





# Progress Report, Project Review, and Final Report of ASEAN IVO Projects

Date: Thursday, November 20, 2025

Venue: Ballroom II, One Farrar Hotel, Singapore

MC: Dr. HAMMURA Kiyotaka, NICT, Japan

Dr. EMOTO Hiroshi, NICT, Japan

08:42 Opening Address

Dr. YANO Hiroyuki, Chair, ASEAN IVO Steering Committee

08:45 Progress Report

17 minutes (12 minutes for presentation and 5 minutes for Q&A)

2025-01

Smart Energy-Sharing and Management Devices for a Low Carbon Society

Project Leader: Dr. Natchpong Hatti, NECTEC, Thailand

2025-02

SLOPE-AI (Smart Landslide Observation and Prediction Enhanced with AI) for Reliable and Economical IoT-Based Landslide Monitoring

Project Leader: Dr. Norinah Abd Rahman, UKM, Malaysia

2025-03

ICT-Driven Water Quality Monitoring Systems: Enhancing Precision and Sustainability under the Climate Change

Project Leader: Dr. Kok Hwa Yu, USM, Malaysia

2025-04

Cloud-Based Hazard Analysis and Critical Control Points (HACCP) Management System for Improving Food Safety implementation and Compliance among Local Food Manufacturers

Project Leader: Dr. Noor Zafira Noor Hasnan, UPM, Malaysia

2025-05 IoT

Road Health Monitoring Platform for Secure Urban Mobility in Smart Communities

Project Leader: Dr. Hadyan Hafizh, SU, Malaysia

**10:10** Break

10:20 Project Review 1

22 minutes (15 minutes for presentation and 7 minutes for Q&A)

2024-01

Cyber to Real World Integrated Testbed for Dam Safety Management and Water

Governance System

Project Leader: Dr. Somsanouk Pathoumvanh, NUOL, Laos







### 2024-02

Al-driven smart horticulture for climate sensitive plant using soil analysis and image processing: a tropical perspective

Project Leader: Dr. It Ee Lee, Multimedia U, Malaysia

## 2024-03

New Quantitative Imaging Markers based on Full-Field Digital Mammography Image Features and Other Clinical Risk Factors to Predict Breast Cancer Risk in Women Project Leader: Dr. Maxine Tan, MUM, Malaysia

#### 2024-04

Smart Aquafarm Feeder and Monitoring System in Highly Turbid Conditions (SAqFeeder) Project Leader: Dr. Eduardo Jr Duray Piedad, ASTI, Philippines

#### 2024-05

Coastal Erosion Monitoring Platform Based on Wireless Sensor Networks and 3D Point Clouds from Airborne LiDAR

Project Leader: Dr. Surasak Boonkla, NECTEC, Thailand

### **12:10** Lunch

## 12:55 Project Review 2

22 minutes (15 minutes for presentation and 7 minutes for Q&A)

2023-01 Integrated Decision Support System for Non-Communicable Ocular Diseases using Machine Intelligence

Project Leader: Dr. Wan Mimi Diyana Wan Zaki, UKM, Malaysia

## 2023-02

Research and development for precise positioning with Artificial Intelligence (AI) during ionospheric disturbances in low-latitude region in ASEAN Project Leader: Dr. Pornchai Supnithi, KMITL, Thailand

### 2023-03

Spoof Detection for Automatic Speaker Verification Project Leader: Dr. Kasorn Galajit, NECTEC, Thailand

## 2023-05

Artificial Intelligence Powered Comprehensive Cyber-Security for Smart Healthcare Systems (AIPOSH)

Project Leader: Dr. Van Phuc Hoang

### **14:23** Break

## 14:35 Final Report

25 minutes (15 minutes for presentation and 10 minutes for Q&A

### 2023-04

Innovation of photonic and electrochemical biosensors for cholangiocarcinoma







diagnosis

Project Leader: Prof. Somchai Pinlaor, NECTEC, Thailand

2023-06

An Organic Food Tracking by using Blockchain in Lao PDR Project Leader: Dr. Vimontha Khieovongphachanh

Speaker: Dr. Phonepadith Phoummavong

2022-01

Visual IoT Network for Environment Protection and Disaster Prevention

Project Leader: Dr. Kanokvate Tungpimolrut, NECTEC, Thailand

Speaker: Dr. Jessada Karnjana

2022-02

Agricultural IoT based on Edge computing

Project Leader: Dr. Hoang Trong Minh, PTIT, Vietnam

2022-03

P2EI-WEALTH (Physiological and Psychological Edge Intelligence WEArable LoRa HealTH)
System for Remote Indigenous Community and Disaster Recovery Operations

Project Leader: Dr. Asma Abu-Samah, UKM, Malaysia

2022-05

An IoT-based Public Transport Data Collection and Analytics Framework using Bluetooth Proximity Beacons

Project Leader: Prof. Sharul Kamal Abdul Rahim, UTM, Malaysia

# 17:05 Certificate to the finished Projects

## 17:15 Closing Address

Dr. Francois Chin Po Shin Co-Chair, ASEAN IVO Steering Committee

Finish