ACID DEPOSITION MONITORING NETWORK OF EAST ASIA

TERMINAL REVIEW OF THE MEDIUM-TERM PLAN 2021-2025

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REVIEWER

AGENDA

- Objective of the review
- Methodology
- MTP 2021-2025 activities & funding situation
- Key findings
  - Effectiveness
  - Efficiency
  - Relevance
  - Coherence
  - Sustainability
- Recommendations

OBJECTIVES OF THE REVIEW

1) To provide insights on the **progress in the implementation of the MTP 2021-2025**;
2) To provide **evidence of results** including recommendations to meet accountability requirements;
3) To **promote operational improvement, learning and knowledge sharing** through results and lessons learned for EANET.

METHODOLOGY

- Quantitative → ***Results framework of the MTP 2021-2025***
- Qualitative → Evaluation criteria & key questions under each:
  1. **Effectiveness** → *To what extent were the intended outputs and outcomes of the activities under the MTP 2021-2025 have been achieved?*
  2. **Efficiency** → *To what extent were the activities under the MTP 2021-2025 implemented efficiently to achieve intended outputs and outcomes?*
  3. **Relevance** → *To what extent did the MTP 2021-2025 address the needs and priorities of the PCs and of the region?*
  4. **Coherence** → *To what extent was the MTP 2021-2025 coherent with and complementary to other national, regional, and international initiatives addressing acid deposition and air pollution?*
  5. **Sustainability** → *To what extent are the achievements of the EANET, specifically under the MTP 2021-2025 likely to be sustained?*

OBJECTIVES OF THE MTP 2021-2025

Objective 1:

MONITORING AND QA/QC

Strengthen monitoring systems, methodologies, and data quality

Objective 2:

DATA DISSEMINATION AND UTILIZATION

Generate, assess, and share monitoring data and information for policy development

Objective 3:

CAPACITY BUILDING

Training, workshops, technical support to PCs

Objective 4:

OUTREACH

Enhance awareness and encourage actions among stakeholders

Objective 5:

COOPERATION AND COLLABORATION

Enhance collaboration/joint activities with regional and international partners

IMPLEMENTATION OF ACTIVITIES

MTP of the EANET for 2021-2025

IMPLEMENTATION PROGRESS:
OBJECTIVE 1 – MONITORING & QA/QC

Activity/Output	Progress as of Dec 2025
1) Monitoring of acid deposition and related chemical substances	Number of monitoring sites: 65 sites for air monitoring (+1.6%); 33 plots for soil &vegetation (+6.5%); 19 lakes/rivers for inland aquatic (0%)
	Number of labs that developed SOP: 10
2) Development/revision of technical guidelines, technical manuals and documents	Number of increased sites and parameters related to improved guidelines/manuals, etc.: → $PM_{2.5}$ and O_3 sites increased by 2; PM_{10} sites increased by 1; SO_2, HNO_3, HCl, and NH_3 no changes
3) Development/update of strategy papers	Reported progress includes draft technical manuals for air concentration monitoring and dry deposition flux estimation; long-term trend and inter-site analyses; HAQMN, VOCs capacity-building, and $PM_{2.5}$ source-analysis projects. Ecological-impact activities include knowledge exchange, catchment analysis, and regional impact assessment.
4) Implementation QA/QC activities (ILC surveys)	Total number of labs is 36, but QA/QC performance varied across monitoring items. For soil monitoring, there has been challenges in achieving sufficient data comparability due to limited participating labs.
5) Routine compilation, verification, evaluation, storage and provision of data and maintenance of database	Data reports for 2021 to 2024 adopted and published; Number of research papers citing EANET data = 72 (for 2025); 64 (for 2024)

IMPLEMENTATION PROGRESS:
OBJECTIVE 2 – DATA DISSEMINATION AND UTILIZATION

Activity/Output	Progress as of Dec 2025
6) Annual assessment data (including status, trends, and use of model outputs)	Number of research papers citing EANET data = 72 (for 2025); 64 (for 2024)
7) Development of Periodic Report on the State of Acid Deposition in East Asia (PRSAD) every 5 years	No information on the number of scientific papers citing PRSAD; PRSAE currently in preparation
8) Regular updating of website	Number of website users: 7,400 (for the period of Jan-Sep of 2025 and 2024) *note: reporting periods between the 5-yr period differed and are not directly comparable* Number of email subscribers: 743 (2025), a 279% change since 2021 Number of web stories published 2021-2025: 95, with an average annual publication rate of 19 stories/year
9) Improved data management system at the NC	Number of registered data users: 454 (as of October 2025); Continuous improvements were made to the data management system as reported over the period of 2021-2025.

IMPLEMENTATION PROGRESS:
OBJECTIVE 4 – ENHANCEMENT OF OUTREACH ACTIVITIES



10 newsletters (2 per year)



5 regional awareness workshops

2021 – 204 (online)
2022 – 79 (online)
2023 – 129 (hybrid)
2024 – 212 (hybrid)
2025 – 372 (Clean Air Week)

+82.4% in participants reported in the 5-yr period

- ✓ Communication Strategy and Plan
- ✓ EANET Secretariat's LinkedIn page
- ✓ Publications/materials:
  - Summary of the 20th Anniversary of the EANET (2021)
  - Videos of workshops/trainings

IMPLEMENTATION PROGRESS:
OBJECTIVE 5 – COOPERATION AND COLLABORATION



Projects/activities in WPBs/AREPs:

From 9 in 2021 → 12 in 2025

+33% within the 5-yr period



Information exchange with scientific communities:

9 information sharing events

IMPLEMENTATION PROGRESS:
OBJECTIVE 5 – COOPERATION AND COLLABORATION



- ✓ **5 IG meetings**
- ✓ **5 SAC meetings**
- ✓ **10 WG meetings**
- ✓ **5 STM meetings**

1. **Review of the arrangements of the EANET Secretariat and the NC** → A survey was conducted & regular coordination meetings between SEC and NC
2. **Revisions to the Guidelines on Administrative and Financial Management for the Secretariat and the NC** → Completed and presented at IG22 & IG25
3. **Terminal Review of the MTP 2016-2020, Mid-term Review for the MTP 2021-2025** → Completed
4. **MTP for the EANET 2026-2030** → Completed and formally adopted by IG27 in November 2025

ANNUAL BUDGET & EXPENDITURE (IN USD)

		2021	2022	2023	2024	2025
SECRETARIAT						
Approved budget		625,900	572,600	637,885	632,235	420,925
Actual revenue (from voluntary contributions)		535,074	475,793	421,626	416,766	476,299
Actual expenditure		436,683	427,169	519,161	499,838	214,029
NETWORK CENTER						
Core activities	Actual budget	439,961	504,603	355,142	401,452	548,799[1]
	Actual expenditure	468,048	465,188	358,145	399,690	No data
Non-core activities	Actual budget	223,397	-	-	-	-
	Actual expenditure	195,943	-	-	-	-

[1] Estimated budget as reported in WPB 2025

CORE BUDGET CONTRIBUTIONS

Secured annual revenue for the Secretariat (from voluntary contributions):
From 88% in 2021 → 78% in 2025, even reaching 69% in 2023 & 2024.

NON-CORE BUDGET/PROJECT FUND (2022-2025)

Project Fund contributions grew:
From US$31,500 in 2022 → US$235,652 in 2024.
In 2024, over 10 contributors across Participating Countries and external partners were identified.

KEY FINDINGS OF THE REVIEW

EFFECTIVENESS

What was achieved?

1. **Core activities such as monitoring, QA/QC, and data publication were delivered as planned.** Their improved monitoring and QA/QC processes were among the positive feedback from stakeholders.
2. **EANET data and technical resources are valued.** Over 136 peer-reviewed papers using EANET data in 2024-2025 were recorded, and EANET data is promoted by partners (CCAC, RAPAP) on their respective platforms
3. **Capacity building and outreach were embedded in Projects, but outcomes are harder to quantify.** There is a lack of uniform outcome indicators and evidence of changes in public awareness and effects of collaborations remain limited.

EFFICIENCY

Finding	Evidence	Implications
1) Coordination was generally regarded as efficient.	• Established working relationships among the Secretariat, NC, and PCs • Regular coordination meetings	• Maintain effective coordination arrangements
2) Delayed voluntary contributions affected delivery.	• Delays in receiving funds constrained implementation & recruitment for EANET Coordinator	• Improve timeliness of contributions to support activity implementation and continuity of Secretariat operations
3) The Non-Core / Project Fund arrangements added flexibility.	• Project Fund supported specific objectives, but some uncertainty remained among PCs regarding procedures for accessing the Fund. • The NC helped facilitate participation where administrative requirements created barriers.	• Clarify fund access procedures

RELEVANCE

What are the priorities of PCs and in the region?

- ✓ The expanded scope of the EANET was generally welcomed, as there has been a shift in priorities from acid deposition to **air pollution and the impacts of meteorological conditions on air pollution** for some PCs.
- ✓ **Trainings and capacity building** are targeted or tailored to the context of the region or PCs involved.

Areas for strengthening:

- Connections between air pollution, climate change, health, and ecological impacts.
- Complementing ground-based monitoring with satellite data, modelling, drones, and low-cost sensors.

COHERENCE



Regional air quality initiatives & IG bodies

- ESCAP's RAPAP
- NEACAP
- APCAP
- ASEAN Haze Agreement

Global monitoring

- WMO Global Atmosphere Watch (GAW) Programme

- ✓ Demonstrated complementarity through joint events, information sharing, and global monitoring initiatives.
- ✓ Potential collaboration areas: low-cost sensors, climate, health, agricultural impacts.

SUSTAINABILITY

RISKS

1. Delayed voluntary contributions affect activity implementation and Secretariat operations.
2. Reliance on voluntary contributions exposes EANET to changes in country priorities.

ENABLING FACTORS

1. The Project Fund mechanism diversifies sources of support
2. PCs' commitment and technical expertise
3. Expanded scope of activities

SUMMARY

1) Long-term monitoring data is a key asset of the EANET. Maintaining the comprehensive regional monitoring data and continued development of monitoring capacity of PCs remains its central function.
2) The expanded scope has helped EANET remain relevant. It responds to shifting challenges and priorities among PCs, while retaining the original purpose.
3) The Project Fund has opened opportunities for diversified support. Financial and in-kind contributions can support collaborative work and development of evidence-base for air pollution control strategies.
4) Financial sustainability remains a fundamental barrier. Delayed and declining voluntary contributions threaten continuity and scaling up of projects and activities.

RECOMMENDATIONS

RECOMMENDATION 1:

- For EANET to plan an assessment of the impacts of its activities in each PC, focusing on the policy development related to acid deposition and air quality management carried out since EANET's inception.

→ As part of future MTP evaluations, consider reporting on the individual PCs progress in key result areas that may be defined and agreed upon by the PCs themselves.

→ Standardize progress monitoring and reporting by adopting the indicators identified in the MTP for annual progress reports to the IG.

RECOMMENDATION 2:

- For EANET to leverage its comprehensive data set and expanded scope on atmospheric environment-related substances to position itself as the leading authority and data repository on air quality and acid deposition in the region.

→ Leverage the long-term dataset and expanded scope to support regional initiatives and development institutions.

RECOMMENDATION 3:

- For PCs to take a more active role in initiating synergies by leveraging their involvement in other existing bilateral initiatives and platforms as part of mapping of funding opportunities for EANET Projects.

→ The Secretariat can help to identify funding opportunities through existing platforms and partnerships.

→ Partnerships with the private sector may be considered, with due diligence.

RECOMMENDATION 4:

- For the EANET endorsing and approving bodies to encourage the development of project proposals that consider the realistic funding opportunities available.

→ Consider eligibility, funding modalities, and application timelines during project development, while keeping strategic relevance and country needs as the primary priorities.

PRESENTATION TO 26TH MEETING OF THE SCIENTIFIC ADVISORY COMMITTEE:

- The Session acknowledged the Draft Terminal Review of EANET MTP (2021-2025) and made comments and recommendations from scientific and technical viewpoints for consideration at the IG28 of EANET.

- Discussion focused mainly on recommendation to assess the impact of EANET's activities at the country-level, particularly with regard to capacity building and policy development.

- The meeting accepted the draft report without any request for modification.



THANK YOU

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