Assessing the Underworld (ATU) held its **third annual meeting** on 14th December 2015 at the **Ordinance Survey, Southampton**. The event attracted over 50 project partners from both academia and industry.

In contrast to the 2014 ATU annual meeting which was ‘practitioner driven’, with the ATU team serving as facilitators. The 2015 annual event featured technical presentations from the ATU team in addition to posters outlining the progress made in the different work streams. The event also featured an exhibition area for practitioners and the ATU team (Figures 1 and 2) to showcase both products and examples of recent innovation.

**Presentations**

Themed ‘**Sensor Technologies and their Potential to Reveal the State of our Infrastructures**’, the annual meeting featured the following presentations:

- **Chris Rogers (University of Birmingham): ‘The Wider Context - A More Sustainable Approach to Streetworks’**. The presentation highlighted infrastructure interdependencies and the consequences of excavating trenches, how ATU’s work is bridging this gap for more sustainable streetworks, and how this work can meet the UK’s future infrastructure needs. Results from field trials in Southampton to validate MTU sensor technologies were also presented and how ATU work will advance this thinking.

- **Derek Magee (University of Leeds): ‘ATU Decision Support System (DSS): Enabling A More Sustainable Approach to Streetworks’**. The presentation highlighted the ongoing work in the development of the ATU DSS, an interactive software tool that supports asset management decisions by accounting for infrastructure interdependencies.

- The **University of Bath** team presented (by Stephen Pennock) ongoing work in the development of high frequency electromagnetic and GPR techniques to enable void/crack detection, leakage of passive signals for cable sheath quality checks, pipe corrosion products in soil and transmission line scanning antenna for asset detection and assessment.

- The **University of Southampton** team presented (by Steve Swingler) ongoing work on passive electromagnetic techniques and their use in the development of a sensing technology device to detect and locate incipient faults in power cable joints.

- The **University of Birmingham** team presented (by Phil Atkins) ongoing work on the use of non-contact electrical resistivity techniques to facilitate the sensing of the extent of tree root structures, detection of cracks and voids in addition to their depth, detection of wet areas under paved surfaces; all packed into a smaller mobile sensor.

- The **University of Southampton** team also presented (by Jen Muggleton) ongoing work in the development of novel vibro-acoustic methodologies to assess the condition of the buried utility service, geotechnical and transport infrastructures.

- The **University of Sheffield** team presented (by Joby Boxall) ongoing work for locating buried pipe infrastructure using a mixture of sensor arrays and signal processing, location and mapping, and a small robotic platform.
The annual meeting was deemed a success, with participants pleased with the format of the event and the opportunity to provide useful feedback on priority concerns for supporting decision making for a more sustainable approach to streetworks using novel sensor technologies for assessing the underworld.

In order to get wider views, it is important to engage with a range of industries, including practitioners, utility providers, contractors and consultants. We therefore ask that you continue to support the research - your opinion is immensely valuable to us.

ATU project partners continue to grow in number and sector diversity. If you are interested in becoming a project partner, please contact the ATU project manager Mark Hamilton.

Book your place at the next annual event on the 15th September 2016 at the BGS in Nottingham. Contact Mark Hamilton to register.

For further information please see the Assessing the Underworld website: http://assessingtheunderworld.org or contact Mark Hamilton, the ATU project manager, via email at: M.Hamilton.3@bham.ac.uk