

17 May, 2019

Marubeni Corporation

Fracta

AI-powered Water Mains Condition Assessment Software Development and Business Expansion
into the UK

Marubeni Corporation (hereinafter “Marubeni”) and Fracta, a California Corporation (hereinafter “Fracta”) will conduct a Proof of Concept to develop a water mains condition assessment software which predicts the likelihood of water mains’ failure in the United Kingdom (hereinafter “the POC”) with Northumbrian Water Group (hereinafter “NWG”; in North East Region of England, UK).

In Europe, especially in developed countries, water main pipes are aging and reaching their end of useful life, which leads to increasing demand for efficient replacement, maintenance and operation of water mains. In January 2019, Marubeni and Fracta became partners with the aim to expand Fracta’s US based water mains likelihood of failure prediction software to Europe.

Marubeni and Fracta decided to start with development of the software in the UK, which has the one of the highest standards for efficient water management in the world, and have come to an agreement with NWG, where NWG will provide data from their 26,000km water network to Marubeni and Fracta to prove the accuracy of their software algorithm. Through the analysis of the data, Marubeni and Fracta will develop compatible software for the UK market within 2019.

The software service developed by Fracta visualises water mains likelihood of failure by using Fracta’s algorithm which analyses the correlation of variables, including soil, climate and population density using machine learning and AI. This results in the significant reductions of capital investment by replacing the water mains that are most at risk efficiently.

Marubeni commenced its water related business in 1990s and is conducting water and wastewater concession business in Europe, Southeast Asia, and Latin America, as well as the wide range of experiences such as the engineering, procurement and construction, the operation and maintenance of water and wastewater plants, and water desalination projects by long-term agreement.

Fracta has developed technology that predicts the likelihood of failure for water mains employing AI and machine learning. Fracta has provided its software services to optimize capital investment plans for water mains replacement to over 40 water utilities in 18 states across the US.

Starting with this POC, Marubeni and Fracta will contribute to the safe and robust water supply by solving the water pipes' aging problems in Europe.

【Outline of Marubeni】

Company Name	Marubeni Corporation
Established	1949
Head Office	Tokyo, Japan
Number of Employees	4,436 (as of March 2018)
Representative	President and CEO: Masumi Kakinoki
Description of Business	Marubeni Corporation and its consolidated subsidiaries use their broad business networks, both within Japan and overseas, to conduct importing and exporting (including third country trading), as well as domestic business, encompassing a diverse range of business activities across wide-ranging fields including food, agriculture & chemicals, consumer products, power, energy & metals, machinery, infrastructure & financial business. Additionally, the Marubeni Group offers a variety of services, makes internal and external investments and is involved in resource development throughout all of the above industries.
HP	https://www.marubeni.com/en/

【Outline of Fracta】

Company Name	Fracta
Established	2015
Head Office	California, US (Silicon Valley)
Number of Employees	35 employees (as of February 2019)
Representative	CEO: Takashi Kato
Description of Business	Software service of predicting water main degradations based on AI and machine learning
HP	https://fracta.ai/

【Outline of NWG】

Name	Northumbrian Water Group
Established	1989
Head Office	North East Region of England, UK (Durham City)
Number of Employees	3,128 employees (as of December 2018)
Representative	CEO: Heidi Mottram
Description of Business	Water supply and wastewater services, water and wastewater contracts, provision of technical and consultancy services on water and environmental issues
HP	https://www.nwl.co.uk/

【Image of the software by Fracta】

