

Saving Streetworks Reductions

1Spatial has supported the VISTA project since 2007. VISTA is being run under the auspices of UK Water Industry Research (UKWIR) and is funded by the Department of Trade and Industry. The project involves both Leeds and Nottingham Universities and a wide pantheon of industrial partners seeking to reduce the impacts of streetworks on congestion.

The School of Computing at Leeds University is carrying out work to create a global schema solution to solve the problem of interoperability. The project is at the stage where pilots are being conducted in Scotland and the East Midlands in the United Kingdom. In parallel with a yearlong dissemination initiative that is underway. This is being funded through the Technology Strategy Board.

By creating more readily accessible and understandable information, the VISTA project aims to make this possible and:

- Reduce the numbers of excavations
- Ensure excavations occur in the right place, first time
- Reduce traffic congestion and associated costs
- Avoid unexpected pipes and cables being damaged, and thereby potential injury or fatalities to workers
- Avoid loss of service to business and domestic customers.

1Spatial has acted as a technology partner supporting the development of a global data model for utility asset data exchange. In order to populate the global schema with data, the relationship between fields in the source table and fields in the global schema have been defined. On-the-fly data validation during the transformation process is required to ensure data quality as data fields are sparsely or imperfectly populated. The mappings, transformations and validation components represent metadata that allow bespoke utility data models to interoperate at a schematic level via a mediating global schema. These concepts are expressed as rules, which represent a knowledge base for describing and exchanging utility data. The rules are expressed in a form independent of any data store, which means that rules can be easily re-used with different schema and data sources.