

## **PROPOSAL OF THE EXCEL-BASED DATA MANAGEMENT FOR THE BASIC FRAMEWORK AS RIVER MANAGEMENT**

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### **Abstract**

In Japan, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) advocated Construction Information Modeling / Management (CIM) in 2012, and started efforts to improve the productivity of construction production systems using 3d models.

However, CIM's efforts have been in many cases of utilization on the part of the contractor, which is mainly led by construction consultants and construction companies. Originally, use cases of the orderer who should be subjects are rare.

The Kyushu Regional Development Bureau (KRDB) of the MLIT focused on the points that suitable human resources and environments are necessary for utilization of the CIM. And we started efforts on the use of CIM in the river field, called River CIM. In the CIM of KRDB a basic framework in river managements was set up, and efforts to utilize it was stated such as for information sharing among stakeholders and for considering necessity of countermeasure works. The purpose of this effort is to use data by orderer to river managements by considering maximum simplification and operability of data. We proposed a model space in a previous study, and showed that it could be used for examinations by combining different data such as vector, elevation data and object.

As a continuation study, we also proposed a deployment model that places multiple existing data (plan, Embankment section, deep-shallow survey map, boring data, aerial photograph, etc.) in the correct position defined in the World Geodetic System in model space, and showed usefulness to examinations. In this paper, we focus on the basic framework in the River CIM as a method of using CIM in a maintenance management stage by orderers, and analyze and consider the data management method. Based on the results, we propose a management method using CIM in the stage.