

## Appendix 5.2

**project 1: Visual IoT Network for Environment Protection and  
Disaster Prevention**

**Project 2: Cyber to Real World Integrated Testbed for Dam Safety Management  
and Water Governance System**

**[Visit to NICT Head Quarter]**

**Report Form**

### I. Proposer:

Name:	Dr. Kanokvate Tungpimolrut
Position:	Research fellow
Institution:	National Electronics and Computer Technology Center

### II. Objective:

- To visit ICT Testbed Research and Development Promotion Center and have discussion with NICT team related to the Cyber to Real World Integrated Testbed for Dam Safety Management and Water Governance System.
- To visit Visual IoT lab and have discussion with NICT Team related to the Visual IoT Network for Environment Protection and Disaster Prevention.

### III. Schedule:

Date	Location	Work	Person in charge
April 1, 2025	ICT testbed Research and Development Promotion Center, NICT Head quarter	To see the facilities in the center and discuss about how to use various testbed for the project and further collaborations in the future.	Dr. Toshiyuki Miyachi
April 2, 2025	Visual IoT Laboratory, NICT Head quarter	To see the newly developed Visual IoT system and facilities in the laboratory and discuss about activities in on-going project and further collaborations in the future.	Dr. Ken T. Murata

#### IV. Participant List & Itinerary:

No.	Name	Organization	Itinerary
1	Dr. Kanokvate Tungpimolrut	NECTEC	31/3/2025 in 2/4/2025 out
2	Dr. Rangsarit Vanijjirattikhan	NECTEC	31/3/2025 in 2/4/2025 out
3			
4			
5			

#### V. Summary of the activities corresponding to the objectives

In this 2-day visiting, the following two objectives were set. The visiting was successfully completed as scheduled. A summary of each visiting is shown below.

**Objective #1:** To visit ICT Testbed Research and Development Promotion Center and have discussion with NICT team related to the Cyber to Real World Integrated Testbed for Dam Safety Management and Water Governance System.

- Dr. Teranishi Yuuichi, Director of the ICT Testbed Research, Development and Operations Laboratory, kindly introduced additional related activities within the laboratory, especially those concerning other layers beyond the middleware layer, where the CyReal Testbed in this project is situated. The duplication and utilization of data from local partners in Thailand at these other layers were also discussed.
- More detailed information about NECTEC's action plan following the training workshop in Yangon was also discussed. The NICT team requested that the NECTEC team design a use case that clearly demonstrates the benefits of using the CyReal Testbed in a real-world application. The NICT team will continue discussions with NECTEC regarding the necessary hardware and software arrangements on the CyReal Testbed to facilitate the integration of data from Thailand as an emulator.

**Objective #2:** To visit Visual IoT lab and have discussion with NICT Team related to the Visual IoT Network for Environment Protection and Disaster Prevention.

- Dr. Ken T. Murata and Dr. Kazutaka Kikuta discussed the issue of IP addresses and accessibility for each camera installed at various locations in different countries. The current situation and requirements were systematically reviewed. The NICT team will discuss internally about setting up a website that allows each project member easier real-time access, as well as a registration system for members.
- Regarding the new Visual IoT system, NICT has confirmed with the supplier in Japan that there are no issues with the design and that it can be used in other countries. The NICT team requested that the NECTEC team check again with the service provider in Thailand on how to set up or configure the SIM card. This issue will be revisited in the next meeting next month.
- Mr. Yuki Murakawa presented and explained the new Visual IoT system installed

on the rooftop of the NICT building. The NICT team is currently testing the new system, which uses a smaller solar panel.

### VI. Others



