



## Summary Report

### **7<sup>th</sup> ASEAN Hydroinformatics Data Centre (AHC) Meeting** 10:00 – 11:30 hrs UTC+8, 01 March 2024, Zoom

#### **INTRODUCTION**

1. The ASEAN Hydroinformatics Data Centre (AHC) was approved as a centre under the ASEAN Committee on Science, Technology, and Innovation (ASEAN COSTI). AHC reports to the Sub-Committee on Microelectronics and Information Technology (SCMIT).
2. AHC is a platform to support data connectivity among ASEAN's water, weather, and disaster related agencies. ASEAN member states can also share their knowledge and technology through AHC, to broaden future implementation and operation.
3. The seventh meeting of the ASEAN Hydroinformatics Data Centre (AHC) was held on 1<sup>st</sup> March 2024 virtually through Zoom and hosted by the AHC Chairman, Prof. Law Wing-Keung, Adrian from the National University of Singapore (NUS) and the AHC Secretariat from Singapore.
4. The meeting was attended by delegates from the 10 member states, including Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic (PDR), 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 Vietnam. The delegate list is shown in ANNEX 1.

#### **AGENDA ITEM 1: OPENING AND ADOPTION OF THE AGENDA**

5. AHC Secretariat warmly welcomed the participants to the seventh AHC official meeting.
6. The meeting discussed and adopted the agenda in ANNEX 2.

## **AGENDA ITEM 2: AHC KEY INFORMATION DURING CHAIRMANSHIP IN 2022-2023**

### **2.1 Review of AHC Roadmap 2020-2030**

7. AHC Chairman summarized the AHC's knowledge-sharing framework which consists of three main focuses: "Knowledge Sharing", "Technology Matching", and "Capacity Building". He emphasized that the adoption of the framework for knowledge sharing is critically important for future disaster reduction in ASEAN, especially given the extreme weather and climate changes. The goal of establishing an open data platform for disaster management has become increasingly important as disaster events have occurred frequently over the last year. This platform will enable us to study specific topics and enhance the operation, adaptation, and precision of disaster management efforts going forward.

### **2.2 AHC Activities and Achievement**

8. AHC Chairman summarized the AHC's activities in the chairmanship period of 2022 - 2023, emphasizing the hosting of five virtual workshops covering five Thematic Areas (TA): TA1: Hydroinformatic Data Centre Development, TA2: Big Data & Data Analytics, TA3: Observation Technology, TA4: Flood Modelling and TA5: Sustainable Water Management. These workshops had drawn many participants from diverse groups, including government bodies, research institutes and universities across ASEAN. The details from all the workshops are attached in ANNEX 3.
9. The meeting highlighted key projects from the Knowledge Sharing Workshops, including Weather Forecasting Models, Observation Technology for Coastal Monitoring, Rainfall-Runoff-Inundation (RRI) Model, Flood and Natural Disaster Management, and Sustainable Water Management and Framework. AHC Chairman emphasized that knowledge sharing is based on the contributions from the community and learning networks of all the AHC members. He would like to thank all AHC member states for their active support and participation in 2023.
10. AHC Chairman noted the consistent upload of articles to the AHC website for knowledge sharing, including flood mitigation projects, flood news across the region, and collective data shared by Thailand, Vietnam, Singapore, and external partners (e.g., JAXA) throughout 2023. He highlighted the efforts on the ongoing mission of enhancing the website for continued effective knowledge sharing by all the parties.

11. AHC Chairman also expressed particular appreciation to AHC Thailand for their diligent efforts in developing a recent revamped AHC website, which includes weather monitoring for the AHC region, to facilitate knowledge sharing.
12. AHC Chairman highlighted the significance of “Technology Matching” in the forthcoming years to mitigate damage and casualties during disasters across ASEAN and to prepare for climate change. Collaborative efforts within ASEAN have the potential to achieve significant milestones, such as an early warning system with a lead time for flood forecasting of up to 48 hours and an 80% reduction in damage to life and property, as reported by the United Nations Economic and Social Council (UNECOSOC) for the Asia-Pacific region, 72nd session.

### **2.3 Collaboration in other ASEAN activities and beyond ASEAN**

13. AHC Chairman summarized the collaboration activities undertaken in 2023. He highlighted particularly the proactive efforts of AHC Thailand, HII in exchanging knowledge on Water Accounting for water, food and energy security under the climate change collaborated with Food and Agriculture Organization (FAO), meeting with Massachusetts Institute of Technology (MIT) to find the solution of water problem in ASEAN, and collaboration with Lao PDR to install automated telemetry stations for early disaster monitoring and warning.
14. In the previous year, AHC also actively participated in regional activities such as: the “Hydroinformatics in Flood Early Warning & Forecasting workshop” as part of the International Hydrological Programme (IHP); the ASEAN Strategic Policy Dialogue on Disaster Management (SPDDM) in Singapore; the 50<sup>th</sup> and 51<sup>st</sup> meetings of the ASEAN Sub-Committee on Micro-electronics and Information Technology (SCMIT-50); and the 57<sup>th</sup> meeting of the Asia-Pacific Advanced Network (APAN).
15. AHC Chairman emphasized the need for more physical engagements and mutual visits in the future among the members, for example his visits to regional partners such as HII and Vietnam Institute of Meteorology, Hydrology and Climate Change (IMHEN). Additionally, he elaborated on the potential funding opportunity for AHC as a partner from the i-Risk EPSRC Centre for Doctoral Training program in UK led by a consortium of UK Universities. This initiative aims to identify opportunities for collaboration and advancement in the fields of disaster risk reduction and climate change adaptation, supporting young professionals in alignment with AHC's missions.

Although the attempt for the funding in 2023 was unsuccessful, the team hopes to try again in 2024.

## **2.4 AHC Vision from 2024 onwards**

16. AHC Chairman remarked that achieving the AHC's vision and mission, which is to exchange the relevant hydroinformatics and knowledge within ASEAN, requires a persistent effort to accomplish. At the same time, the mission is highly meaningful and can contribute significantly to future disaster reduction across ASEAN particularly under climate change.
17. AHC Chairman proposed exploring the possibility of developing an AHC mobile application as a forward-looking initiative. This application can potentially compile open-source information from the portals of ASEAN countries, and provide communities easy access to real-time data, such as weather forecasting.

## **AGENDA ITEM 3: AHC PROGRESS UPDATE**

### **3.1 Progress update from each member state**

18. AHC members from Malaysia, Singapore, Thailand, and Vietnam updated their respective progress for the year 2023 as shown in ANNEX 4.

## **AGENDA ITEM 4: TRANSITION OF CHAIRMANSHIP**

### **4.1 Introduction of the New Chairman for 2024 – 2025**

19. AHC Secretariat announced the appointment of the new AHC Chairman, Assoc. Prof. Pham Thi Thanh Nga, from the Vietnam Institute of Meteorology, Hydrology and Climate Change (IMHEN), Ministry of Natural Resources and Environment (MONRE), Vietnam. The new chairman introduced herself and extended greetings to the AHC members.

### **4.2 Remarks by the New Chairman**

20. The new AHC Chairman, Prof. Pham, conveyed her gratitude to Prof. Law for his distinguished leadership during his tenure as Chairman of AHC from 2022 to 2023.

She highlighted his effectiveness in implementing initiatives and shaping discussions on hydrological and water-related matters.

21. Prof. Pham underscored that AHC has formed a solid position in the field of hydroinformatics, facilitating invaluable knowledge exchange and fostering connections within the scientific community. Additionally, IMHEN, which has been representing Vietnam in the AHC network, has been actively engaged in AHC activities, conducting on-site research to address hydrological challenges since 2019.
22. Prof. Pham emphasized that addressing natural disasters, particularly under the impact of climate change, requires a comprehensive approach involving advanced technology and scientific disciplines such as hydroinformatics, artificial intelligence (AI), and big data. She promised to exert her utmost efforts to reinforce the activities of IMHEN and contribute to the AHC mission, thereby enhancing the community.

#### **AGENDA ITEM 5: OTHER MATTERS**

23. AHC Indonesia representative, Prof. Adam Pamudji Rahardjo, encouraged the involvement of more young members from Indonesia in the upcoming AHC activities.
24. AHC Myanmar representative, Prof. Khin Ni Ni Thein, proposed seeking funding from Thailand's Friend in Need (of "Pa") Volunteer Foundation and HII to activate a collaborative project with Myanmar. Dr. Sutat Weesakul, Advisor of HII, Thailand responded that while the project is ready for activation, it is currently on hold due to the circumstances in Myanmar.
25. AHC Brunei representative, Dr. Lim Tiong Hoo, invited the AHC members to participate in the SCMIT COSTI 52 event taking place in Cambodia in June 2024. AHC members can explore the possibility of preparing a proposal to enhance regional collaboration among ASEAN countries. The tentative submission deadline for this proposal is April 2024.

#### **AGENDA ITEM 6: ADOPTION OF THE REPORT OF THE 7<sup>TH</sup> AHC MEETING AND CLOSING**

26. The meeting agreed that the report would be adopted ad referendum. The AHC Secretariat will thereafter forward the endorsed report to ASEAN Secretariat.

27. AHC Chairman expressed his appreciation to all AHC members for their support and valuable assistance to the meeting.

28. The meeting was held in the traditional spirit of ASEAN cordiality and solidarity.

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Written by: AHC Secretariat, Singapore

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### **List of ANNEXES**

ANNEX 1: List of Delegates

ANNEX 2: Agenda of the 7<sup>th</sup> ASEAN Hydroinformatics Data Centre Meeting

ANNEX 3: Summary of Virtual Workshops in 2022 - 2023

ANNEX 4: Update from Malaysia, Singapore, Thailand and Vietnam