

Introduction of “Comprehensive BPO Services ‘Water Supply Operations and Facility Expansion Work, etc.’” for East Gunma Water Supply Authority

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Keywords Waterworks, Comprehensive BPO services, Public-private partnership, PPP, DBO, Third-party outsourcing, Facility operation, Water purification, Water pipe, Water supply devices, Water bill collection, Clerical work management, Wide-area integration, Aged facility, Facility renovation/renewal

Abstract

The water utility services for three cities and five towns in the eastern area of Gunma Prefecture (Ota City, Tatebayashi City, Midori City, Itakura Town, Meiwa Town, Chiyoda Town, Oizumi Town, and Oura Town) were integrated and the business project of East Gunma Water Supply Authority (EGWSA) started its operation in April 2016. The water supply service covers about 450,000 people and the daily maximum water supply rate is approximately 200,000m³/d. The annual business income is about 10 billion yen.

As a member of the consortium of four private-sector firms, the “Consortium” we bid for a Business Process Outsourcing (BPO) Contractor Selection for “Comprehensive BPO Services ‘Water Supply Operations and Facility Expansion Works, etc.’” and were selected as the BPO Contractor. The purpose of this bid was to provide sustainable water utility operations for a wider area water supply.

As a Public-Private Joint Venture company (“a PP JV company”) with EGWSA, we established Gunma Tobu Water Supply Services Co., Ltd. (“GTSS”). This company utilizes the private sector firms engineering resources and expertise to secure public interest. With such a framework (scheme) for business, this company started its operations in April 2017 and we helped this leading-edge public private partnership initiative.

1 Preface

We actively promoted Business Process Outsourcing (BPO) services for water processing facilities. We view such plants as our focused target to exercise our lifecycle engineering. After the amendment of the Waterworks Act in Japan in 2002, we worked hard to deploy our BPO services across Japan. By working closely with the water utility-related service providers through our business alliance, we gained the experiences of comprehensive outsourcing services for water utility operations including water bill collection, facility management of water pipes, and management of water supply devices.

Recently, the water utility services for three cities and five towns in the eastern area of Gunma

Prefecture (Ota City, Tatebayashi City, Midori City, Itakura Town, Meiwa Town, Chiyoda Town, Oizumi Town, and Oura Town) newly established East Gunma Water Supply Authority (EGWSA) through integration. Through BPO Contractor Selection Bidding, EGWSA selected a consortium headed by our company as the BPO contractor. The consortium then established a Public-Private Joint Venture company (“PP JV company”) with EGWSA, called Gunma Tobu Water Supply Services Co., Ltd. (“GTSS”). It started a “Comprehensive Outsourcing Service (Water Supply Operations and Facility Expansion Works, etc.)” in April, 2017. This paper introduces the background and history for this advanced Public-Private Partnership (PPP) business.

2 Background

The business conditions surrounding water utilities across Japan are increasingly more challenging every year. There are now many issues such as the “decrease of water-supplying population, water supply volume, and water utility income,” “rising needs to renew aged water processing facilities,” “increasing risk of source water quality deterioration,” “deterioration of utility service quality by the decrease of water utility personnel,” and “needs for the readiness for Business Continuity Plan (BCP) after the Great East Japan Earthquake in 2011.”

In order to solve the above issues, the Ministry of Health, Labour and Welfare in Japan drew up a new vision of waterworks and announced it in March, 2013 (see Fig. 1). This vision is based on “Safety,” “Resilience,” and “Sustainability.” It defines the ideal state “to realize water utility operations that can continually supply safe quality water by using earthquake-resistant facilities.”

In order to realize such an ideal state, we must manage the water utility business adapted to the times and the environment by securing safe quality water and earthquake-resistant facilities. In addition, it is necessary to secure qualitative and quantitative human resources who are responsible for operation under the circumstances of decreasing water utility personnel, and the aging of these indi-

viduals. The renewal of facilities must be done based on the long-term vision and according to the established plan. Further, in order to secure sufficient funding, we have to set up an appropriate water bill rate considering the declining water supplying population and declining water supply volume. Efficient business operation and optimized scale of water supply facilities are needed.

Against the above background, the most urgently required actions to address these issues are, a wide-area water supply service by working with other water utilities, public-private partnership, introduction of asset management, and appropriate pricing of water bill rates.

This paper introduces the “Comprehensive BPO Services ‘Water Supply Operations and Facility Expansion Work, etc.’” for EGWSA.

Such outsourcing is an example of a solution applying the measures of a wider area water supply service and a public-private partnership initiative.

3 Introduction of EGWSA

3.1 Outline of Water Supply Service Business

Fig. 2 shows the member local governments of EGWSA and their locations in a graph. The water supply service area of EGWSA is for the east side of Gunma Prefecture. The main area is placed between the Watarase River and the Tone River. The area is near Tochigi and Saitama Prefecture. In Fiscal 2012, a study group for expanding the water supply service area for East Gunma was established and the group decided a framework for the integration of water supply service areas covering three cities and five towns. This wider area water supply service was started in Fiscal 2016. The scale of this water supply service is supplying water to a population of about 450,000 people, daily maximum water supply volume of approximately 200,000m³/d, and a business income of about 10 billion yen/year. This water supply service scale is the biggest in Gunma Prefecture.

3.2 Outline of Key Facilities

As an integration of water supply services, EGWSA was established. At that time, however, EGWSA had 20 drinking water treatment plants and total length of 3056km of water pipes and conduits, and the consolidation of key facilities to rebuild for wider water supply service was not attempted.

The big challenge then was to introduce effi-

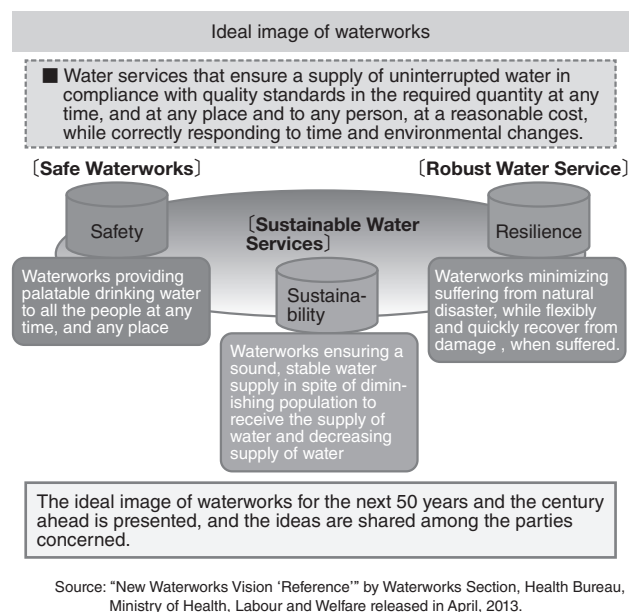


Fig. 1 New Vision of Waterworks (Ideal Image of Waterworks)

An ideal image of waterworks is explained with the three key words of “Safety,” “Resilience,” and “Sustainability.”

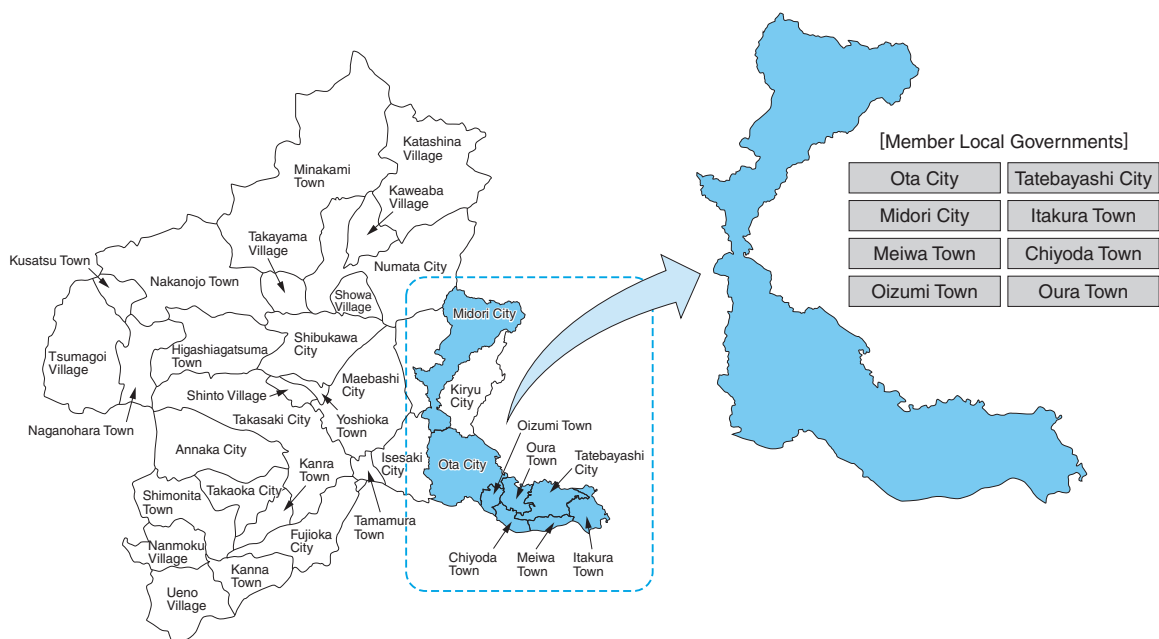


Fig. 2 Member Local Governments of EGWSA and their Locations in Graph

EGWSA was formed by integrating the water supply service utilities of three cities and five towns in the east area of Gunma Prefecture.

Table 1 Situation of Drinking Water Treatment Facilities Just before the Starting Wider Area Water Supply Service

As a result of parallel integration of water supply services covering three cities and five towns, EGWSA had 20 Drinking Water Treatment Plants (DWTPs) in operation.

Member local government	Name of DWTP	No. of operating facilities
Ota City	Watarase DWTP	2
	Tone DWTP	
Tatebayashi City	DWTP 1 (already abolished)	2
	DWTP 2	
	DWTP 3	
Midori City	Shiobara DWTP	1
Itakura Town	Kita DWTP	4
	Iwata DWTP	
	Higashi DWTP	
	Minami DWTP	
Meiwa Town	Owa DWTP	3
	Minami Oshima DWTP	
	Kami Eguro DWTP	
	Umehara DWTP (already abolished)	
Chiyoda Town	DWTP 1	4
	DWTP 3	
	DWTP 4	
	DWTP 5	
Oizumi Town	DWTP 1	2
	DWTP 2	
Oura Town	Nakano DWTP	2
	DWTP 3	
Total		20

Table 2 Situation of Water Pipe Facilities Just before Starting Wider Area Water Supply Service

EGWSA has water pipe facilities with a total length of more than 3000km.

Member local government	Total length of water pipes and conduit tubes (m)
Ota City	1,437,954
Tatebayashi City	552,110
Midori City	297,663
Itakura Town	163,490
Meiwa Town	81,182
Chiyoda Town	141,057
Oizumi Town	199,342
Oura Town	182,772
Total	3,055,570

cient asset management considering the life-cycle and make the facility renovation/scraping based on the long-term plan.

Table 1 shows drinking water treatment facilities just before beginning the wider area water supply service and **Table 2** shows water pipe facilities.

The Enterprise Bureau (Water Supply Service) of Gunma Prefecture currently operates two drinking water treatment plants (for Nitta-Yamada Area Water Supply and for East Area Water Supply). These two drinking water treatment plants don't supply the purified water to other water supply utilities except for EGWSA management area. Since

there is no conflict of interest with other water supply utilities, the Enterprise Bureau and EGWSA are currently discussing the possibility of asset transfer of such water processing plants to EGWSA in the future.

4 Events Leading to “Comprehensive BPO Services ‘Water Supply Operations and Facility Expansion Works, etc.’”

4.1 Most Progressive Cases of Public-Private Partnership Initiatives in the Past

Due to the amendment of Waterworks Act in 2002, the related third party outsourcing services were legislated. Ota City, a member local government body of EGWSA started to use the outsourcing service by the third party. The outsourced work is the operation and management of its drinking water treatment plant. Our company was the BPO Contractor. This was the first such water supply – related BPO Service in Japan. After that, Tatebayashi City also started to use the outsourcing service by the third party in Fiscal 2008. Our company was the BPO Contractor.

Since Fiscal 2007, in addition to the outsourcing of the operation and management of the drinking water treatment plant, Ota City entered a comprehensive BPO service contract which includes maintenance and management of water pipe facilities, water supply devices-related services, water bill collection, and clerical jobs management of water supply service. At that time, we worked closely with a water bill collection service company and a water pipe construction company. We established a new joint venture company called “Advanced Business Service Co., Ltd.” (“ABS” hereafter). ABS realized comprehensive management on the water supply service from raw water intake to water supply at the faucets, and a water bill collection service.

Ota City limited the jobs by comprehensive BPO services on water supply to the area covered by operating income and expenditure (for water treatment and supply operations – a.k.a. “Article 3 Budget”). Since Fiscal 2012, however, the outsourced jobs were extended to the area partly covered by capital income and expenditure (income and expenditure for waterworks facility renovation/renewal – a.k.a. “Article 4 Budget”). As the latter case and as a typical example of facility improvement conducted by our company, we show here an



Fig. 3 Ultraviolet Ray Treatment Facility at the Watarase Drinking Water Treatment Plant

A cryptosporidium treatment facility is shown, introduced by the DBO Contract. This is a part of BPO Service Contract which includes the jobs defined in the category of Article 4 (waterworks facilities renovation/renewal)

introduction of ultraviolet rays processing equipment for Watarase Drinking Water Treatment Plant. This is a measure against cryptosporidium which is a microscopic parasite that causes the diarrheal disease. **Fig. 3** shows an external appearance of the ultraviolet ray treatment facility.

As mentioned above, the water supply service at East Gunma Area underwent many cases of public-private partnership initiatives for a long time. The terms of accepting the comprehensive BPO service has been nurtured over the years as instilling trust takes a long and gradual process.

4.2 Events Leading to BPO Contractor Bidding

In February 2016, “Implementing Policies for Comprehensive BPO Services ‘Water Supply Operations and Facility Expansion Works, etc.’ for East Gunma Water Supply Authority” was announced and it showed that EGWSA would make a new PP JV company with three basic policies of the business.

Table 3 shows Business Policies of a PP JV company. It also shows the specific six BPO service businesses. At that time, six target business brackets were defined. **Table 4** shows a list of service

Table 3 Business Policies of a PP JV Company

The three essential policies of PP JV company are shown, proposed by EGWSA to PP JV company.

Contents
By working closely with EGWSA, we contribute by solving issues relating to water supply services in the East Gunma Region and help the progress of the regional economy.
We will make effective service operations by drawing on the private sector technologies and expertise while securing public interest of water supply service to promote public well-being.
We aim to demonstrate the scale merit through the progress of wider area water supply services under unified management. This will be through the BPO service of water supply connecting the nearby regions beyond the boundary of the administrative districts.

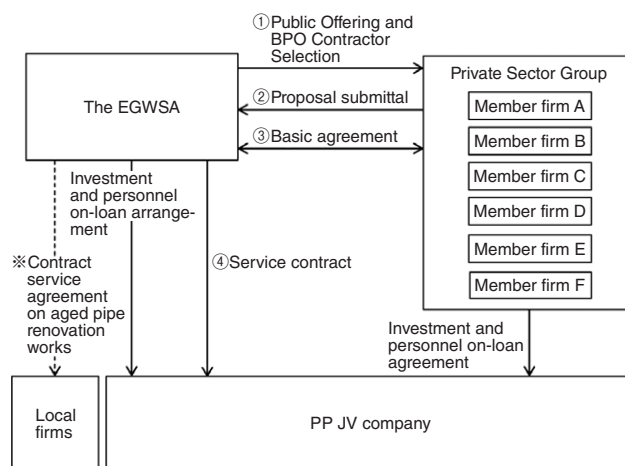
Table 4 List of Service Business Specified in the Implementing Policies

“① Comprehensive BPO Service Jobs (Facility Management and Water Supply Service Management Support, etc.)” include the jobs relating to the Article 3 Business.

No.	Name of business
①	Comprehensive BPO Service Jobs (Facility Management and Water Supply Service Management Support, etc.)
②	Facility renovation/scraping to rebuild the facilities for wider area service
③	Water pipe facility renovation/scraping to rebuild the facilities for wider area service
④	Facility renovation/renewal to the aged existing facilities
⑤	BPO Service to renovate the aged existing water supply pipe facilities
⑥	BPO Service to other water supply-related services

business specified in the implementing policies. In ①, conventional outsourcing service jobs (under Article 3 Budget) are specified. In ② to ⑥, these service businesses are classified into construction works and outsourcing service jobs under the Article 4 Budget. Compared with the conventional outsourcing service, works and services listed in ② through ⑥ are quite different in scale and nature. In the implementing policies, EGWSA invited opinions from the companies who were planning to join the BPO Contractor bidding. In response to this request, our company submitted some opinions reflecting the views of supplier. Such opinions were later officially disclosed in the public announcement document.

The following next year in April, 2016, the tender invitation guideline for BPO Contractor was formerly announced. Fig. 4 shows a diagram of how to form a joint venture as specified in the tender invitation guidelines. In the functionality of each business entities, the main duties as water supply service operator shall rest on EGWSA and the jobs relating to the ownership of the drinking water treat-



※ Aged pipe renewal work is not included in the service contract with PP JV company. As the conventional practice at EGWSA, such work orders will be made directly to local firms from EGWSA.

Source: Guidelines for Tender Invitation on Comprehensive BPO Service (Water Supply Service Operations and Facilities Expansion Works, etc.) by EGWSA on April 2016

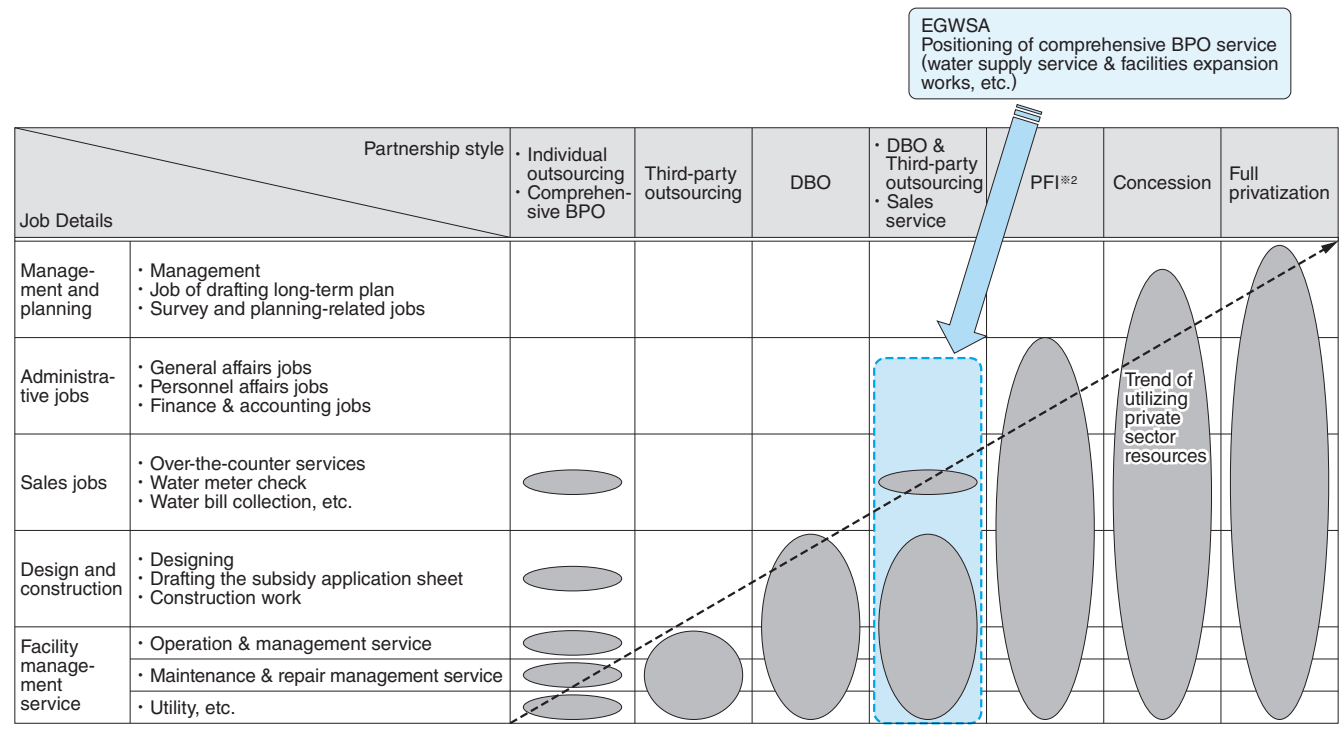
Fig. 4 Diagram of How to form a Joint Venture as Specified in the Tender Invitation Guidelines

A PP JV company is established and the company conducts BPO services (water supply service operations and the waterworks facility expansion works, etc.)

ment plants and water supply facilities shall be conducted by EGWSA. Meanwhile, EGWSA was planning to outsource the other jobs relating to the water supply services and the waterworks facilities renovation or renewal works to a PP JV company. The comprehensive BPO contract is for the business duration of eight (8) years. In this connection, unlike the concession system^{*1}, water bills are collected by EGWSA by the PP JV company on behalf of EGWSA and finally, the income will be documented by EGWSA. The costs relating to the water supply service management and the waterworks facilities renovation and renewal works will be paid by EGWSA to the PP JV company as outsourcing service fees and the operating expenses for the facility renovation and renewal. According to Article 24-3 of the Waterworks Act, such act of outsourcing can be categorized as the third party BPO with the bestowed technical duties and the powers for waterworks management. Fig. 5 shows the level of public-private partnership initiative for Comprehensive BPO Services (Water Supply Operations and Facility Expansion Works, etc.).

4.3 Schedules for BPO Contractor Selection, etc.

Table 5 shows schedules for BPO contractor selection, etc. For the schedules relating to BPO



Source: "Guidelines to Public-Private Partnership in Waterworks 'March 2014' 'Partially added in December, 2016'" by Waterworks Section, Health Bureau, Ministry of Health, Labour and Welfare. (<http://www.mhlw.go.jp/topics/bukyoku/kenkou/suido/houkoku/suidou/140328-1.html>) We drafted the above graphics based on this link.

Fig. 5 Level of PPP Initiative for Comprehensive BPO Service (Water Supply Operations and Facility Expansion Works, etc.)

This time BPO Service is the PPP implementation level which includes the scope of facility management service, design, construction and sales and marketing work, management and administration service (not including the personnel affairs).

Table 5 Schedules for BPO Contractor Selection, etc.

Schedules specified in the tender invitation guidelines were so tight that selection of BPO Contractor, establishment of a PP JV company, signing of service contract, and jobs taking over from EGWSA were actions needed to be complete within one year.

Schedule	Implementation items	Schedule	Implementation items
April 21, 2016	Public notice of tender invitation (invitation guidelines, documents showing the requirement level, basic agreement draft and agreements relating to the establishment of a PP JV company (draft), service contract (draft), bid proposal evaluation standard, guideline for bid proposal drafting)	August 25, 2016	Deadline on the acceptance of proposal
April 28, 2016	Briefing for tender invitation	First 10 days of October, 2016	Presentation and Q & A (hearing) session
May 9~20, 2016	Period for tender document browsing and the waterworks facilities inspection	Last 10 days of October, 2016	Notice of result of evaluation
May 9~20, 2016	Acceptance of questions	Last 10 days of November, 2016	Conclusion of basic agreement and agreements relating to a PP JV company
June 10, 2016	Providing Answers to questions	Last 10 days of November to middle 10 days of December, 2016	Negotiation on contract terms and conditions
July 25, 2016	Notice of joining the bid and acceptance of documents relating to the eligibility of bidder	Last 10 days of December, 2016	Establishment of a PP JV company
July 25, 2016	Deadline of notice of declining the bid	January, 2017	Signing of a BPO service contract
August 3, 2016	Notice on evaluation result on the eligibility of the tender application	January~March, 2017	Taking-over of the jobs from EGWSA

contractor selection, etc. specified in the bidding invitation guidelines, we organized a special project team to meet the requirements of the bid. It was a long stretch of activities which lasted for six months from the public announcement of the invitation for BPO Contractor (April, 2016) to the announcement

of the evaluation result (October, 2016). Following, it was challenging to cope with various necessary procedures such as conclusion of agreements, establishment of a PP JV company, contract negotiations and conclusion of BPO contract. It was a difficult process.

Table 6 Scope of Work among the Consortium Members

The scope of work at our Group was defined. A consortium was organized by 4 parties.

Classification	Third-party outsourcing	Name of jobs	Scope of work among 4 member firms			
			MEIDEN	ABS	GCCJS	Kubota
Article 3 Budget	Applicable	Facility Management service of drinking water treatment plants and related facilities	○			
	Applicable	Pipe facilities management service		○		
	Applicable	Water supply devices-related services		○		
	—	Water bill collection service			○	
	—	Clerical service management on water supply service		○		
Article 4 Budget	—	Water treatment facility renovation/scraping works to rebuild the facilities for wider area service	○			
	—	Pipe facilities renovation/renewal to rebuild the facilities for wider area service				○
	—	Existing aged facilities renovation/renewal works	○			
	—	BPO service on existing aged pipe facilities renovation/renewal works				○
	—	Other related outsourcing service for water supply service				○

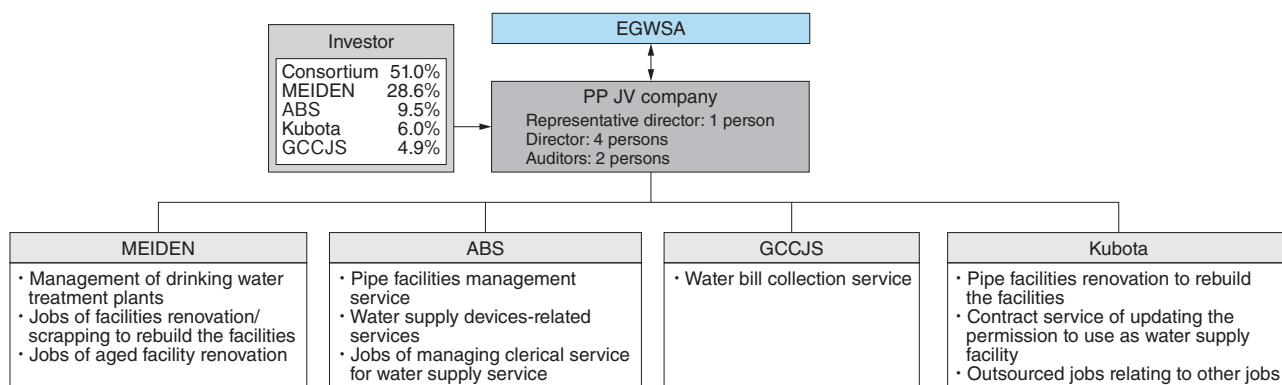


Fig. 6 Scheme of Business Proposed by Our Group

In anticipation of the establishment of a PP JV company, we proposed an above business scheme.

5 Our Consortium Group on the BPO Contractor Selection Process

5.1 Consortium Structure

In meeting the request for the bid proposal by EGWSA for BPO Contractor Selection, we organized a consortium (“Consortium” or “our Group”) with other three organizations: ABS, GCC JICHITAI SERVICE (“GCCJS” hereafter), and KUBOTA Corporation (“Kubota” hereafter). We became the leading (representative) member of this consortium. **Table 6** shows the scope of works among the Consortium members.

5.2 Contents of Proposal from Our Group

(1) Business scheme and organization of a PP JV company

The scheme of business proposed by our

Group is shown (see **Fig. 6**). This scheme was proposed in anticipation of the establishment of a PP JV company. In building the organization at the PP JV company, we first worked on the selection of key general managers of Business Units (BUs) and built the organizations. Although we made the organization as a simple one, it shows that the organization allows the realization of governance and compliance-driven operations. **Fig. 7** shows the implementation structure of the PP JV company.

(2) Implementing policy for the BPO Service on waterworks facilities management and water supply service management supports, etc.

(a) Jobs of managing drinking water treatment plants and other related facilities.

This is the operation and maintenance service which Meiden Group has been offering. Under the proposed business scheme, we will work on

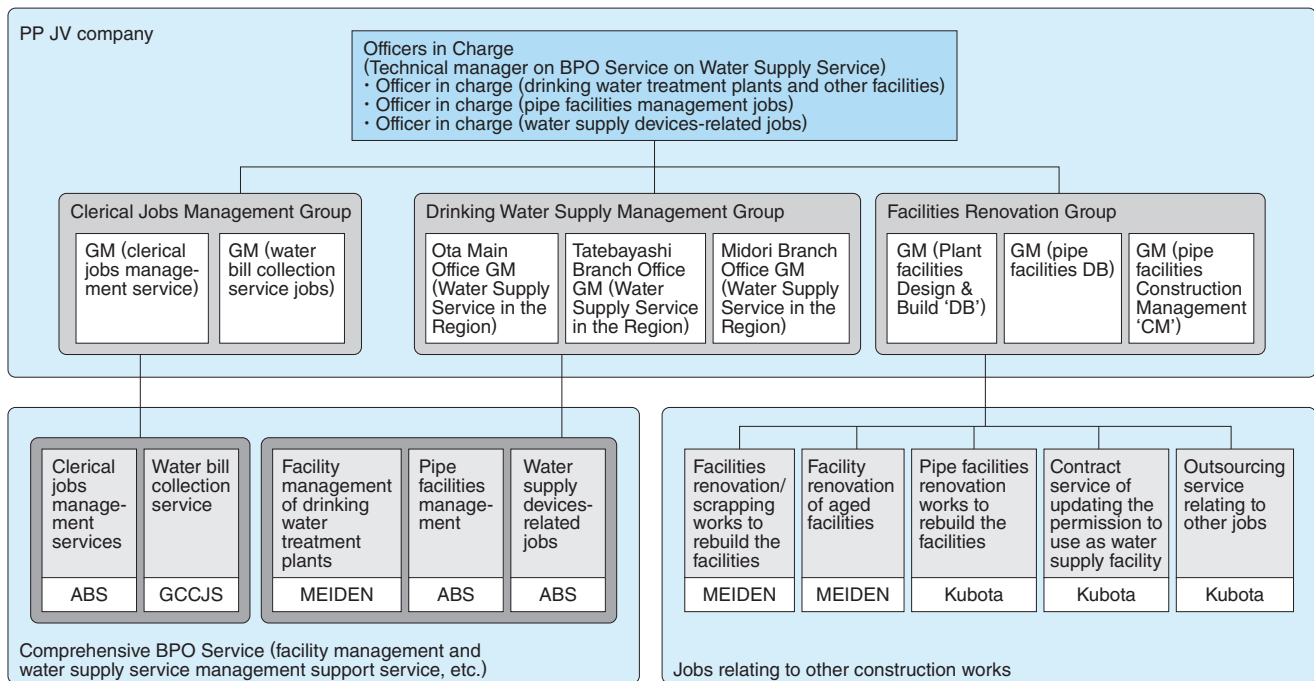


Fig. 7 Implementation Structure of the PP JV Company

We proposed a simple organization that allows compliance and governance-driven operations.

facility management focusing on the following key actions: maintain and improve water quality, secure the necessary raw water volume, and reduce management costs. We proposed a plan to maximize the merits (in the areas of technology, organization, and cost) which come from wider area services.

(b) Jobs of managing water supply pipes and conduits facilities

This BPO business is conducted by ABS. ABS handles the maintenance, management, and emergency repair work of water supply pipe facilities for stable supply of the purified water for water distribution pipes and a part of water supply pipes.

Implementation policies were proposed in the following points: “emergency repair jobs for pipe facilities,” “inspection of pipe facilities,” “update application for exclusive use in road and river,” “management and update of as-built drawings of water supply pipe,” and “investigation of water leakage.”

(c) Business relating to household water supply device

This BPO service is conducted by ABS. It involves all jobs relating to household water supply devices such as accepting application for water supply work, checking the household water supply devices (stop valve, water meter and faucet), final

work inspection, replacement of water meters, and water leakage checks. Implementation policies were proposed in the following: “providing consultation and accepting for water supply work,” “checking the design compliance on household water supply devices and conducting final inspection on the work,” “collection of water supply service starting fees and other various miscellaneous service expenses,” “water supply service ledgers and management and update as-built drawings of water supply pipe,” “meter replacement,” and “managing application approval for new water supply development request.”

(d) Water bill collections

This BPO service is conducted by GCCJS. It covers a series of jobs from water meter check to water bill collection. Specific proposals were made on: “water meter check,” “accepting customer’s call,” “water bill collection,” “managing the main valves,” “delinquent adjustment of payment (notifying the delinquent users and making seizure),” “shut-downing the water supply service,” “jobs of computer processing,” “refunding the overpayment,” and “checking data error and refunding the overpayment.”

(e) Clerical jobs of water supply service

This BPO service is conducted by ABS. It covers jobs related to budget and financial settle-

Table 7 Contents of Proposal for Article 4 Business

Contents of proposals within the Article 4 Business are shown regarding “Jobs relating to the Waterworks Facilities Renovation/Renewal to Rebuild the Facilities for Wider Area Services”. It only shows jobs covered by our company.

Name of business	Items	Outline of proposal (Key Proposal Points)
Jobs relating to the Waterworks Facilities Renovation/Scrapping to rebuild the facilities for Wider Area Services	Purpose of renovations and how we understand the details	<ul style="list-style-type: none"> ● The purposes of rebuilding the waterworks facilities are: To promote the wider area water supply services; Reduce the overall operational costs through the consolidation of the facilities; and Contribute to a better financial profile of the PP JV company. ● By drawing on our group’s engineering resources and expertise and our BPO experiences of operating EGWSA facilities, we will carry out the waterworks facilities consolidation and scrapping in an accelerated manner.
	Design and construction plan	<ul style="list-style-type: none"> ● To ensure stable water supply and cost reduction, we will make a design plan considering “cost,” “anti-seismic design” “functionality,” “easy maintenance” and “safety.” ● This business heavily relies on every single year’s subsidy from the Japanese Government. We will draw up an implementation plan considering safety, quality, works process, cost. We will also pay attention to work compatibly with the local community people and environmental protection.
	Design and construction organization	<ul style="list-style-type: none"> ● In order to make an organization that can design and implement two jobs: waterworks facilities consolidation/scrapping, and the facilities renovation/renewal, we will select a general manager (facilities DB works) who has rich project and job experience on DB at the offices (Ota City and Tatebayashi City.) ● For Occupational Health and Safety (OHS) management, we will actively use the OHS Management System.
	Issues relating to the design and construction and how to deal with such issues	<ul style="list-style-type: none"> ● In arranging the design and construction, we will ask EGWSA to unify the design philosophy and construction approach which is currently different at each member local government of EGWSA. Then, we will implement the jobs of the waterworks facilities for consolidation and scrapping. ● We will: “Make sufficient survey on the existing facilities.” “Clarify the existing problems ,”and “Perform the evaluation and examination on the possible measures.” In doing so, we avoid reworking an issue or design redundancy.
	Resourceful ideas to address the reliability improvement	<ul style="list-style-type: none"> ● To secure stable water supply, we will make the waterworks facilities renovation focusing on “Safety,” “Sustainability,” and “Resilience” and we will make them as stable against natural disasters and make them highly reliable facilities. ● By drawing on our experiences as a supplier of key devices for waterworks and as a service provider for the related facility management, we will make the best use of such resources for the BPO service. We will make a consistent design for manufacturing and secure the quality by conforming to relevant standards.
	Resourceful ideas to address the cost reduction	<ul style="list-style-type: none"> ● Our construction and water supply service personnel will work closely together and we will implement the waterworks facilities rebuilding work. We will work to reduce the total cost in terms of “initial costs,” “running costs,” and “repair costs,” ● Cost reductions are achieved by coordinated efforts: Reduce the worker-hour cost by making common specifications; select right capacity devices; draw up an efficient construction plan; and work closely with the facilities renovation/renewal.

ment work support, issuing of various bills, and asset management. Implementation policies were proposed in the following points: “supporting the budget preparation work,” “supporting the financial settlement,” “issuing accounting documents/slips,” “managing fixed assets ledger,” “managing stored goods,” “managing financial records of appliances and consumables,” “general affairs,” “managing the building for EGWSA,” and “procuring and maintaining waterworks facility mapping system.”

(3) Implementation policies relating to other jobs-construction works-related jobs

In regard to construction works-related jobs, the detailed proposals on the following six points were requested in the tender on the major construction works: “purpose of waterworks facility renovation/renewal and understanding on works details,” “design and construction schedule,” “design and construction organization,” “possible issues in design

and construction and how to deal with such issues,” “any ingenious idea to improve reliability improvement,” and “any ingenious idea to lower costs.” As an example, [Table 7](#) shows the contents of our proposal regarding waterworks facility renovation/renewal jobs to rebuild the overall facilities for the wider service area.

6 Events after being Selected as BPO Contractor

6.1 Establishment of a PP JV Company

In October, 2016, our group was selected as a BPO contractor and the basic agreements on BPO service and on establishment of a PP JV company were concluded. Then, in December, 2016, a PP JV company was established, called Gunma Tobu Water Supply Services Co., Ltd. (“GTSS”). [Table 8](#) shows the outline of the PP JV company.

Table 8 Outline of PP JV Company

A PP JV company was established based on investment by EGWSA and 4 private sector firms including our company.

Trade name	Gunma Tobu Water Supply Services Co., Ltd.
Date of establishment	December, 2016
Capital	¥200,000,000.-
Location of the main office	Ota City, Gunma Prefecture
Investors	Gunma Tobu Water Supply Authority MEIDENSHA CORPORATION, Advanced Business Service, GCC JICHITAI SERVICE, KUBOTA Corporation

Table 9 Scope of Work at Each Group BU of the PP JV Company

We formed three Business Unit (BU) Groups called “Clerical Jobs Management Group,” “Waterworks Facilities Management Group,” and “Facilities Renovation/Renewal Group.” We clarified each scope of work.

Clerical Jobs Management Group	<ul style="list-style-type: none"> • Water bill collection service • Clerical jobs management for water supply service
Waterworks Facilities Management Group	<ul style="list-style-type: none"> • Facility Management service on drinking water treatment plants and other related facilities • Water pipe facilities management services • Water supply devices-related services
Facilities Renovation/Renewal Group	<ul style="list-style-type: none"> • Waterworks facilities renovation/scraping jobs to rebuild the facilities for wider area services • Water pipe facilities renovation jobs to rebuild the facilities for wider area services • Facilities renovation jobs to the existing facilities and the aged facilities • Contract water pipe facilities renovation jobs to address the aging of the existing facilities • Other outsourcing service jobs to other matters relating to the water supply services

6.2 The Assignment of Each Job

Since January, 2017, we provided necessary personnel to the PP JV company. We took over the jobs from EGWSA. To get our BPO Contract services up and running as soon as possible, we built the GTSS organization. During the early days of operation, we found many different job descriptions and job procedures in the main office and each branch office of EGWSA. Although we worked hard to harmonize job descriptions and/or procedures, in some cases, such harmonization takes time and sudden changes do not produce positive results. We made some special exceptions providing such acts were allowed within the operating rules. We decided to realize the harmonization of job descriptions and procedures along the way, taking several years in a step-by-step process.

6.3 Jobs Implementation Organization

The above-mentioned organization which we

proposed to EGWSA during BPO Contractor selection stage was organized as an actual organization. Specifically, we put three major group business units on each major service and job. In doing so, we secured the integrity of the organization and clearly defined the scope of work/duties of the invested private-sector firms of the PP JV company. **Table 9** shows the scope of work at each group BU of the PP JV company.

7 Results after Passing One Year from Business Commencement

7.1 Results

More than one year passed after the start of this business and positive results gradually emerged.

(1) Economic effect by local job creation

Comprehensive BOP Services including facility management service and water supply service management support service, etc. (Jobs relating to the Article 3 – water treatment and supply operations), started with about 160 employees from the Consortium member companies – private sector firms (this figure does not include the people for the jobs relating to Article 4 – waterworks facilities renovation/renewal jobs). This business brought a great economic effect contributing much to local job creation.

(2) Securing public interest and efficient business operations

Under the supervision by EGWSA, the PP JV company secures public interest and smoothly runs the operation by applying the private sector’s flexible approach to the business operations. The jobs relating to the household water supply devices (stop valve, water meter and faucet) produced the increased operational efficiency by operating in the wide-area service and by public-private partnership undertaking (see above Section 5.2, (2)-(c)). Initially, we faced irregular job-flow (procedures) among the main office and branch offices, so we made a unified job-flow by making the best use of each office’s best practice.

(3) Demonstrating the scale merits by common management

The scale merits are strongly felt in the field of procurement (materials and services). Our company and Kubota have various product suppliers and service providers across Japan and both companies are helping the JV company greatly in the procurement.

8 Postscript

In the business of public private joint venture, GTSS began in Ota City in the field of water supply service and the service expanded to include three cities and five towns in the east area of Gunma Prefecture. We feel GTSS has only just begun its operations. From the second year (Fiscal 2018), GTSS will work on the waterworks facilities (water treatment facilities and water supply pipe facilities), renovation and renewal work. In the first year (Fiscal 2017), GTSS did design jobs for above waterworks facilities and water pipes facilities by themselves as a part of the jobs relating to Article 4 – waterworks facilities renovation/renewal jobs. As the renovation and renewal work becomes fully in progress in Fiscal 2018, we expect the great benefits will emerge through the implementations.

GTSS is required to accomplish the business

policies outlined in the [Table 3](#) during the BPO contract years of eight years. We are the private-sector representative member of the Consortium that delivers its responsibility. We aim to demonstrate a leadership role in GTSS organization and help the progress of water supply service by GTSS.

· All product and company names mentioned in this paper are the trademarks and/or service marks of their respective owners.

(Notes)

※1. Concession: A business scheme where a private sector firms operate the previous public sector business by using the facilities whose ownership belongs to the public sector government office. The service refers to the utility services involving the utility service fee collection. (This is based on PFI Law of Japan, Article 16)

※2. Private Finance Initiative (PFI): This refers to an approach that the construction works, facility management and facility operations of public facilities are conducted by utilizing the private sector finance and management & engineering capability.