



Using sound waves for fast problem finding

ACOUSTEK

When our gas pipes are thought to be blocked or damaged there are currently only a few methods available to our engineers to survey them. These involve digging up land or roads to use remote video cameras and conduct pressure tests. These procedures are often costly, disruptive to customers and the communities we serve, and time-consuming.

Along with other gas networks we have developed an alternative technology that uses sound waves to find what our engineers are looking for.

A little like sonar, the 'Acoustic Pulse Reflectometry' (APR), sends ultrasound waves down a pipe, and by measuring the returning signals, can identify any issues.

The technology has already been commercialised for use in offshore natural gas pipelines. However we now want to extend the technology for use in our own network. The 'ACOUSTEK' project identified the capabilities and limitations of APR to produce prototype equipment.



**YOUR GAS EMERGENCY
AND PIPELINE SERVICE**



Key Benefits

- Faster location of blocked pipes and damage locations.
- Can provide accurate measurement of underground pipes.
- Computer controlled and easy to operate.
- Reduces digging and inconvenience to customers and the general public and does not need mechanical insertion of objects into the gas pipe.
- Saves time and reduces cost – benefiting gas networks and our customers.

Next Steps

- Develop the unit to make it rugged and fully field ready.
- Develop a dual system for use on both old metal and newer, plastic pipes.
- Develop a training programme to make sure the technology is used to its full capacity by operational colleagues.

