



Concept Note

Workshop on National Air Quality Monitoring Systems and Methodologies with Related Partners - EANET Project Activity 4 in 2022 -

1. Background

The EANET as an intergovernmental network in East Asia has achieved excellent progress in monitoring cooperation and had great progress in dealing with common concerned problems in the region. The EANET has been monitoring more than 18 atmospheric substances including ions at 64 monitoring sites in the EANET Participating Countries. EANET implements five monitoring items – wet deposition, dry deposition (air concentration), soil and vegetation, inland aquatic environment, and catchment-scale monitoring.

Depending on differentiated economic stages, industrial structures and meteorological conditions, Participating Countries face diversified environmental challenges and priorities, and even in the same region, the challenges differ from time to time. Therefore, in dealing with acid deposition and air pollution issues, it becomes critical to understand the latest atmospheric environment status in the EANET region firstly, and constantly keep up with the latest trend of air pollution measurements and state-of-the-art research methodology/technology, and fully utilize all aspects of resources to seek the solutions in improving air quality in EANET.

Through more than 20 years of activities, the EANET has established a comprehensive and integrated monitoring network, and EANET monitoring data has been used to evaluate and analyze the atmospheric environment in East Asia. The EANET has focused on the national level to promote cooperation among thirteen Participating Countries to address air pollution, including acid deposition issues, and has achieved significant progress in improving air quality in the East Asia region. However, considering the lifetime of air pollution substances, city-level air quality management is also important besides the national level. Furthermore, in terms of implementing management regulations and standards, along with initiatives from central governments, the local/city governments are also crucial in steadily carrying out various measurements.

To accelerate its further development, the Twenty-third Intergovernmental Meeting of the EANET reached an agreement to expand its scope and enable the EANET to conduct monitoring of more atmospheric environment-related substances. In response to this historical decision of scope expansion and steadily undertaking the necessary actions to adopt the changes of EANET, sharing

the latest monitoring system and methodologies, discussing the most pressing challenges, and thinking together about possible solutions among the EANET Participating Countries with related partners are critical.

This workshop will gather different stakeholders (scientists and researchers, government officers, technicians including QA/QC managers, the representative of an international organization) together and invite them to discuss from different perspectives on how to overcome the challenges so as to improve the monitoring system in EANET.

This workshop will be divided into two sessions. The first session will briefly introduce the EANET monitoring activities and its function, followed by the case studies of Japan, R. of Korea, and China. In addition, the specific monitoring methodologies including QA/QC activities will be also introduced. In the second session, the panel discussion will take place involving different stakeholders to seek solutions for improving the EANET monitoring system.

2. Objectives

This workshop aims to provide opportunity of sharing a wide range of national and international experiences in the field of atmospheric monitoring, discussing the current development and future challenge of monitoring system and related methodologies in EANET.

3. Organizing Form

Considering the COVID-19 situation, the workshop will be held virtually through an online platform. The video record of the workshop will be posted for the public view subsequently.

The registration URL: https://zoom.us/webinar/register/WN_KLQZhQmmQoCO25SI03CAVw

4. Date and Time

The workshop will be held on 6 July, Wednesday, 2022.

The workshop will be started at 13:00 Bangkok Time and last 4 hours.

5. Expected Participants

- Representative of Participating Countries of the EANET including:
 - ✓ Central and local government officials from monitoring and air quality management related departments or divisions
 - ✓ Scientists, researchers, and technicians (including QA/QC managers and technicians) in related area
- Participants from related stakeholders, including representatives from UNEP and other regional and international organizations
- The Network Center for the EANET, the Secretariat for the EANET

6. Agenda

There will be two sessions base on the objectives of the workshop.

The first session aims to:

- Provide an overview of the development of science and policy related to acid deposition in East Asia over 30 years.
- Introduce the monitoring systems of Japan, R. of Korea, and China.
- Discuss national monitoring system with QA/QC capacity for a wide range of monitoring stations, including mobile monitoring units, and introduce past experiences in order to expand possible opportunities in Participating Countries.

The second session aims to:

- Provide discussion platform to various stakeholders to discuss the challenges the Participating Countries are facing, and seek possible or efficient solutions in improving monitoring system.
- Provide useful and practical advice from scientific views in strengthening monitoring system from the SAC members of EANET.
- Provide lesson learned and important insights for air quality monitoring management experiences towards resolving the related difficulties in the Participating Countries of the EANET.
- Share Clean Air Asia (CAA)'s knowledge gained through the cooperation between cities that has been implemented over the years in strengthening and improving City's air quality monitoring system.
- Discuss opportunities of respective concerns or difficulties in further developing air quality monitoring systems in Participating Countries of the EANET involving different stakeholders.

In the second session following **two guiding discussion points** (tentative) will be provided.

1. Air pollution issue are deferred from country to country, and deferred from time to time. Taking the latest trend of your country into account, what do you think are the most significant challenge such as targeted substances and spatial coverage for the EANET in improving atmospheric environment in 5-10 years ahead?
2. International cooperation is critical from national to city-level in dealing with the regional air pollution issue. But, what is the pros and cons of the linkage between national-level and city-level cooperation, and what are the key points to optimize the co-benefit for the regional/city-level air quality in terms of monitoring system, its solutions and prioritized actions?

Program (From 13:00 Bangkok Time)

Time	Agenda Item	Speaker
13:00	General introduction	Facilitator, Ms. Yao Dong, Assistant Deputy Director General, the NC for the EANET
13:05	Opening remarks	Dr. Shiro Hatakeyama, Director General, The NC for the EANET Mr. Toshiyuki Yamasaki, Director, International Cooperation Office, Environmental Management Bureau, Ministry of the Environment, Japan (MOEJ)
13:15~15:00 (105 min, including introduction of four speakers for 5min)		
Session 1: Introduction of monitoring systems of the EANET Participating Countries		
25 min	Development and role of monitoring system in the EANET and the case study of Japan	Dr. Hajime Akimoto, Science Advisor, Asia Center for Air Pollution Research (ACAP)
20 min	Latest national and local/city monitoring system and methodology in R. of Korea	Dr. Choi Jin-soo, Researcher, Air Quality Research Division, Climate and Air Quality Research Department, National Institute of Environmental Research (NIER), R. of Korea
20 min	Study on the co-control of PM2.5 and Ozone pollution in Beijing, Tianjin, Hebei, and the surrounding region of China	Dr. Jingnan Hu, Director, Institute of Atmospheric Environment, Chinese Research Academy of Environmental Sciences (CRAES), China
20 min	Monitoring methodologies and QA/QC activities in the EANET	Dr. Mingqun Huo, Senior Researcher, Atmospheric Research Department, The NC for the EANET
10 min	Q&A	Facilitator
10 min	Break time	
15:00~16:40 (105min, including introduction of panelists for 10 min)		
Session 2: Seeking solutions for improvement of monitoring systems in EANET,		
10 min	Information sharing: Brief introduction of proposal of new EANET project	Dr. Meihua Zhu, Senior Researcher, Planning and Training Department & Atmospheric Research Department, The NC for the EANET
85 min	Panel discussion	Dr. Toshimasa Ohara, Research Director, Center for Environmental Science in Saitama (CESS), Japan
		Prof. Taehyoung Lee, Professor, Department of Environmental Science, HANKUK University of Foreign Studies, R. of Korea
		Dr. Le Ngoc Cau, Director, Center for Environmental Research, Vietnam Institute of Meteorology, Hydrology and Climate Change, Viet Nam
		Ms. Dang Espita-Casanova Program Manager, Clean Air Asia

	Open discussion	Mr. Mohan Kumar Sammathuria, Principal Assistant Director, Atmospheric Sciences and Cloud Seeding Division, Malaysian Meteorological Department, Ministry of Environment and Water, Malaysia
		Dr. Kok Sothea, Vice Dean of Faculty of Science, Royal University of Phnom Penh, Cambodia
		Ms. Witt Yi Soe, Assistant Director, Department of Meteorology and Hydrology, Myanmar
		Engr. Jundy T. Del Socorro, Supervising Environmental Management Specialist, Air Quality Management Section, Environmental Quality Management Division, Environmental Management Bureau, the Philippines
		Dr. Sergey A. GROMOV, Deputy Director, Institute of Global Climate and Ecology (IGCE) Roshydromet, Russia
		Dr. Hathairatana Garivait, Former Senior Specialist, Environmental Technology Research and Development, Environmental Research and Training Center (ERTC), Thailand
	Q&A	Facilitator
16:45~16:55	Summary	Facilitator
16:55~17:00	Closing remarks	Dr. Fan Meng, Deputy Director General of the NC for the EANET