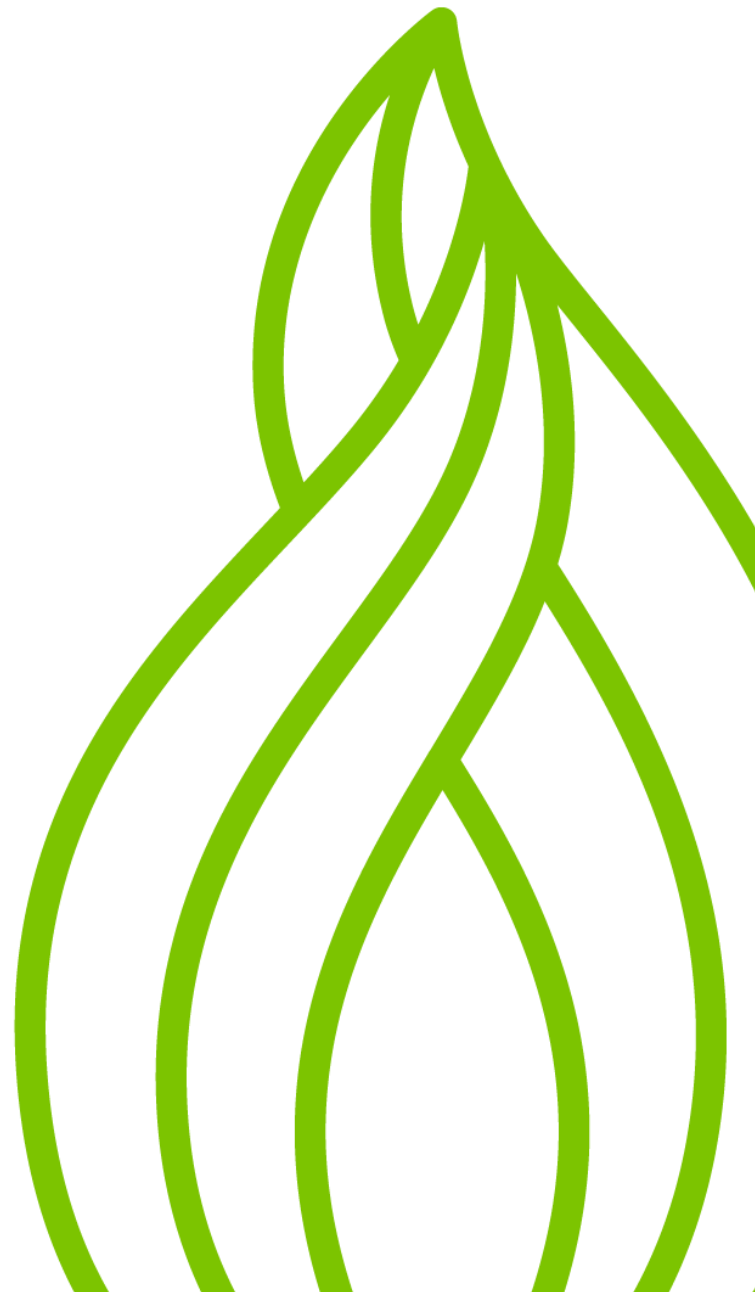




ILI Dig Marker

Value Tracking Case Study



ILI Dig Marker

Background

Unnecessary costs are incurred by National Gas Transmission (NGT) when assets are excavated unnecessarily. This can be caused by many reasons (e.g. incorrect records) but the outcomes provide additional costs that could have been avoided or unnecessary work completed that could have been spent on actual repair/ remediation work on the Transmission Network.

It is proposed to develop a simple tag or marker that can be fixed to the pipeline following an ILI (In Line Inspection) or CIPS (Close Interval Potential Surveys) excavation, which can be identified by a future ILI tool to mark that an excavation / intervention has already taken place.

The driver is based upon evidence that we have already excavated ILI or CIPS features that have previously been investigated. By recording this information, and having better visibility of this information, we can avoid repeat excavations and the costs incurred through this work (i.e. labour, planning, materials, etc).

What's new?

Magnetic markers produced that are fitted at required points of our assets when work is completed. As part of ILI runs, markers will be picked up regardless of the repair and identify where a prior dig has been completed. This will then confirm what has been completed and avoid the previous issue of repeat excavations that were unnecessary. The solution was tested via field trials with several successful sites and has now been taken forward to regular use when assets are excavated.

The benefits

Average cost (used for T2/T3) is £134k per excavation. Therefore, based on the 3 recent examples, this had the potential to save £402k of unnecessary excavation, pressure restrictions, inspection and backfilling costs.

Exception report can automatically be compiled to show locations of ILI digs and uploaded into GEOGRID. Thus, saving of time (1 – 2 days) to manually screen results for corrosion growth, defect history etc.

Provides confidence in matching of previous ILI results with latest ILI results.

Financial savings

Title	PAC Number	Qty of ILI Markers Used	Qty of excavations	Cost Saved
T2_Pipelines_2021_ILI and CIPS Digs 2022	PAC1052121	70	35	£4.725m
T2_Pipelines_2021_ILI and CIPS Digs 2021	PAC1034033	40	20	£2.7m

Benefits realised to date: £7.425m This is collated using the avoidance of excavations estimated at £134k.



Implementation

The process has been rolled out across National Gas Transmission with markers fitted whenever an excavation is open for future reference. Further ILI runs to be completed and benefits to be tracked for cost avoidance and cost saving when markers have been identified.

