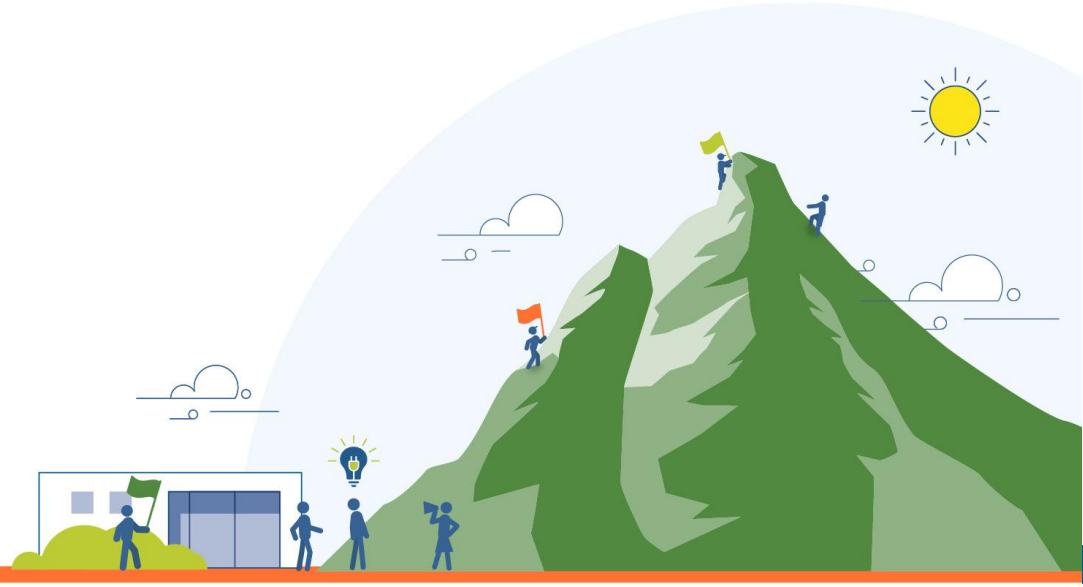
Innovation Basecamp 2026

4th February 2026 – Park Plaza, London

Introduction

SGN Network

- **Peter How**
- **Engineering Asset Manager <7bar Scotland**
- **Peter.how@sgn.co.uk**



Background Information

SGN owns and operates aging gas networks, contained within are some components that are no longer supported by the original supplier or coming to the end of their design life. To ensure security of supply and network integrity SGN must address these aspects:

- Aging assets
- Inoperable valves (Seized or Worn)
- Non-supported components
- Digital system modernisation

All while ensuring a smooth and efficient transition to Biomethane and Hydrogen.

What are the Problems – Pressure Control and Valves?

- Valves seized or rounded off, preventing safe operation.
- Worn or corroded spindles requiring full removal for overhaul.
- Non-locatable underground valves with incomplete mapping records.
- Valves located in flooded or inaccessible chambers.
- Obsolete GCM and Krysalis ERS regulators with limited spare availability.
- Large-diameter PRI assets approaching end of life; replacements cost £1.8m+.
- Lack of condition monitoring; maintenance triggered only after failure.
- Risk from vehicle impact.

What are the Problems – Obsolescence?

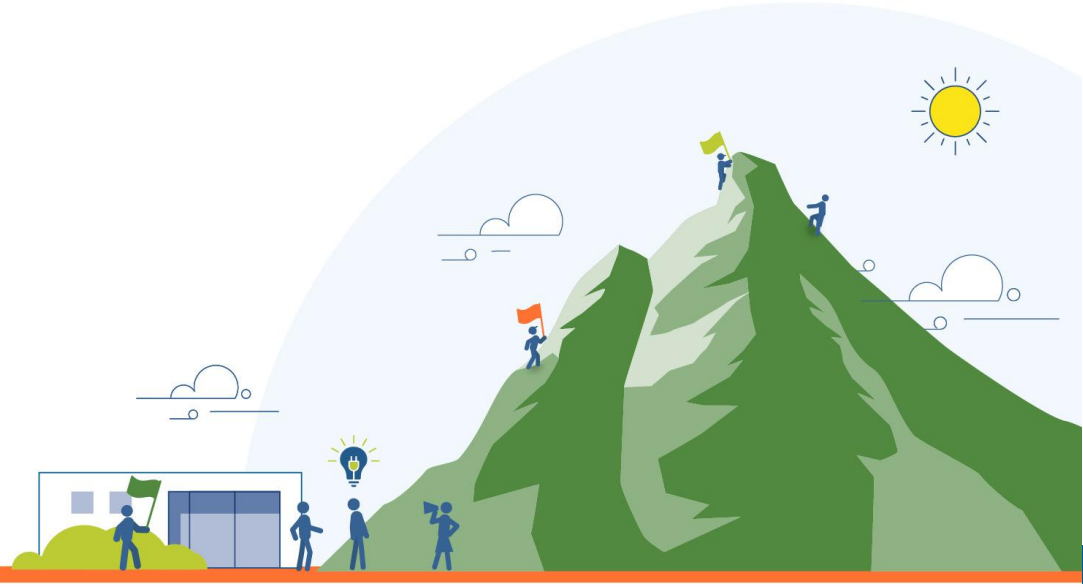
- Inconsistent spares availability for legacy valve and regulator types.
- No OEM support for GCM, Krysalis, and certain ERS units.
- Reliance on imported or single-supplier parts.
- Manual stock visibility across depots and lack of digital traceability.
- High lead times for machining or bespoke parts.
- Waste from scrapping otherwise serviceable assets due to minor defects.

What are the Problems – Visibility and Intelligence?

- Limited real-time visibility of governor load and capacity.
- Difficulty identifying dominant feeds and network bottlenecks.
- Fragmented data systems and manual GIS updates.
- Inaccurate or missing marker post locations.
- Inconsistent field data collection and mapping procedures.
- Issues with linking Land Registry information to SGNs mapping system.
- Visibility and ability of easily assessing encroachments and ground movement.

What are the Problems – PRI Kiosk Life-Extension?

- Water ingress and corrosion causing accelerated degradation.
- Leaking or damaged roofs requiring repeat repairs.
- No standard repair material or coating specification.
- Environmental exposure leading to PRI component deterioration.



Our Expectations

What are we looking for?

How can SGN modernise and refurbish its valve and regulator population through modular, in-situ, low-disruption methods that improve reliability and reduce cost?

How can SGN deliver a digital, data-driven network view that combines capacity, asset health, and spatial accuracy to improve planning and operations?

How can SGN safely restore operability and inspect seized or non-locatable valves without requiring full isolation, excavation and venting?

A cheap solution to link Land Registry information to our mapping system to help manage new landowner liaison requirements for our IP mains.

How can SGN create a sustainable, localised spares ecosystem that combines digital design, additive manufacturing, and predictive obsolescence management?

How can SGN extend kiosk life through improved materials, coatings, and modular designs that prevent water ingress and corrosion?

A cost-effective, non-intrusive assessment method for determining the integrity of gas pipelines affected by ground movement or third-party encroachments.

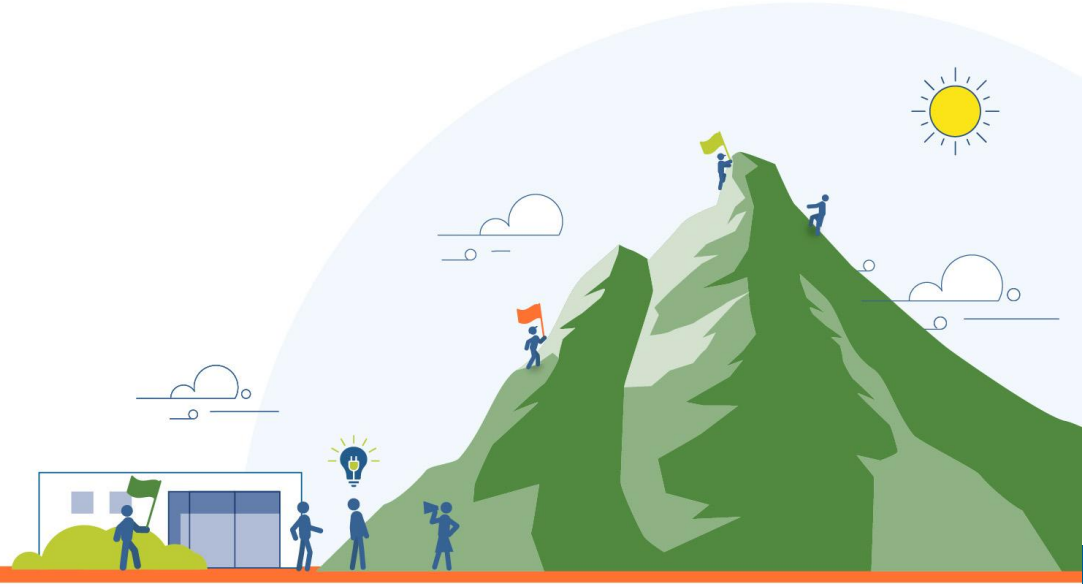
Cost effective methods to reduce the likelihood or consequence of vehicle collisions on our assets. Current vehicle protection measures include bollards, box beam or Armco barriers. Are there alternatives that we could install to prevent collisions with lower associated costs?

Key Contacts:

For further information / Clarity:

- Peter How, Asset Engineering Manager <7bar Scotland
- Peter.how@sgn.co.uk
- 07896860900

ANY QUESTIONS?



Energy Networks Association
4 More London Riverside
London SE1 2AU
t. +44 (0)20 4599 7700

@EnergyNetworks
energynetworks.org

scan me

Subscribe to our newsletter to receive updates from ENA

energynetworks.org/**subscribe**

The voice of the networks