

Figures for ASEAN IVO Projects (2016-2025)

Start date (Fiscal Year)	Project Title	Duration (years)	Countries	Members	Completed Researchers	Ongoing or Completed
2025	1 Smart Energy-Sharing and Management Devices for a Low Carbon Society	2	5	5	12	O
	2 SLOPE-AI (Smart Landslide Observation and Prediction Enhanced with AI) for Reliable and Economical IoT-Based Landslide Monitoring	2	4	7	26	O
	3 ICT-Driven Water Quality Monitoring Systems: Enhancing Precision and Sustainability under the Climate Change	2	4	4	14	O
	4 Cloud-Based Hazard Analysis and Critical Control Points (HACCP) Management System for Improving Food Safety implementation and Compliance among Local Food Manufacturers	2	3	3	5	O
	5 IoT Road Health Monitoring Platform for Secure Urban Mobility in Smart Communities	2	3	3	9	O
	Subtotal			22	66	
2024	1 Cyber to Real World Integrated Testbed for Dam Safety Management and Water Governance System	2	6	6	20	O
	2 AI-driven smart horticulture for climate sensitive plant using soil analysis and image processing: a tropical perspective	2	4	5	12	O
	3 New Quantitative Imaging Markers based on Full-Field Digital Mammography Image Features and Other Clinical Risk Factors to Predict Breast Cancer Risk in Women	1.8	2	3	3	O
	4 SAqFeeder: Smart Aquafarm Feeder and Monitoring System in Highly Turbid Conditions	2	4	7	22	O
	5 Coastal Erosion Monitoring Platform Based on Wireless Sensor Networks and 3D Point Clouds from Airborne LiDAR	2	4	6	21	O
	Subtotal			27	78	
2023	1 Integrated Decision Support System for Non-Communicable Ocular Diseases using Machine Intelligence	2.5	3	3	10	O
	2 Research and development for precise positioning with Artificial Intelligence (AI) during ionospheric disturbances in low-latitude region in ASEAN	3	5	9	29	O
	3 Spoof Detection for Automatic Speaker Verification	3	4	8	35	O
	4 Innovation of photonic and electrochemical biosensors for cholangiocarcinoma diagnosis	2	3	4	24	C
	5 Artificial Intelligence Powered Comprehensive Cyber-Security for Smart Healthcare Systems (AIPOSH)	3	5	6	17	O
	6 An Organic Food Tracking by using Blockchain in Lao PDR	2	3	4	15	C
	Subtotal			33	112	
2022	1 Visual IoT Network for Environment Protection and Disaster Prevention	3	5	10	27	C
	2 Agricultural IoT based on Edge Computing	3	4	5	25	C
	3 P2EI-WEALTH (Physiological and Psychological Edge Intelligence WEArable LoRa Health) System for Remote Indigenous Community and Disaster Recovery Operations	2.5	2	3	8	C
	4 AI-Based Real Time Analysis and Control of the Monitoring on the Growth of Freshwater Prawn Using Video Image Processing from Underwater Drone	2	4	7	11	C
	5 An IoT-based Data Collection and Analytics Framework using Bluetooth Proximity Beacons	3	4	6	24	C
	Subtotal			31	100	
2021	1 2.5D Technology-based Integrated Antenna Array mm-Wave System For Non-Invasive Food Safety Scanner (TIAS)	2	6	9	15	C
	2 Resilient Artificial Intelligence of Things (AIoT) Green Energy System with Real-time Solution for Effective Aquaculture (REAS-SEA)	2	6	10	22	C
	3 IoT System for Water Reuse in Developing Cities	2	4	4	8	C
	4 GNSS and Ionospheric Data Products for Disaster Prevention and Aviation in Magnetic Low-Latitude Regions (Phase II)	2	5	7	23	C
	Subtotal			33	78	

Total members: 113
Total researchers: 611

Start date (Fiscal Year)	Project Title	Duration (years)	Countries	Members	Completed Researchers	Ongoing or Completed
2020	1 Context-Aware Disaster Mitigation using Mobile Edge Computing and Wireless Mesh Network	3	4	5	18	C
	2 Reusable, Sharable, and Transferable Smart Data Platform for Collaborative Development of Data-driven Smart Cities	2	5	5	12	C
	3 ASEAN-Wide Cyber-Security Research Testbed	3	5	6	13	C
	4 An Energy Efficient, Self-Sustainable, and Long Range IoT System for Drought Monitoring and Early Warning	1.8	4	9	14	C
	Subtotal			14	26	
2019	1 Relay Station Network Based on Low-power Wide-area Network (LPWAN) Technologies for Disaster Management	3	6	9	23	C
	2 FarmTab: Precision Agriculture System using Internet of Things and Artificial Intelligence for Urban Farming	2	4	6	8	C
	3 Prevention of 4 Disasters and Their Single Recovery Networks based on Internet-of-Things with Airborne Capability (PATRIOT-41R-Net)	3	5	5	6	C
	4 GNSS and Ionospheric Data Products for Disaster Prevention and Aviation in Magnetic Low-Latitude Regions	2	4	6	9	C
	Subtotal			32	55	
2018	1 Event Analysis: Applications of computer vision and AI in smart tourism industry	2	7	8	8	C
	2 Cyber-Attack Detection and Information Security for Industry 4.0	3	3	3	11	C
	3 Scalable Distributed IoT Framework based on Mobile Robot Technology for High Performance Greenhouse Plants	2.5	3	4	6	C
	4 Smart Aquaculture Quality Monitoring (AQM) System with Internet of Things (IoT)	2	4	7	7	C
	5 NAPC: Networked ASEAN Peat Swamp Forest Communities	2	5	7	15	C
	6 A mesh-topological, low-power wireless network platform for a smart watering system	2	5	6	20	C
	Subtotal			31	56	
2017	1 A Hybrid Security Framework for IoT Networks	2	4	6	9	C
	2 Smart Lighting for Internet of Things and Smart Homes	3	3	6	9	C
	3 IoT System for Public Health and Safety Monitoring with Ubiquitous Location Tracking	2	4	5	12	C
	4 Evapotranspiration (ET)-Based Irrigation System with Internet of Things (IoT) Integration for Smart Farming Application Addressing the ASEAN Impending Water Crisis	3	4	5	9	C
	5 Study and evaluation of heterogeneous network for smart community and smart city applications	2	3	4	10	C
	Subtotal			26	49	
2016	1 Open Collaboration for Developing and Using Asian Language Treebank	3	6	6	14	C
	2 ASEAN Language Speech Translation thru' U-STAR	3	7	8	17	C
	3 Mobile IoT	2	4	4	6	C
	4 ASEAN forum for Software Defined System on Disaster Mitigation and Smart Cities	3	7	10	12	C
	5 IoT Open Innovation Platform	3	4	5	6	C
	6 Cambodia NerveNet Field Testing	3	3	3	6	C
	7 TV White Space (TVWS) Experimental for Application in Remote Area	2	3	4	8	C
	8 Research and development on short distance communication and imaging for applications in ASEAN region	3	5	11	13	C
	Subtotal			51	82	