Enterprise Management

By Perrine Parrod

Technology provides a greater view of street works performance for U.K. water supply company

ARTICLE SUMMARY

Challenge: Bristol Water needed a way to monitor its performance and provide reporting to internal and external stakeholders.

Solution: The water supply company implemented an information management system to obtain real-time data.

Conclusion: Bristol Water achieved greater visibility of performance and a reduction in fixed penalty notices and fines.

Bristol Water, a water supply company responsible for providing water to 1.2 million consumers in and around the Bristol, England, area, needed a way to help monitor its performance and meet increasing challenges presented by the U.K.'s Traffic Management Act (TMA). Bristol and its solution provider, Bentley, developed an Exor Information Manager-based solution that provides high-level aggregate executive information and monthly performance reports, and manages noticing and street works activities. This enabled a reduction in the administrative burden of reporting, a reduction in street works fines and greater visibility of performance, and allowed Bristol Water to meet legislation requirements.

The TMA required utilities in the U.K. to register additional street works. It also changed notices to be based on the length of occupation of the road or highway, thus increasing not only the number of notices, but the complexity of noticing requirements.

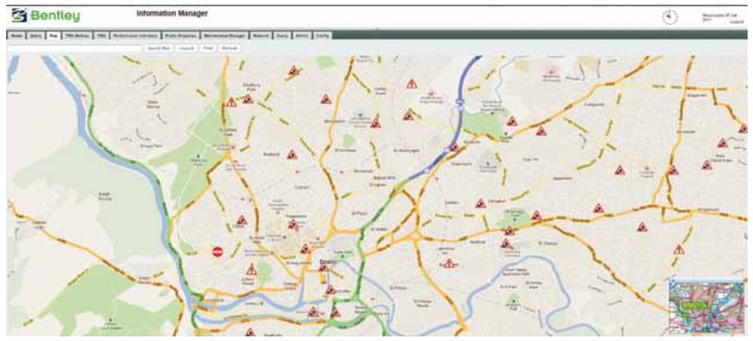
Of equal concern to Bristol Water and other utilities are the potential fines and penalties the TMA introduced. With fixed penalty notices, street works promoters can be fined $120 (GBP) for each breach of noticing requirements. Given that Bristol Water produces more than 70,000 notices per year, this greatly increased its exposure to financial risk.

To overcome these, challenges Bristol Water needed a solution that would help improve day-to-day noticing management and provide accurate reporting for internal and external stakeholders, while being flexible enough to accommodate future needs.

Capturing & Accessing Data

In early 2008, when the TMA came into effect, Bristol Water's collection of street works information was labor-intensive and often incomplete, with much of the requirements generated manually. Street works data were stored in numerous different systems, which made it difficult to extract. In addition to being incomplete, data often were out of date, which made accurate reporting a challenge. Lastly, Bristol needed a way to help evaluate business performance as well.

"With improved data quality and better reporting, we can hopefully improve our performance," said Bristol Water's Street Works and Partnership Manager Simon Bennett.



The information manager allows for full visibility of Bristol Water's assets.

Information Manager Implementation

Working with Bentley Systems, Bristol Water used Exor Information Manager to streamline the process.

"We sat down with Bentley's Exor team and discussed how we could get full visibility of our assets on the road network and produce reporting criteria set out by NJUG [the National Joint Utilities Group]," Bennett said. "It was a surprisingly simple process because of the functionality offered by Exor Information Manager."

Now, real-time data about notices are captured, updated and then published internally. "The solution implemented is a live system, continually updating as notices are sent and information comes back. And it's Web-based so it's all real-time information. So, within seconds, the local authority knows we're on site," Bennett said. From data, Bristol Water is able to access high-level executive information that provides a common operating picture, as well as generate 52 monthly performance reports to NJUG on core areas of competency and interest.

Information also is categorized so it can be analyzed according to Bristol Water's business units, or by a local authority, for better reporting and, ultimately, improved performance. "What we are trying to do for street works is self-regulation. We need to regulate ourselves with street works, and this reporting facility is allowing us to look at our performance and improve the way we do things," Bennett said.

GIS Improves Customer Satisfaction

In 2011, Bristol Water added further improvements to the solution, including a customer-facing Web-based GIS solution for viewing street works noticing throughout the Bristol Water operating area. This allowed Bristol Water's customer service team to provide better information to customers, direct enquiries to the correct business unit and full visibility for the general public via Bristol's Web page. "The site went live in 2011 and we soon recorded an increase in customer viewing of the site," Bennett said. "As well as complying with regulatory demands, Bristol Water is seeing the benefit of the GIS Web page, which is keeping customers better informed of our works going on in their area."

Reducing Potential Fines

The solution has provided Bristol Water with benefits including targeted street works training, greater visibility of performance, and a reduction in fixed penalty notices and Section 74 fines. With improved reporting and an "executive dashboard," Bristol Water also has greater visibility of performance of both its business and its various contractors.

"The new reports available through Exor Information Manager enable us to share information far more effectively and highlight problems far more quickly, enabling our contractors and us to act on potential issues before they become liabilities," Bennett said.

The water supply company also has improved relationships with local authorities by providing them with reports and information that they are unable to obtain from their own in-house systems.

"Right from the start, Bentley's Exor team has been highly supportive and responsive to our needs," Bennett said. "They understand that the maintenance of our infrastructure is not just a series of one-off events, but a continual process involving numerous parties at Bristol Water, including several third-party contractors. The solution they have provided reflects this, providing us not only with full visibility of the current state of our infrastructure, but the tools to meet all our partner requirements as well as those set by government." WWD

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