

Proposal for reformation of Task Forces and Expert Groups in EANET in the next Medium Term Plan

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Taking account of the current activities and the next Medium Term Plan (MTP), reformation of Task Forces (TFs) and Expert Groups (EGs) is proposed as follows. The relationship between Scientific Advisory Committee (SAC), TFs, and EGs is also shown below the Table.

MTP (2015-2020)	The next MTP (2021-2025)	Terms of Reference (TOR) of TF in the next MTP	Expected outcomes
Task Force on Monitoring for Dry Deposition	The names are changed below to handle general atmospheric monitoring, atmospheric deposition evaluation methods, and research directions. (1) Task Force on Monitoring, Evaluation and Research of Atmospheric Environment	(1) Discussion about the development, improvement and future direction of the atmospheric monitoring method will be conducted, and advice on the expansion of atmospheric monitoring data and monitoring accuracy management will be given. (2) Atmospheric monitoring data evaluation methods (atmospheric deposition estimation, trend analysis, etc.) will be developed and improved. (3) The results of air pollution monitoring data analysis and research trends will be reviewed in the EANET region as well as in the world, and the future direction of EANET (including monitoring items/methods, atmospheric models, and analysis combined with emission inventory) will be proposed.	Based on the examination results of (1) and (2), a revised version of the air concentration monitoring technical manual and the dry deposition estimation technical manual will be prepared in 2022. By using the method developed and improved by (2), the evaluation results of the air pollution situation in East Asia will be reported as PRSAD5 (2026) and these results will be published as an academic paper to obtain scientific evaluation of EANET. (3) By 2025, the future direction of EANET based on the global trends in the relevant field will be summarized and reported to SAC and Task Force on Atmospheric Environmental Management (APCAP Science Panel).

MTP (2015-2020)	The next MTP (2021-2025)	Terms of Reference (TOR) of TF in the next MTP	Expected outcomes
<p>Task Force on Soil & Vegetation Monitoring</p>	<p>The reformed TF will be renamed as follows, in order to discuss monitoring on total environmental effects, evaluation methods, and research directions.</p> <p>(2) Task Force on Monitoring, Evaluation and Research of Environmental Effects</p>	<p>(1) To suggest elaboration of the monitoring methods for evaluation of effects on ecosystems and human health risk, taking account of land-use change with economic development and elaborating monitoring targets and assessment scales. To recommend monitoring methods for atmospheric environment, if necessary.</p> <p>(2) To evaluate the EANET and relevant data for the specific subjects, namely, “Recovery of ecosystems from acidification (also important as validation of relevant measures/policies in the region and each country)”, “Loads of atmospheric nitrogen to ecosystems and its cycle”, and “Effects of ozone and PM on trees/crops”.</p> <p>(3) To evaluate human health risk using the EANET and relevant data.</p> <p>(4) To review measures, activities, monitoring, and research directions on environmental effects of air pollution</p>	<p>(1) Preparation and/or revision of technical documents (manuals, guidelines, etc.) for monitoring on evaluation of effects on ecosystems and human health risk (until 2025, if necessary)</p> <p>(2) (together with (3))</p> <p>(3) Report of the evaluation results on ecological effects and human health risk to PRSAD5 (to be prepared in 2026) based on the EANET and relevant data. Publication of these results as scientific papers, obtaining scientific evaluation of the EANET.</p> <p>(4) Compilation of the future direction of the EANET taking account of directions on these study fields in the world (until 2025) and report it to SAC and the Task Force on Atmospheric Environmental Management (APCAP Science Panel)</p>

MTP (2015-2020)	The next MTP (2021-2025)	Terms of Reference (TOR) of TF in the next MTP	Expected outcomes
		within the EANET region and the world. (including the subjects, such as evaluation of human health risk, effects of ozone and PM, and nitrogen loads). To propose the future direction of the EANET based on the review.	
Task Force on Monitoring Instrumentation	Combined with the new TF (1)		
Task Force on Research Coordination	Combined with the new TFs (1) and (2)		
Expert Group on revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring	The activity will continue until 2023 when the revised manual is expected to be published. After that, resume the activity as needed.		
	The following TF is newly established to coordinate overall directions of atmospheric environmental management. (3) Task Force on Atmospheric Environmental Management Working together with APCAP	(1) To investigate (and propose) evaluation methods of emission inventories. (2) To investigate the future scenarios on acid deposition and air pollution. (3) To investigate co-benefit/co-control approaches with climate change. (4) To investigate (and propose) evaluation	(1) Preparation and revision of technical documents (manuals, guidelines, etc.) for atmospheric environmental management. (2) Preparation of the manual for emission inventories (3) Report of the investigated results to PRSAD5 (to be prepared in 2026).

MTP (2015-2020)	The next MTP (2021-2025)	Terms of Reference (TOR) of TF in the next MTP	Expected outcomes
	Science Panel because of their similar objectives	methods of policy effects.	<p>Publication of these results as scientific papers, obtaining scientific evaluation of the EANET.</p> <p>(4) Descriptions on the future direction of the EANET including air pollution measures in PRSAD5 taking account of reports from other TFs, and dissemination of the EANET direction using the report.</p>

● **Current activities of Task Forces and Expert Groups**

Scientific Advisory Committee (SAC) of the EANET established Task Forces (TFs) and Expert Groups (EGs) as substructures in order to implement activities described in the Medium Term Plan (MTP). TFs are standing groups for implementing specific objectives, such as discussion on future directions of monitoring and research activities, and reporting outcomes to SAC. EGs are ad hoc groups established for preparation or revision of manuals based on recommendations of TFs. EGs will be dissolved after their objectives are implemented. Outlines of four TFs and one EG currently established are as follows:

1. Task Force on Monitoring for Dry Deposition

Chair: Prof. Fang Meng (CRAES, China)

Member: Nomination from 1 person from each country, 14 members including Chair

TOR:

- ① To further develop and elaborate the strategy for dry deposition evaluation in the region
- ② To discuss on future direction of dry deposition evaluation and provide guidance on relevant activities based on the strategy
- ③ To develop the Technical Manuals for Air Concentration Monitoring and Dry Deposition Flux Estimation

Recent activities:

In 2015, a dry deposition monitoring strategy paper (2016-2020) was prepared and an Expert Group was proposed to establish to SAC15 to revise the air concentration monitoring technical manual and dry deposition estimation technical manual.

The 5th meeting will be held in July 2020 to discuss the dry deposition monitoring strategy paper (2021-2025). The final draft of the strategy paper will be submitted and adopted at SAC20 in 2020.

2. Task Force on Soil & Vegetation Monitoring

Chair: Prof. Wilfredo M. Carandang (University of the Philippines Los Baños, Philippines)

Member: Experts from China, Japan, Malaysia, Philippines, Republic of Korea, and Russia (in total 9 members including the Chair)

TOR:

- ① To revise the technical documents on soil and vegetation monitoring as necessary

- ② To assess the impacts of acid deposition and relevant air pollutants on soil and vegetation based on available data and other information for the EANET periodic reports
- ③ To improve methodologies mentioned in the Technical Manual for Soil and Vegetation Monitoring and the Sub-Manual on Forest Vegetation Monitoring for EANET
- ④ To recommend activities for future direction of soil, vegetation and related ecosystems monitoring
- ⑤ To develop guidelines and methods for future monitoring
- ⑥ To identify future research activities for soil and vegetation

Recent activities:

The 6th meeting held in November prepared the final draft of revised strategy paper (including specific works for the period from 2021 to 2025) and it will be submitted to SAC20 for adoption. The strategy paper suggested ecological-effect monitoring, including effects of air pollutants (such as ozone and PM), effects on inland water, and effects on forest catchments. Back-to-back the meeting above, the workshop on regional impact assessment was held in cooperation with ICP Forests under CLRTAP and the knowledges on the emission reduction based on impact assessments in Europe and possible future assessments in East Asia were shared among the participants.

3. Task Force on Monitoring Instrumentation

Chair: Not decided yet (after the previous Chair passed away)

Member: One expert nominated from each country (in total 14 members including the Chair)

TOR:

- ① To review acid deposition monitoring instrumentation and laboratory equipment including their operation
- ② To recommend suitable less expensive monitoring methodologies for EANET
- ③ To review current QA/QC procedures and recommend improvements
- ④ To develop monitoring manuals and guidelines in cooperation with other subsidiary groups under SAC

Recent activities:

The 2nd meeting held in 2009 discussed outcomes from the low-cost monitoring methodology project, the current review of acid deposition monitoring, and subjects for future improvements. The meeting outcomes were reported at SAC9.

No meeting thereafter.

4. Task Force on Research Coordination

Chair: Dr. Sergey Gromov (IGCE, Russia)

Member: Experts from Japan, Malaysia, Philippines, Republic of Korea, Thailand, Russia, and Vietnam (in total 10 members including the Chair)

TOR:

- ① To propose the future direction of research activities for the network
- ② To review the outcomes of EANET research activities
- ③ To review the reports of EANET Research Fellowship program
- ④ To identify potential international collaborative researches for EANET

Recent activities:

The 8th meeting held in 2016 discussed reports from EANET research fellows and EANET Science Bulletin (Vol. 4). The meeting outcomes were reported at SAC16.

5. Expert Group on revision of the Technical Manuals for Dry Deposition Flux Estimation and Air Concentration Monitoring

Chair: Dr. Patcharawadee Suwanathada (PCD, Thailand)

Member: Experts from China, Japan, Philippines, Republic of Korea, and Vietnam (in total 6 members including the Chair)

TOR:

- ① To review the current Technical Manual on Dry Deposition Flux Estimation in East Asia and Technical Manual for Air Concentration Monitoring in East Asia
- ② Identification of elaborated methods of dry deposition flux estimation and air concentration monitoring methods in East Asia
- ③ Preparation of the revised version of Technical Manual on Dry Deposition Flux Estimation in East Asia and Technical Manual for Air Concentration Monitoring in East Asia

Recent activities:

The establishment of an expert group was approved by SAC in 2016, and Chair and Member were nominated in 2018. After that, the NC reviewed the existing manual and examined the points to be improved.

The first meeting was held in April 2020, where the NC reviews existing manuals and reported the results of consideration of improvements, and examines the methods

to be included in the manuals. The outcome of the meeting will be reported to the Dry Deposition Monitoring Task Force.