



## SUMMARY REPORT 2023

### ASEAN Hydroinformatics Data Centre (AHC)

December 2023

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#### 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 - 2023, 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 2023 were participated by delegates from 10 countries, including Brunei Darussalam, 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 two activities and one future plan for the AHC as follows:

#### Summary of AHC Activity in 2023

##### 1. Highlighted activity

###### 1.1 AHC Knowledge Sharing (Virtual Workshop)

- The AHC operates within three major frameworks: Knowledge Sharing, Technology Matching, and Capacity Building. This activity aims to share existing technology and knowledge among ASEAN members to match potential partners for future collaboration.
- All workshop topics were aligned with the five AHC Thematic Areas (TA), TA1: HIC Development, TA2: Big Data and Data Analytics, TA3: Observation Technology, TA4: Modeling, and TA5: Sustainable Water Management. These workshops were designed in a 3-hour virtual session on a quarterly basis from 2022 to 2023. The

events were hosted and moderated by AHC Singapore, and participated by AHC members and relevant agencies, institutes, and universities in ASEAN.

- Five workshops were conducted in March 2022 – October 2023. The last two workshops organized in 2023 were TA3: Observation Technology, and TA1: Hydroinformatics Centre Development.
- The outcome of this activity was to promote the expertise and researcher to share existing technology and innovation for climate change resilience, water management and disaster mitigation in their own countries. This includes expanding hydroinformatics and environmental networks for future collaboration.
- The report of completed workshops in 2022 is attached in [ANNEX 1](#), and in 2023 is attached in [ANNEX 2](#).

## **2. Collaboration with other networks**

The AHC representatives actively participated in the online meeting to share knowledge and activities related to climate and disaster risk reduction management among AHC members and other relevant agencies in ASEAN.

### **2.1. Water Scarcity in the context of Climate change workshop on “Current situation, impacts, and solutions”, under International Hydrological Programme (HIP)**

- The workshop was organized in a hybrid format on 29<sup>th</sup> June 2023 by the Viet Nam Institute of Meteorology, Hydrology and Climate Change (IMHEN) from Vietnam. The AHC Representative from HII, Thailand, virtually participated as a speaker from AHC to share knowledge on the topic “The Assessment of Water Stress under Climate Change in Thailand Case study: Chi River Basin” which could enhance knowledge and future collaboration with all participants.

### **2.2. The 51<sup>st</sup> Meeting of ASEAN Sub-Committee on Micro-electronics and Information Technology (SCMIT-51)**

- The meeting was organized in a hybrid format on 16<sup>th</sup> October 2023 during the 84<sup>th</sup> ASEAN Committee on Science, Technology and Innovation (COSTI-84) meeting in Philippines. The AHC Chairman virtually reported and shared AHC’s activities and achievements, and other collaborations in ASEAN region in 2022 - 2023, including future workplan related to AHC members.
- The SCMIT representative from Brunei Darussalam expressed interest in joining AHC. The AHC Chairman warmly invited Brunei to participate in the 5<sup>th</sup> AHC Knowledge Sharing and other future AHC activities that will contribute to future collaboration in ASEAN.

## **Future Plan**

The AHC Knowledge Sharing (Virtual Workshop) activity will be organized every 5 – 6 months.

- According to the above 1.1 activity, 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.



### **List of ANNEXES**

ANNEX 1: Summary of AHC Virtual Workshops in 2022 (1<sup>st</sup> – 3<sup>rd</sup> Workshop)

ANNEX 2: Summary of AHC Virtual Workshops in 2023 (4<sup>th</sup> – 5<sup>th</sup> Workshop)

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

<https://drive.hii.or.th/s/ggS9BYcPdSfMrA4>)