Smart JAMP(2021) The Feasibility study for Enhancement of Sungai Skudai River Management and Monitoring Tool (RMMT)

Category of Issues in the Area

Target Area	• Skudai river and Melana river, Johor Bharu, Malaysia
Background and Purpose	• The Iskandar Regional Development Authority of Malaysia (IRDA) recognizes that water pollution in the Skudai river, which is the source of water in the region, is becoming more serious, and it is an urgent task to take timely and appropriate measures such as immediate guidance when water quality deteriorates. • Visualization of water pollution in rivers, examination of effective countermeasures, and efficient water quality management･improvement are necessary to be studied. • IRDA has been operating the River Management Monitoring Tool (RMMT) to contribute to these improvements, but there is a need for improvement in terms of appropriateness and efficiency. • This study aims to investigate the use of water quality sensors and system configuration to improve the RMMT and to formulate a mid-long-term action plan, with the Skudai and Melana rivers as the target river.
Related Organization	• Iskandar Regional Development Authority (IRDA), Department of Environment (DOE), University Technology Malaysia (UTM), etc.
Project Stage	• Feasibility Study
Contents and Results	<u>1 Identifying the current situation and issues in Johor Bahru and IRDA</u> • A field survey and water quality test were carried out at the target rivers. • Understanding issues of the existing RMMT and the needs of IRDA. <u>2. Feasibility study for the establishment of a monitoring system</u> • With the results in the above 1, the causes of pollution to be identified in real time was considered. Also, sensors to measure items of Malaysia's water quality standards and their installation locations were identified. • A draft outline of RMMT system was prepared, based on issues of the existing RMMT system and the needs in the area, and good practices in Japan. <u>3. Formulate an action plan</u> • An action plan showing the step-by-step implementation of the project was prepared, with a small-scale demonstration project in the next phase and a large-scale demonstration project for the entire Skudai River onward. • The cost required for this project was estimated.

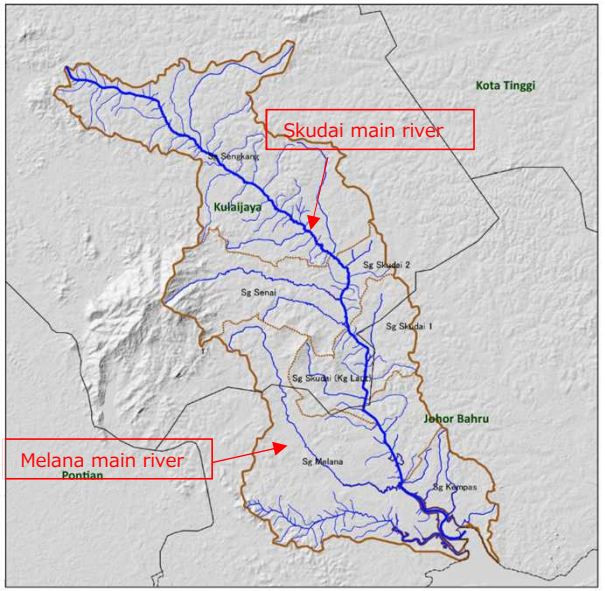

Figure1 :
Target river for this study

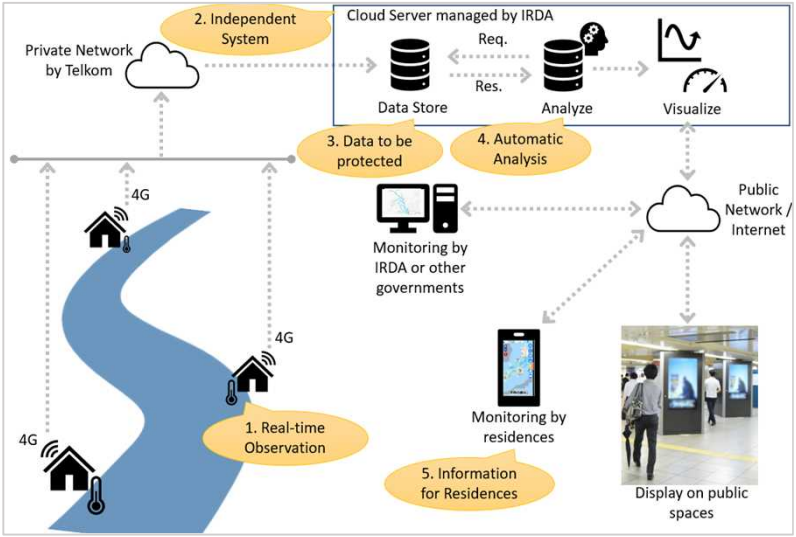

Figure2 :
Draft overall system of the RMMT

Source: The map of the target rivers is a draft as prepared based on the data by the UTM and Diva-GIS.