

# Study on the effective asset management in prospect of sustainable sewage works

Whole term

2005.7 ~ 2006.3

**(Purpose)**

With the enormous investment in sewerage facilities which have been continued so far, the issues of the increase in the facilities requiring rehabilitation and reconstruction are getting focused on. Meanwhile financing conditions are extremely sever and so-called the problem of the year 2007, which means the big amount of retirement of skillful professionals of the baby boomers, is supposed to shadow the sewage works also. Thus, the circumstances around sewage works seem very unfavorable in future. It is recognized crucial to supply sewerage services by utilizing the sewerage facilities with great efficiency and transparency, applying asset management methods to sewerage. This study aims for the analysis of characteristics of sewage works from the viewpoint of asset management, operation/maintenance work analysis for example, in order to establish the basic guide for systematic management of sewerage asset.

**(Result)**

Figure 1 shows the flows of duties in operation/maintenance of sewerage and the issues to discuss in each process. In the transition to the processes of investigation/diagnosis, designing, construction or recording, the judgment should be made based on the examination of the necessity or propriety. The point in this judgment is that “who” explains it “how intelligibly” on the basis of “what kind of standard”. “What kind of standard” means the service level to be maintained in sewerage works in other words and explaining “how intelligibly” is needed to fulfill the duty of “accountability”. Notice should be taken of the fact that the final inappropriate judgment of taking no countermeasures could bring the increase in potential risk. Since the sewerage functions as a complex system, the determination of the service level and the appraisal of the potential risk are difficult and performing the duty of accountability is not easy, either. Establishing this flow network substantially is important for sewerage works to supply intelligible services to all users and to let users understand the significance of sewerage works. Considering that the sewerage works should transit to a new phase of applying the concept of asset management from the present phase of prioritizing facility construction, this study aims for the sewerage works where the public involvement activities would be conducted to let inhabitants and other stakeholders understand characteristics and contents of sewerage services and to manage the facilities with sustainability obtaining necessary funding.

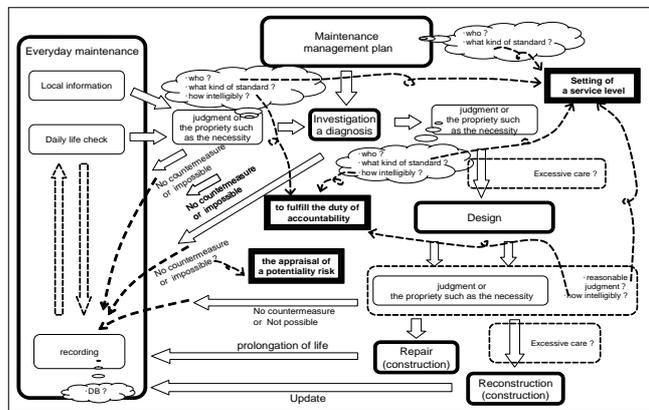


Figure-1 The flows of duties in maintenance of sewerage and the issues to discuss in each process

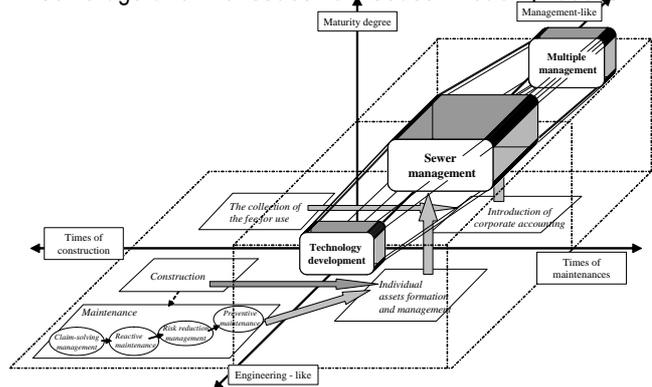


Figure-2 Image of sewerage asset management

**(Future Plans)**

Researches will be conducted on the “assessment of potential risk” and the “determination of service level” in order to accomplish the sustainable management of sewerage.

Investigation under the responsibility of the Ministry of Land, Infrastructure and Transport.

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key words

aset-management, potential risk, service-level, accountability