Alternative Gas Pinpointing

Phase 2

Project summary

Industry Partner(s):

Northern Gas Networks, UK Power Networks

Innovator:

Frazer-Nash Consultancy

Challenge:

In order to identify gas leaks under carriageways, operatives have to create small holes in the surface in order to take readings. These holes are created by the operative driving a large spike into the ground, causing high levels of shock through the operative's arms and shoulders, and potentially resulting in long term health problems from repeated use.

Approach:

Initially there was a concept design stage, in which a number of designs were produced. These were filtered until the most suitable design was identified and could be produced into a prototype, which subsequently underwent a series of tests to compare vibrations and impact compared to the standard design.

Outputs:

A comprehensive report was produced to detail the decisions along the process and the test comparison results from the trials.

Looking forward:

Stage 3 would involve discussions with manufacturers about the possibility of adapting current design to include features of the new prototype.

Impact:

Transformational

Key benefit:

Health & safety

The innovation will change how operatives work by making processes both safer and easier

Additional benefits:

Efficiency

Less restrictions on current operation times for tools

Business as usual

The same device is currently used across all gas networks, so the innovation has the potential to be implemented across the whole industry