



SUMMARY REPORT 2022

ASEAN Hydroinformatics Data Centre (AHC)

February 2023

INTRODUCTION

ASEAN Hydroinformatics Data Centre (AHC), proposed by Hydro - Informatics Institute (HII), Thailand, is the centre under ASEAN Committee on Science, Technology, and Innovation (ASEAN COSTI) and report to Sub-Committee on Microelectronics and Information Technology (SCMIT).

The AHC project is a platform to support data connectivity from ASEAN's water, weather, and disaster-related agencies. ASEAN member states can also share their knowledge and technology that could support AHC in data sharing toward its future operation and implementation. AHC is aimed to be an integrated platform for regional knowledge sharing, technology matching, and capacity building on the implementation of Science and Technology to tackle climate change and water/weather-related disaster risk reduction.

In 2022, AHC was chaired by Prof. Law Wing Keung, Adrian from Nanyang Technological University (NTU), Singapore. Assoc. Prof. Dr. Pham Thi Thanh Nga from the Vietnam Institute of Meteorology, Hydrology and Climate Change (IMHEN), Ministry of Natural Resources and Environment (MONRE), Vietnam was participated as Vice-chair.

The AHC activities in 2022 were participated by delegates from 9 countries, including Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Republic of the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand and the Socialist Republic of Viet Nam. There were three activities and one future plan for the AHC as follows:

Summary of AHC Activity in 2022

1. AHC Formal Meeting

1.1 In 2022, AHC Singapore was the host to organize the AHC official virtual meeting through Zoom meeting as follows:

- The 6th AHC Meeting on 8 December 2022, attended by 36 delegates from 8 countries, including the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, the Republic of the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand and the Socialist Republic of Vietnam. The report of the Sixth AHC Meeting attached in ANNEX 1.

2. Highlighted activities:

2.1 AHC Knowledge Sharing (Virtual Workshop)

- Responding to three main frameworks of AHC, Knowledge Sharing, Technology Matching, and Capacity Building. This activity aims to share the existing technology and knowledge to build on expertise for AHC members, including to link with potential partners among ASEAN members for future collaboration.
- The topics had been identified based on the willingness to share and the need to learn of AHC members according to five AHC Thematic Areas (TA), TA1: HIC Development, TA2: Big Data and Data Analytics, TA3: Observation Technology, TA4: Modeling, and TA5: Sustainable Water Management.
- All activities have been designed in virtual format, set as a 3-hour session, every 3 months, hosted by AHC Singapore, and participated by AHC members and relevant agencies, institutes and universities in ASEAN.
- Three workshops have organized in 2022; the first workshop started with TA2 “Big Data and Data Analytics” on 29 March, the second workshop was on 5 July on TA4 “Flood Modeling”, and the third workshop was on 11 October on TA5 “Sustainable Water Management”. The fourth and fifth workshops will be organized in 2023.
- The report of completed workshops is attached in ANNEX 2.

2.2 Sharing of information “AHC Website (www.aseanwater.net)”

- The AHC Website is the key platform to provide AHC-related information, and has continuously updated by AHC members from Thailand, Vietnam and Singapore. Thailand and Vietnam contributed the real-time monitoring information on “Weather Research and Forecasting and Regional Ocean Model System (WRF-ROMS) Model”. Singapore shared Public Utility Board (PUB) and National Environmental Agency (NEA) on “Flash Flood Updates by Singapore” and weather data. Moreover, the collaborated information by HII and Japan Aerospace Exploration Agency (JAXA) on Cloud Top Temperature using Japan’s Himawari-8 satellite information was also updated every 10 minutes in the website. The AHC aims to share more information related to disaster resilience knowledge e.g., weather forecast, coastal environment, and marine data on the AHC Website in the future. We also encouraged other AHC members to contribute more knowledge sharing on the website.

3. Collaboration with other networks

The AHC Chairman actively represented AHC in ASEAN-related workshops for the updated flood and disaster risk reduction management planning from other organizations.

3.1. Hydroinformatics in Flood Early Warning & Forecasting workshop, under International Hydrological Programme (IHP)

- The workshop organized virtually on 8th June 2022 by Viet Nam Institute of Meteorology, Hydrology and Climate Change (IMHEN) from Vietnam. The AHC Representative was invited as a speaker from AHC to share knowledge related to the topic of this workshop among ASEAN and could be connected in the future.

3.2. ASEAN Strategic Policy Dialogue on Disaster Management (SPDDM)

- AHC Chairman and AHC Secretariat in Singapore were the representatives of AHC to participated in this physical event on 18 – 19th August 2022 at Mandarin Oriental Singapore. The activity aimed to share knowledge on disaster resilience to develop ASEAN region and encouraging ASEAN to link and work across sectoral to strengthen regional capacity.

3.3. The 50th Meeting of ASEAN Sub-Committee on Micro-electronics and Information Technology (SCMIT-50)

- The AHC Chairman reported and shared AHC activities, achievements and future workplan to the committee. He warmly welcomed other relevant agencies in ASEAN to join in the future workshop and other activities of AHC.

Future Plan

The AHC Knowledge Sharing (Virtual Workshop) activity in 2023.

- According to the above 2.1 activity, the fourth workshop on TA3: Observation Technology and the fifth workshop on TA1: HIC Development will be scheduled in 2023.
- With the success of all workshops, AHC Secretariat proposed to maintain the regular workshop schedule in every 5 – 6 months during Phase 2: Technology (2022 – 2025) of AHC Roadmap.
- The remaining and future workshops are planned in the following order:

Workshop	Topics	Date
4	TA3: Observation Technology	Mar 2023
5	TA1: HIC Development	TBC 2023
6	TBC	Every 5 – 6 months



List of ANNEXES

ANNEX 1: The report of the Sixth AHC Meeting

ANNEX 2: Summary of AHC Virtual Workshops in 2022

(All reports of ANNEX 1 – 2 are attached in the following link:

<https://drive.hii.or.th/s/6qjsrNXNE6x8YE8>)