

The Twenty-sixth Session of the Scientific Advisory Committee (SAC2026) on the
Acid Deposition Monitoring Network in East Asia (EANET)
20-22 October 2026, Kuala Lumpur, Malaysia

CONSIDERATION OF THE DRAFT EANET PROJECT PLANS FOR 2027

I. INTRODUCTION

1. EANET is in its fifth year of implementing the EANET Project Fund mechanism. In accordance with the EANET Project Fund and Project Guidelines approved by IG23 and revised in December 2024 (Para 2, point 2.5): “*A potential Working Group Meeting can be held to discuss and provide inputs to the draft (EANET Project Plans) EPPs and Project Concept Notes (PCNs) on their preparation stage if the IG decides so*”. In the Preparation Stage (para 1, point 1.2), “*The PL will prepare the project using the EPP Template-B (Annex 2), considering the EPC defined in these Guidelines and follow the review process as agreed by all Participating Countries, which consists in the presentation and review of the EPP in a potential WG; followed by the review of the SAC; and the review and approval of the IG.*”
2. The Twenty-seventh Session of the Intergovernmental Meeting (IG27) on the Acid Deposition Monitoring Network in East Asia (EANET) held in Bangkok, Thailand, on 27-28 November 2025, tasked the Secretariat to “*organize a Working Group Meeting in 2026 to discuss and consider, among other matters, the EANET Project Plans in 2027*” (EANET/IG27/12).
3. Five newly proposed EANET Project Plans (EPPs) for 2027, one Continued EANET Project Plan from 2026 and four Project Concept Notes (PCNs) were submitted for consideration and discussion to the Working Group Meeting in 2026 (WG2026), which was held virtually on 4-5 August 2026. During the WG 2026, the Network Center introduced each of the EPPs and China introduced each of the PCNs. The WG2026 participants provided initial feedback which was consolidated in the Report of the Session (EANET/WG2026/9). The Project Leads were requested to review the EPPs based on the guidance provided during the WG2026.
4. Following the WG2026, four more new EPP were proposed for 2027 and submitted to the Secretariat. There are nine EPPs presently being submitted to SAC26 for consideration and discussion.
5. **Attachment 1** provides the list of EANET Project Proposals (Table 1: Proposed EANET Project Plans (EPP) in 2027, and Table 2 - Continued EANET Project Plan from 2026); **Attachment 2** provides the summary of Proposed EANET EPPs Review based on the

EANET Project Plan Criteria (Table 3: Summary: Review of EPPs for 2027 based on the EANET Project Criteria), and **Attachment 3** provides the proposed EANET Project Plans for 2027 submitted to the Secretariat of the EANET.

II. ACTIONS REQUIRED

6. The SAC26 is invited to review the document “Consideration of the draft EANET Project Plans for 2027” and may wish to discuss, consider, and provide guidance for further action to the 28th Intergovernmental Meeting (IG28) to be held in November 2026, as appropriate.

Attachment 1**Table 1 - Proposed EANET Project Plans (EPP) in 2027**

Proposal Number	Title of Project	Proposer/Project Lead	Duration and Remarks	Total Budget and Requested Amount from EPF	Co-Finance and/or In-kind Support
EPP (2027-01)	Enhancement of ammonia monitoring for sustainable nitrogen management in the EANET region	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP)	January/2027 – December/2029	56,000 USD (18,000 requested from the EPF) <i>(for 2027)</i>	21,000 USD from In-kind (TUAT, Co-leads) 17,000 USD from Co-Finance (EMB, MOEJ) <i>(for 2027)</i>
EPP (2027-02)	Capacity building webinar workshop on application of satellite observation for atmospheric environmental management	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP)	January 2027 – December 2027	18,000 USD (10,500 requested from EPF)	7,500 USD from In-Kind (NIES)
EPP (2027-03)	Fellowship for building leadership in Atmospheric Environment and Air Quality Management in East Asia	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP), Fudan University	January 2027 – December 2027	90,000 USD (27,000 requested from EPF)	63,000 USD from Co-Finance (Fudan University, MOEJ)
EPP (2027-04)	The collaboration of Technical and Training (TNT) and capacity building program for personnel of the Participating Countries on monitoring	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP), The National Institute of Environmental Research (NIER)	January/2027 – December/2027	120,000 USD (22,630 requested from the EPF)	97,350 USD from Co-Finance (NIER, MOEJ)
EPP (2027-05)	Integrated Capacity Building for Urban Ozone and Ambient VOCs under EANET	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP), Chinese Research Academy of Environmental Sciences (CRAES)	January/2027 – December/2029	80,000 USD (35,000 requested from the EPF) <i>(for 2027)</i>	10,000 USD from Co-Finance (MEE, China) and 35,000 from Co-Finance (MOEJ) <i>(for 2027)</i>

Proposal Number	Title of Project	Proposer/Project Lead	Duration and Remarks	Total Budget and Requested Amount from EPF	Co-Finance and/or In-kind Support
EPP (2027-06)	Integrated Early Warning System (IEWS) Feasibility Study for Heat Stress and Air Pollution in the Mekong Sub-region	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP)	January/2027 – December/2027		
EPP (2027-07)	Research on Spatiotemporal Evolution Patterns and Driving Mechanisms of Regional Acid Deposition Based on Artificial Intelligence	Institute of Atmospheric Environment, Chinese Research Academy of Environmental Sciences (CRAES)	January/2027 – December/2027	30,000 USD <i>(30,000 USD requested from the EPF)</i>	0
EPP (2027-08)	Roundtable Dialogue on Innovative Investment and Financing for Air Pollution Prevention and Control and Green Economy Incentive Policies (online+offline)	Foreign Environmental Cooperation Center (FECO) / China-ASEAN Environmental Protection Cooperation Center (CAEC), Ministry of Ecology and Environment of China	January/2027 – December/2027	30,000 USD <i>(30,000 USD requested from the EPF)</i>	0
EPP (2027-09)	Leveraging the AQMx platform for building capacity of EANET Participating Countries	Climate and Clean Air Coalition (CCAC), and Secretariat for the EANET	January/2027 – December/2027	8,000 USD <i>(0 requested from the EPF)</i>	8,000 USD from CCAC (in-kind)

Table 2 - Continued EANET Project Plan from 2026

EPP Number	Title of Project	Proposer/Project Lead	Duration and Remarks	Total Budget and Requested Amount from EPF	Co-Finance and/or In-kind Support
EPP (2026-06)	Methodological Study on PM2.5 Source Identification and Capacity Enhancement in EANET with Emphasis on Southeast Asia	Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP)	January/2026 – December /2027	30,000 USD (30,000 requested from the EPF) <i>(for 2027)</i>	

Attachment 2

Summary of EANET Project Plan Criteria Review

“The EANET Project Criteria (EPC) is a set of Criteria applied for each EANET Project Plan (EPP) to determine whether the EPP is ready to be submitted to the IG for its discussion and approval (EANET Project Fund and Project Guideline” (EANET/IG25/8/2/L). The EPC includes the following, please carefully check (mark ✓) the EPP in line with the guidance below.

EANET Project Criteria

1. Activities should be within the EANET Scope.
2. The EPP is in line with the principles defined in these Guidelines.
3. The EPP clearly and reasonably indicates its objectives, activities, the rationale to implement, tangible expected outputs, and outcomes.
4. More than half of EANET Participating Countries (PCs) (at least 7) are identified as beneficiaries directly and/or indirectly.
5. Contents of the EPP are considered and developed using criteria stated in ANNEX 3 of the EANET Project Fund and Project Guidelines.
6. Necessary resources other than from the EANET Project Fund (EPF) are secured or highly likely to be secured, while the allocation of EPF is the matter of the IG’s decision.
7. At least one CF in-kind, is secured or highly likely to be secured. In the case of a small project of which the total amount of required resources is 30,000 USD or less, a financial contribution other than from the EPF is not always required, while in-kind contribution is encouraged.
8. In principle, the Project period is around one year. Some types of projects can set their period up to 3 to 5 years, provided that such a Project has a mechanism to be reviewed by IG on the implementation of the Project for IG's decision to continue or terminate.

Table 3. Summary: Review of EPPs for 2027 based on the EANET Project Criteria

EPPs No.	EPC Satisfied	Revision recommended	Remarks
EPP 2027-01		✓	Secretariat: Secured financial and in-kind contributions are indicated. Additional contributions remain under consultation.
EPP 2027-02	✓		Secretariat: Secured in-kind contribution is indicated.

EPPs No.	EPC Satisfied	Revision recommended	Remarks
EPP 2027-03		✓	Secretariat: Co-financing marked TBC.
EPP 2027-04		✓	Secretariat: Co-financing marked TBC.
EPP 2027-05		✓	Secretariat: All co-financing remains under consultation.
EPP 2027-06		✓	Secretariat: Co-financing is under consultation.
EPP 2027-07	✓		Secretariat: In-kind contribution is encouraged.
EPP 2027-08	✓		Secretariat: In-kind contribution is encouraged.
EPP 2027-09	✓		Secretariat: Secured in-kind contribution is indicated. No financial resources requested from EANET Project Fund.
EPP 2026-06		✓	Secretariat: Focus is Southeast Asia and pilot cities; broader EANET benefit is stated but not quantified.

Draft EANET Project Plans (EPPs)

[Proposal Number: 2027-01]

I. General Information

Project Title	[Proposal Number: 2027-01] [Title: Enhancement of ammonia monitoring for sustainable nitrogen management in the EANET region]
Background and Rationale	- Sustainable nitrogen management is a global environmental issue highlighted in UNEA resolutions 4/14 and 5/2, which call on Member States to develop national action plans to reduce nitrogen waste. - EANET has accumulated monitoring data on nitrogen oxides (NO_x), ammonia (NH₃), and related ionic species through observations of wet deposition, dry deposition and air concentrations, inland aquatic environments, and forest catchments. These data are expected to contribute to a better understanding of the regional nitrogen cycle and to support sustainable nitrogen management. - Among these nitrogen species, NH₃ deserves particular attention because it: - is an important precursor of PM_{2.5}, including ammonium sulfate (NH₄)₂SO₄ and ammonium nitrate (NH₄NO₃); - is emitted mainly from agricultural fields, livestock-related sources, and other rural or remote areas; - tends to remain in the gas phase as emissions of SO₂ and NO_x decrease; and - exhibits complex behavior, including bidirectional exchange between the atmosphere and terrestrial ecosystems. - Therefore, improving the understanding of NH₃ behavior is essential for managing reactive nitrogen flows between the atmosphere and terrestrial environments.
Project Duration	[January/2027 – December/2029]
Project Lead (PL)	<u>Project Lead</u>: Network Center for EANET (NC), Asia Center for Air Pollution Research (ACAP) <u>Co-Project Lead</u>: Environmental Management Bureau (EMB), the Philippines <u>Co-Project Lead</u>: <i>Malaysian Meteorological Department (MET Malaysia), Malaysia (under consultation)</i> [Representative of the PL/Contact Address] Dr. Hiroyuki Sase, ACAP, Niigata, Japan; sase@acap.asia
Partner Organizations (POs)	Tokyo University of Agriculture and Technology (TUAT: Prof. Kazuhide Matsuda and his research team): assessment of NH₃ data comparing the data from their project in Thailand and Japan
Implementation Agencies (IAs)	- NC, ACAP: Planning of NH₃ passive sampling, data assessment, preparation of online seminars, etc. - EMB: NH₃ passive sampling, data assessment, etc. <i>MET Malaysia: NH₃ passive sampling, data assessment, etc.</i> - TUAT: technical advice, data assessment (Additional countries may be involved in the project in later years.)

Beneficiaries of PCs	<u>All EANET Participating Countries</u>; inclusion of additional NH₃ data from relevant countries in EANET annual Data Reports; improved understanding of NH₃ behavior and nitrogen flows from the atmosphere to terrestrial ecosystems; and opportunity for practical discussion on sustainable nitrogen management through online seminars			
Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: 150,000 2027: 56,000 USD: 35,000 (18,000 + 17,000) + in-kind (21,000) 2028: 50,000 USD: 29,000 (18,000 + 11,000) + in-kind (21,000) 2029: 44,000 USD: 23,000 (15,000 + 8,000) + in-kind (21,000) The requested amount for EANET Project Fund (USD): 51,000 USD 2027: 18,000 USD (including PFH Fee, 3,000) 2028: 18,000 USD (including PFH Fee, 3,000) 2029: 15,000 USD (including PFH Fee, 3,000)			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	TUAT		7,000 (2027) 7,000 (2028) 7,000 (2029)	Secured
	EMB		7,000 7,000 7,000	Secured
	TBD		7,000 7,000 7,000	Under consultation
	EMB	12,000 (2027) 8,000 (2028) 5,000 (2029)		Secured
	Ministry of the Environment, Japan (MOEJ)	5,000 3,000 3,000		Under consultation
	Total	36,000	63,000	
Relevant Scope and Activities of EANET	<u>Monitoring, Assessment, Research, and Exchange Information</u> , especially for NH ₃ behavior, nitrogen deposition, and sustainable nitrogen management <u>In the MTP (2026-2030), strengthening efforts to obtain and assess data on nitrogen deposition and its effects is recommended.</u>			
Project Processing Information	Submission Date to the EANET Secretariat			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			

	3) Date of Approval	
	4) Date of Completion Report Submitted	
Project Keywords	Ammonia, nitrogen flows, sustainable nitrogen management	
Project Summary	● NH₃, an important precursor of PM_{2.5}, is emitted in significant amounts from agricultural areas and tends to remain in the gas phase as emissions of SO₂ and NO_x have decreased. NH₃ undergoes bidirectional exchange (both deposition and emission) in forest ecosystems. Monitoring NH₃ air concentrations in these areas should therefore be further promoted in rural and forest areas for sustainable nitrogen management. ● To obtain additional NH₃ data in rural and forest areas where electricity is unavailable, the NC, in cooperation with voluntary PCs, will conduct passive NH₃ sampling. Methodological studies, including comparisons with other observational techniques, such as the filter-pack method and the denuder method, as well as assessments using satellite observations, will also be implemented in collaboration with external researchers. NH₃ data obtained by passive samplers will be submitted for annual Data Reports. ● This project will enhance NH₃ monitoring and deepen understanding of NH₃ behavior and nitrogen flows from the atmosphere to terrestrial ecosystems. ● Online seminars will be organized to discuss project outputs and support the preparation of national action plans for sustainable nitrogen management, drawing on relevant country experiences (e.g., Japan).	

II. Description of the Project

Project Title	[Proposal Number: 2027-01] [Title: Enhancement of ammonia monitoring for sustainable nitrogen management in the EANET region]
Expected Outcome	● Ammonia (NH₃) monitoring will be strengthened, and understanding of nitrogen flows from the atmosphere to terrestrial ecosystems will be improved. ● Practical discussion on the preparation of national action plans for sustainable nitrogen management will be promoted in each country.
Project Objectives	● To enhance ammonia (NH₃) monitoring in rural and forest areas ● To understand NH₃ behavior and nitrogen flows from the atmosphere to ecosystems ● To promote discussion on preparation of a national action plan for sustainable nitrogen management
Expected Outputs	1. Additional ammonia (NH₃) concentration data in annual Data Reports 2. Improved understanding of NH₃ behavior and nitrogen flows from the atmosphere to terrestrial ecosystems 3. Exchange of country experiences on reducing atmospheric nitrogen waste, including NO_x and NH₃, towards sustainable nitrogen management

Activities to achieve Expected Outputs	Output 1. Additional ammonia (NH₃) concentration data in rural and forest areas Activity 1.1. NH₃ monitoring using passive samplers at 5–10 sites in rural and forest areas in 2–3 countries, including parallel sampling at existing EANET sites for comparison with the filter-pack method. Activity 1.2. Submission of additional NH₃ concentration data for inclusion in EANET annual Data Reports Output 2. Improved understanding of NH₃ behavior and nitrogen flows from the atmosphere to terrestrial ecosystems Activity 2.1. Data comparison and assessment using other methods, such as the filter-pack method, the denuder method, satellite observations, and, where applicable, model simulations, as part of a methodological study on an integrated monitoring and assessment system, in cooperation with external scientists. The possible use of low-cost sensors (LCS) may also be examined, taking into account the current limited availability of reliable LCS for NH₃ monitoring. Activity 2.2. Assessment of nitrogen flows from the atmosphere to forest ecosystems using existing and additional data, where applicable at existing monitoring sites, such as catchment monitoring sites or inland aquatic environment monitoring sites. Activity 2.3 Progress reports at annual SAC sessions Activity 2.4. Online seminars to discuss above scientific outputs, to be held together with Activity 3. Output 3. Exchange of country experiences on reducing atmospheric nitrogen waste, including NO_x and NH₃, towards sustainable nitrogen management Activity 3. Online seminars to exchange country experiences on reducing atmospheric nitrogen waste, including NO_x and NH₃, towards sustainable nitrogen management and to support the preparation of national action plans, drawing on relevant examples, such as Japan's experience.
Links and relevance to existing policy process(es) of the target area and regional Activities	● Sustainable nitrogen management is a global issue, which was recommended by the UNEA resolutions 4/14 and 5/2. Member States are requested to develop national action plans to reduce nitrogen waste globally. ● In the MTP (2026-2030), strengthening efforts to obtain and assess data on nitrogen deposition and its effects is recommended.
Risks and Countermeasures	<u>Risk:</u> Several types of passive samplers are available, and different conversion factors may be used to convert the detected amounts of NH₃ into ambient air concentrations. <u>Measures:</u> The comparability of passive samplers should be carefully confirmed through comparison with other monitoring methods, such as the denuder method.
Comments from PCs to be considered in the implementation	To be completed by SEC
Responses from the Project Lead to Above	To be completed by PL
Comments from SEC, NC, PCs	*This column will be filled after submission of the proposal to SEC. SEC and NC provide comments on whether the project meets the project criteria or not. Other than above, the interests of PCs will also be added.

III. Implementation Plan

In table format, please present a brief, on- to two-page work plan matrix, with a timeline including target dates for activities for the project's life, reflecting the overall program approach and objectives. Applicants may use smaller but legible font sizes in tables.

Activities and Milestones

Act	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Project kick-off	Kick-off Meeting (online) for detailed project plan including the possible schedule: NC, EMB, MET Malaysia, and TUAT	January – March 2027
Start of NH ₃ monitoring in the Philippines (Activity 1.1)	Selection of additional monitoring points and installation of passive samplers: NC, EMB	April – June 2027
Start of NH ₃ monitoring in Malaysia (Activity 1.1)	Selection of additional monitoring points and installation of passive samplers: NC, MET Malaysia	April – June 2027
Start of NH ₃ monitoring in Japan (Activity 1.1)	Selection of additional monitoring points and installation of passive samplers: NC, TUAT	April – June 2027
Monthly NH ₃ sampling (Activity 1.1)	Monthly (or four-week) NH ₃ passive sampling: EMB, MET Malaysia, and NC	Continuously until April – June 2029
Assessment of existing nitrogen data (Activity 2.1 and 2.2)	Assessment of NH ₃ data and other nitrogen-related data at existing EANET sites: NC, EMB, MET Malaysia, and TUAT	April – October 2027
Technical Meeting-1 (Activity 2.3)	Discussion on the initial data from NH ₃ passive sampling and the data assessment for preparation of a progress report to SAC27: NC, EMB, MET Malaysia, and TUAT	September 2027
Progress report at SAC27 (Activity 2.3)	Progress report of the project at SAC27: NC as the Project Lead	October 2027
Start of NH ₃ monitoring in additional countries (Activity 1.1)	Selection of additional monitoring points and installation of passive samplers: NC, one or two additional countries, if applicable	January – March 2028
Submission of the 1 st year data (Activity 1.2)	Submission of the 2027 data for inclusion in the Data Report 2027: EMB, MET Malaysia, and ACAP as the national center of Japan	June 2028
Assessment of nitrogen data (Activity 2.1 and 2.2)	Assessment of NH ₃ data obtained in 2027/2028 and other nitrogen-related data at existing EANET sites: NC, EMB, MET Malaysia, TUAT, and new project countries, if applicable	April – October 2028
Technical Meeting-2	Discussion on the NH ₃ data from new project countries and the data assessment for preparation of a progress report to SAC28: NC, EMB, MET Malaysia, TUAT, and new project countries, if applicable	September 2028
Progress report at SAC28 (Activity 2.3)	Progress report of the project at SAC28: NC as the Project Lead	October 2028

Online Seminar-2 (Activity 2.4 and 3)	Online seminar to discuss scientific outputs and exchange of country experiences on reducing atmospheric nitrogen waste	November/December 2028
Submission of the 2 nd year data (Activity 1.2)	Submission of the 2028 data for inclusion in the Data Report 2028: EMB, MET Malaysia, ACAP as the national center of Japan, and additional project countries, if applicable	June 2029
Assessment of nitrogen data (Activity 2.1 and 2.2)	Assessment of NH ₃ data obtained in 2027 – 2029 and other nitrogen-related data at existing EANET sites: NC, EMB, MET Malaysia, TUAT, and additional project countries, if applicable	April – October 2029
Technical Meeting-3	Discussion on the NH ₃ data from the project and the data assessment for preparation of a progress report to SAC29: NC, EMB, MET Malaysia, TUAT, and new project countries, if applicable	September 2029
Progress report at SAC29 (Activity 2.3)	Progress report of the project at SAC29: NC as the Project Lead	October 2029
Online Seminar-3 (Activity 2.4 and 3)	Online seminar to discuss scientific outputs and exchange of country experiences on sustainable nitrogen management	November/December 2029
Preparation of the completion report	Preparation of the completion project report within 3 months after completion: NC, EMB, MET Malaysia, TUAT, and new project countries, if applicable	March 2030

IV. BUDGET PLAN

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Consumables (passive samplers, filters, etc.)	2027: 10,000 2028: 6,000 2029: 4,000	Not yet	
Installation of samplers: travel cost	2027: 8,000 2028: 4,000 2029: 0	Not yet	
Online seminars (hosted by NC):	2028: 2,000 2029: 2,000	Not yet	
Data assessment (in-kind from TUAT)	2027: 7,000 2028: 7,000 2029: 7,000	2027: 7,000 2028: 7,000 2029: 7,000	0
Sampling, analysis, and data assessment (in-kind from Philippines and Malaysia)	2027: 14,000 2028: 14,000 2029: 14,000	Not yet	
Arrangements and data assessment by NC (2 man-months)	2027: 14,000 2028: 14,000 2029: 14,000	Not yet	
PFH fee	2027: 3,000 2028: 3,000 2029: 3,000	Not yet	
Total	<u>2027:</u> 56,000 USD: 35,000 + in-kind (21,000) <u>2028:</u> 50,000 USD: 29,000 + in-kind	2027: 7,000 2028: 7,000 2029: 7,000 Total:	129,000

	(21,000) <u>2029: 44,000 USD:</u> 23,000 + in-kind (21,000) Total: 150,000	21,000	
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Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

[Proposal Number: 2027-02]

I. General Information

Project Title	Proposal Number: 2027-02 The capacity building webinar and hybrid workshop on application of satellite observation for atmospheric environmental management
Background and Rationale	The EANET was established in 2001 and 13 countries in East Asia are participating in the EANET at present. The original target of the EANET was the acid deposition problem, but in 2021, EANET expanded its scope to wider atmospheric environmental issues. EANET currently monitors atmospheric environment-related substances, including atmospheric deposition and air pollution, across East Asia with high reliability. However, one hurdle for the EANET is achieving sufficient spatial coverage with the limited number of monitoring sites. Recently, satellite observations have become available for many atmospheric environment-related substances. Although satellite observations have limitations such as spatial and temporal resolutions and relatively large uncertainties, they generally provide coverage across the whole East Asia. Therefore, the satellite monitoring data have potential to support the analysis based on the EANET monitoring data. In addition, satellite observation has another potential to support the sustainable monitoring of the EANET because the satellite monitoring data are becoming increasingly publicly available. However, the benefit, practical uses, and limitations of satellite observation data are not still well recognized in the EANET community. In this project, the capacity building webinar and hybrid workshops will be held to share information of currently available satellite observation data, how to access, analyze and utilize the data including practical applications of satellite observation data in air quality management as case studies.
Project Duration	January/2027 – December/2027
Project Lead (PL)	Network Center for the EANET, Asia Center for Air Pollution Research (NC/ACAP) (Japan) Dr. Junichi Kurokawa, Department Head, the Network Center of EANET / 1182 Sowa, Nishi-ku, Niigata-shi 950-2144, JAPAN, kurokawa@acap.asia
Partner Organizations (POs)	National Institute for Environmental Studies (NIES) (Japan) ➤ Provision of advice, preparation of lecture materials, and participation in the webinar and hybrid workshops as lecturers and advisers. *Additional POs are being explored.
Implementation Agencies (IAs)	Network Center for the EANET, Asia Center for Air Pollution Research (NC/ACAP) (Japan) ➤ Development of a program of the webinar and hybrid workshops, decision and invitation of the lectures, preparation and holding the webinar and hybrid workshops, creation of the report
Beneficiaries of PCs	EANET participating countries ➤ Technical officers who are responsible for analyzing ground monitoring data and interested in using satellite observation data to support their analysis ➤ Policymakers who are responsible for atmospheric environmental management and interested in using satellite observation data for policy making.

Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: 18,000 (of which in-kind contributions expressed in USD: 7,500) The requested amount for EANET Project Fund in USD:10,500 (including Project Fund Holder fee: 3,000)			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	NIES	0	Provision of advice, preparation of lecture materials, and participation in the webinar and hybrid workshops as lecturers and advisers. (7,500)	Secured
	Total	0	7.500	
Relevant Scope and Activities of EANET	➤ Education and Training ➤ Public Awareness and Exchange Information			
Project Processing Information	Submission Date to the EANET Secretariat			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			
	4) Date of Completion Report Submitted			
Project Keywords	Satellite observation, Analysis of monitoring data, Capacity building, Public awareness			
Project Summary	The EANET was established in 2001 and 13 countries in East Asia are participating in the EANET at present. The original target of the EANET was the acid deposition problem, but in 2021, EANET expanded its scope to wider atmospheric environmental issues. EANET currently monitors atmospheric environment-related substances, including atmospheric deposition and air pollution, across East Asia with high reliability. However, one hurdle for the EANET is achieving sufficient spatial coverage with the limited number of monitoring sites. Recently, satellite observations have become available for many atmospheric environment-related substances. Although satellite observations have limitations such as spatial and temporal resolutions and relatively large uncertainties, they generally provide coverage across the whole East Asia. Therefore, the satellite			

	monitoring data have potential to support the analysis based on the EANET monitoring data. In addition, satellite observation has another potential to support the sustainable monitoring of the EANET because the satellite monitoring data are becoming increasingly publicly available. However, the benefit, practical uses, and limitations of satellite observation data are not still well recognized in the EANET community. The objective of this webinar and hybrid workshop is to share the recent progress in satellite observations of atmospheric environment-related substances, general knowledge and techniques to access, analyze and utilize the data, and their practical applications of satellite observation data in air quality management as case studies for EANET participating countries. Furthermore, how satellite observation data can be utilized in EANET activities, as well as their potential and limitations, will be discussed.
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II. Description of the Project

Project Title	Proposal Number: 2027-02 The capacity building webinar and hybrid workshop on application of satellite observation for atmospheric environmental management
Expected Outcome	➤ Technical officers from EANET participating countries will be able to use satellite observation data to support the analysis of ground-based monitoring of atmospheric environment-related substances. ➤ Policymakers from EANET participating countries will be able to utilize the satellite observation data, together with ground-based monitoring data, for atmospheric environmental management.
Project Objectives	The objective of this webinar and hybrid workshop is to share the latest information of available satellite observation data for atmospheric environment-related substances over East Asia, general knowledge and techniques to access, analyze and utilize the data, and their practical applications (case studies) of satellite observation data in air quality management.
Expected Outputs	➤ Presentation materials and lectures on the latest information about available satellite observation data over East Asia including general knowledge and techniques to access, analyze and utilize the data for atmospheric environmental management. ➤ Participants with the latest knowledge about satellite observation data, including its application methodologies for air quality management in East Asia. ➤ Suggestions on how EANET could utilize satellite observation data in its activities, especially to support the analysis of EANET monitoring data, along with a discussion of their potential and limitations.
Activities to achieve Expected Outputs	Output 1 - Presentation materials and lectures on the latest information about available satellite observation data over East Asia including general knowledge and techniques to access, analyze and utilize the data for atmospheric environmental management. Activity 1.1 – Development of a program consisting of a half-day webinar workshop (WWS) and a half-day hybrid workshop (HWS). Activity 1.2 – Decision and invitation of lectures of the WWS and the HWS. Activity 1.3 – Preparation of the WWS and the HWS including discussions on topics of the lecture presentations from experts.

	Potential topics are as follows (the abbreviations in parentheses indicate which workshop (WWS or HWS) covers each topic): ➤ Overview of satellite observation of atmospheric environment-related substances over East Asia (WWS). ➤ How to access the data including the websites, data formats, and required tools (WWS). ➤ How to analyze the data such as for hot spots and differences of concentrations with their limitations and uncertainties (WWS). ➤ How to utilize the data such as for evaluation of biomass burning, and early warning system for air pollution (HWS). ➤ Case study of application of satellite observation data in EANET participating countries for atmospheric environmental management (HWS). Output 2 – Participants with the latest knowledge about satellite observation data, including its application methodologies for air quality management in East Asia. Activity 2.1 – Announcement of the WWS and the HWS. Activity 2.2 – Holding the WWS and the HWS: Lecture presentation session including discussions with experts. Activity 2.3 – Creation of a report of the WWS and the HWS Activity 2.4 – Uploading the lecture materials and report of the WWS and the HWS to the EANET website Output 3 – Suggestions on how EANET could utilize satellite observation data in its activities, especially to support the analysis of EANET monitoring data, along with a discussion of their potential and limitations. Activity 3.1 – Holding the WWS and the HWS: Discussion session among participants from EANET participating countries focusing on utilization of satellite observation data in EANET activities
Links and relevance to existing policy process(es) of the target area and regional Activities	➤ Satellite observation data will be taken into consideration, along with ground-based monitoring data, in policies for air quality management. ➤ Satellite observation data have the potential to be utilized for regional assessment and cooperation. ➤ The importance of maintaining reliable surface monitoring data from EANET as a basis for validating and interpreting satellite observation data will be better understood.
Risks and Countermeasures	Risk: Research and case studies on target atmospheric environment-related substances and the use of satellite observation data for atmospheric environmental management in East Asia may be limited. Countermeasure: Research and case studies from outside East Asia that could be reference for East Asia and suitable for the webinar and hybrid workshops will be surveyed.
Comments from PCs to be considered in the implementation	To be completed by SEC
Responses from the Project Lead to Above	To be completed by PL
Comments from SEC, NC, PCs	*This column will be filled after submission of the proposal to SEC. SEC and NC provide comments on whether the project meets the project criteria or not. Other than above, the interests of PCs will also be added.

III. Implementation Plan

In table format, please present a brief, on- to two-page work plan matrix, with a timeline including target dates for activities for the project's life, reflecting the overall program approach and objectives. Applicants may use smaller but legible font sizes in tables.

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Development of a program of the WWS and the HWS	Contents of the webinar workshop (WWS) and the hybrid workshop (HWS) are considered by PL with advice from POs. The program of the WWS and the HWS is documented.	JAN-MAY 2027
Selection and invitation of lectures of the WWS and the HWS	Based on the program, appropriate lectures are selected by the IA, taking into consideration the advice from the POs. PL invites selected ones to deliver lectures at the WWS and the HWS.	JAN-AUG 2027
Announcement of the WWS and the HWS	The announcement of the WWS and the HWS is sent to National Focal Points (NFPs), National Centers, SAC members, National QA/QC Managers of the EANET from PL. The WWS and the HWS is also promoted on the EANET website. Participants are requested to submit registration forms to PL.	JUL-OCT 2027
Preparation and holding of the WWS and the HWS	IA prepares the WWS and the HWS including creating necessary documents to be sent to participants in advance as well as technical settings of a web meeting system. The WWS and the HWS are moderated by IA with support from POs. POs deliver presentations, answer questions from participants, and provide comments on presentations from PCs. Participants are requested to submit questionnaires for the WWS and the HWS.	SEP 2027 (WWS) OCT 2027 (HWS)
Creation of a report of the WWS and the HWS	PL creates a report of the WWS and the HWS including a summary of answers of questionnaires from participants. POs review the report and provide comments for improvement. PL revises the report based on the comments.	DEC 2027
Upload the lecture materials and report of the WWS and the HWS to the EANET website	PL uploads the lecture materials including from POs as well as the report of the WWS and the HWS to the EANET website. PL shares the website to NFPs, National Centers, SAC members, National QA/QC Managers of the EANET and ask them to share the WWS and the HWS information with related institutes and persons.	DEC 2027

IV. BUDGET PLAN

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Development of a program of the WWS and the HWS	Personnel cost: 1000 (In-kind from POs)	Not yet (In-kind: Secured from NIES)	

	(2100): Providing advice to the program of the WHWS)		
Selection and invitation of lectures of the WWS and the HWS	Personnel cost: 350 (In-kind from POs (700): Providing advice about appropriate lectures for the WHWS)	Not yet (In-kind: Secured from NIES)	
Announcement of the WWS and the HWS	Personnel cost: 175	Not yet	
Preparation and holding of the WWS and the HWS	Personnel cost: 2450 (In-kind from POs (3500): Providing lecture presentations and answering questions from participants.)	Not yet (In-kind: Secured from NIES)	
Creation of a report of the WWS and the HWS	350 (In-kind from POs (700): Providing advice for improvement of the report)	Not yet (In-kind: Secured from NIES)	
Upload the lecture materials and report of the WWS and the HWS to the EANET website	Personnel cost: 175 (In-kind from POs (500): Providing lecture materials to be uploaded to the EANET website)	Not yet (In-kind: Secured from NIES)	
Venue for the hybrid workshop	3,000	Not yet	
Project Fund Holder fee	3,000	Not yet	
Total	10,500 (7,500)	Not yet (In-kind: Secured from NIES)	

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

[Proposal Number: 2027-03]

I. General Information

Project Title	[Proposal Number: 2027-03] Fellowship for building leadership in Atmospheric Environment and Air Quality Management in East Asia			
Background and Rationale	EANET has been conducting the Research Fellowship Program since 2005. The program has been implemented annually for one or two researchers from the EANET Participating Countries, with a total of 40 researchers having participated to date. Through this program, the researchers have carried out various research activities related to EANET, and these activities have contributed significantly to improving the skills of individual researchers. In order to further contribute to the future development of EANET, it is necessary to provide a platform that fosters human resources who will support EANET in the future and to promote the early formation of a research community. Following the successful implementation of the first phase (2024–2025), this proposal represents the second phase of the project. This phase will be implemented under the guidance of the newly developed EANET Medium-Term Plan (MTP) (2026–2030). In line with the EANET MTP guidance, the following themes are particularly encouraged for strengthening research activities: advanced monitoring data analysis; PM and ozone source identification, including VOCs; nitrogen deposition and nitrogen management; air pollution and climate-related issues; and other related topics.			
Project Duration	January 2027 – December 2027			
Project Lead (PL)	Network Center for the EANET Fudan University, China			
Partner Organizations (POs)				
Implementation Agencies (IAs)	• Network Center for the EANET [Overseeing the implementation of the project, communicating with EANET participating countries and fellows, responsible for the fellowship program in Japan] • Fudan University, China [Responsible for the fellowship program in China]			
Beneficiaries of PCs	Administrators/Researchers in the EANET Participating Countries			
Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: 90,000 (of which co-finance contributions expressed in USD): 39,000 The requested amount for EANET Project Fund (USD): 24,000			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)

	Fudan University	39,000		TBC
	Ministry of the Environment of Japan (MOEJ)	24,000		TBC
	Total	63,000		
Relevant Scope and Activities of EANET	• Capacity building on network management and development • Capacity building on monitoring air pollution including related chemical substances with quality assurance and quality control (QA/QC) • Capacity building on promotion of data dissemination and utilization • Enhancement of cooperation and collaboration among EANET Participating Countries			
Project Processing Information	Submission Date to the EANET Secretariat:			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			
	4) Date of Completion Report Submitted			
Project Keywords	Research, capacity building			
Project Summary	Two or three participants from the EANET Participating Countries will take part in the “Fellowship for building leadership in Atmospheric Environment and Air Quality Management in East Asia” for 6 months including intensive on-site research for 3 weeks at Fudan University, Shanghai, China, and for 4 weeks at the NC for the EANET, Japan, respectively. In order to fully utilize the limited budget, this project adopts a hybrid approach. During the first five months (May to September), the officials/researchers will report their progress on their topics to their designated supervisors in China and Japan and further collaborate virtually. In October, the last month of the program, the officials/researchers will visit China and Japan to receive intensive guidance from their supervisors in China and Japan, deepen discussions, and work on and complete their themes. In addition, opportunities will be arranged for the participants to interact with other Japanese research organizations, such as the National Institute for Environmental Studies (NIES) and local research institutes in Niigata, through seminars, technical exchanges, and networking activities. These interactions are expected to broaden participants’ professional networks, strengthen institutional collaboration, and contribute to the long-term sustainability of the project. The theme should be limited within the scope of EANET, including • Advanced monitoring data analysis • PM and ozone sources identification, including VOCs • Nitrogen deposition and nitrogen management • Air pollution and climate-related issues • And other topics This program will provide a platform for the young generation of researchers and government officials, who will be responsible for managing EANET in the future, to have an integrated discussion and reflection.			

I. Description of the Project

Keywords of the project	Research, capacity building
Summary of the	Two or three participants from the EANET Participating Countries will

project	take part in the “Fellowship for building leadership in Atmospheric Environment and Air Quality Management in East Asia” for 6 months, including intensive on-site research for 3 weeks at Fudan University, Shanghai, China, and for 4 weeks at the NC for the EANET, Japan, respectively. In order to fully utilize the limited budget, this project adopts a hybrid approach. During the first five months (May to September), the officials/researchers will report their progress on their topics to their designated supervisors in China and Japan, and further collaborate virtually. In October, the last month of the program, the officials/researchers will visit China and Japan to receive intensive guidance from their supervisors in China and Japan, deepen discussions, and work on and complete their themes. In addition, opportunities will be arranged for the participants to interact with other Japanese research organizations, such as the National Institute for Environmental Studies (NIES) and local research institutes in Niigata, through seminars, technical exchanges, and networking activities. These interactions are expected to broaden participants’ professional networks, strengthen institutional collaboration, and contribute to the long-term sustainability of the project. The theme should be limited within the scope of EANET, including ➤ Advanced monitoring data analysis; ➤ PM and ozone sources identification, including VOCs; ➤ Nitrogen deposition and nitrogen management; ➤ Air pollution and climate-related issues; ➤ And other topics. This program will provide a platform for the young generation of researchers and government officials, who will be responsible for managing EANET in the future, to have an integrated discussion and reflection.
Background and Rationale	• EANET has been conducting the Research Fellowship Program since 2005. The program has been implemented annually for one or two researchers from the EANET Participating Countries, with a total of 40 researchers having participated to date. Through this program, researchers have carried out a wide range of activities related to EANET. • These activities have been highly successful in enhancing the skills and capacities of individual researchers. • To further contribute to the future development of EANET, it is essential to provide a platform that fosters human resources who will support EANET and to encourage the early formation of a collaborative research community. • The first term of this project was implemented in 2024–2025, and this proposal represents its second term. The second term will be implemented under the guidance of the newly established EANET Medium-Term Plan (MTP) (2026–2030), aligning its activities with the MTP’s strategic priorities.
Objectives	• To strengthen the research capacity of young officers/researchers in the EANET Participating Countries, especially in the developing countries. • To promote scientific policy making as well as research in those countries. • To obtain the potential capacity to be a leader of EANET by the officers/researchers. • Promoting interdisciplinary research and enhancing sectoral cooperation of academia and government representatives are crucial to addressing the comprehensive problems in the EANET region,

	especially in the developing nations. To provide a platform for the young generation of researchers and government officials, who will be responsible for managing EANET in the future, to have an integrated discussion and reflection.
Activities to achieve Objectives	The selection of two or three applicants will be conducted early each year and this project will be conducted in the 2nd half of the year. This program is planned with the duration of a half year, including the intensive on-site research for 3 weeks at Fudan University, Shanghai, China and for 4 weeks at the NC for the EANET, Japan, respectively. Selected applicants will carry out their research activities supervised by two supervisors from Fudan University and the NC at ACAP, respectively. The thinkable themes are as follows: ✓ Establish air quality monitoring standards or guidelines ✓ Air quality data analysis ✓ Methodology development on simulation and modeling, emission inventory, health impact and others ✓ Policy making and management Expected applicants are: ✓ Researchers ✓ Government officials Who are qualified for: ✓ Applicants from the EANET Participating Countries should be nominated by their countries' National Focal Points, recommended by the EANET members, including the National Focal Points (NFPs), Scientific Advisory Committee (SAC) members, Task Forces (TFs) members, National Centers (NCs), and Quality Assurance/Quality Control (QA/QC) managers. ✓ Applicants will actively bridge their country and the EANET network, such as the NFPs, SAC members, TFs members, NCs, and QA/QC managers. ✓ Applicants have (or are expected to have) demonstrated leadership in their respective fields, and one's achievements/lessons learned with their colleagues internally. ✓ Applicants are required to develop and submit a research proposal that interfaces their own research interests with the research agenda of one of the various activities pursued at the NC for the EANET and Department of Atmospheric and Oceanic Sciences/ Institute of Atmospheric Sciences, Fudan University. ✓ Applicants are required to submit their report by middle of November (one month and a half later at the end of the program) following a given template. ✓ Written and oral fluency in English. The NC and Fudan University will conduct the following activities in joint effort: ✓ Preparing the advisor list for applicants ✓ Selection of applicants ✓ Provide advice and guidance for the researchers ✓ Evaluation and assessment for reports ✓ Budget sharing
Links and relevance to existing policy	- Science-based evidence is essentially important for developing environmental policy. - The interlinkage between research activities and policy making is

process of the target areas and regional activities	crucial for approaching air pollution problems. The accumulated experiences and lessons learned from the Research Fellowship Program will be fully utilized and considered in this program.
Expected Outputs	Capacity Building and Leadership Development - Enhanced technical knowledge and analytical skills of participating government officials and researchers in atmospheric environment and air quality management. - Strengthened capacity to apply scientific evidence, monitoring data, and research findings to environmental management and policymaking in their respective countries. - Development of future environmental leaders who will actively contribute to EANET activities and regional environmental cooperation. Knowledge Generation and Dissemination - Completion of research projects on priority themes aligned with the EANET Medium-Term Plan (2026–2030). - Submission of scientific papers, technical papers, and/or conference presentations based on the research conducted under the Fellowship Program. - Publication and dissemination of Fellowship Program research reports to share findings, experiences, and recommendations with EANET stakeholders and the wider scientific community. Regional Networking and Collaboration - Strengthened professional networks among government officials, researchers, and experts from the 13 EANET Participating Countries. - Enhanced collaboration between EANET participating countries and research institutions in China, Japan, and other relevant organizations through knowledge exchange and joint activities. Sustainability and Long-term Impact - Establishment of a sustainable alumni network that promotes continued knowledge sharing, technical cooperation, and active engagement in EANET and related environmental initiatives.
Expected Outcome	- Promotion of scientific research which would be a base to enhance and develop environmental policy in participating countries of EANET. - Human resources who will be responsible for the future of EANET are developed and a leadership network is built for the sustainable development of EANET and the improvement of the atmospheric environment in Asia. <i>** All the articles by project experts could only represent their personal opinions. Without approval of IG, all project outputs should not be published in the name of the EANET.</i>
Risks and Countermeasures	If the applicant's applied topic will not be covered by existing researchers at NC and Fudan University, the NC will request support from IGES or other research institutions.
Plan to deliver outcomes to beneficiaries	- The applicants will prepare the report of the outputs from their research activity and publish it in journals and EANET research portal of the website of EANET, if appropriate. - A Wrap-up Presentation will be organized in the form of a seminar.
Comments from PC to be considered in the	

implementation	
Responses from the Project Lead to above	
Comments from SEC, NC, PCs	

1. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Invitation to PCs	Invitation letter is issued to PCs (NC)	1 month
Selection of applicants	The selection committee selects the applicants	1 month
Implementation of research activity	Research study at Fudan University and NC	7 weeks (4 weeks in Japan and 3 weeks in China respectively)
Development of reports, and review by experts	Applicants develop the report of the research and external experts review the paper	6 months

2. Budget Plan

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Direct Expenses	Travel cost	11,000	
	Accommodation, Transportation, Daily Subsistence Allowance (DSA), and others	16,000 in Japan	
		16,000 in China	
Personnel cost/person	The NC for the EANET	21,000	
	Fudan University, China	23,000	
Project fund holder fee		3,000	
Total		90,000	

[Proposal Number: 2027-04]

I. General Information

Project Title	[Proposal Number: 2027-04] The collaboration of Technical and Training (TNT) and capacity building program for personnel of the Participating Countries on monitoring
Background and Rationale	This capacity-building activity has been carried out since 1999 every year because of its importance for maintaining and improving monitoring systems in EANET Participating Countries. This capacity building has been implemented based on various needs of countries from basic methods to country specific issues to maintain monitoring systems. The scope of EANET was expanded in 2021, but many countries of EANET cannot implement the monitoring of VOCs, NH₃ and CO yet. The capacity building of EANET needs to respond to this matter. In 2023, EANET started collaboration with the Technical and Training Program (TNT Program) by NIER. The researchers of the labs of each Participating Country received training to carry out the monitoring and sample analysis activity, and lectures for methodology and data analysis are also provided in this program since 2023. In line with the Medium-Term Plan (MTP 2026–2030), this project will focus its training on PM_{2.5} and surface ozone (O₃), which are identified as priority pollutants due to their significant impacts on human health and the environment. PM_{2.5} is the most critical pollutant affecting public health, while surface ozone, formed from reactions of NO_x and VOCs, also contributes to health risks and reduced crop productivity. Strengthening capacity in monitoring these pollutants will therefore be essential for enhancing EANET's overall monitoring effectiveness.
Project Duration	[January 2027 – December 2027]
Project Lead (PL)	Network Center for the EANET [Overseeing the implementation of Project, Communication with EANET participating countries and trainees, responsible for training program in Japan] The National Institute of Environmental Research (NIER), Republic of Korea [Communication with EANET trainees, responsible for training program in R. of Korea]
Partner Organizations (POs)	None
Implementation Agencies (IAs)	Network Center for the EANET [Overseeing the implementation of Project, Communication with EANET participating countries and trainees, responsible for training program in Japan] The National Institute of Environmental Research (NIER), Republic of Korea [Communication with EANET trainees, responsible for training program in R. of Korea]
Beneficiaries of PCs	Researchers or officers from the institutes related to EANET such as the National Center of Participating countries of EANET
Total Required Resources and Requested Amount	The total amount of required resources in USD: 120,000 (of which Co-finance contributions expressed in USD): 77,700 The requested amount for EANET Project Fund (USD): 19,650 For multi-year projects, please specify both amounts for each year.

of the Project Fund				
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	NIER	77,700		Confirmed
	Ministry of the Environment of Japan	19,650		TBC
	Total	97,350		
Relevant Scope and Activities of EANET	- Capacity building on monitoring air pollution including PM2.5, Ozone, related chemical substances with quality assurance and quality control (QA/QC) - Capacity building on promotion of data dissemination and utilization - Enhancement of cooperation and collaboration among EANET Participating Countries			
Project Processing Information	Submission Date to the EANET Secretariat			
	1) Date of Register in the Project Cycle		15 July 2025	
	2) Date of Latest Project Plan		16 September 2025	
	3) Date of Approval			
	4) Date of Completion Report Submitted			
Project Keywords	Capacity building for PM2.5 and Ozone Monitoring, Data analysis, and QA/QC			
Project Summary	Training activity for capacity building - In-person training Lab study focusing on practicing maintenance of the PM2.5 monitor and calibration of the ozone monitor, along with measurement of pH, EC, ions, making Filter Pack (FP) filters, extracting FP samples, filtration of FP and rain samples, Ion Chromatograph (IC) analysis and checking IC results, site visit, etc. - Online training for lecture Atmospheric deposition, automatic monitor maintenance (PM2.5, O3 monitor etc.), IC lecture (principle, troubleshooting etc.), data analysis, Soil and vegetation/Inland aquatic environment			

1. Description of the Project

Keywords of the project	Capacity building for PM2.5 and Ozone Monitoring, Data analysis, and QA/QC
Summary of the Project	Training activity for capacity building - In-person training Lab study for measurement of pH, EC, ions, making Filter Pack (FP) filters, extracting FP samples, filtration of FP and rain samples, Ion Chromatograph (IC) analysis and checking results of IC, practicing maintenance of PM2.5 monitor and calibration of ozone monitor, site visit etc. - Online training for lecture Atmospheric deposition, automatic monitor maintenance (PM2.5, O3 monitor etc.), IC lecture (principle, troubleshooting etc.), data analysis, Soil and vegetation/Inland aquatic environment
Background and Rationale	This capacity-building activity has been carried out since 1999 every year because of its importance for maintaining and improving monitoring systems in EANET Participating Countries. This capacity building has

	been implemented based on various needs of countries from basic methods to country specific issues to maintain monitoring systems. The scope of EANET was expanded in 2021, but many countries of EANET cannot implement the monitoring of VOCs, NH₃ and CO yet. The capacity building of EANET needs to respond to this matter. In 2023, EANET started collaboration with the Technical and Training Program (TNT Program) by NIER. The researchers of the labs of each Participating Country received training to carry out the monitoring and sample analysis activity, and lectures for methodology and data analysis are also provided in this program since 2023. In line with the EANET Medium-Term Plan (MTP) 2026 to 2030, Sustainable Monitoring System, Nitrogen Deposition and Nitrogen Management, and Air Pollution and Climate Change Countermeasures, these future capacity-building activities must be designed to support countries in achieving these strategic objectives. Recommended themes aligned with the MTP include advanced monitoring data analysis, PM and ozone source identification (including VOCs), nitrogen deposition and nitrogen management, air pollution and climate-related issues, and other emerging technical topics relevant to the region.
Objectives	1) Monitoring • To maintain and improve the monitoring system, which prioritizes substances including PM_{2.5} and ozone • To obtain the latest information and skill as well as those of basic ones for monitoring • To keep continuous monitoring activity by basic maintenance of equipment etc. 2) Analysis of sample and data • To maintain and improve the monitoring system • To obtain the latest information and skill as well as those of basic ones to analyze monitoring samples and data • To keep the quality of analysis including satisfying Data Quality Objective (DQO) etc. 3) Emission inventory • To get the latest information on emission inventory • To obtain the knowledge to collect dataset to build emission inventory • To understand various application of the inventory 4) Forecasting • To improve the accuracy of forecasting systems or techniques • To explore the application of forecasting data for developing modeling • To obtain knowledge about the cause and characteristics of air pollution 5) Policy development • To help trainees to build effective air quality management/control measures or policies in their respective country • To understand the importance of joint responses between countries with regards to the transboundary air pollution
Activities to achieve Objectives	• Training opportunities in Japan (ACAP) and the Republic of Korea (NIER) will be utilized to develop specialized training materials and technical documents focusing on PM_{2.5} and ozone (O₃) monitoring. These materials will incorporate the content of lectures, laboratory practices, site visits, and research activities conducted during the program, including FRM operation, PM_{2.5} sampling, O₃ automatic monitoring,

	data analysis, and QA/QC procedures. • Technical materials and experts will be provided to support national-level training activities in participating countries, particularly for PM2.5 and O3 monitoring, when follow-up capacity-building activities are implemented after the trainees return home. • A two-week capacity-building program focusing on PM2.5 and O3 monitoring will be conducted in Japan and the Republic of Korea. Two sessions are planned for 2027, each with four in-person participants, building on the structure and experience of the 2026 program, which includes PM2.5/O3 measurement, FRM operation, IC analysis, QA/QC, hands-on experiments, and site visits. • A series of specialized lectures on atmospheric monitoring—particularly PM2.5 and O3—will be provided for trainees. Topics include atmospheric environment fundamentals, measurement principles, QA/QC, data interpretation, and related monitoring methodologies. • Trainees will participate in hands-on and simulated experiments focusing on PM2.5 and O3, such as PM2.5 sampling, FRM start-up and shutdown, filter conditioning and weighing, ion chromatography analysis, and operation of O3 automatic monitoring instruments. These activities will strengthen practical skills in monitoring, analysis, and forecasting of air pollution. • Site visits will be arranged to laboratories, universities, manufacturers, and government agencies—including ACAP facilities, the Niigata Prefectural Headquarters, the Niigata city monitoring stations, SNUH laboratories, the NIER Air Quality Department, and the Seoul Metropolitan Research Center—to deepen understanding of the latest PM2.5 and O3 monitoring technologies, policy trends, and international collaborative projects. • Training programs and technical assistance provided by donor agencies will be utilized, where applicable, to support capacity building on acid deposition as well as PM2.5 and O3 monitoring, analysis, and forecasting for participating countries. • A follow-up questionnaire survey will be conducted for trainees to evaluate the outcomes and effectiveness of the capacity-building activities, particularly regarding improvements in PM2.5 and O3 monitoring capabilities. • To achieve the objectives above, Japan (NC/ACAP) will focus on fundamental monitoring methodologies—including PM2.5/O3 monitoring, wet and dry deposition, soil and vegetation, inland aquatic environment, and laboratory sample analysis—in line with the EANET QA/QC program. Meanwhile, the Republic of Korea (NIER) will focus on applied methodologies, including advanced automatic monitoring, satellite monitoring, emission inventory development, forecasting techniques, and policy-related aspects for PM2.5 and O3. • Prior to the training, an online pre-meeting will be held to discuss specific PM2.5 and O3 monitoring challenges in each participating country. This will enable NIER and NC/ACAP to understand country needs in advance and ensure that trainees can effectively apply and share the outputs of the program after returning home.
Links and	• To support the monitoring of air pollution by trained researchers

relevance to existing policy process of the target areas and regional activities	• To obtain the reliable monitoring data of air pollution • To support PCs to solve the troubles of monitoring activity by themselves
Expected Outputs	1) Monitoring (NC, NIER) • Trained persons having obtained the latest information and fundamental skills related to air quality monitoring, including PM2.5 and O3 measurement techniques. • Trained persons with knowledge and skills to conduct continuous monitoring activities, including routine and periodic maintenance of monitoring instruments, while maintaining an appropriate QA/QC level. 2) Analysis of sample and data (NC) • Trained persons having obtained the latest information and technical skills to analyze monitoring samples and data, including chemical analysis of PM2.5 components. • Trained persons with knowledge and skills to ensure the quality of analytical results, including the ability to meet the Data Quality Objective (DQO) required for EANET monitoring activities. 3) Emission inventory (NIER) • Trained persons having obtained the latest information on emission inventory development and management. • Trained persons with knowledge and skills to apply emission inventory datasets for various analytical and policy-related purposes. 4) Forecasting (NIER) • Trained persons having obtained information on air quality forecasting systems and forecasting techniques. • Trained persons with knowledge and skills to understand the causes and characteristics of air pollution, supporting improved interpretation of forecasting results. 5) Policy establishment (NIER) • Trained persons having obtained the latest information on measures, regulations, and policies implemented to address air pollution at national and local levels. • Trained persons with knowledge of the importance of joint responses and international cooperation among countries in addressing transboundary air pollution issues. <i>** All the articles by project experts could only represent their personal opinions. Without approval of IG, all project outputs should not be published in the name of the EANET.</i>
Expected Outcome	1) Monitoring • Continuous air quality monitoring is sustained with improved QA/QC standards in participating countries. • Enhanced national capacity enables trained personnel to disseminate monitoring knowledge and skills, contributing to the maintenance and improvement of monitoring systems. 2) Analysis of sample and data • Analytical capacity for monitoring samples and data is maintained and strengthened with improved QA/QC practices. • The quality and reliability of analytical results are

	improved, supporting the generation of comparable monitoring data across participating countries. 3) Emission inventory - Emission inventory datasets are maintained and improved with enhanced quality assurance procedures. - Emission inventory information is increasingly utilized for air quality assessment, forecasting, and policy development. 4) Forecasting - Capacity for air quality forecasting is strengthened in participating countries, supporting more accurate interpretation and application of forecasting results. - Regional cooperation and information exchange on air quality forecasting are enhanced among participating countries. 5) Policy development - Policymakers are better informed to develop and strengthen air pollution control measures and policies based on regional experiences and best practices. - Cooperation among participating countries is strengthened to address transboundary air pollution through coordinated measures and policy dialogue.
Risks and Countermeasures	
Plan to deliver outcomes to beneficiaries	The obtained knowledge, skills and technique can be further shared among the organizations that the trainees belongs to in their countries.
Comments from PC to be considered in the implementation	
Responses from the Project Lead to above	
Comments from SEC, NC, PCs	

2. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Development of program	The training program is developed in collaboration with the TNT program of NIER	2 month/session * 2 sessions
Invitation to PCs	Invitation letter is issued to PCs and screening and select applicants	1 month/session * 2 sessions
Implementation of training	Implementation of lectures, lab study, site visits, etc.	2 weeks/session * 2 sessions
Review of training	Review of output for the training	1 month/session * 2 sessions

** Please note that the schedule and program in the Republic of Korea are subject to change depending on further consultation with the Ministry of Environment of RoK.*

3. Budget Plan**In USD**

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources * Under consultation	In-balance
1) Travel costs			
Travel costs from the participant's country to Korea	7,000	Co-finance from NIER, R. of Korea	
Expense occurring in Korea (Lodging and meals, Visa issuance fee, Business trip expenses, and others)	15,100	Co-finance from NIER, R. of Korea	
Consumables at lab in Korea	9,000	Co-finance from NIER, R. of Korea	
Travel costs from Korea to Japan	2,600	Co-finance from NIER, R. of Korea	
Expense occurring in Japan (Lodging and meals, Visa issuance fee, Insurance fee (inc. Trip to R. of Korea), Business trip expenses, and others)	13,300		
Consumables at lab in Japan	5,000		
Travel costs from Korea to participant's country	7,000	Co-finance from NIER, R. of Korea	
2) Personnel costs			
Personnel cost of NIER	37,000	Co-finance from NIER, R. of Korea	
Personnel cost of NC	21,000		
3) Project fund holder fee	3,000		
Total	120,000		

[Proposal Number: 2027-05]

I. General Information

Project Title	[Proposal Number: 2027-05] Title: Integrated Capacity Building for Urban Ozone and Ambient VOCs under EANET
Background and Rationale	Ground-level ozone has become one of the most pressing air pollution issues across East Asia, with increasing concentrations reported in many EANET Participating Countries (PCs). Ozone pollution poses significant risks to human health, agricultural production and ecosystems, and is closely associated with emissions of volatile organic compounds (VOCs), nitrogen oxides (NO_x), and changing meteorological conditions. At the same time, many PCs are strengthening their ozone-related air quality standards and seeking technical support for ozone monitoring and management. Building on the successful implementation of the EANET VOC Project (2024–2026), important foundations have been established, including the development of the VOC Technical Training Guidance, and strengthened capacity-building activities on ambient VOC monitoring at pilot cities and strengthened cooperation on VOC monitoring in participating countries. However, substantial gaps remain in comparison of various methodologies of ambient VOCs and ozone monitoring, quality assurance and quality control (QA/QC), integrated assessment of VOC–ozone relationships, and the application of scientific findings to policy development. Building upon the achievements of the EANET VOC Project (2024–2026), this project will strengthen the capacity building for integrated urban ozone and VOCs monitoring, methodologies of data analysis and urban ozone management. Through comparison of monitoring methodologies, technical training, assessment methodology study, and policy dialogue, the project will further strengthen the capacity of EANET Participating Countries on ambient urban ozone and VOCs monitoring, thereby improving understanding of ozone formation mechanisms and supporting evidence-based ozone mitigation policies. The project will also strengthen regional scientific cooperation under EANET and maximize the outcomes of previous EANET VOC Project (2024–2026).
Project Duration	[January /2027 – December/2029]
Project Lead (PL)	Network Center for EANET (NC) Chinese Research Academy of Environmental Sciences (CRAES)
Partner Organizations (POs)	- Center for Environmental Science in Saitama (CESS), Japan Provide scientific and technical expertise on VOC and ozone monitoring, QA/QC, support on capacity building activities. - Tokyo Metropolitan Research Institute for Environmental Protection, Japan (TMRIEP) Provide expertise on urban ozone monitoring, photochemical assessment, VOC–ozone relationships and support capacity building and technical guidance. - Korea University, Republic of Korea
Implementation Agencies (IAs)	Network Center for EANET (NC) Coordinate project implementation, organize regional coordination

	meetings, facilitate country-level technical training activities, support communication among participating countries, and provide project management. 2. Chinese Research Academy of Environmental Sciences (CRAES), China Provide scientific coordination, technical training, integrated data analysis, preparation of technical reports and policy recommendations.													
Beneficiaries of PCs	- Primary Beneficiaries: Kingdom of Cambodia Mongolia Republic of the Philippines Socialist Republic of Viet Nam These countries will directly participate in capacity building activities, technical training, harmonized VOC/ozone monitoring, QA/QC exercises, and integrated scientific assessment. - Secondary Beneficiaries Other interested EANET Participating Countries will benefit through regional workshops, technical guidance, knowledge sharing, and access to project outputs. - Regional Benefits All EANET Participating Countries will benefit from strengthened regional cooperation, outcomes of comparison of monitoring methodologies, improved understanding of regional ozone pollution, and enhanced policy dialogue under EANET. - The project will aim to achieve at least 50% female participation in regional workshops and training activities.													
Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: USD 175,000 The requested amount for EANET Project Fund (USD): <table><tr><td>Year</td><td>Requested EPF (USD)</td></tr><tr><td>2027</td><td>35,000</td></tr><tr><td>2028</td><td>25,000</td></tr><tr><td>2029</td><td>12,500</td></tr><tr><td>Total</td><td>72,500</td></tr></table> The total required resources for the project are USD 175,000 comprising USD 72,500 requested from the EANET Project Fund, USD 72,500 of MOEJ’s financial contribution, and USD 30,000 of financial contributions from MEE, China. The project adopts a phased implementation approach. Resource requirements are higher during the initial stage to facilitate the alignment of monitoring methodologies and data comparison among participating countries, establish robust QA/QC procedures, and strengthen capacity building, and gradually decrease in the later stages as the project focuses on integrated assessment, development of technical recommendations and dissemination of project outcomes.				Year	Requested EPF (USD)	2027	35,000	2028	25,000	2029	12,500	Total	72,500
Year	Requested EPF (USD)													
2027	35,000													
2028	25,000													
2029	12,500													
Total	72,500													
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)										
	Ministry of Ecology and Environment of the People's Republic of China (MEE.	<table><tr><td>Year</td><td></td></tr><tr><td>2027</td><td>USD 10,000</td></tr><tr><td>2028</td><td>USD 10,000</td></tr><tr><td>2029</td><td>USD 10,000</td></tr></table>	Year		2027	USD 10,000	2028	USD 10,000	2029	USD 10,000		under consultation		
Year														
2027	USD 10,000													
2028	USD 10,000													
2029	USD 10,000													

	China)			
	Ministry of the Environment of Japan (MOEJ)	Year 2027 2028 2029	USD 35,000 USD 25,000 USD 12,500	under consultation
	Total	Year 2027 2028 2029	USD 45,000 USD 35,000 USD 22,500	
Relevant Scope and Activities of EANET	The project will support the implementation of EANET by strengthening capacity building for urban ozone and VOCs monitoring, comparison study of monitoring methodologies and QA/QC systems, advancing scientific understanding photo chemical of ozone formation, and facilitating policy dialogue among participating countries. The project will also contribute to the evolving role of EANET in addressing emerging atmospheric environmental issues beyond acid deposition, particularly urban ozone pollution and its precursors.			
Project Processing Information	Submission Date to the EANET Secretariat			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			
	4) Date of Completion Report Submitted			
Project Keywords	Urban Ozone, Volatile Organic Compounds (VOCs), Capacity Building, Comparison of Monitoring Methodologies, QA/QC, Policy Support			
Project Summary	Building upon the achievements of the EANET VOC Project (2024–2026), this project aims to strengthen capacity building for integrated monitoring, data analysis and management of urban ozone and VOCs under EANET. The project will enhance comparison study of monitoring methodologies, quality assurance and quality control (QA/QC), and technical capacity through technical training, technical exchanges and pilot activities in selected participating countries. It will also conduct capacity building on data analysis of VOCs characteristics, urban ozone formation mechanisms and their relationships with meteorological conditions. Based on these activities, the project will develop technical recommendations and promote knowledge sharing to support evidence-based urban ozone management. The project will strengthen regional cooperation, maximize the outcomes of the previous EANET VOC project, and contribute to the long-term development of EANET in addressing emerging atmospheric environmental issues.			

V. Description of the Project

Project Title	Proposal Number: 2027-5 Title: Integrated Capacity Building for Urban Ozone and Ambient VOCs under EANET
Expected Outcome	By the completion of the project, EANET Participating Countries will have strengthened technical capacity building for monitoring methodology and integrated data analysis of VOCs and urban ozone, enabling improved scientific understanding of ozone formation and supporting evidence-based urban ozone management. The project will compare various monitoring methodologies, strengthen QA/QC systems, enhance regional scientific cooperation, and promote policy dialogue among participating countries. Building upon the achievements of the EANET VOC Project (2024–2026), the project will further strengthen EANET's role in addressing emerging atmospheric environmental issues and contribute to sustainable urban ozone management in East Asia.
Project Objectives	1. Strengthen the capacity building for VOC, ozone (O₃), NO_x and related pollutant monitoring in EANET Participating Countries and promote the alignment of monitoring practices. 2. Improve scientific understanding of VOC characteristics, ozone formation mechanisms, and their relationships with meteorological conditions through integrated assessment. 3. Support evidence-based urban ozone management and strengthen regional cooperation through policy dialogue and knowledge sharing.
Expected Outputs	1. QA/QC procedures for VOC, NO_x and urban ozone monitoring in participating countries. 2. Capacity building completed in joint participating countries on integrated data analysis of VOC characteristics and urban ozone formation. 3. Technical recommendations for urban ozone management developed and disseminated through EANET.
Activities to achieve Expected Outputs	Output 1 - Capacity building on monitoring methodologies and QA/QC procedures for VOC and urban ozone monitoring in participating countries. Activity 1.1 –Review existing urban ozone monitoring methodologies in participating countries, building on the outcomes of the previous EANET VOC Project (2025-11). Activity 1.2 – Develop and comparing monitoring methodologies and QA/QC procedures Activity 1.3 –Organize technical training on VOC and urban O₃ monitoring in participating countries, focusing on practical implementation, QA/QC and field applications. Activity 1.4 – Conduct intercomparison exercises and provide technical support for pilot monitoring Output 2 – Capacity building on integrated data analysis of VOC characteristics and urban ozone formation completed in selected participating countries Activity 2.1 – Review and summarize the methodologies of analyzing monitoring data Activity 2.2 –Conduct methodology study of data analysis of VOC characteristics and ozone formation Activity 2.3 –Analyze the relationships among VOCs, ozone, NO_x and meteorological conditions

	Output 3 –Technical recommendations for urban ozone management developed and disseminated through EANET Activity 3.1 –Organize policy dialogues Activity 3.2 –Develop technical recommendations based on project findings Activity 3.3 –Share best practices and experiences among participating countries Activity 3.4 –Disseminate project outputs through EANET meetings and technical reports
Links and relevance to existing policy process(es) of the target area and regional Activities	The project builds upon the achievements of the EANET VOC Project (2024–2026) and supports EANET activities on monitoring, assessment and capacity building. It also complements the air quality management policies of participating countries by strengthening technical capacity for VOC and urban ozone monitoring and assessment, thereby supporting evidence-based ozone management.
Risks and Countermeasures	• Risk: Different technical capacities among participating countries. Countermeasure: Provide stepwise technical support and tailor-made capacity building activities. • Risk: Changes in national priorities or staff. Countermeasure: Maintain regular communication through EANET and encourage participation of multiple experts from each country. • Risk: Budget limitations. Countermeasure: Prioritize core activities and maximize the use of online meetings and existing EANET platforms.
Comments from PCs to be considered in the implementation	To be completed by SEC
Responses from the Project Lead to Above	To be completed by PL
Comments from SEC, NC, PCs	

VI. Implementation Plan

In table format, please present a brief, on- to two-page work plan matrix, with a timeline including target dates for activities for the project's life, reflecting the overall program approach and objectives. Applicants may use smaller but legible font sizes in tables.

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Activity 1. Capacity building to support the urban ozone and ambient VOCs	Review current urban ozone monitoring methodologies in participating countries; conduct technical training on QA/QC procedures for urban ozone and ambient VOCs monitoring; organize in-country technical training focused on practical implementation; and conduct intercomparison	Jan 2027 – Dec 2029

monitoring practices	exercises to strengthen monitoring capacity. Milestone: Three technical training for urban ozone and ambient VOCs monitoring completed; three regional training workshops and intercomparison exercises successfully conducted. Responsible IA: NC and CRAES, with technical support from CESS and TMRIEP.	
Activity 2. Capacity building on integrated data analysis of ambient VOCs characteristics and urban ozone formation	Review and summarize the data analysis methodologies; conduct capacity building on integrated data analysis of VOCs characteristics, ozone formation mechanisms, and their relationships with NOx and meteorological conditions. Milestone: Three training on integrated data analysis methodologies. Responsible IA: CRAES, with technical support from Korea University, CESS and TMRIEP.	Jan 2028 – Sep 2029
Activity 3. Development and dissemination of technical recommendations	Develop technical recommendations for urban ozone management based on project findings; organize policy dialogue in conjunction with EANET meetings; disseminate project outputs through existing EANET platforms. Milestone: Technical recommendations and final project report completed and disseminated. Responsible IA: CRAES and NC.	Jul 2029 – Dec 2029

VII. BUDGET PLAN

Budget plan for 2027 In USD

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Activity 1. Capacity building to support the urban ozone and ambient VOCs monitoring practices	Direct expenses: USD 30,000 Personal cost: USD 10,000		USD 40,000
Activity 2. Capacity building on integrated data analysis of VOC characteristics and urban ozone formation	Direct expenses: USD 13,000 Personal cost: USD 7,000		USD 20,000
Activity 3. Development and dissemination of technical recommendations	Direct expenses: USD 10,000 Personal cost: USD 7,000		USD 17,000
Project fund holder fee	USD 3,000		USD 3,000
Total	USD 80,000		USD 80,000

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

Budget plan for 2028 In USD

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Activity 1. Capacity building to support the urban ozone and ambient VOCs monitoring practices	Direct expenses: USD 22,500 Personal cost: USD 7,500		USD 30,000
Activity 2. Capacity building on integrated data analysis of VOC characteristics and urban ozone formation	Direct expenses: USD 10,000 Personal cost: USD 5,000		USD 15,000
Activity 3. Development and dissemination of technical recommendations	Direct expenses: USD 7,000 Personal cost: USD 5,000		USD 12,000
Project fund holder fee	USD 3,000		USD 3,000
Total	USD 60,000		USD 60,000

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

Budget plan for 2029 In USD

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Activity 1. Capacity building to support the urban ozone and ambient VOCs monitoring methodologies	Direct expenses: USD 13,000 Personal cost: USD 4,500		USD 17,500
Activity 2. Capacity building on integrated data analysis of VOC characteristics and urban ozone formation	Direct expenses: USD 5,500 Personal cost: USD 3,000		USD 8,500
Activity 3. Development and dissemination of technical recommendations	Direct expenses: USD 3,500 Personal cost: USD 2,500		USD 6,000
Project fund holder fee	USD 3,000		USD 3,000
Total	USD 35,000		USD 35,000

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

[Proposal Number: 2027-06]

I. General Information

Project Title	[Proposal Number: 2027-06] Title: Integrated Early Warning System (IEWS) Feasibility Study for Heat Stress and Air Pollution in the Mekong Sub-region
Background and Rationale	The Mekong Sub-region continues to face significant challenges from air pollution, including transboundary pollution episodes and increasingly complex atmospheric conditions. The proposed IEWS is a regional forecasting and warning platform designed to provide advance alerts for both extreme heat and air pollution events in the Mekong Sub-region. It combines meteorological forecasts and air quality data to predict high-risk environmental conditions several days in advance. However, before full implementation, a one-year feasibility study is needed to assess the technical, institutional, and operational feasibility of the proposed system and to provide a solid foundation for the 2028–2030 project. The 2027 study will review existing air quality monitoring and forecasting systems, meteorological observation and prediction capacities, relevant datasets, and institutional arrangements. It will engage national stakeholders to identify priorities, data availability, operational constraints, and opportunities for enhanced cooperation; assess technical and institutional gaps; and develop a common understanding of the IEWS scope, functions, and governance arrangements. A dedicated analytical component on the potential use of artificial intelligence (AI) will be undertaken, with the Chinese Research Academy of Environmental Sciences (CRAES) serving as Co-project Lead for the AI-related analysis. CRAES will contribute experience from the development and operation of air pollution forecasting systems in China, including meteorological and air quality modelling, integration of monitoring and emissions data, forecast evaluation, operational system design, and the potential use of AI-based approaches. The study will examine how AI could support air quality forecasting, early warning services, data integration, and decision-support functions, while assessing data requirements, technical feasibility, limitations, and opportunities for practical application within the future IEWS. The study will consolidate the findings into a submission-ready full project proposal for implementation from 2028, including a refined system design, implementation arrangements, priority activities, capacity-building needs, and resource requirements to support improved air pollution management and regional cooperation across the Mekong Sub-region and the wider EANET region. While the feasibility study will focus primarily on the Mekong Sub-region, transboundary haze is an ASEAN-wide concern addressed under the ASEAN Agreement on Transboundary Haze Pollution. The study will therefore examine not only the feasibility of the proposed system in the Mekong Sub-region, but also its compatibility with existing regional mechanisms and its potential scalability and applicability to other parts of ASEAN. Cooperation with ASMC will be essential to ensure complementarity with existing ASEAN-wide haze monitoring and warning functions.

Project Duration	[January /2027 – December/2027]
Project Lead (PL)	Lead: Asia Center for Air Pollution Research (ACAP) Overall Project Lead and Coordinator Co-lead: Chinese Research Academy of Environmental Sciences (CRAES) – Co-project Lead for AI-related analysis; contributes technical expertise and analytical inputs on AI applications.
Partner Organizations (POs)	Asian Institute of Technology (AIT), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), ASEAN Specialised Meteorological Centre (ASMC), and relevant universities – technical and research inputs, as appropriate. National government agencies and relevant institutions in participating Mekong countries – stakeholder consultation, needs assessment and provision/validation of information, as appropriate.
Implementation Agencies (IAs)	IA: Asia Center for Air Pollution Research (ACAP) Overall Project Lead and Coordinator ACAP: overall coordination, desk review, regional synthesis, stakeholder engagement, feasibility assessment and drafting/finalization of the full project proposal. Co-IA: Chinese Research Academy of Environmental Sciences (CRAES) CRAES: Co-project Lead for AI-related analysis, including assessment of potential AI applications, data and analytical requirements, feasibility constraints and recommendations for the future IEWS. National counterparts/participating institutions: provide information, participate in consultations and validate country-level findings and priorities. Other technical partners: provide specialized technical inputs where relevant.
Beneficiaries of PCs	1) Direct beneficiaries: Agencies in the Mekong countries responsible for air quality, meteorology, forests and wildfires, public health, and disaster response 2) Regional institutional beneficiaries: EANET, AATHP-affiliated organizations, and ASMC 3) Indirect/future beneficiaries: Relevant agencies in other ASEAN member states and residents affected by HAZE.

Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: 60,000 (of which in-kind contributions expressed in USD): The requested amount for EANET Project Fund (USD): 30,000 For multi-year projects, please specify both amounts for each year.			
Resources other than EPF from Co-financers	Orga niza tion	Financial contributio n (USD)	In-kind contributi on (with estimated equivalent USD, if possible)	Status (Secured/unde r consultation etc.)
	MOEJ	30,000		Under consulta tion
	Total			
Relevant Scope and Activities of EANET	1) Monitoring 2) Data analysis 3) Capacity building 4) Information exchange			
Project Processing Information	Submission Date to the EANET Secretariat			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			
	4) Date of Completion Report Submitted			
Project Keywords	Air Pollution, Heat Stress, Early Warning			
Project Summary	This one-year preparatory project will assess the feasibility of establishing an Integrated Early Warning System (IEWS). The IEWS is a regional forecasting and warning platform designed to provide advance alerts for both extreme heat and air pollution events in the Mekong Sub-region. It combines meteorological forecasts and air quality data to predict high-risk environmental conditions several days in advance. The study will: 1) review existing monitoring, forecasting, research and institutional			

	capacities; 2) assess national needs, priorities and constraints through stakeholder consultations; 3) identify technical, data, institutional and operational gaps and preconditions; 4) assess the potential role of AI in the future IEWS, led analytically by CRAES as Co-project Lead; 5) align stakeholders on the proposed scope, governance and implementation approach; and 6) prepare a submission-ready full project proposal for a three-year implementation phase beginning in 2028. The study will produce a Final Feasibility Study Report that consolidates the baseline assessment, country needs assessment, feasibility and gap analysis—including analysis of the potential application of AI—and the proposed implementation approach for an IEWS. The study will be implemented under the EANET Project framework, while seeking technical and institutional cooperation with relevant bodies and institutions under the ASEAN Agreement on Transboundary Haze Pollution, including Technical Working Group (TWG) Mekong and ASMC for field consultations where possible, reducing transaction and travel costs while maximizing access to national counterparts. The report will establish a technically, institutionally, and operationally feasible concept and implementation pathway for an IEWS, providing a sound basis for the proposed three-year implementation project from 2028.
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II. Description of the Project

Project Title	[Proposal Number: 2027-06] [Title: Integrated Early Warning System (IEWS) Feasibility Study for Heat Stress and Air Pollution in the Mekong Sub-region]
Expected Outcome	A technically, institutionally and operationally feasible concept and implementation pathway for an IEWS is established, providing a sound basis for the proposed three-year implementation project from 2028.
Project Objectives	The proposed IEWS is a regional forecasting and warning platform designed to provide advance alerts for both extreme heat and air pollution events in the Mekong Sub-region. It combines meteorological forecasts and air quality data to predict high-risk environmental conditions several days in advance. The IEWS will help the Mekong countries better protect people's livelihoods, and economic productivity by providing advance warnings of extreme heat, air pollution, and transboundary haze events. By integrating weather forecasts, air quality data analysis, the system enables governments, businesses, and communities to take timely preventive actions, reducing heat-related illnesses, respiratory diseases, and productivity losses among vulnerable populations. The purpose of this project is to assess the feasibility and priority requirements for establishing an IEWS for combined heat stress and air pollution risks in the Mekong Sub-region, and to develop an evidence-

	based, submission-ready full project proposal for implementation from 2028.
Expected Outputs	Feasibility Study Report covering: ➤ Baseline and country need assessment ➤ Feasibility, gap, and AI-related analysis ➤ IEWS concept and implementation pathway for 2028–2030
Activities to achieve Expected Outputs	Output 1 – Baseline Assessment and Needs Identification Activity 1.1 – Review existing air quality monitoring, forecasting, and related data systems in participating countries. Activity 1.2 – Assess institutional capacities, operational needs, data gaps, and country priorities through stakeholder consultations. Activity 1.3 – Identify common regional needs and opportunities for cooperation, data sharing, and system development. Output 2 – Feasibility and System Analysis Activity 2.1 – Assess the technical, institutional, and operational feasibility of the proposed IEWS, including integration of air quality, meteorological, satellite, and emissions data. Activity 2.2 – Review operational air pollution forecasting systems and assess their applicability to the Mekong Sub-region. Drawing on operational experience in China and other relevant countries and regions, assess forecasting system architecture, meteorological and air quality modelling, emissions and monitoring-data integration, forecast verification, operational requirements, and potential AI applications for the future IEWS. CRAES will lead this activity in cooperation with ACAP, ASMC and participating national institutions. Activity 2.3 – Develop preliminary governance, coordination, and data-sharing arrangements and evaluate implementation options. Output 3 – IEWS Concept, Implementation Pathway and ASEAN Scalability Activity 3.1 – Develop and refine the IEWS concept, implementation framework, and roadmap through stakeholder consultations. Activity 3.2 – Validate key findings and recommendations at the regional level. Activity 3.3 – Assess the transferability, scalability and interoperability of the proposed IEWS for potential application in other ASEAN sub-regions, taking into account existing AATHP mechanisms, ASMC functions, regional differences in haze conditions, and national institutional arrangements. Activity 3.4 – Prepare a submission-ready full project proposal for implementation from 2028.

Links and relevance to existing policy process(es) of the target area and regional Activities	The feasibility study directly supports the EANET scope of Monitoring, Assessment, Research, Education and Training, and Exchange of Information. It complements ongoing regional efforts to enhance air quality monitoring, forecasting, assessment, and transboundary information exchange. The study is preparatory in nature and will provide the analytical foundation, institutional framework, and implementation options for a potential regional air pollution forecasting and early warning project during 2028–2030.
Risks and Countermeasures	Key Risks and Countermeasures Data and institutional gaps: Limited data availability, comparability, and differences in national mandates and priorities. → Engage national agencies early, use multiple data sources, identify minimum data requirements, and develop flexible data-sharing and governance options. Technical and AI feasibility: Uncertainty regarding technical feasibility and practical applications of AI. → Assess technical gaps, realistic AI use cases, data requirements and limitations. CRAES will lead the AI-related analysis. Stakeholder engagement and project readiness: Limited stakeholder participation or insufficient evidence to support the proposed 2028–2030 project. → Use existing regional/TWG meetings and targeted online consultations, with clear decision criteria, review milestones and partner consultation before finalization.
Comments from PCs to be considered in the implementation	To be completed by SEC
Responses from the Project Lead to Above	To be completed by PL
Comments from SEC, NC, PCs	*This column will be filled after submission of the proposal to SEC. SEC and NC provide comments on whether the project meets the project criteria or not. Other than above, the interests of PCs will also be added.

III. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Activity 1 – Baseline and Country Needs Assessment	Review existing air-quality and meteorological monitoring/forecasting systems, relevant data, heat-stress research and institutional capacities, and consult national stakeholders to identify priorities, constraints and data/institutional needs. Milestone: Baseline and Country Needs Assessment.	Q1–Q3 2027

Activity 2 – Feasibility, Gap and AI-related Analysis	Assess technical, data and institutional gaps and preconditions for IEWS implementation, including options for data integration and AI applications. CRAES, as Co-project Lead, will lead the AI-related analysis. Milestone: Feasibility, Gap and AI-related Analysis.	Q2–Q3 2027
Activity 3 – IEWS Concept and Implementation Pathway	Develop and validate the IEWS scope, governance, coordination and data-sharing arrangements, and formulate the implementation concept and pathway for the proposed 2028–2030 project. Milestone: Final Feasibility Study Report.	Q2–Q4 2027

IV. BUDGET PLAN

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Personnel Costs	Sub-total: USD 39,000 NC: USD 21,000 CRAECE USD 18,000	EANET Project Fund and co-finance	USD 39,000
Field Missions & Consultations	Sub-total: USD 18,000 6 persons @USD 3,000; NC ×2, Health Expert ×1, Weathernews ×1, CRAEC×2	EANET Project Fund and co-finance	USD 18,000
EANET Project Fund Holder Fee		EANET Project Fund	3,000
Total			USD 60,000

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

Proposal Number – 2027-07**I. General Information**

Project Title	Proposal Number: 2027-07 Title: Research on Spatiotemporal Evolution Patterns and Driving Mechanisms of Regional Acid Deposition Based on Artificial Intelligence
Background and Rationale	Acid deposition remains one of the longest standing transboundary atmospheric problems in East Asia. Over more than two decades, the EANET has produced long term standardized monitoring records for wet deposition, dry deposition, soil and vegetation, and inland aquatic environments, and these records form the scientific basis of the network's periodic assessments. The region still lacks an integrated, high resolution description of how acid deposition has evolved in space and time and of the factors that drive the observed changes. Monitoring stations are unevenly distributed, national datasets use different formats and quality flags, and existing assessments rely mainly on station statistics and simple interpolation. Such approaches cannot resolve sub-regional gradients or attribute deposition to emission categories and meteorological conditions. Recent advances in machine learning and explainable artificial intelligence make it possible to combine the EANET monitoring archive with satellite remote sensing and meteorological reanalysis, to fill spatial gaps, and to quantify the contribution of individual drivers. This project will build a harmonized multi-source acid deposition database for the EANET region, develop a validated spatiotemporal prediction model, and apply explainable AI methods to source apportionment and driver identification. The results give EANET Participating Countries an evidence base for reviewing their acid deposition control strategies and strengthen the scientific foundation of the EANET assessment process. The project is new. It builds on, and does not repeat, earlier EANET monitoring and assessment activities, and it uses their data as its primary input.
Project Duration	January 2027 – December 2027 (12 months)
Project Lead (PL)	Institute of Atmospheric Environment, Chinese Research Academy of Environmental Sciences (CRAES) Representative of the PL / Contact Address: No. 8, Dayangfang, Beiyuan, Chaoyang District, Beijing, China
Partner Organizations (POs)	No additional partner organizations are proposed at this stage. The project will cooperate with the EANET National Focal Points of the beneficiary countries and with the EANET Network Center through the existing EANET framework, without additional resource commitments.
Implementation Agencies (IAs)	Institute of Atmospheric Environment, Chinese Research Academy of Environmental Sciences (CRAES), the same entity as the Project Lead. Role: implements all project activities, hosts the integrated database and the modelling framework, prepares the technical documentation and the results report, and organizes the validation and training workshop.
Beneficiaries of PCs	Direct beneficiaries: China, Japan and the Republic of Korea. These countries will take part in model validation and in the training workshop, and will receive sub-regional deposition maps, source apportionment results and a transferable modelling workflow. The national authorities responsible for air quality and acid deposition management will apply these results directly in their assessment and policy work. The final list will be confirmed with the EANET Secretariat and the National Focal Points during the inception phase.

	Indirect beneficiaries (the remaining Participating Countries): Mongolia, the Philippines, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand, Viet Nam and the Russian Federation. These countries will have access to the model outputs, the technical documentation and the results report, and will benefit from the strengthened regional assessment, without contributing monitoring data or staff time. Other beneficiaries: research institutions, universities, atmospheric monitoring bodies and policy-making bodies active in the EANET region, which gain access to a documented data and modelling resource. The project will target at least 50% female participation in the validation and training workshop.			
Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: 30,000 (of which in-kind contributions expressed in USD): 0 The requested amount for EANET Project Fund (USD): 30,000 The project covers a single year, 2027, so the amounts above apply to the full project period. The total is inclusive of the PFH's additional personnel costs under Section VI.2 of the EANET Project Fund and Project Guidelines.			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	Not applicable. No co-financing and no in-kind contributions are proposed for this project, which is financed entirely from the EANET Project Fund.	0	0	
	Total	0	0	
Relevant Scope and Activities of EANET	According to the Supplementary Document (Annex) to the Instrument for Strengthening the EANET, the scope and activities are: Monitoring, Assessment, Research, Education and Training, Public Awareness and Exchange Information, and the identified atmospheric environment-related substances. This project covers Research, Assessment and Monitoring data integration, with an Education and Training component delivered through the validation and training workshop.			
Project Processing Information	Submission Date to the EANET Secretariat 14 October 2026			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			

	4) Date of Completion Report Submitted	
Project Keywords	Acid deposition; Artificial intelligence; Spatiotemporal prediction; Source apportionment; Data integration; East Asia	
Project Summary	Background and rationale. Acid deposition remains a transboundary atmospheric problem in East Asia. The EANET has generated long term standardized monitoring data, but the region still lacks an integrated, high resolution picture of the spatiotemporal evolution of acid deposition and of its driving mechanisms. Monitoring stations are sparse, and conventional statistical and interpolation approaches cannot resolve sub-regional gradients or attribute deposition to specific sources. Objectives. The project applies artificial intelligence techniques to characterize the spatiotemporal evolution of regional acid deposition, to identify its key driving factors, and to strengthen the capacity of EANET Participating Countries to use these results in national assessment and policy work. Activities. The project will collect and harmonize EANET monitoring data on wet deposition, dry deposition, soil and vegetation, and inland aquatic environments; integrate satellite remote sensing and meteorological reanalysis data into a regional multi-source database with a standardized preprocessing workflow; develop a machine learning based spatiotemporal prediction model, including Random Forest and Gradient Boosting Trees, to simulate high resolution spatial distributions; and apply explainable AI methods to source apportionment and driver identification. A validation and training workshop will be held for national experts. Expected outputs. An integrated multi-source acid deposition database for the EANET region with technical documentation of the preprocessing procedures; a validated spatiotemporal prediction model and high resolution deposition maps; source apportionment and driving factor results; and a results report with policy-relevant recommendations submitted to the EANET Scientific Advisory Committee (SAC) and the Task Force on Atmospheric Environment (TFAE). Expected outcome. National authorities of the EANET Participating Countries use an integrated, AI based regional acid deposition assessment when they review and adjust their control strategies.	

II. Description of the Project

Project Title	Title: Research on Spatiotemporal Evolution Patterns and Driving Mechanisms of Regional Acid Deposition Based on Artificial Intelligence
Expected Outcome	By 2030, the national authorities of the EANET Participating Countries use an integrated, artificial intelligence based regional acid deposition assessment when they review and adjust their acid deposition control strategies, and the EANET assessment process routinely draws on the harmonized multi-source deposition dataset produced by this project.
Project Objectives	The objective of the project is to improve the understanding of the spatiotemporal evolution and the driving mechanisms of regional acid deposition in East Asia by building a harmonized multi-source data foundation and an artificial intelligence based modelling framework, and to strengthen the capacity of the EANET Participating Countries to apply these tools in their national assessment and policy work.
Expected Outputs	Output 1. Integrated multi-source acid deposition database for the EANET region, with technical documentation of the standardized preprocessing workflow. Output 2. Artificial intelligence based spatiotemporal prediction model for regional acid deposition, with high resolution spatial distribution mapping

	and validated performance metrics. Output 3. Source apportionment and driving factor analysis based on explainable artificial intelligence. Output 4. Results report with policy-relevant recommendations submitted to SAC and TFAE, and a validation and training workshop delivered for national experts of the beneficiary countries.
Activities to achieve Expected Outputs	Output 1. Integrated multi-source acid deposition database Activity 1.1 Compile and harmonize EANET monitoring data on wet deposition, dry deposition, soil and vegetation, and inland aquatic environments into a single quality controlled database. Activity 1.2 Collect and preprocess satellite remote sensing and meteorological reanalysis data, and co-register them with the monitoring data. Activity 1.3 Develop and document a standardized data preprocessing workflow. Activity 1.4 Circulate the database and its documentation to the beneficiary countries for review. Output 2. Artificial intelligence based spatiotemporal prediction model Activity 2.1 Select and tune machine learning models, including Random Forest and Gradient Boosting Trees, together with benchmark models. Activity 2.2 Train and validate the model using cross-validation and withheld station data. Activity 2.3 Generate high resolution spatial distribution maps of regional acid deposition. Activity 2.4 Assess model uncertainty and transferability across sub-regions. Output 3. Source apportionment and driving factor analysis Activity 3.1 Apply explainable artificial intelligence methods to identify the key driving factors of acid deposition. Activity 3.2 Conduct source apportionment and link deposition patterns to emission categories and meteorological conditions. Activity 3.3 Compare the results with the findings of previous EANET assessments. Output 4. Results report, capacity building and submission Activity 4.1 Prepare the results report and policy-relevant recommendations. Activity 4.2 Hold a validation and training workshop for national experts of the beneficiary countries. Activity 4.3 Submit the model, the analytical methods and the results report to SAC and TFAE, and support their review.
Links and relevance to existing policy process(es) of the target area and regional Activities	The project supports the monitoring and assessment functions of the EANET under the Instrument for Strengthening the EANET, and its outputs feed into the EANET periodic assessment. The harmonized dataset and the model results are directly relevant to national acid deposition and clean air programmes in the Participating Countries, for example the air pollution prevention and control framework in China and the acid deposition monitoring and assessment programmes of Japan and the Republic of Korea. The project also complements regional cooperation on transboundary air pollution and the exchange of information among EANET Participating Countries.
Risks and Countermeasures	Risk 1. Monitoring data from some countries are incomplete or not available in time. Countermeasure: begin with the countries that confirm data availability, accept data in batches through the standardized workflow, and use satellite and reanalysis data to fill gaps. Risk 2. Differences in national monitoring methods reduce comparability. Countermeasure: apply documented quality assurance and quality control procedures, flag data quality at record level, and report the resulting uncertainty. Risk 3. Sparse station density limits model performance. Countermeasure: validate against withheld stations, use ensemble models, publish uncertainty maps, and limit interpretation to areas supported by data. Risk 4. Limited participation of national experts in validation and training. Countermeasure: use a hybrid format, schedule the workshop around existing EANET meetings, and circulate the materials in advance. Risk 5. Results are not taken up in national policy processes. Countermeasure: engage National Focal Points, SAC and TFAE from the start, and include policy-

	relevant recommendations in the results report. Risk 6. Delays in obtaining permission to share data. Countermeasure: use the existing EANET data-sharing arrangements and confirm permissions before the analysis phase begins.
Comments from PCs to be considered in the implementation	To be completed by SEC
Responses from the Project Lead to Above	To be completed by PL
Comments from SEC, NC, PCs	*This column will be filled after submission of the proposal to SEC. SEC and NC provide comments on whether the project meets the project criteria or not. Other than above, the interests of PCs will also be added.

III. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity, with milestones and name of responsible IA	Implementation Period
Activities 1.1 to 1.4 Data compilation, harmonization and preprocessing	Compile and harmonize EANET monitoring data, integrate satellite and reanalysis data, and finalize the standardized preprocessing workflow. Milestone: integrated database version 1.0 and preprocessing documentation completed. Responsible IA: Institute of Atmospheric Environment, CRAES.	January to April 2027 (Months 1 to 4)
Activities 2.1 and 2.2 Model development, training and validation	Select, tune and validate the machine learning models and benchmark models; report performance metrics against withheld stations. Milestone: validated prediction model and model performance report completed. Responsible IA: Institute of Atmospheric Environment, CRAES.	May to August 2027 (Months 5 to 8)
Activities 2.3, 2.4, 3.1 to 3.3 Mapping, uncertainty and source apportionment	Generate high resolution deposition maps, assess uncertainty and transferability, and apply explainable AI methods for source apportionment and driver identification. Milestone: high resolution deposition maps and source apportionment results completed. Responsible IA: Institute of Atmospheric Environment, CRAES.	July to October 2027 (Months 7 to 10)
Activities 4.1 and 4.2 Results report and training workshop	Prepare the draft results report and hold the validation and training workshop for national experts of the beneficiary countries. Milestone: workshop delivered and draft results report completed. Responsible IA: Institute of Atmospheric Environment, CRAES, with the national experts of the beneficiary countries.	September to November 2027 (Months 9 to 11)
Activity 4.3 Submission to SAC and TFAE	Submit the model, the analytical methods and the final results report to SAC and TFAE, and support their review. Milestone: final results report and model package submitted. Responsible IA: Institute of Atmospheric Environment,	November to December 2027 (Months 11 to 12)

	CRAES.	
Project management, data sharing permissions and reporting	Coordinate with the EANET Secretariat and the National Focal Points, confirm data-sharing permissions, and submit progress reports. Milestone: progress reports and the completion report submitted to the EANET Secretariat. Responsible IA: Institute of Atmospheric Environment, CRAES.	January to December 2027 (continuous)

IV. BUDGET PLAN

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Activities 1.1 to 1.4. Data compilation, harmonization and preprocessing	USD 6,000 from the EANET Project Fund for personnel and data processing.	EANET Project Fund: USD 6,000 (requested).	0
Activities 2.1 and 2.2. Model development, training and validation	USD 9,000 from the EANET Project Fund for personnel and computing.	EANET Project Fund: USD 9,000 (requested).	0
Activities 2.3, 2.4, 3.1 to 3.3. Mapping, uncertainty and source apportionment	USD 7,000 from the EANET Project Fund for personnel and analytical software.	EANET Project Fund: USD 7,000 (requested).	0
Activities 4.1 to 4.3. Results report, workshop and submission to SAC and TFAE	USD 8,000 from the EANET Project Fund for report preparation, the validation and training workshop, travel and publication.	EANET Project Fund: USD 8,000 (requested).	0
Total	USD 30,000 from the EANET Project Fund, inclusive of the PFH's additional personnel costs under Section VI.2 of the EANET Project Fund and Project Guidelines.	EANET Project Fund: USD 30,000 (requested).	0

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

Project Proposal 2027-08

General Information

Project Title	[Proposal Number: 2027-08] Roundtable Dialogue on Innovative Investment and Financing for Air Pollution Prevention and Control and Green Economy Incentive Policies (online+offline)
Background and Rationale	The Asia-Pacific region is undergoing rapid urbanization and industrialization. Air pollution prevention and control faces a dual constraint of "funding gaps" and "institutional shortcomings". Many cities lack scientific cost-benefit analysis for pollution control projects, leading to inefficient investment decisions. Meanwhile, green financial instruments are not yet fully integrated into the air pollution prevention sector, making it difficult for small and medium-sized projects to access affordable financing. The proposed Roundtable Dialogue focuses on "investment and financing innovation and green economy incentives" and will be held in China. It aims to establish a cross-sectoral and cross-country dialogue platform to bring together government officials, financial institutions, academia, and practitioners from EANET Participating Countries to share best practices, discuss solutions, and promote regional cooperation and capacity building. The dialogue directly serves the EANET objectives in monitoring, assessment, exchange of information, capacity building, and regional cooperation. Lessons from the investment and financing discussions will support Participating Countries in applying financial analysis to air quality monitoring data interpretation and policy-making, thereby enhancing the practical value of monitoring results. Outcomes will be shared with the EANET secretariat and all Participating Countries, in line with the MTP (2026-2030) emphasis on capacity building and information exchange.
Project Duration	January/2027 - December/2027 The project duration is one year, consistent with the EANET Project Fund Guidelines
Project Lead (PL)	Foreign Environmental Cooperation Center (FECO) / China-ASEAN Environmental Protection Cooperation Center (CAEC), Ministry of Ecology and Environment of China Contact Address: 5 Houyingfang Hutong, Xicheng District, Beijing, P.R. China Contact Person: Fu Jie, fu.jie@fecomee.org.cn
Partner Organizations (POs)	Describe the role of the PO in project implementation

Implementation Agencies (IAs)	FECO/CAEC (China): 25,000 USD Network Center for EANET (NC): 5,000USD FECO/CAEC (China): overall project coordination, agenda design, speaker coordination, logistical arrangements, report drafting, publication, and overall reporting. Network Center for EANET (NC): support invitation and communication with EANET Participating Country policymakers, participant outreach, coordination with the EANET Secretariat, and dissemination support.			
Beneficiaries of PCs	Direct beneficiaries: government agencies, financial institutions, academic institutions, and practitioners from EANET Participating Countries (expected 10 in-person + 20-30 online = 30-40 total participants). Target: at least 50% female participation in the dialogue sessions. Indirect beneficiaries: all EANET Participating Countries through publicly released outcome reports and policy briefs.			
Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: 30,000			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	TBD (potential co-financer)	To be confirmed	To be confirmed	Under consultation
	Total	0	0	
Relevant Scope and Activities of EANET	Monitoring, Assessment, Research, Education and Training, Exchange of Information			
Project Processing Information	Submission Date to the EANET Secretariat: 14 October 2026			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			
	4) Date of Completion Report Submitted			

Project Keywords	Air pollution prevention; investment and financing innovation; cost-benefit analysis; capacity building; regional cooperation
Project Summary	The Asia-Pacific region faces dual challenges of funding and institutional constraints in air pollution prevention. This project will host a Roundtable Dialogue on Innovative Investment and Financing for Air Pollution Prevention and Green Economy Incentives (online+offline) in China in 2027, focusing on four themes: (1) Cost-benefit analysis and project decision-making practices (this theme seeks to promote the shift of air pollution prevention and control projects from “experience-based judgment” to “data-driven decision-making,”); (2) Digital and intelligent urban air quality monitoring (this theme will explore how digital tools can be used to achieve precise identification and dynamic tracking of pollution sources, provide real-time and credible data support for policy decisions); (3) Green financing instruments empowering air pollution control (this theme will focus on financial support tools, and will share their applicability and implementation cases in air pollution prevention and control projects); (4) Transparent disclosure of governance outcomes and public trust building (this theme will focus on how to make pollution control progress and environmental improvement effects more visible to the public, thereby attracting more long-term capital into the air pollution prevention and control sector). The project is designed to strengthen practical knowledge exchange among EANET Participating Countries on how to mobilize investment, improve financing mechanisms, and integrate green incentives into air pollution prevention and control policies. Expected outputs include: one successful roundtable dialogue; a Best Practice and Policy Recommendations Report. The project will directly and indirectly benefit at least 7 EANET Participating Countries and indirectly all member countries through public dissemination. Female participation target: at least 50%. Total budget: USD 30,000.

I. Description of the Project

Project Title	[Proposal Number: 2027-08] [Title: Roundtable Dialogue on Innovative Investment and Financing for Air Pollution Prevention and Control and Green Economy Incentive Policies (online+offline)]
Expected Outcome	By the end of 2027, government officials and practitioners from EANET Participating Countries will have gained an enhanced understanding of cost-benefit analysis methods and green financing instruments for air pollution prevention. They will be able to initially identify applicable tools and approaches in their daily work, and will be encouraged to promote relevant cross-sectoral dialogue and practical exploration in their own countries. In the medium term, the project is expected to contribute to better-informed investment decisions, stronger policy coordination, and wider adoption of innovative financing approaches for air pollution prevention

	and control across the EANET region.
Project Objectives	To raise awareness and enhance the understanding of EANET Participating Countries regarding investment and financing for air pollution prevention; to promote cross-sectoral dialogue and sharing of best practices; and to provide reusable governance tools and policy recommendations for regional cooperation.
Expected Outputs	1. One roundtable dialogue (online+offline) with participants from EANET Participating Countries and total attendance of at least 30-40. 2. A "Best Practice and Policy Recommendations Report on Innovative Investment and Financing for Air Pollution Prevention" (English, electronic version). 3. An online exchange community (by email) for continued communication among participants. 4. bilingual e-version of the final report for wider dissemination among EANET stakeholders.
Activities to achieve Expected Outputs	Output 1 - The roundtable dialogue: Activity 1.1 –Establish the organizing committee; finalize agenda, speaker list, and invitation plan (Jan-Mar 2027) Activity 1.2 –Issue formal invitations; collect confirmations (Apr-May 2027) Activity 1.3 –Hold the 1.5-day dialogue (keynote speeches, 4 thematic sessions, expert commentary) (Jun 2027) Activity 1.4 –Compile meeting minutes and collect participant feedback (Jul 2027) Output 2 – Develop the outcome report: Activity 2.1 – Synthesize speeches and discussion points (Jul-Aug 2027) Activity 2.2 – Draft and review the report (Sep-Oct 2027) Activity 2.3 –Publish (bilingual e-version) and distribute to all participants and the EANET Secretariat (Nov 2027) Output 3 - Establish the online exchange community: Activity 3.1: Create a mailing list community (Jun 2027). Activity 3.2: Regularly share updates and follow-up information (Jul-Dec 2027)
Links and relevance to existing policy process(es) of the target area and regional Activities	This project is aligned with EANET's MTP (2026–2030), particularly its priorities on capacity building, information exchange, monitoring and assessment, and regional cooperation. It also complements national air quality management strategies and green finance policy initiatives in participating countries by providing a platform to exchange practical approaches on investment decision-making, financing mechanisms, and incentive design. The project further supports regional efforts under the EANET framework by translating monitoring and assessment information into policy-relevant and finance-relevant dialogue, thereby strengthening the linkage between

	environmental data, governance actions, and investment planning.
Risks and Countermeasures	Risk 1: Thematic discussions may be too broad and remain superficial. Countermeasure: Circulate guiding questions to speakers in advance and request presentation outlines; include breakout sessions for in-depth discussion. Risk 2: Limited uptake of outcomes after the event. Countermeasure: Formally submit the policy brief to the EANET secretariat and maintain follow-up communication with Participating Countries to track adoption. Risk 3: Lower-than-expected participation from some EANET Participating Countries. Countermeasure: Begin outreach early through the NC and EANET Secretariat, send repeated reminders, and offer online participation options to reduce travel and time constraints. Risk 4: Gender balance target is not achieved. Countermeasure: Proactively invite female speakers and participants, work with partners to identify qualified women experts, and monitor registration data during the invitation phase.
Comments from PCs to be considered in the implementation	To be completed by SEC
Responses from the Project Lead to Above	To be completed by PL
Comments from SEC, NC, PCs	*This column will be filled after submission of the proposal to SEC. SEC and NC provide comments on whether the project meets the project criteria or not. Other than above, the interests of PCs will also be added.

II. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Activity 1: Preparation & Invitation	Establish organizing group; finalize agenda and speaker list (Milestone 1: draft agenda completed); issue invitations and collect confirmations. Responsible IA: FECO/CAEC, NC	Jan 2027 - May 2027
Activity 2: The Roundtable Dialogue	Host the 1.5-day event (keynote speeches, 4 thematic sessions, breakout discussions) (Milestone 2: successful closing); collect participant feedback.	Jun 2027

	Responsible IA: FECO/CAEC	
Activity 3: Synthesize outcomes & draft report	Compile meeting minutes and discussion points (Milestone 3: first draft completed); write and review the outcome report. Responsible IA: FECO/CAEC	Jul 2027 - Oct 2027
Activity 4: Publication & dissemination	Publish the report (bilingual e-version) (Milestone 4: report publicly released); distribute to all participants and the EANET Secretariat; maintain the online exchange community. Responsible IA: FECO/CAEC + NC	Nov 2027 - Dec 2027

III. BUDGET PLAN

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Activity 1: Preparation and Invitation	Communication and coordination for the preparation of NC with PCs: \$5,000		
Activity 2: The Roundtable Dialogue	Conference Expenses (including Venue & equipment, Coffee break/meal, Accommodation and other related costs): \$ 6000; International and local transportation expenses: \$7000; Personal Expenses: \$3000		
Activity 3: Compiling outcomes and writing report	Personal Expenses: \$3000		
Activity 4: Dissemination and promotion	Personal Expenses: \$1525 Project management (5%): \$1,475		
Project fund holder fee	\$ 3000		
Total	\$30000		

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

Proposal Number: 2027-09

I. General Information

Project Title	[Proposal Number: 2027-09] Leveraging the AQMx platform for building capacity of EANET Participating Countries
Background and Rationale	The Air Quality Management Exchange Platform (AQMx) is a ‘one stop shop’ for knowledge, tools, data, and guidance on air quality management. It was launched by the CCAC on International Clean Air Day 2024, responding to the mandate of Member States who called for the development of a global online platform in UNEA resolution 6/10. AQMx aims to support national and local governments, practitioners and other stakeholders in building their capacity and moving from assessment and planning towards implementation, with the overarching objective to meet the WHO Air Quality Guidelines and interim targets. The EANET Secretariat has been contributing to AQMx since its launch, with several EANET guidelines and other documents being available on the AQMx Library, and active contribution of EANET experts to the development of the AQMx Environmental Impact Assessment Guidance. Some EANET Participating Countries are also actively using AQMx (including Thailand and Japan). Air quality management capacity varies across EANET Participating Countries, and each Participating Country has specific needs and priorities. Paragraph 16 of the Medium-Term Plan for the EANET (2026-2030) highlights the needs of the Participating Countries with a particular focus on enhanced capacity building to strengthen air quality monitoring and management, from increasing capacity in information and methodology exchange of new technologies to policy development support.
Project Duration	[January 2027 – December 2027] (1 year)
Project Lead (PL)	CCAC and Secretariat for the EANET CCAC: Juliette Laurent, AQMx coordinator (juliette.laurent@un.org) Secretariat for the EANET: Coordinator
Partner Organizations (POs)	
Implementation Agencies (IAs)	CCAC and Secretariat for the EANET
Beneficiaries of PCs	Primarily targeted to representatives of Ministry of Environment and relevant air pollution control agencies of the EANET PCs.

Total Required Resources and Requested Amount of the Project Fund	The total amount of required resources in USD: USD 8,000 (of which in-kind contributions expressed in USD): USD 8,000 The requested amount for EANET Project Fund (USD): none For multi-year projects, please specify both amounts for each year.			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	CCAC	-	USD 8,000 (staff time)	
	Total		USD 8,000	
Relevant Scope and Activities of EANET	The proposed project is aligned with item 7 (Education and Training) and item 9 (Exchange of Information) as outlined in the 'Supplementary Document (Annex) to the Instrument for Strengthening the EANET.			
Project Processing Information	Submission Date to the EANET Secretariat: 14 October 2026			
	1) Date of Register in the Project Cycle			
	2) Date of Latest Project Plan			
	3) Date of Approval			
	4) Date of Completion Report Submitted			
Project Keywords	Air quality management; AQMx; capacity-building			
Project Summary	The Air Quality Management Exchange Platform (AQMx), launched by the Climate and Clean Air Coalition (CCAC) on International Clean Air Day 2024, is a global online platform providing guidance, tools, data and other resources to support air quality management. Developed in response to Member States' call in UNEA resolution 6/10 for a global knowledge platform, AQMx helps national and local governments and practitioners strengthen their capacity to move from air quality assessment and planning to implementation. This project will strengthen the capacity of representatives of EANET Participating Countries (PCs) to use AQMx Guidance and Resources in their work. It will begin with a scoping exercise to identify countries' needs and priorities and develop practical use cases, followed by online capacity-building webinars featuring AQMx guidance, complementary resources, and discussions with experts and practitioners. The project will also use the scoping exercise and webinar discussions to identify opportunities for longer-term collaboration between EANET and AQMx/CCAC. This may include joint capacity-building activities, identifying priorities for future AQMx content based on the needs of EANET PCs, and drawing on relevant EANET guidelines and expertise. The project will highlight how EANET and its Participating Countries can			

	contribute to AQMx and apply its resources in their own work, while also sharing relevant EANET expertise and guidance with air quality practitioners in other regions. Expected outputs include strengthened capacity to use AQMx and a report summarizing the webinars' outcomes and opportunities for further cooperation.
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II. Description of the Project

Project Title	[Proposal Number: 2027-09] [Title: Leveraging the AQMx platform for building capacity of EANET Participating Countries]
Expected Outcome	Representatives of Ministry of Environment and relevant air pollution control agencies of the EANET Participating Countries are aware of the AQMx platform and can successfully apply its Guidance and Resources to their own work.
Project Objectives	The objective of the project is to support strengthening the capacity of EANET PCs on air quality management leveraging the Guidance and Resources of the AQMx platform, and scoping needs and priorities of EANET PCs for the development of future AQMx content.
Expected Outputs	Strengthened capacity of EANET PC's in using AQMx Report on the capacity-building webinar(s) and potential areas for further collaboration
Activities to achieve Expected Outputs	Output 1 – Strengthened capacity of EANET PC's in using AQMx Activity 1: Scoping and planning Activity 2: Delivery of capacity-building webinar(s) Output 2 – Exploration of further cooperation between EANET and AQMx/CCAC Activity 3: Exploration of further collaboration
Links and relevance to existing policy process(es) of the target area and regional Activities	CCAC Clean Air Flagship
Risks and Countermeasures	Risk: Audio/video glitches, internet connection issues, or platform challenges. Countermeasure: Conduct comprehensive technical tests for all audio, video, and screen sharing tools before the event. Dry run or rehearsals with speakers.

	Secure back-up files and visuals ready in case of connection issues.
Comments from PCs to be considered in the implementation	<i>To be completed by SEC</i>
Responses from the Project Lead to Above	<i>To be completed by PL</i>
Comments from SEC, NC, PCs	<i>*This column will be filled after submission of the proposal to SEC. SEC and NC provide comments on whether the project meets the project criteria or not. Other than above, the interests of PCs will also be added.</i>

III. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Activity 1: Scoping and planning	This will include the dissemination of a questionnaire to EANET Participating Countries to scope their needs and priorities and co-design practical AQMx use cases. The concept note and programme for the capacity-building webinar(s) will be developed based on this scoping exercise. This will also include content development and speaker and participant invitations, as well as joint communication (website and social media) by the EANET Secretariat and CCAC.	January to June 2027
Activity 2: Delivery of capacity-building webinars	This will include the delivery of the capacity-building webinar(s), including lecture-style presentations and discussions with experts and practitioners. A report summarizing the main outcomes of the capacity-building webinar(s) will also be developed.	July to September 2027
Activity 3: Exploration of further collaboration	This will include the development of a proposal for longer-term cooperation between EANET and AQMx/CCAC, drawing on the scoping exercise and feedback from the capacity-building webinar(s). Potential areas for collaboration include joint capacity-building activities; identifying future AQMx guidance and resources that respond to the needs and priorities of EANET PCs; and drawing on relevant EANET guidelines and technical expertise to inform and strengthen AQMx content. The activity will also highlight how EANET and its Participating Countries can contribute to AQMx in addition to using its Guidance and Resources in their own work. Where relevant, EANET guidelines and expertise—for example, on deposition monitoring and VOC monitoring—could also be showcased to AQMx users in other regions	September to December 2027

IV. BUDGET PLAN

Name of Activities	Required Resources (financial and in-kind)	Secured Sources for Required Resources	In-balance
Activity 1: Scoping and planning	Personnel cost: 4,000 (in-kind 4,000)	Confirmed	
Activity 2: Delivery of capacity-building webinars	Personnel cost: 2,000 (in-kind 2,000)	Confirmed	
Activity 3: Exploration of further collaboration	Personnel cost: 2,000 (in-kind 2,000)	Confirmed	
Total	8,000		

Note: For multiple-year projects, specify the total amount for entire projects and subtotal for each year

[Proposal Number: 2026-06]

I. General Information

Title of Project	Methodological Study on PM _{2.5} Source Identification and Capacity Enhancement in EANET with Emphasis on Southeast Asia			
Duration of Project	[January/2026 – December/2027]: 2 years			
Project Lead (PL)	Network Center for EANET, Asia Center for Air Pollution Research (ACAP)			
Partner Organizations (POs)				
Implementation Agencies (IAs)	Network Center for EANET			
Beneficiaries of PCs	- National and local/city government officers in charge of air quality monitoring - Policy makers involved in air pollution mitigation			
Total Required Resources and Requested amount of Project Fund	The total amount of required resources in USD: 42,000(2026), 60,000(2027) (of which Co-finance contributions expressed in USD): 21,000(2026), 30,000(2027) The requested amount for EANET Project Fund (USD): 21,000(2026), 30,000(2027) For multi-year projects, please specify both amounts for each year.			
Resources other than EPF from Co-financers	Organization	Financial contribution (USD)	In-kind contribution (with estimated equivalent USD, if possible)	Status (Secured/under consultation etc.)
	JICA SATREPS Program (for 2026)	15,000		Confirmed
	JETRO Indonesia Proof of Concept (PoC) project (for 2027)	30,000		Under arrangement
	Ministry of the Environment of Japan (MOEJ) (for 2026)	6,000		
	Total	21,000		
Relevant Types of Activities	- Activity 1 of Core Activities: Monitoring of acid deposition, improvement in monitoring methodologies and better instrument maintenance - Activity 10 of Core Activities: Promotion of public awareness on acid deposition, including other priority chemical species, etc.			
Relevant Scope of EANET	ITEM 6 of the Instrument: Studies on scientific issues related to acid deposition			
Representative of the Project Lead /Contact Address	- Dr. Keiichi Sato, Head of Atmospheric Research Department, Network Center for EANET, Asia Center for Air Pollution Research, 1182 Sowa, Nishi-ku, Niigata-shi 950-2144, JAPAN, ksato@acap.asia - Co-Project Lead: TBD			
Project Processing Information	Submission Date to the EANET Secretariat: 17 July 2025			
	1) Date of Register in the Project Cycle	17 July 2025		
	2) Date of Latest Project Plan	17 July 2025 30 June 2026 (Modified)		
	3) Date of Approval	28 November 2025		
	4) Date of Completion Report Submitted			

1. Description of the Project

Keywords of the project	PM _{2.5} , Receptor model, Source analysis, Biomass burning, Vehicle emission, Secondary aerosol
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Summary of the project	This project aims to collaboratively develop standardized methodologies for PM2.5 component measurement and source apportionment, with active participation from EANET member countries especially emphasis on Southeast Asia. By selecting pilot cities across diverse regions and engaging local institutions, the project will foster regional ownership, enhance technical capacity, and support evidence-based air quality policies aligned with national priorities.
Background and Rationale	PM2.5, or fine particulate matter, poses a serious threat to public health and the environment across Asia, particularly in Southeast Asian countries where rapid urbanization, biomass burning, and transboundary pollution are prevalent. Exposure to PM2.5 has been strongly linked to respiratory and cardiovascular diseases, while also contributing to reduced visibility, ecosystem degradation, and climate impacts. The sources of PM2.5 are diverse and complex, including both anthropogenic and natural contributors such as vehicle emissions, industrial activities, agricultural burning, and secondary aerosol formation. Identifying and quantifying these sources is essential for designing effective air quality management strategies. However, many EANET member countries, especially in Southeast Asia, face challenges due to limited technical capacity, lack of standardized methodologies, and insufficient data on PM2.5 composition and sources. This project addresses these gaps by conducting a methodological study to develop reliable, regionally adaptable techniques for PM2.5 component measurement and source apportionment. It will also focus on building local capacity through training and collaboration with national institutions. By prioritizing pilot studies in Southeast Asian cities, the project aims to generate actionable data and foster regional cooperation, ultimately supporting evidence-based policymaking and long-term air quality improvement in the EANET region.
Objectives	1. To develop and validate standardized and regionally adaptable methodologies for PM2.5 component measurement, with a focus on applicability in Southeast Asian urban and rural environments. 2. To conduct source apportionment studies using receptor models and integrated data analysis, including low-cost sensor (LCS) data, to identify and quantify major PM2.5 sources in selected pilot cities. 3. To strengthen institutional and technical capacity in EANET member countries, particularly in Southeast Asia, through targeted training, knowledge exchange, and collaborative research on PM2.5 monitoring and source apportionment.
Activities to achieve Objectives	(Objective 1) • Conduct a comprehensive literature review of existing PM2.5 measurement techniques, including chemical speciation and sampling protocols. • Identify gaps and challenges in current practices in Southeast Asian countries through stakeholder consultations and site visits. • Select pilot cities in Southeast Asia (e.g., Bangkok, Hanoi, Manila) based on data availability, pollution levels, and institutional readiness. • Collaborate with local laboratories and research institutions to test and refine measurement protocols under different environmental conditions. • Develop a draft guideline for standardized PM2.5 component measurement tailored to regional contexts. (Objective 2) • Collect filter-based PM2.5 samples for chemical analysis (e.g., ions, carbon fractions, metals) and low-cost sensors (LCS) data in selected pilot cities. • Apply receptor models (e.g., Positive Matrix Factorization, Chemical Mass Balance) to identify and quantify major PM2.5 sources. • Integrate LCS data with receptor model outputs to enhance spatial and temporal resolution of source apportionment. • Compare results across cities to identify common and unique source profiles in Southeast Asia. (Objective 3)

	- Organize regional workshops and webinars on PM_{2.5} measurement and source apportionment techniques, targeting government officials, researchers, and technicians. - Develop and distribute technical documents of PM_{2.5} composition measurement and source apportionment. - Document and disseminate best practices and lessons learned through the EANET website and regional forums.
Links and relevance to existing policy process of the target areas and regional activities	National or local governments in Asian region have adopted a range of air quality standards, most of which are based on the prevailing international guidelines, such as Air Quality Guidelines (AQG) of WHO. National or local governments have developed standards after considering prevailing exposure levels, meteorological and topographical conditions, socio-economic levels, natural background concentration, and population susceptibility in their communities. In many Asian countries, particulate matter concentration exceeds their air quality standards. Since 2018, Japan-Thailand Clean Air Partnership (JTCAP) has been established based on the policy dialogue between the Ministry of the Environment of Japan (MOEJ) and the Ministry of Natural Resources and Environment of the Kingdom of Thailand (MONRE) as the joint project of countermeasure for severe air pollution caused by PM_{2.5} and other air pollutants in Thailand. JTCAP is implementing the following activities to mitigate the effects of air pollution caused by PM_{2.5} and other pollutants. (1) Identification of major source sectors and areas of PM_{2.5} by chemical transport model (2) Long-term observations and identification of major PM_{2.5} sources using receptor models (3) Formulate policies and appropriate measures by building relationships with stakeholders Considering the identified issues by JTCAP, the technical cooperation project in Thailand was launched in 2022 by Japan International Cooperation Agency (JICA). This project aims to improve the inventory of air pollutants caused by PM_{2.5} in Bangkok and to develop an air quality simulation model. The PM_{2.5} composition data and source analysis results obtained by JTCAP and this project will contribute to improve the model reproducibility. The workshop co-organized by EANET and JICA will build common understanding of important PM sources in Mekong region.
Expected Outputs	- Standardized Methodologies for PM_{2.5} Component Measurement: A set of validated, reliable protocols for PM_{2.5} sampling and component analysis, designed for use in 13 EANET countries. - Source Apportionment Information: Information on sources of PM_{2.5}, including quantitative contributions from each source type and insights into seasonal and regional variations. - Trained Local Personnel and Stakeholders: Skilled local stakeholders, equipped with the knowledge and technical abilities needed to monitor PM_{2.5} levels and conduct source apportionment independently. - Sustainable Capacity for Long-term PM_{2.5} Monitoring: Established local capacity for ongoing, independent monitoring of PM_{2.5} and analysis of its sources, enabling air quality management and policy support.
Expected Outcome	Enhanced regional capacity to monitor and manage PM_{2.5} air pollution, leading to improved understanding of PM_{2.5} sources and their impacts on air quality in EANET region. This will support the development of evidence-based policies and interventions to reduce PM_{2.5} levels and mitigate associated health and environmental risks. Furthermore, these efforts are expected to contribute to better public health, a cleaner environment, and increased awareness and engagement among stakeholders and communities of air quality management in EANET countries.
Risks and Countermeasures	Risk: Limited accuracy or reliability of PM_{2.5} measurement and source apportionment methodologies in some countries. Countermeasure: Conduct extensive testing and validation of methodologies across different environmental contexts, and refine techniques based on pilot study results to ensure robustness.

Plan to deliver outcomes to beneficiaries	- The results of workshops and training to introduce source apportionment and technical documents will be uploaded to the EANET Web page. - The benefit and challenges of monitoring and data analysis techniques will be reported and discussed at the EANET Task Force and SAC.
Comments from PC to be considered in the implementation	No comments from PCs
Responses from the Project Lead to above	None
Comments from SEC, NC, PCs	None

2. Implementation Plan

Activities and Milestones

Name of Activities	Brief Summary of Each Activity with milestones and name of responsible IA	Implementation Period
Establish reliable methodologies for measuring PM _{2.5}	- Literature survey of reliable methodologies for measuring the components of PM_{2.5} - Communicate with research institutions and laboratories in the pilot cities about the feasible methodologies for measuring PM_{2.5}	JAN-MAY 2026
Source apportionment analysis	- Identify and compile a list of potential PM_{2.5} sources - Use receptor models and other source apportionment tools to analyze PM_{2.5} samples	JUN- OCT 2026
Capacity building for local stakeholders	- Preparation on online workshops - Online workshops on PM_{2.5} measurement and source apportionment techniques	AUG-OCT 2026
Follow-up	- Summaries the workshop (Compile potentials and challenges) - Compile a proceeding report of the workshop	NOV-DEC 2026
Reporting the interim activity	- To report EANET Task Force and SAC - Compile the interim results	SEP-NOV 2026
Preparing the standardized methodologies for PM _{2.5} component measurement	- Develop technical documents for PM_{2.5} component measurement and source apportionment - Review the draft guideline by experts	OCT 2026-NOV 2027
Data screening and analysis of PM _{2.5} measurement data	- Generate harmonized PM_{2.5} datasets for subsequent source identification. - Statistical analysis of PM_{2.5} measurement data	MAY-AUG 2027
PM _{2.5} Source identification	- Identify potential PM_{2.5} sources in pilot cities - Compare other similar studies in East Asia	AUG-NOV 2027
Capacity building for local stakeholders	- Preparation on the capacity building - Local training or workshops on PM_{2.5} source identification	SEP-NOV 2027
Reporting the summary activity	- To report EANET Task Force and SAC - Prepare a proceeding report and publicize	OCT-DEC 2027

3. Budget Plan

Name of Activities	Required Resources (financial and in-kind) (in US\$)	Secured Sources for Required Resources	In-balance
Establish reliable methodologies for measuring PM _{2.5} (Filter based measurement and LCS)	Direct expenses: 4,500 (for 2026) Personnel cost: 6,000 (for 2026) Direct expenses: 3,500 (for 2027) Personnel cost: 5,000 (for 2027)		
Source apportionment analysis	Direct expenses: 4,500 (for 2026) Personnel cost: 9,000 (for 2026) Direct expenses: 43,000 (for 2027) Personnel cost: 5,000 (for 2027)		
Capacity building for local stakeholders	Direct expenses: 6,000 (for 2026) Personnel cost: 9,000 (for 2026) Direct expenses: 4,500 (for 2027) Personnel cost: 6,000 (for 2027)	JICA SATREPS Program (15,000)	
Project Fund Holder Fee	3,000 (for 2026) 3,000 (for 2027)		
Total	42,000 (for 2026) 30,000 (for 2027)		