useful information and also promotion of mutual cooperation.

- develop a common understanding on atmospheric environmental issues among the participating countries and the scientific community such as the Asia Pacific Clean Air Partnership (APCAP) Science Panel collaborating with the Task Force on Atmospheric Environmental Management to be established in 2022.

[Benefit of the activity]

- Development of a common understanding on atmospheric environmental issues

among the participating countries and the scientific community will promote and contribute to solve regional air pollution issues.

II. Expanded Scope Activity

Activity 27: Learning Opportunity on Identifying Co-benefits from Emissions Trading Schemes (new proposed activities in 2022)

- Many countries in Asia are using—or planning to use—emissions trading schemes to achieve ambitious trading schemes.
- Emissions trading can deliver not only cost-effective reductions in GHGs but other air pollutants; they can also lead to the redistribution of GHGs and pollutants to poor communities that already are in worse health.
- This learning series will engage policymakers and researchers from Northeast and Southeast Asia in a discussion of how to maximize the air pollution and health benefits and minimize the losses from emissions trading.

[Benefit of the activity]

- It is expected to understand the co-benefits from emissions trading in relation with air pollution problems in EANET countries.

Annex 3

Core Budget of the EANET in 2022

Table 1 Core Budget of the Secretariat & Network Center in 2022 (US\$)

Activities	Secretariat				Network Center			
	Man/ Month	Personnel cost	Direct expenses	Total	Man/ Month	Personnel cost	Direct expenses	Total
Objective 1: Monitoring of acid deposition including related chemical substances with quality assurance and quality control (QA/QC)	—	—	—	—	21	126,000	40,000	166,000
(1) Monitoring of acid deposition (acidifying species and related chemical substances) including an increase of EANET monitoring sites, improvement in monitoring methodologies and better instrument maintenance	—	—	—	—	8	48,000	15,000	63,000
(2) Development/ revision of (technical) guidelines, technical manuals and documents, as necessary	—	—	—	—	1	6,000	0	6,000
(3) Development/ update of strategy papers for guidance on the future direction of the monitoring, as necessary	—	—	—	—	1	6,000	0	6,000
(4) Implementation of quality assurance and quality control (QA/QC) activities on acid deposition	—	—	—	—	4	24,000	20,000	44,000
(5) Routine compilation, verification, evaluation, storage and provision of data and maintenance of database	—	—	—	—	7	42,000	5,000	47,000
Objective 2. Promotion of data utilization and dissemination	2	14,800	7,200	22,000	7	42,000	25,000	67,000

(6) Conduct annual assessment of the state of acid deposition using trend analysis, numerical models	—	—	—	—	3	18,000	0	18,000
(7) Development of Periodic Report on the State of Acid Deposition in East Asia (PR SAD, regional assessment report published every 5 years), including the impact on plants and ecosystems.	—	—	—	—	2	12,000	15,000	27,000
(8) Regular updating of the website	2	14,800	7,200	22,000	2	12,000	10,000	22,000
(9) Updating of the data management system in the NC to enable easy access by approved users	—	—	—	—	—	—	—	—
Objective 3. Promotion of capacity building	—	—	—	—	—	—	—	—
Objective 4. Enhancement of outreach activities	4	20,000	23,600	43,600	3	18,000	3,000	21,000
(10) Promotion of public awareness on acid deposition including other priority chemical species, etc.	4	20,000	23,600	43,600	3	18,000	3,000	21,000
Objective 5. Enhancement of cooperation and collaboration	12.5	163,000	179,600	342,600	16	96,000	105,000	201,000
(11) Arrangements for the EANET Sessions agreed to by the IG	11	150,000	179,600	329,600	13	78,000	105,000	183,000
(12) Consideration on future development of the EANET	—	—	—	—	1	6,000	0	6,000
(13) Review of the arrangements of the EANET Secretariat and the NC	1	9,300	0	9,300	1	6,000	0	6,000
(14) Revision of Guidelines on Administrative and Financial Management for the Secretariat and NC taking account of the new decisions of the IG	—	—	—	—	—	—	—	—
(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)	—	—	—	—	—	—	—	—

(16) Sharing a common understanding on atmospheric environment issues among the scientific community	0.5	3,700	0	3,700	1	6,000	0	6,000
Sub total	18.5	197,800	210,400	408,200	47	282,000	173,000	455,000
(17) Administrative works	13	98,500	0	98,500	10	60,000	0	60,000
Grand total	31.5	296,300	210,400	506,700	57	342,000	173,000	515,000
Grand Total	Programme Support Cost (PSC: Grand total × 13%): 65,900			572,600	Office rental fee: 119,581			634,581

**Table 2 Estimated Voluntary Financial Contribution of Participating Countries
to the Secretariat & Network Center Core Budget for the EANET in 2022**

Participating Countries	UN scale of assessment 2019-2021 (%)	Scale of EANET burden sharing (%)	Estimated annual contribution in 2022 (US\$)	
			Secretariat	Network Center
Cambodia*	0.006	0.022	134*	121*
China	12.005	44.895	272,602	246,384
Indonesia	0.543	2.031	12,332	11,146
Japan	8.564	32.027	194,468	175,764
Lao PDR *	0.005	0.019	115*	104*
Malaysia	0.341	1.275	7,742	6,997
Mongolia*	0.005	0.019	115*	104*
Myanmar	0.010	0.037	225	203
Philippines	0.205	0.767	4,657	4,209
Republic of Korea	2.267	8.478	51,478	46,527
Russia	2.405	8.994	54,612	49,359
Thailand	0.307	1.148	6,971	6,300
Viet Nam	0.077	0.288	1,749	1,581
Total	----	100	607,200**	548,800**

*Minimum amount for the voluntary financial contribution is US\$ 200.

**Estimated 5-year flat amount of annual voluntary contribution based on MTP for the EANET (2021-2025).

Table 3 Estimated Core Budget of the Secretariat in 2022 (US\$)

Items	Budget 2022
1. Personnel Cost	
1.1 Staff	195,000
1.2 Consultant	75,000
Sub-total	270,000
2. Travel	
2.1 Travel of Secretariat staff	10,000
2.2 Other travels directly managed by the Secretariat	46,700
Sub-total	56,700
3. Contractual services	
3.1 Contractual services directly managed by the Secretariat for meetings, printing, facilities, etc.	20,000
Sub-total	20,000
4. Grants for implementing partners	
4.1 Support to Secretariat functions and Activities (SSFA with RRCAP)	140,000
Sub-total	140,000
5. Operating and other direct costs	
5.1 Operating and other direct costs including office supplies and communications	20,000
Sub-total	20,000
Total Direct Expenditure	506,700
Indirect Support Costs (PSC) (Total Direct Exp. × 13%)	65,900
Grand total	572,600

Table 4 Estimated Revenue for the Network Center in 2022

Items	Revenue (US\$)
1. NC Core activities from participating countries	548,800
2. Support from Niigata Prefecture and Niigata City	4,500
3. Support for NC activities from Niigata Prefecture - (Office rental)	119,581
Total	672,881

Annex 4

Budget for candidates of Non-Core (Project) Activities of the EANET in 2022

Table 1-1 Draft Budget for candidates of Non-Core (Project) Activities in 2022 (US\$)

Activities	Man/ Month	Personnel cost	Direct expenses	Total
Objective 1: Monitoring of acid deposition including related chemical substances with quality assurance and quality control (QA/QC)	20	120,000	106,000	226,000
<i>I. Current Scope Activity</i>				
(1) Research on analysis of long term trend and acid deposition including related chemical substances by using monitoring data of EANET accumulated so far (<i>continued from 2021</i>)	1	6,000	6,000	12,000
(2) 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 (<i>continued from 2021</i>)	5	30,000	30,000	60,000
(3) Sessions to raise awareness of application and quality control and quality assurance of air-pollution monitoring	2	12,000	10,000	22,000
(4) Workshop on national air-quality monitoring systems and methodologies with APCAP and other partners	2	12,000	10,000	22,000
(5) Expanding the regional air quality monitoring using the low-cost sensor and improving the ability to the monitoring data to policy making	4	24,000	26,000	50,000
<i>II. Expanded Scope Activity</i>				
(6) Promotion of studies on estimation of the source of air pollution of PM2.5	3	18,000	12,000	30,000
(7) Promotion of studies on analysis in terms of climate change (e.g., EC/ OC, SLCPs)	1	6,000	6,000	12,000
(8) Conduct annual assessment of the state of air pollution (except acid deposition) using trend analysis, numerical models	2	12,000	6,000	18,000
Objective 2: Promotion of data dissemination and utilization	3	18,000	12,000	30,000
<i>I. Current Scope Activity</i>				
(9) Preparatory work for supporting APCAP Solution Tracker from Monitoring Aspects	3	18,000	12,000	30,000
Objective 3: Promotion of capacity building	44	264,000	253,000	517,000
<i>I. Current Scope Activity</i>				
(10) Promotion of capacity building for personnel of the participating countries including training courses, capacity building workshops, etc. for monitoring (<i>continued from 2021</i>).	7	42,000	45,000	87,000

(11) Promotion of technical support to participating countries by provision of advice, technical information and equipment (<i>continued from 2021</i>).	7	42,000	65,000	107,000
(12) Promotion of research and technical cooperation on emission inventory to support the capacity building (<i>continued from 2021</i>).	2	12,000	0	12,000
(13) Conduct fellowship research program (<i>continued from 2021</i>).	3	18,000	20,000	38,000
(14) Intensive training for city government officials of air pollution monitoring and related skills	2	12,000	10,000	22,000
(15) Learning Opportunity of IIASA Study on Urban and Rural Air-pollution Relations	2	12,000	10,000	22,000
<i>II. Expanded Scope Activity</i>				
(16) Promotion of studies on atmospheric simulation models to assess the trend of national and regional acid deposition including other related air pollutants in East Asia through workshops, training courses, etc.	8	48,000	41,000	89,000
(17) Organize workshops or seminars for practitioners to learn co-benefits of air pollution measures and how to maximize co-benefits in designing mitigation measures	2	12,000	10,000	22,000
(18) Learning Opportunity on Reducing Emissions from Open Burning (Alternatives to Burning Bans)	2	12,000	10,000	22,000
(19) Learning Opportunity on Reducing Emissions and Capturing Other Co-benefits from High-Efficient Heat Only Boilers or gas-fired one in Mongolia (emphasis on energy audits)	3	18,000	12,000	30,000
(20) Organize Seminars for practitioners and experts of PCs, in collaboration with ADB or other donor agencies, to learn the impacts and effectiveness of their air pollution mitigation related projects	4	24,000	20,000	44,000
(21) Learning opportunity on reducing emission from diesel powered vehicles (Emphasis on inspection and maintenance programmes)	2	12,000	10,000	22,000
Objective 4: Enhancement of outreach activities	5	30,000	19,000	49,000
<i>I. Current Scope Activity</i>				
(22) Maintain the EANET Research Portal on EANET website (<i>continued from 2021</i>)	2	12,000	3,000	15,000
<i>II. Expanded Scope Activity</i>				
(23) Organizing session(s) in the Better Air Quality conference or other international or regional events, such as events related to International Day of Clean Air for blue skies, to share EANET's new expanded scope and disseminate its new roles and functions as well as potential co-financed projects with stakeholders and potential partners	1	6,000	6,000	12,000
(24) Learning Opportunity of international activities and scientific knowledge on SLCP/SLCF	2	12,000	10,000	22,000
Objective 5: Enhancement of cooperation and collaboration	11	44,200	33,100	77,300

<i>I. Current Scope Activity</i>				
(25) Providing information and policy recommendations to policy makers based on sound science and assessment (<i>continued from 2021</i>)	7	28,200	21,800	50,000
(26) Promotion of communication, collaboration and cooperation with other relevant international organizations, initiatives and programs (<i>continued from 2021</i>)	3	10,000	5,300	15,300
<i>II. Expanded Scope Activity</i>				
(27) Learning Opportunity on Identifying Co-benefits from Emissions Trading Schemes	1	6,000	6,000	12,000
Grand total	83	476,200	423,100	899,300

※The budget of activities with "continued from 2021" was estimated assuming the continued activity from 2021.

※The budget for activities from 2022 was estimated referring to the similar activity as reference.

Table 1-2 Estimated Revenue for Candidates of Non-Core (Project) Activities in 2022 (US\$)

Activities	Non-Core (Project) specific contribution from Participating Countries	Non-Core (Project) specific contribution from partner organization	Total	In-kind contribution from participating countries
Objective 1: Monitoring of acid deposition including related chemical substances with quality assurance and quality control (QA/QC)				
<i>I. Current Scope Activity</i>				
(1) Research on analysis of long term trend and acid deposition including related chemical substances by using monitoring data of EANET accumulated so far (continued from 2021)				
(2) 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 (continued from 2021)				
(3) Sessions to raise awareness of application and quality control and quality assurance of air-pollution monitoring				
(4) Workshop on national air-quality monitoring systems and methodologies with APCAP and other partners				
(5) Expanding the regional air quality monitoring using the low-cost sensor and improving the ability to the				

monitoring data to policy making				
<i>II. Expanded Scope Activity</i>				
(6) Promotion of studies on estimation of the source of air pollution of PM2.5				
(7) Promotion of studies on analysis in terms of climate change (e.g., EC/OC, SLCPs)				
(8) Conduct annual assessment of the state of air pollution (except acid deposition) using trend analysis, numerical models				
Objective 2: Promotion of data dissemination and utilization				
<i>I. Current Scope Activity</i>				
(9) Preparatory work for supporting APCAP Solution Tracker from Monitoring Aspects				
Objective 3: Promotion of capacity building				
<i>I. Current Scope Activity</i>				
(10) Promotion of capacity building for personnel of the participating countries including training courses, capacity building workshops, etc. for monitoring (continued from 2021).				
(11) Promotion of technical support to participating countries by provision of advice, technical information and equipment (continued from 2021).				
(12) Promotion of research and technical cooperation on emission inventory to support the capacity building (continued from 2021).				

(13) Conduct fellowship research program (continued from 2021).				
(14) Intensive training for city government officials of air pollution monitoring and related skills				
(15) Learning Opportunity of IIASA Study on Urban and Rural Air-pollution Relations				
<i>II. Expanded Scope Activity</i>				
(16) Promotion of studies on atmospheric simulation models to assess the trend of national and regional acid deposition including other related air pollutants in East Asia through workshops, training courses, etc.				
(17) Organize workshops or seminars for practitioners to learn co-benefits of air pollution measures and how to maximize co-benefits in designing mitigation measures				
(18) Learning Opportunity on Reducing Emissions from Open Burning (Alternatives to Burning Bans)				
(19) Learning Opportunity on Reducing Emissions and Capturing Other Co-benefits from High-Efficient Heat Only Boilers or gas-fired one in Mongolia (emphasis on energy audits)				
(20) Organize Seminars for practitioners and experts of PCs, in collaboration with ADB or other donor agencies, to learn the impacts and effectiveness of their air pollution mitigation related projects				

(21) Learning opportunity on reducing emission from diesel powered vehicles (Emphasis on inspection and maintenance programmes)				
Objective 4: Enhancement of outreach activities				
<i>I. Current Scope Activity</i>				
(22) Maintain the EANET Research Portal on EANET website (continued from 2021)				
<i>II. Expanded Scope Activity</i>				
(23) Organizing session(s) in the Better Air Quality conference or other international or regional events, such as events related to International Day of Clean Air for blue skies, to share EANET's new expanded scope and disseminate its new roles and functions as well as potential co-financed projects with stakeholders and potential partners				
(24) Learning Opportunity of international activities and scientific knowledge on SLCP/SLCF				
Objective 5: Enhancement of cooperation and collaboration				
<i>I. Current Scope Activity</i>				
(25) Providing information and policy recommendations to policy makers based on sound science and assessment (continued from 2021)				
(26) Promotion of communication, collaboration and cooperation with other relevant international organizations, initiatives				

and programs (continued from 2021)				
<i>II. Expanded Scope Activity</i>				
(27) Learning Opportunity on Identifying Co-benefits from Emissions Trading Schemes				
Grand Total				