

Tokyo Waterworks PPP for Customer Services - Effectiveness and Future outlook -

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Abstract

To respond appropriately to changes in the water supply environment and deal correctly with new problems that emerge from time to time, cooperation between the public and private sectors needs to be promoted to accomplish the common purpose of improving management efficiency considering the characteristics of water utility and suitable organizational management. In 2007, the Bureau of Waterworks, Tokyo Metropolitan Government established partnerships with two companies owned by the Tokyo metropolitan government, and started concerted efforts with them in waterworks management. This paper gives an overview of this waterworks management framework from the standpoint of Public Utility Services Center Co., Ltd., one of the two partner companies, summarizes the benefits of the business operation framework, and clarifies the future vision.

Keywords

Customer service; management; public private partnership

BACKGROUND

Most waterworks utilities in Japan are owned and managed by public sectors. As the local water suppliers, local governments have stably managed the water supply so far. However, this waterworks management framework is now reaching a turning point. For one thing, baby boomers have begun to retire, with the number of retirements peaking in 2007. Japanese waterworks utilities are faced with the issue of large numbers of skilled waterworks engineers retiring at the same time. Consequently, a major challenge of the waterworks utilities is the employment and development of new staff to inherit the skills and know-how of the engineers.

The waterworks utilities are also suffering from stagnating water charge revenues due to Japan's economic doldrums and mature markets. Meanwhile, their water purification plants, distribution pipes, and other waterworks facilities, most of which were constructed during the high economic growth era of the 1960s, require costly repairs or reconstruction.

To sustain water supply into the future under these circumstances, many water works utilities have to improve management efficiency by establishing partnerships with private-sector companies. Therefore, the Tokyo metropolitan Waterworks Bureau (the Tokyo waterworks, TMWB) and many other Japanese utilities are seeking a new

management style based on a partnership with a private-sector company. In other words, local governments plan to focus themselves on core operations such as planning and finance, by leveraging the strengths of private-sector companies in waterworks operations.

NEW MANAGEMENT STYLE FOR THE TOKYO WATERWORKS

The Tokyo metropolitan Waterworks Bureau is one of the largest waterworks utilities in the world. It supplies drinking water to 13 million residents and fulfills the water requirements for a great deal of urban activities in the nation's capital, Tokyo. Since 1989 when it began as a modern waterworks utility, it has continuously supported the life and urban activities of Tokyo's citizens.

As of late, however, even the Tokyo waterworks recognizes the unavoidable need for improvement in management efficiency and reform of the operational framework. The retirement of many skilled engineers, which reached a peak in 2007, has made it difficult to maintain the level of skills acquired over many years in the customer service and technical departments of the Bureau of Waterworks.

Another challenge comes from decrepit facilities. In Tokyo, waterworks facilities were quickly constructed in the 1960s to fulfill rapidly increasing demand for water when Japan enjoyed high economic growth. These facilities have become older. After another 10 to 20 years, most of the water purification plants and water pipe networks will need repairs or reconstruction, requiring massive expenditures according to estimates.

In addition, the more diverse and greater needs of citizens are leading to demand for a higher standard of water supply service too. To sustain a stable water service in Japan's capital, Tokyo, into the future in this environment, the Bureau of Waterworks has no choice but to promote collaboration with private-sector companies.

To overcome these difficulties, the Tokyo waterworks developed *Management Plan 2007* and thoroughly reformed its management framework.

TOKYO WATERWORKS PPP

Three-tier management framework

The Tokyo waterworks, as a service managed by the local government, must always continue to work hard in management and promote novel management innovations in order to gain and retain the trust of Tokyo's citizens. In one approach to accomplishing this purpose, the Tokyo waterworks decided to utilize quasi-public companies. The Tokyo metropolitan government invested to set up two affiliated companies to provide services in both customer service and technical areas. Important waterworks operations were entrusted to these two companies.

As a lifeline service supporting residents' lives, waterworks are expected to always provide safe and stable services. For this reason, the waterworks utility must pursue

both public welfare and efficiency, which was considered in the decision for a new management framework. In this management framework, business planning, finance, tariff setting, and other policy decisions are made directly by the Tokyo waterworks. Sub-core operations are performed by two companies, Public Utility Services Center Co., Ltd. (PUC) and Tokyo Suido Services Co., Ltd. (TSS). Meter reading, construction of water pipes, and other such tasks are outsourced to 100% privately held companies to be done in the same way as before. The most remarkable feature of the framework lies in the three-tier structure: the Tokyo waterworks handles core tasks, the two Tokyo Waterworks partner companies handle sub-core tasks, and private-sector companies handle simple routine tasks.

Now, as a result, the Tokyo waterworks can focus management resources in the planning and administration and outsource the work done in other works. For the sub-core tasks, PUC is in charge of customer services, and TSS is in charge of operations at purification plants and acceptance of service pipe construction. The framework successfully established by the Tokyo waterworks enables the pursuit of efficiency while remaining open with the public, thereby fulfilling the responsibility for continuing a stable supply of water to people in Tokyo in the present and future.

Figure 1

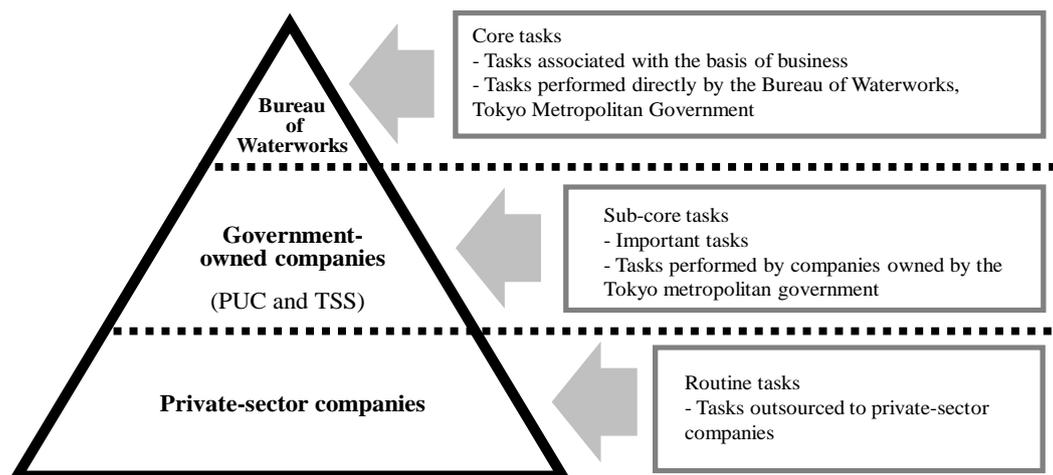


Table 1

	Performed by		Nature of tasks	Examples of tasks
Core tasks	Bureau of Waterworks, Tokyo Metropolitan Government		Tasks associated with basis of waterworks governance	Planning, budgeting, water quality control, and water service over a large area
Sub-core tasks	Companies owned by Tokyo metropolitan government	PUC TSS	Important tasks for waterworks operations	Comprehensive customer services and supervision of private-sector companies Facility operation and maintenance, and acceptance of requests for water service pipe construction
Routine tasks	Private-sector companies		Simple tasks that can be outsourced to private-sector companies	Meter reading, facility and pipe construction, etc

PUC's role in Tokyo Waterworks PPP

PUC was established in 1960 as an incorporated foundation of the Tokyo waterworks. As a group company of the Tokyo waterworks, PUC has been engaged mainly in the development and operation of the system for calculating water bills. For more than 40 years after being established, PUC has been an affiliated company of the Bureau of Waterworks, Tokyo Metropolitan Government and playing an important role in the charge calculation service such as by developing and running the system for calculating water charges, issuing water bills, and managing customer information.

The Tokyo waterworks acquired a 56% stake in PUC in 2006, resulting in PUC becoming a government-owned company. Prior to this acquisition, in 2005, PUC began to undertake comprehensive customer service in waterworks, including operation and management of call centers and service stations, in addition to the conventional charge calculation service. Today, PUC is capitalized at 100 million yen, with annual sales of about 11 billion yen. It has about 390 employees. PUC currently operates and manages two call centers in Tokyo and twelve service stations in the Tama area of western Tokyo. PUC also began to operate a service station in central Tokyo in August this year. In this way, PUC has solidified its position as a group company of the Tokyo waterworks.

Customer service is an important part of waterworks operations, providing face-to-face support to customers. In efficiently operating the call centers and service stations, PUC takes advantage of its waterworks-related experience and know-how accumulated from its charge collection businesses. PUC plans to provide high-quality services more effectively by combining the continuing charge calculation service and new customer service operations to create synergistic effects.

BENEFITS

There are three benefits to entrusting work to PUC operating as a company owned by the Tokyo metropolitan government.

More efficient operations

When the Tokyo waterworks actually did the work directly, the flexibility to change staffing plans according to seasonal fluctuations, changes in demand, etc. was an issue. This was because the Tokyo waterworks, as a public-sector organization, had to observe strict rules on staffing numbers and labor union agreements, resulting in restricted operational flexibility. In contrast, PUC as a private-sector company has the flexibility in business operations to be able to focus on the necessary areas and streamline staffing for waterworks operations taken over from the Bureau of Waterworks. For example, the Tokyo waterworks operated 22 service stations in central Tokyo and 26 service stations in the Tama area to receive calls from customers when it was directly involved in customer service. After PUC assumed responsibility, it consolidated customer contact bases into two call centers. In addition, the number of service stations in the Tama area was cut from a total of 26, one in each municipality, to 12. These consolidation and streamlining efforts led to significant cost reductions, cutting annual costs by about four billion yen only in the Tama area of Tokyo where PUC started operating.

Service improvements

Customer's needs to waterworks have changed recently because of demographic changes, changes in family structures, and more diverse lifestyles. Current water supply services need to be reviewed in order to provide services matching what Tokyo's citizens actually need and to improve customer satisfaction.

PUC can provide high-quality services efficiently with its accumulated technologies and years of experience as an IT company. Examples of these services include a one-stop service where customers send all their requests to one place, a 24-hour call center, and acceptance of service requests via the Internet. PUC as a private-sector company has professional telephone operators answering customers' calls with a customer-first attitude, which has drastically changed citizens' image of water supply services. The call centers maintain the call response rate at 90% or higher.

Stability and reliability maintained

In Japan, public organizations have run waterworks operations for a long time because they handle water, which is essential for their residents to live. Many Japanese citizens prefer that water supply services be provided by the public sector. Outside Japan, there have been examples of problems with the outsourcing of waterworks operations to private-sector companies: for example, service degradation, soaring water charges, and water supply service disruptions due to a business impasse or withdrawal from business.

To fulfill citizens' demand for stable and reliable water supply services, the services are not outsourced to 100% privately held companies but outsourced to companies in which the government is the investor, which guarantees stability and gives people a sense of security. The Bureau of Waterworks, Tokyo Metropolitan Government has declared it assumes administrative responsibility for supervising the management of the partner companies.

With the business under the control of the public sector, which is the investor, not only can business risk be avoided but also management stability can be ensured. In addition, since operations are entrusted to partner companies, technologies and expertise can be transferred smoothly to them from the Bureau of Waterworks, Tokyo Metropolitan Government, leading to the added benefit of business continuity.

Thus, efficient management and stable business operations have been achieved through the establishment of long-term partnerships with group companies.

OUTLOOK FOR THE FUTURE

Although the new management framework based on Tokyo Waterworks PPP has just entered into operation, its service scale will be expanding further. Obviously, PUC is steadily preparing for this expansion. At the same time, as part of its future plans, PUC wants to further contribute to water supply development in Tokyo and the rest of Japan by taking advantage of its own particular abilities, moving beyond its current role as a mere substitute for water service agents. PUC is going to be able to contribute in the following areas.

Integrated information management

Water supply is an information management business too. Water supply services handle a huge amount of information, including not only customer and water charge information but also meter readings and customer remarks. The accumulation and combination of this variety of information will help provide more fine-grained services and proposals appropriate for further improvement of business efficiency.

PUC will make full use of its business know-how and IT expertise accumulated so far to make proposals aiming to improve business processes and customer services. For example, after collecting and analyzing customer comments, PUC can use the results to improve service quality and propose new services and streamlined business procedures. The analysis results of records of accepted calls and their answers at the call centers will also help improve the efficiency and quality of public relations and business procedures. By aggressively striving to streamline and develop business, PUC can contribute to providing better water supply services.

Support for developing countries

The Tokyo waterworks is currently engaged in water supply support activities in developing countries in Asia and elsewhere. A major problem in developing countries is

non-revenue water. The worst non-revenue water rate in these countries exceeds 50%. The causes include not only actual water leakage but also charge collection-related issues such as a lack of meters and sloppy customer management and billing. The Tokyo waterworks has a charge collection rate of 99.9% for two reasons. One reason is a system that can accurately measure water consumption and issue water bills. The other reason is the direct action and communication with water users, such as to urge customers in arrears to pay their bills or to stop water supply to customers.

The reliable customer management technology and accurate billing and charge collection know-how owned by PUC are important technologies. By transferring these technologies and know-how outside of Japan as a group company of the Tokyo waterworks, PUC can contribute to water supply development in Asia.

FOR DEVELOPMENT OF WATER UTILITIES

Japanese waterworks management today faces various challenges, such as infrastructure maintenance, financial reform, and securing human resources. There is no overarching solution. However, we believe the management innovations introduced by the Tokyo waterworks as described in this paper can be a model for organizations seeking solutions to similar problems. Hopefully, the business operation methods established, maintained, and improved by the Tokyo metropolitan government together with PUC and TSS will be used as a reference by other Japanese waterworks utilities to accelerate their practical management innovations. We want a rebirth of the water utility in Japan, with water suppliers able to provide higher-quality services more efficiently.

References

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