

【MIRAIT ONE Corporation】
Promotes DX of Water Supply Projects to Resolve Social Issues
Related to Water Supply

Provision of integrated solution spanning from water pipe deterioration diagnosis to construction and maintenance begins on September 28

Major telecommunications construction company MIRAIT ONE Corporation (head office: Koto-ku, Tokyo; President and Chief Executive Officer: Toshiki Nakayama; “MIRAIT ONE”) will begin providing a Water Supply DX Solution on September 28 to promote DX of water supply projects aimed at the realization of a sustainable society.

As the aging of social infrastructure and the decline of the working population become increasingly serious, MIRAIT ONE has provided engineering services including construction valued at billions of yen every year to water-supply corporations to support the stable and continuous operation of water infrastructure. Based on the experience gained through these efforts and the requests of water-supply corporations, MIRAIT ONE will begin providing a data-driven Water Supply DX Solution spanning from water pipe deterioration diagnosis to construction and maintenance.

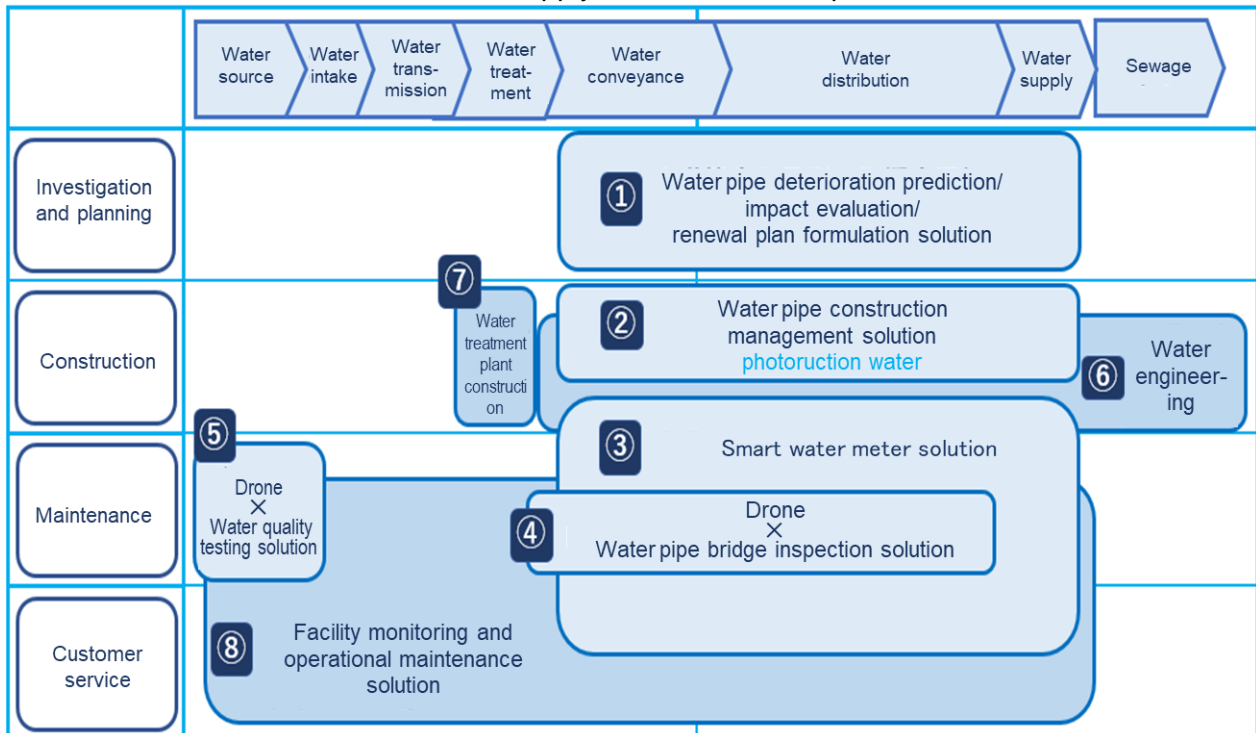
The Water Supply DX Solution provided by MIRAIT ONE is made up of eight solutions. These include **(1) a water pipe deterioration prediction/impact evaluation/renewal plan formulation solution** utilizing conduit facility data and leak history information held by water-supply corporations and AI/machine learning algorithms to predict water pipe damage risks and the condition of deterioration, and formulate response plans considering cost conditions, etc., **(2) a water pipe construction management solution (photoruction water)** specializing in water pipe construction and **(3) a smart water meter solution** enabling automatic meter reading, leak detection and ascertaining flow at each time without going on site by automatically sending flow data wirelessly. MIRAIT ONE also provides **(4) a drone-based water pipe bridge inspection solution** utilizing drones and ICT in on-site inspections and **(5) a drone-based water quality testing solution**. Using a solution for collecting, aggregating and managing data and images obtained in (1) through (5), it is possible to further optimize and improve the efficiency of operations. In addition, full outsourcing needs are met by linking these to **(6) water engineering** and **(7) water treatment plant construction** enabling the creation and updating of efficient water supply

facilities utilizing data from these solutions, and **(8) a facility monitoring and operational maintenance solution** for performing operation and maintenance with a year-round 24-hour support system after facilities are installed.

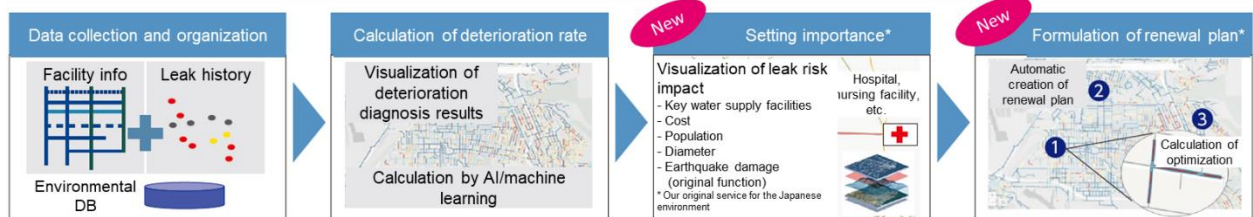
About MIRAITS ONE Corporation

MIRAITS ONE Corporation was launched on July 1, 2022 through the integration of MIRAITS Holdings Corporation, MIRAITS Corporation, and MIRAITS Technologies Corporation. MIRAITS ONE has established “co-creating an exciting future through challenges and technology” as its purpose (significance of existence), and is engaged in the resolution of issues faced by customers and society and regional revitalization by promoting initiatives such as urban development and regional development, corporate DX and GX, green business and global business based on the technical capability cultivated until now in telecommunications facility construction and the civil engineering business.

<Water Supply DX Full Value Map>



① The “water pipe deterioration prediction/impact evaluation/renewal plan formulation solution” is a solution that utilizes conduit facility data and leak history information held by water-supply corporations in combination with an environmental database developed with proprietary technology and AI/machine learning algorithms to predict water pipe damage risks and the condition of deterioration. The impact evaluation involves visualization of business risks occurring in the event of a leak on a map by predicting deterioration and also considering the importance of the water pipes. Furthermore, the prediction results can be used to automatically draft renewal plans, and the provision of these solutions is expected to reduce costs such as the formulation and implementation of renewal plans and maintenance costs by around 30%.



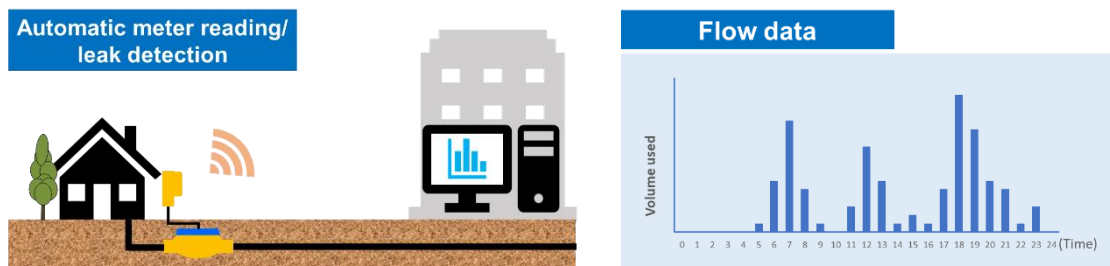
* FRACTA's system is used

② The “water pipe construction management solution” (photoruction water) is a solution jointly developed by Kurimoto, Photoruction and MIRAIT ONE that can be used on sites specializing in water pipe construction. It is based on a construction management system (photoruction) for the construction industry that has a track record of many implementations, and is equipped with unique functions specializing in water pipe construction such as creation of detailed pipe diagrams and checking of joints. Detailed pipe diagrams can be created on site using devices such as smartphones and tablets.

Furthermore, it is expected to reduce construction management work by around 30% such as improvement of the efficiency of preparation of documents that has previously been carried out at night or on holidays after on-site work is carried out because records of joint checks can be linked to forms.



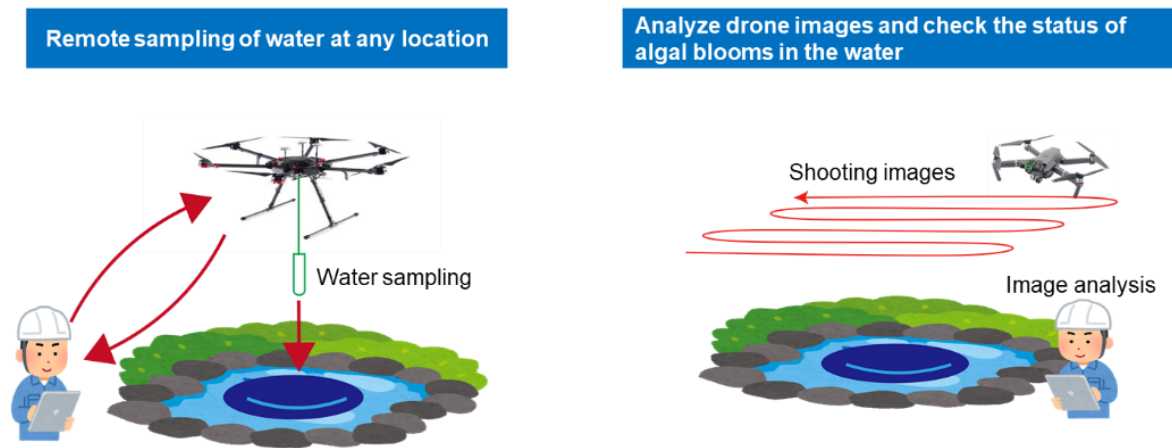
- ③ The “smart water meter solution” enables automatic meter reading without going on site by automatically sending flow data wirelessly. Furthermore, it is also possible to detect leaks, take steps to improve the revenue rate and provide new services to residents based on the flow data obtained.



- ④ The “drone-based water pipe bridge inspection solution” uses drones to enable inspections in areas difficult to view directly, and increases safety and improves operational efficiency in processes where there were concerns about conventional inspection work such as the erection of scaffolding. Furthermore, data shot with drones contributes to the prevention of leaks and damage incidents due to aging of water supply facilities through the detection of rust and concrete cracks using infrared camera images and AI analysis technology.



- ⑤ The “drone-based water quality testing solution” enables significant reductions in the time to take water samples and the travel time to testing points by using drones for testing of water quality and algae in water reservoirs that had previously been carried out by hand using boats, etc. Furthermore, it is also possible to check the status of algal blooms by taking images with a spectral camera and performing image analysis.



- ⑥ ⑦ “Water engineering” and “water treatment plant construction” enable the engineering operations that have been MIRAIT ONE’s strength developed in the telecommunications construction and water engineering areas until now to be combined with the utilization of data to perform efficient construction and renewal of water supply facilities.



- ⑧ The “facility monitoring and operational maintenance solution” provides facility monitoring and operational support 24 hours a day all year. It also meets diverse needs such as call center operations and technical support that are required in water pipe construction and operations related to monitoring and operational maintenance of water supply facilities.

