



ASEAN IVO 10 Years of Activities

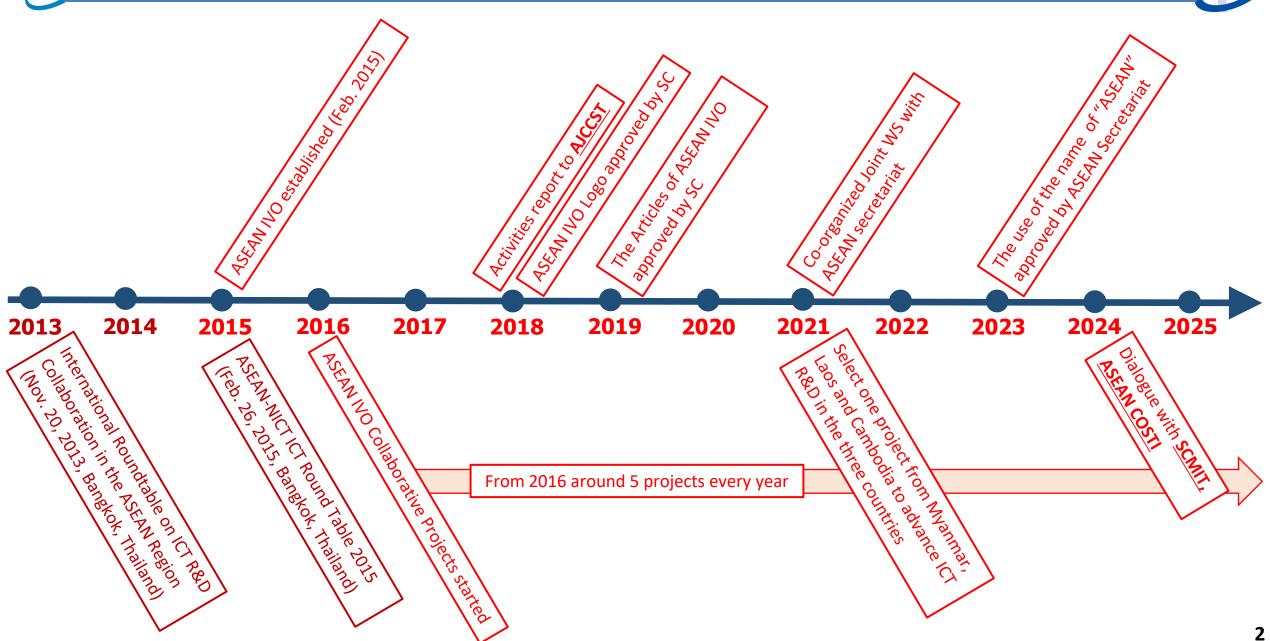
EMOTO, Hiroshi
ASEAN IVO Secretariat
NICT, Japan
2025.9

ASEAN IVO HP: https://www.nict.go.jp/en/asean_ivo/index.html



Timetable of ASEAN IVO activities







Preparation: 2013



International Roundtable on ICT R&D Collaboration in the ASEAN Region 2013.11.20, Bangkok, Thailand





Preparation: 2015



ASEAN-NICT ICT Round Table 2015 2015.2.26, Bangkok, Thailand





ICT Virtual Organization of ASEAN Institutes and NICT (ASEAN IVO)







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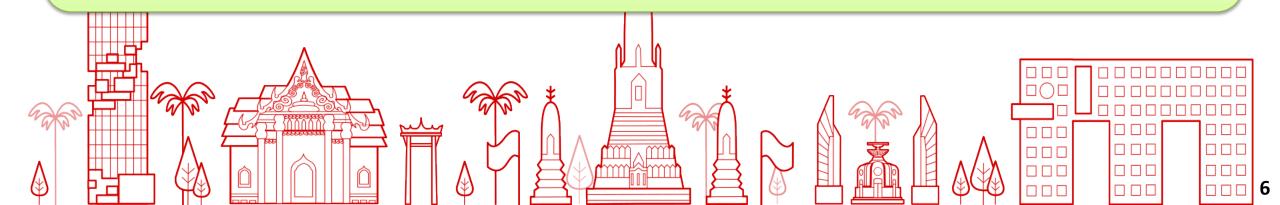
ASEAN IVO

is a global alliance of ICT R&D institutes and universities in the ASEAN region and Japan, it is operated and represented by a Steering Committee of representatives from 10 ASEAN countries and Japan.

Established in Feb. 2015 with 23 institutes in ASEAN region as initial members.

Mission:

is to seek and identify strategic ICT research areas in the ASEAN region, and promote collaborative projects in them.





ASEAN IVO Members



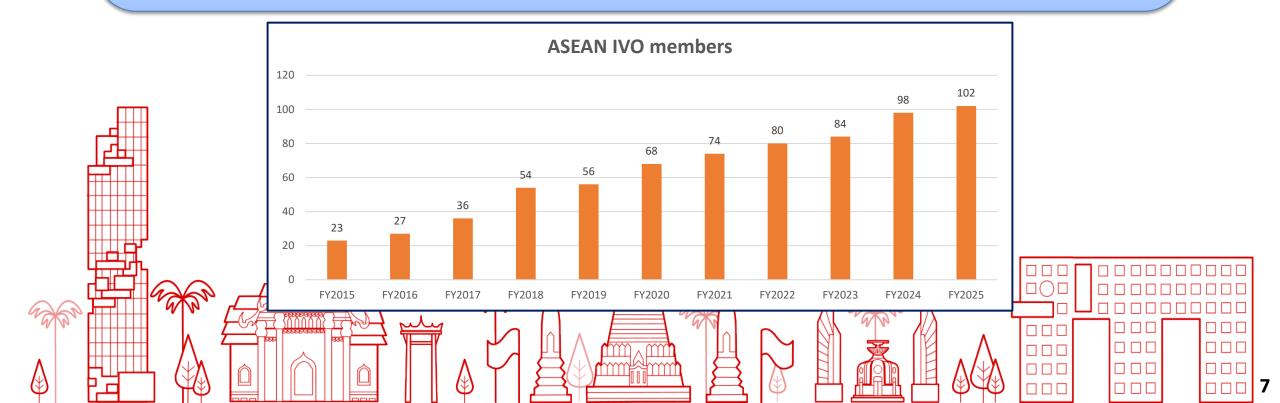
Members:

Country: 10 countries of ASEAN region + Japan

Institution: 102 institutions as for 2025.9.

(BRN: 2, KHM: 2, IDN: 16, LAO: 2, MYS: 21, MMR: 8, PHL: 9, SGP: 6, THA: 14, VNM: 19, JPN: 3)

(https://www.nict.go.jp/en/asean_ivo/members.html)





Activities of ASEAN IVO



Annual

ASEAN IVO Forum

The Forum provides a place for all ASEAN IVO members to exchange ideas, discuss R&D topics and coordinate projects. Any and all members of ASEAN IVO can apply for the Forum.

2015. 11: Kuala Lumpur (Malaysia) 2016. 11: Hanoi (Vietnam) 2017. 11: Bandar Seri Begawan (Brunei)

2018. 11: Jakarta (Indonesia) 2019. 11: Manila (Philippines) 2020. 11: Online

2021. 11: Online 2022. 11: Bangkok (Thailand) 2024. 11: Vientiane (Lao PDR)

2024. 11: Phnom Penh (Cambodia) 2025. 11: Singapore (Planning)

ASEAN IVO Project

at minimum 2 institutions total, and from at least 2 different countries in the ASEAN region (Max.: 2 years)

FY2016: 8 projects FY2017: 5 projects FY2018: 6 projects FY2019: 4 projects FY2020: 4 projects FY2021: 4 projects FY2022: 5 projects FY2023: 6 projects

FY2024: 5 projects FY2025: 5 projects

Total: 52 projects

ASEAN IVO Steering Committee

To decide the R&D topics, operate the annual events, select the projects.

(Steering Committee members are from 10 ASEAN countries and Japan, they are senior researcher, specialist, professor, etc.)



ASEAN IVO Forum



To promote the ICT R&D, the Forum provides a place for all ASEAN IVO members to exchange ideas, discuss R&D topics and coordinate projects. Any and all members of ASEAN IVO can apply for the Forum.



2015.11.26, KL, Malaysia



2016.11.24, Hanoi, Vietnam



2017.11.23, Brunei Darussalam



2018.11.27, Jakarta, Indonesia



2019.11.20, Manila, The Philippines



2020.11.25 – 2021.1.11, Online 2021.11.18 – 2022.1.11, Online



2022.11.29, Bangkok, Thailand



2023.11.15, Vientiane, Lao PDR



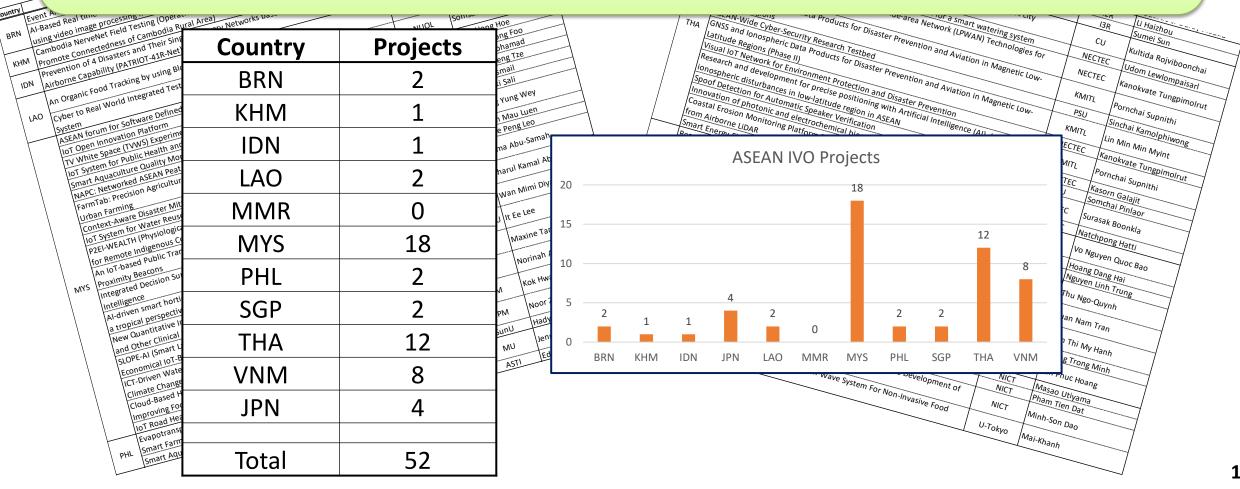
2024.11.6, Phnom Penh, Cambodia



ASEAN IVO Projects



From core research to real world application, ASEAN IVO projects focus on a broad range of topics in the field of ICT. Particularly with regards to providing solutions for specific regional needs or environmental or social problems, great emphasis is placed on not just fundamental research but practical solutions.





ASEAN IVO Projects





2018 Project:

NAPC: Networked ASEAN Peat Swamp

Forest Communities

2016-2025

Total Projects: 52

Institutions: 113

Researchers: 611

Finished Projects: 38



2022 Project:

Visual IoT Network for Environment Protection

and Disaster Prevention



Resilient Artificial Intelligence of Things (AIoT) Green Energy System with Real-time Solution for Effective Aquaculture (REAS-SEA)









2023 Project:

Research and development for precise positioning with Artificial Intelligence (AI) during ionospheric disturbances in low-latitude region in ASEAN



ASEAN IVO Projects



Submission History 2016-2025

Country/Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
BRN	0	3	3	2	3	3	2	3	0	2	21
KHM	1	0	0	0	0	0	0	0	1	0	2
IDN	0	3	1	8	2	2	3	2	6	4	31
LAO	0	0	2	0	0	0	0	1	2	0	5
MMR	0	2	0	0	2	2	0	0	1	1	8
MYS	8	8	17	42	14	14	18	16	22	13	172
PHL	0	2	2	2	3	3	0	0	3	0	15
SGP	2	1	0	1	0	0	0	0	0	0	4
THA	1	4	5	3	4	4	3	6	2	4	36
VNM	4	4	6	6	4	4	3	4	2	1	38
JPN	1	1	0	0	2	2	0	0	1	1	8
Total (Year)	17	28	36	64	34	34	29	32	40	26	340

Reference (2016-2025):

Total Project :52 Ratio: 52/340=15.29%



Other Activities



Contribution to AJCCST

The secretariat of ASEAN IVO is reporting the activities into AJCCST (Meeting of the ASEAN - JAPAN Cooperation Committee on Science and Technology) from 2018 every year.





Other Activities



Co-organized a Joint WS as a side event in conjunction with ASEAN COSTI-80 Meeting October 14, 2021, Online

CONCEPT NOTE

VIRTUAL SEMINAR "STI x LIVELIHOOD x WOMEN FOR THE SUSTAINABLE USE OF PEATLAND AND MANGROVE: FEMALE EMPOWERMENT TO PEATLAND AND MANGROVE RESEARCH THROUGH ASEAN-JAPAN COLLABORATION" 14 October 2021, 09:00 - 12:00 (Malaysia time, GMT+8)

(A side event in conjunction with ASEAN COSTI-80 Meeting)

Overview:

Present in more than 180 countries, peatlands, approximately 25 million hectares of peatlands are found in the Southeast Asia, are locally and globally vital ecosystems. Though they cover only 3 per cent of the world's land surface, they store nearly 30 per cent of its soil carbon. They provide vital ecosystem services such as controlling water supplies and preventing floods and droughts and provide many people with livelihoods such as food and fuel. They are also inhabited by rare plants and animals that can only survive in these unique, watery environments.

Despite their importance, peatlands around the world and the AMS are being drained and converted for agriculture, infrastructure development, mining and oil and gas exploration. Peatlands are also being degraded by fire, overgrazing, nitrogen pollution and extraction of peat as fuel and as a growing medium. Despite covering only 0.4 per cent of the global land surface, drained peatlands are responsible for more than 5 per cent of the carbon emissions, and much more when they are burning. Fires in the peatlands recognized as a major contributor to transboundary haze pollution in the ASEAN region also negatively impacts on the local society and environment as well as people's health due to the haze with PM2.5.

To address these problems, researchers from Brunei, Indonesia and Malaysia have conducted the project, "NAPC: Networked ASEAN Peat Swamp Forest Communities" since 2018. This project aims to develop IoT-based solution for peat swamp forest monitoring, targeting the environmental and agricultural issues, and it has been implemented as one of projects of ASEAN-IVO (ICT Virtual Organization of ASEAN Institutes and NICT(*1)), global alliance of ICT R&D institutes and universities in the ASEAN region and Japan, which is supported by National Institute of Communication Technology (NICT, Japan).

NICT and JASTIP(*2) have thereby started to collaborate since 2018 on the peatland issues as recognized that it is one of the most complex social challenges in the region, in which a wide range of scientific knowledge and technology, ICT, forest ecology, rural sociology, disaster science, needs to be mobilized, so that NICT and JASTIP can complement with each expertise to take a more integrated approach, NICT and JASTIP so far mutually participated in activities of each.

STI x LIVELIHOOD x WOMEN FOR THE SUSTAINABLE USE OF PEATLAND AND MANGROVE: FEMALE EMPOWERMENT IN RESEARCH AND PRACTICE THROUGH ASEAN-JAPAN COLLABORATION

> https://zoom.us/j/91927163357 October 14, 2021, 8:00 - 11:00 (GMT+7)

Time	Topic	Presenter		
8:30-9:00	Registration			
	Opening session	MC: Ms. Fitrie A. Nurritasari UNESCO Jakarta Office		
9:00-9:05	Welcome remarks	Prof. Dr. Mohd Adzir Mahdi Director of Research Management Center, Universiti Putra Malaysia		
9:05-9:25	Keynote lecture 1: ASEAN IVO: To Solve Common Social Challenges	Dr. Hiroshi Emoto Director, International Research Development Office, NICT, Japan		
9:20-9:35	Keynote lecture 2: Women in Tropical Peatland Research	Dr. Lulie Melling Director, Sarawak Tropical Peat Research Institute, Malaysia		
Part I				
9:35- 9:50	Peatland x ICT x Women Peatland Management at Raja Musa Forest Reserves in Malaysia	Ms. Debora Belawan Selangor Forestry Department, Malaysia		
9:50-10:05	When Peatland Meets Data and LoRaWAN	Prof. Ir. Dr. Aduwati Sali Universiti Putra Malaysia, Malaysia		
10:05-10:20	How Indonesia Tackles Peatland Forest Fire	Dr. Lailan Syaufina IPB University, Indonesia		
10:20-10:35	Peatland Forest Fire Mitigation Management in Brunei	Dr. Wida Susanty Haji Suhaili Universiti Teknologi Brunei, Brunei		
10:35-10:40	Break			
Part II	STI x Knowledge x Women			
10:40-10:55	Sustainable Traditional-Knowledge on Peatland Hydrological Management Reduce Soil CO ₂ Emission, Fire Risk and Biomass Loss	Prof. Dr. Dwi Astiani Universitas Tanjungpura, Indonesia		
10:50-11:05	"Women, Peatland and Wellness": Knowledge on nutrient and bioactive compounds empowering the community wellness	Prof. Dr. Christofora Hanny Wijaya IPB University, Indonesia		
11:05-11:20	The potential of sago palm for plantation on rewetted drainage-impacted peatland	Dr. Yukako Monda Kyoto University, Japan		
11:20-11:55	Panel Discussion How could we empower further the role of females in research and practice for the sustainable use of peatlands and mangroves From the gender perspectives, adequate balance between conservation and development How to engage more next-gen female researchers and practitioners Possible actions at local, national and	Panelists: Prof. Ir. Dr. Aduwati Sali Dr. Lailan Syaufina Prof. Dr. Dwi Astiani Prof. Dr. C. Hanny Wijaya Dr. Wida Susanty Haji Suhaili Moderator: Ms. Flitrie A. Nurritasari UNESCO Jakarta Office		
11:55-12:00	regional scales Closing session Closing remarks	Prof. Dr. Eiji Nawata Director of Kyoto University ASEAN Center, Japan/Thailand		



























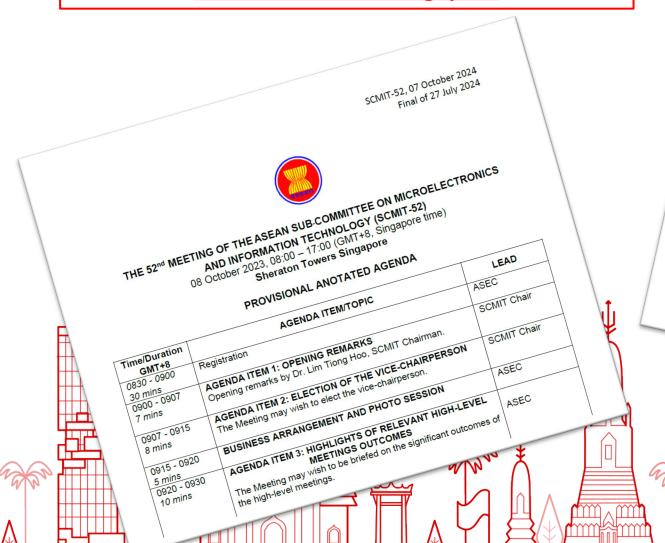


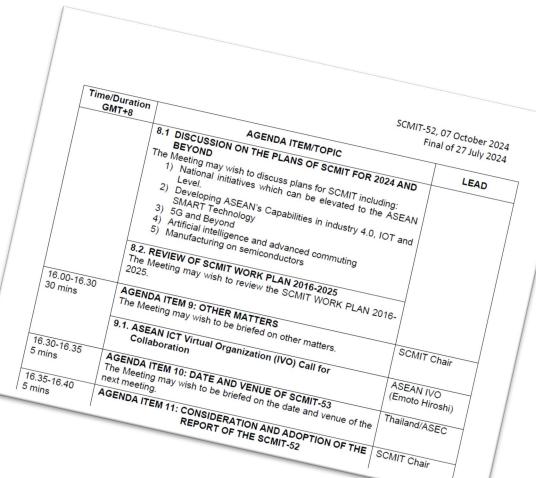


Other Activities













Thank you very much.

ASEAN IVO HP:

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