



SmartMetro : Smart Metro Operations Enhancement through Data Analysis

Activities under SmartMetro Project

MOU between Mahidol University and Department of Rail Transport

The Memorandum of Understanding (MOU) between Mahidol University and Department of Rail Transport has been discussed. Both the President of Mahidol University and the new Director-General of the Department of Rail Transport agreed in principle to collaborate in the areas of academic, research, and capacity development in the rail-related system. The objectives of the MOU are 1) To jointly develop a Data Center for rail system and its linkages to other modes of transportation which staff of both organizations can access and analyze the data 2) To support each other on academic, research and projects related to rail system 3) To exchange knowledge and encourage practical implementation of research outcome to the community 4) To educate the staff of both organizations, reskill and upskill and to disseminate the knowledge and experience for public benefits.

Meeting on the next project plan

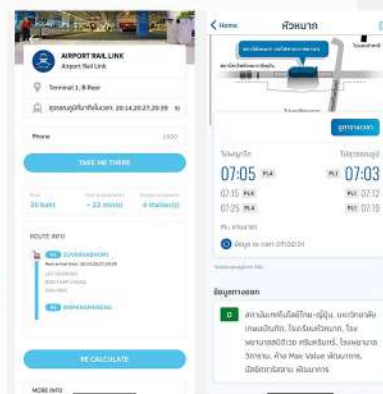
Assistant professor Dr. Waessara Weerawat, the researcher from Mahidol University had visited Dr. Taku Fujiyama and the UK researchers at the University College London (UCL) in March 2020. Dr. Waessara had delivered a talk on rail transit systems in Thailand. Participants are faculty members and researchers from UCL, staff of Transport for London, and experts from industry. The researcher team had discussed on the project activities and plan for future collaborations.



Meeting on the next project plan

Additional feature for Airport Rail Link (ARL) approaching time

The SmartMetro researchers worked with Airport Rail Link (ARL) staff to develop additional feature for ARL train approaching time. The implementation of additional feature for ARL train approaching time in the mobile application has been developed to align with the digital 4.0 framework. The API of the application can be shared to other applications such as BKK Rail app and other transit systems.



Extended collaboration to a new project proposal

A new project proposal on the topic of rail transportation system has been developed and submitted to the Royal Academy of Engineering for the Newton Fund under the Transforming Systems to Partnership 2019-20 scheme. Assistant Professor Dr. Waessara Weerawat of Mahidol University and Dr. Taku Fujiyama of the University College London jointly collaborated with the existing partners from the current SmartMetro project which are Mahidol University, Department of Rail Transport, Thailand, University College London and Transport for London, UK, and extended the network with other industries.



Effect of the covid-19 Pandemic

The situation of covid-19 pandemic all over the world has affected all of our partner organisations since beginning of 2020. Activities related to travel, workshop organisation, and personal interaction are limited. The project team would need to discuss in details to adjust the project plan and reschedule some activities due to travel limitation and the new normal practice. The student internships with industry had been postponed.

Future Activities: SmartMetro Project

- Student internships with industry and workshop will be rescheduled after the relief of the Covid-19.
- Courses on the topic of data analysis in metro operations will be outlined and developed.

Contact: Dr. Jirapan Liangrokapart, Program Director-Ph.D. program in Logistics and Engineering Management, Faculty of Engineering, Mahidol University, Thailand (Email: jirapan.lia@mahidol.ac.th)

