ASEAN IVO Forum

The ASEAN IVO Forum is an annual event providing an opportunity for all ASEAN IVO members to exchange ideas, discuss R&D topics and coordinate projects. Each year, the ideas exchanged lead to new project teams forming in time for the following Call for Proposals. The Forum is hosted in a different ASEAN country each year.
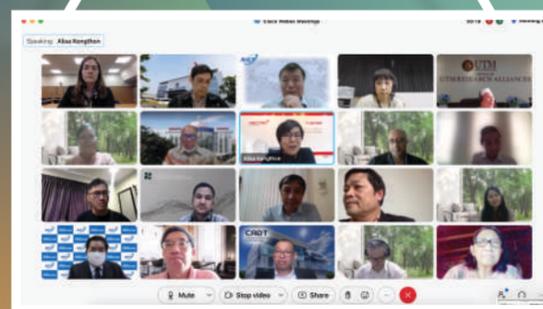
Past Forums:

2021   November 18, Online Video Conference

2020   November 25 - January 11, Online

2019   November 20-21, Manila, The Philippines

2018   November 27-28, Jakarta, Indonesia

2017   November 23-24, Bandar Seri Begawan, Brunei Darussalam

2016   November 24, Hanoi, Vietnam

2015   November 26, Kuala Lumpur, Malaysia

Pictures from ASEAN IVO Forum 2019 in Manila

Steering Committee

A Steering Committee formed from the ASEAN IVO member institutes and NICT, with one or two representatives for each ASEAN country. The Steering Committee is responsible for overseeing ASEAN IVO activities. Meetings are typically held twice a year.

The Steering Committee: Selects proposals for collaborative projects; Reviews ongoing projects and provides feedback; Promotes ASEAN IVO with relevant ministries and organizations and identifies sources of support for ASEAN IVO activities; Decides overall ASEAN IVO policy and administrative matters.

Picture of the ASEAN IVO Online SC Meeting March 2022

For More Information

Homepage:
http://www.nict.go.jp/en/asean_ivo/

ASEAN IVO Secretariat:
Email: asean_ivo_sc_nict@ml.nict.go.jp

ASEAN IVO

ICT Virtual Organization of ASEAN Institutes and NICT

2022.05

About ASEAN IVO

"ICT Virtual Organization of ASEAN Institutes and NICT" (ASEAN IVO) is a global alliance of institutes and universities in the ASEAN region and Japan focused on ICT research and development.

The mission of ASEAN IVO is to seek and identify strategic ICT research areas in the ASEAN region and support collaborative projects in them, promoting international alliance amongst universities and research institutes in the ASEAN region and Japan.

Collaborative projects aim to address common challenges such as communication limitations in rural areas and disaster situations, language barriers, network security, energy, infrastructure, agriculture etc.

The idea for ASEAN IVO was conceived at the "International Roundtable on ICT R&D Collaboration in the ASEAN Region" held in 2013 by NICT. A proposal to establish the Organization was brought by NICT and approved at the second Round Table in 2015. ASEAN IVO began in 2015 with 23 members from 8 ASEAN countries plus Japan. Now membership includes all ASEAN countries, with 60 members as of April 2020 and rising.

Membership

ASEAN IVO members can apply to make presentations on their research activities at the ASEAN IVO Forum, with the possibility of receiving support for travel expenses. Additionally, member universities and public research institutes from ASEAN countries are eligible to receive financial support for collaborative projects.

Membership is open to universities, institutes and companies located in the ASEAN region. Depending on the type of organization, the following conditions may apply:

1. Organizations applying for membership must be involved in research and development in the field of ICT.
2. Organizations from non-ICT sectors can be accepted as members, if their aim in joining is ICT development for their field.
3. Private companies are welcome to apply for membership if the company applying provides matching funds for ASEAN IVO joint projects. No financial support will be provided to the company.

Research Collaboration

New collaborative projects are selected for support through an annual call for proposals. All projects are required to include participant institutions from at least two different ASEAN countries. Proposals from all technical fields are welcome and are evaluated on the potential benefit of output.

ASEAN IVO supports research collaboration by:

1. Developing common technologies in broad areas based on common considerations
2. Forming multinational collaborative projects for research, field trials, etc. to address common regional needs
3. Promoting collaborative research through researcher exchange
4. Sharing knowledge through international joint workshops and other academic events

A call is periodically made to ASEAN IVO members for proposals related to the above, financial support is offered by NICT.
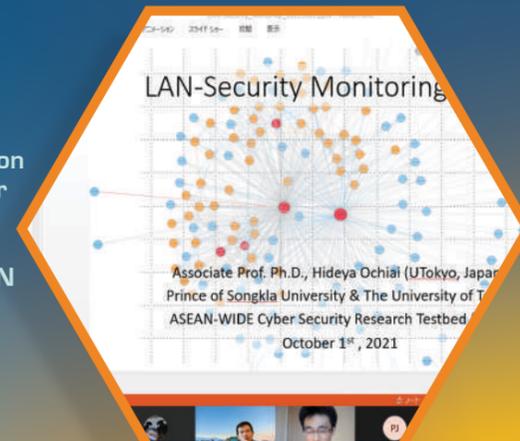
Some ASEAN IVO Projects

ASEAN-Wide Cyber-Security Research Testbed (2020)

Leader: PSU (THA)

Members: UB (IDN), UCSY (MMR), UIT (MMR), UTokyo (JPN)

According to a survey study, malware encounter rates in the ASEAN region are very high. In order to make a real-world public testbed for cyber-security studies, this project is going to enhance the functions of the monitoring devices provided by LAN-security monitoring project by installing around hundred newly-developed security devices across ASEAN countries.

LAN-Security Monitoring
Associate Prof. Ph.D., Hideya Ochiai (UTokyo, Japan
Prince of Songkla University & The University of T
ASEAN-WIDE Cyber Security Research Testbed
October 1st, 2021

Relay Station Network Based on Low-power Wide-area Network (LPWAN) Technologies for Disaster Management (2019)

Leader: NECTEC (THA)

Members: UTB (BRN), MU (PHL), ASTI (PHL), NUOL (LAO), TCEI (LAO), UCSY (MMR), NICT (JPN), CMP (THA), KMITL (THA)

This project aims to produce a back up communications system in the even of natural disasters. The relay station network consists of an array of relay stations whose function is to forward the received data to the next station until the data reaches the destination (base) station. As for the realization of the proposed system, we will show how to apply it with two applications: the landslide monitoring system and the intelligent remote monitoring system for dam safety.

Smart Aquaculture Quality Monitoring (AQM) System with Internet of Things (2018)

Leader: USM (MYS)

Members: UTM (MYS), MAMPU (MYS), Kyoto U (JPN), UNISSULA (IDN), UTP (MYS), RMUTSV (THA)

This project is focusing on enhancement of shrimp farm management through the embedding of multiple wireless communication technologies. The technologies of RFID, WSN, mobile application platform and IoT systems will be embedded into one platform as an efficient solution for aquaculture quality monitoring (AQM). The proposed wireless system known as "Smart Aquaculture Monitoring with Internet of Things System (SAM-IoT)" is designed to collect data of pH level, dissolved oxygen (DO) and water temperature at shrimp ponds.

IoT System for Public Health and Safety Monitoring with Ubiquitous Location Tracking (2017)

Leader: MIMOS (MYS)

Members: NICT (JPN), HUST (VNM), UBD (BRN), Gifu U (JPN)

In today's highly digitized society, ICT plays a critical role in preserving the health and safety of vulnerable citizen especially women, children and the elderly. There is a growing need for monitoring citizens' safety and lifestyle anytime, anywhere. The goal is to develop a system which enables tracking of location, lifestyle and health status in promotion of public health and safety, taking into consideration ASEAN culture, lifestyles, behaviours and infrastructures, by integrating the state of the art indoor/outdoor localization, motion/health reasoning, IoT and analytics technologies system.