

**PROJECT SUMMARY:** 

**INDUSTRY PARTNER(S):** Northern Gas 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.