Integration of Borehole Information Databases using Meta Data

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In the past years, a great number of underground structure surveys were conducted nationwide for various purposes. The data collected through the surveys, however, had seen limited use in comparison to its full potential, with some of them now kept in dead storage and at risk of being lost. At present, Japan does not have a comprehensive, national database of underground structures. It is therefore very important to ensure these data are not lost while also making them accessible to anyone through the construction of a database.

Since the underground structure information and geological information were acquired through surveys conducted for various purposes, these data are scattered across ministries, local governments and relevant organizations. To integrate the data and make it more usable, cooperation of these relevant entities is indispensable.

We have been developing a management system on sharing for an integrated geophysical and geological information database to support researches on earthquake disaster mitigation. The database consists of borehole information, geological data, geophysical data, and surface soil structures. Our target is to use the database on computer network. People can access the data sets on the underground database by using web browser like Internet Explorer. The management database system is based on the concept of establishing a portal site for individual agency to be responsible for its own data.

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