

# A study on sewerage facilities management approach by using innovative ICT

Year of Research

FY2012

Appropriate stock management

**(Purpose)**

In Japan, ICT (information and communication technology) filed has been developed as one of its key growth areas. As the result, international state-of-the-art ICT infrastructures have been built, and many innovative and high value-added ICT products and services have been produced. It is believed that taking advantage of ICT in a wide range will solve advanced and diverse issues in sewer business, and expansion of high-quality, sustainable sewer business will become possible. Considering these circumstances, the objective is to consider future and potential strategies for achieving action plans for concrete use of ICT in sewer business.

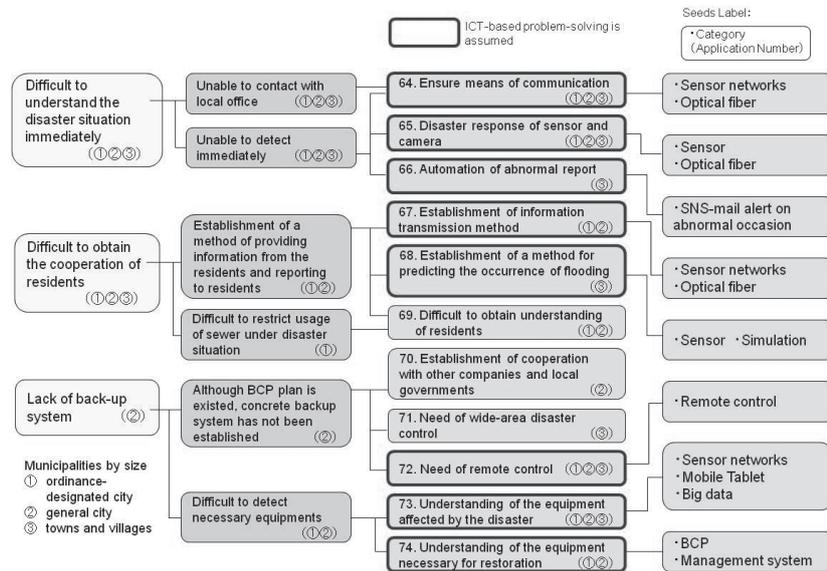
**(Methods)**

In this study, we ①identified issues of sewer business (needs), ②identified ICT (seeds), and created an image of problem-solving and matching of those needs and seeds.

The identification of ① issues of sewer business (needs) was carried out by digging out opinions of issues, demands, future outlook, required services, etc., by holding a workshop for local officials involved in sewer management. More than 50 issues in 8 segments were identified, and then we organized trends of the issues adapting to the scales of each ordinance-designated cities, general cities, towns and villages.

The identification of ② ICT (seeds) was carried out by organizing public comments recruited by the Ministry of Land, Infrastructure and Transport Website. Then, we summarized about 80 comments that ICT has been presented into 23 technical fields.

Then, the matching was performed for ICT which can be a means of solving issues identified in ① (figure 1).



**Figure 1 example of matching problems and ICT**  
(issue segment : Disaster response)

**(Conclusions)**

ICT seeds identified by this study were in a wide variety of which can be deployed immediately, which can be commercialized in five years, which future development is expected, and It is required to develop those seeds into solutions to be hit in practice. In the future, it is important to set the priority considering the effects of the introduction, ease of implementation and practical application, and put in practice that can be commercialized immediately among them. By brushing up while implementation, it is expected to avoid the situation that technology become obsolete by other technology development preceded while holding back the introduction. Furthermore, it is effective to examine success stories from the seeds that have already been implemented as process learning.

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Key words

ICT, cloud, information systems