

## Visual IoT Network for Environment Protection and Disaster Prevention [Field Experiment for Commissioning of Visual IoT System] Report Form

### I. Organizer:

Name:	Dr. Kanokvate Tungpimolrut
Position:	Principal Researcher, Research Group Director
Institution:	NECTEC, NSTDA

### II. Objective:

This field experiment aims to commission the Visual IoT system which will be installed at targeted locations in Chiang Mai, Thailand and to perform the final checking of the whole system. The activity is crucial to this project's objective since the effectiveness of the proposed system depends upon the readiness and reliability of the installed system in the real environment.

Five experimental areas include

- Area#1 - Huai Huk (lat 18.9245582, long 99.094015),
- Area#2 - Pang Sak (lat 18.9026969, long 99.203065),
- Area#3 - Doi Koo 1 (lat 18.8854613, long 99.1708773),
- Area#4 - Doi Koo 2 (lat 18.885279, long 99.1706582), and
- Area#5 - Pa Miang (lat 18.9145094, long 99.2284893), as shown in Figure 1.



Figure 1 Five experimental areas

### III. Schedule:

Date: 27 Feb – 1 Mar 2024

Venue: Chiang Mai, Thailand

#### Program Agenda:

27 Feb 2024	<ul style="list-style-type: none"> <li>- Travel to Chiang Mai from Bangkok</li> <li>- Visit and check asset of the previous ASEAN IVO project (Relay</li> </ul>
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	Station)
28-29 Feb 2024	<ul style="list-style-type: none"> <li>- Field experiment for commissioning of installed Visual IoT system in Area 1 to Area 5</li> <li>- Visit and check asset of the previous ASEAN IVO project (Relay Station)</li> </ul>
1 Mar 2024	<ul style="list-style-type: none"> <li>- Meet the representative of each sub-district in order to inform the method to monitor and download the taken images and give the key of control board cabinet and battery cabinet.</li> <li>- Travel back to Bangkok</li> </ul>

Remarks:

- *The schedule is revised slightly from the proposal due to the completion of system installation by local company in Chiang Mai.*

#### IV. Participants:

No.	Name	Organization	Itinerary
1	Dr. Kanokvate Tungpimolrut	NECTEC	6/6/2023 (in) 16/6/2023 (out)

Remarks:

- *Dr. Nathavuth and Mr. Montri have been urgently assigned to do the other tasks in another project, so they could not join the field experiment this time. They supported this field experiment by on line communications.*

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

The activities of this field experiment have to be synchronized with another proposal for equipment purchasing and installation by the local company, therefore the activities could be divided mainly to 2 periods.

##### Before field visit and field experiment (Feb 9 – Feb 26, 2024)

During this period, NECTEC has to coordinate and check the progress to the local company in order to coordinate to the representative of each sub-district and to fix the exact period of the field experiment. NECTEC team asked the local company to send the pictures as shown below whenever they finished the following activities (1) component purchasing (2) Assembly the component into the cabinet and (3) Installation at sites.



(a) Component purchasing



(b) Assembly component into the cabinet





(c) Installation at sites

Fig. 2 Activities before field visit and field experiment

During field visit and field experiment (Feb 27 – Mar 1, 2024)



Fig. 3 Activities during field visit and field experiment

## VI. Others