

# Can we automate vibration monitoring on AGIs?

EIP018

28 February 2023

## Background

- Transporting large quantities of gas through the network can lead to vibration in our assets in certain cases.
- Vibration can be designed for in the assets but when the frequency of vibration changes, damage can occur.
- We need to monitor our new and importantly existing assets better to understand when the vibration frequency changes.
- Retrofit sensors on existing assets
- Transmit data to a central store
- Analyse and set alarms



## Enablers and Constraints



- NIA\_NGGT0038 – Novel vibration measurement technologies
  - Good progress into solutions for vibration monitoring but more work and demonstrations needed
- How vibration will change with hydrogen is being researched by an SGN SIF Application
- Vibration monitoring sensors and assets will need to be ATEX compliant as they will be in high risk locations
- Data will need to be transmitted to a central location

## Involvement and Implementation

- Beneficiaries would be pipeline operators who are required to monitor vibration
  - Onshore transmission and distribution companies
  - Gas terminals
  - Offshore pipeline operators
- Target Market size – Globally, Large
- Target Implementation Date – As soon as possible

# Energy Innovation Basecamp

28 February 2023  
ICC Birmingham

# #Basecamp28

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