

Study on the use of ICT in sewerage

Year of Research

2013

Appropriate stock management

(Purpose)

In the conduct of the sewer business operations, one of the most important elements is the "visualization" of management of resources; people, asset and money.

To achieve "visualization" of information about sewer business operation by ICT, it is considered that to solve advanced and wide-ranging issues faced by sewer, that is to say, it is possible to evolve sustainable and high-quality sewerage works (Figure 1).

Based on that in this study, it is recommended that as well as give an opportunity use of ICT considering the introduction, to show possibility, effect and future vision of use of ICT in the sewer, aimed to show specific efforts toward the realization of sewer ICT society.

(Results)

In this study, the process learning (success case verification) and the feasibility study were conducted as verification of ICT introduction effect. In the process learning, the issues for the realization of ICT introduction by researching the factors that interfere with the ICT introduction (bottleneck) was organized, and in the feasibility study, the effect of introducing which was assumed the actual field was verified at a desk.

As a result, there is effect of cost savings to some extent have been shown, however, it was confirmed that there is bottleneck which were lack of knowledge and information, shortages of human resources and difficulty of introduction judgment, etc.

In order to realize the ICT introduction, it is necessary to solve the bottleneck which has been identified.

To that end, it is believed that the construction of ICT promotion platform (tentative) function (shown in Figure 2) is effective.

In addition, it was shown that to obtain a synergistic effect by utilizing the data for management is important.

Further, it is considered that to collectively manage the data of the whole country is possible, the significant analysis also enabled it is effective to built Sewer National Database (tentative).

(Conclusion)

In this study, the future vision of ICT use in sewerage and the line of policy which is specific approach to give an opportunity of considering the ICT introduction for municipality are showed.

Future, by executing this approach continuously, it is expected that the expansion of high quality and sustainable sewerage works across the country can be achieved.

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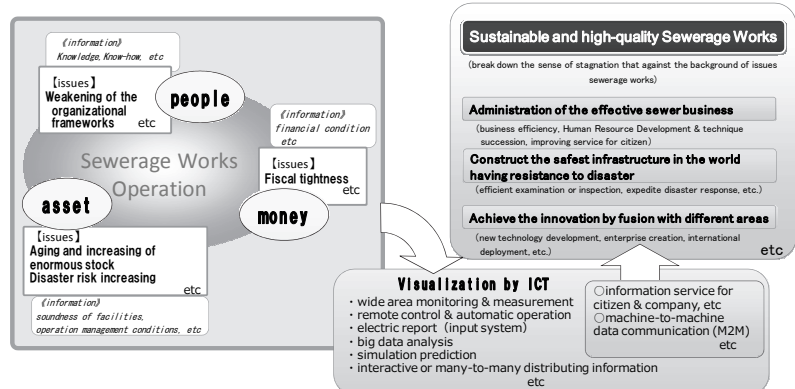


Figure 1 Location of ICT in the management of sewerage works

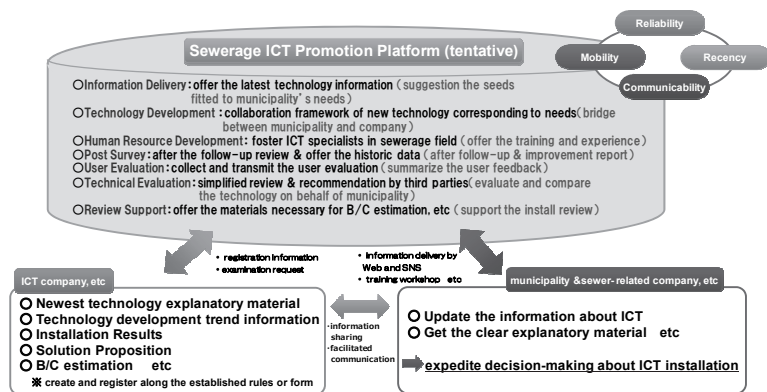


Figure 2 Overview of the Sewer ICT Promotion Platform (tentative)

Key words

ICT, Cloud, Information System