

‘Develop The Network’ ‘DTN 2021’

Response to Ofgem Forward Work Programme 2018-19 Consultation

Discussion Draft

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Develop the Network

Gas DTN 2018

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Develop the Network

Gas DTN 2018



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Scope and Purpose

- The DTN 2018 Project focuses on improvements in the GT's processes to enable industrial connections; many of which directly contribute to decarbonisation and enhance the "Future of Gas". This proposal aims to facilitate co-ordinated innovation to reduce costs and simplify processes whilst maintaining high standards of safety

Future of gas

- Safety and emergency
- Reliability and maintenance
- Repair
- Distribution mains replacement
- Security
- Environment and low carbon.



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Strategic Driver

- The Gas Act, GT Licences and HSE Safety Cases underpin the GTs' entry and exit connections process
 - Competitive connections companies would prefer common policies and standards. These would allow the gas industry to better compete with other energy vectors and maintain downward pressure on costs
- There is limited shareholder value in having different policies, procedures and technical standards
 - Significant divergence since the GDN sales
- A successful DTN 2018 would mean that the governance and workstream approach would continue once the project has been completed

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Issues that this proposal addresses

- The Gas Act, Ofgem Licences and HSE Safety Cases underpin the entry and exit connections process, in principle there should be common policies and standards to allow the gas industry to better compete
- NIA's in the DTN process are not co-ordinated as part of an overall strategic programme with overlaps and difficulties of wider roll-out
 - Eg CNG and Hexel One projects from Cadent are very good but the wider roll out is not facilitated in absence of wider industry buy-in
- All GTs have good Stakeholder Consultation processes but it is very difficult for SME's to support given resource challenges
 - Often junior staff attend these sessions and they may not have the wider competency to provide valuable input
- Policy divergence can be a good thing for internal facing processes
- Different external connection processes and technical standards amongst GDNs disrupt the supply chain and add a lot of cost and complexity

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Stakeholder Input Concept

- Aim to support innovation in the GTs' processes that enable competitive connections and increase co-ordination across the distribution and transmission networks
- Ofgem governance provides the opportunity for co-ordination to reduce costs and make it easier for competitive connections companies to operate better across the whole of GB
- Ofgem support provides the opportunity to bring in key stakeholders who can drive the innovation
 - This will drive efficiency into the delivery of both entry and exit connections (many of which are for environmentally friendly services such as biomethane and CNG), reducing costs, improving safety performance and reducing environmental impact
- It is not intended to deal with the GT's internal facing policies such as replacement, operations, maintenance, repair etc where co-ordination is less important than organisational innovation

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Governance and Workstreams

- Steering Committee to include all GTs i.e. all four GDN's, NGT and representative of IGT's, plus third parties
- Scope of the DTN 2018 will be 'external facing' and 'non domestic' with the following 6 workstreams:
 - Entry (Biomethane +)
 - Exit (1) CNG
 - Exit (2) Power Generation
 - New Materials
 - Connection Pipelines
 - >7 Bar Pipelines 'taking ownership'
- Common output from all Workstreams is to identify any possible Incentive Arrangements for the GTs that can be proposed to Ofgem
- Support policies in relation to injection of BioSNG, P2G, H2 and onshore gas

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Workstream Programme

- The following are the proposed 6 workstreams
- Intention would be to consult with stakeholders to identify priorities for development and associated resources, costs and programme
- The external collaboration parties identified are illustrative at this stage pending wider discussion

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Workstream 1 – Entry (inc. Biomethane and Bio-SNG)

In collaboration with **REA** and **ADBA** review the range of processes across all network owners impacting the following areas:

- Cost reduction target for Grid Entry Units
- Ownership Models and Fundamental Design Review
- Single box/two box options
- Biomethane Producer requirements (DFO maintenance etc)
- Within grid compression and other capacity management techniques including use of Smart Gas Metering to identify GDN capacity
- ME/2 and ISO test for low flow and instrument calibration
- GQ/8 and gas quality monitoring regime
- Biogas and Biomethane testing
- Danint modernisation and new devices
- Lower cost telemetry
- Industry information sharing (safety related and gas quality)
- Low cost Exit Connections at the Grid Entry Unit
- Blending as interim solution to help some producers ahead of Future Billing

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Workstream 2 – Exit (1) (CNG)

In collaboration with **NGV Network, British Compressed Gas Association and IGEM** review the range of processes across all network owners impacting the following areas:

- Pressure guarantees from GDN
- ROV and design principles
- ‘GT approval’ of Supply Point Metering (unregulated)
- Odorant (for NTS)
- Consider impact on GDN capacity provision
- Safety Review to build confidence (eg with local authorities, fire officers)
- Co-ordination of infrastructure design/ownership/operation and demarcation to avoid excessive requirement for unintended GT licence requirements and GS(M)R Safety Cases for small sections of pipe

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Workstream 3 – Exit (2) Power Generation

In collaboration with **ADE and the Energy UK** review the range of processes across all network owners impacting the following areas:

- Capacity studies
- Ramp rates
- Pressure guarantee/boosters
- Reinforcement calculations/economic test
- Need for ROVs
- Dust issues from old mains upstream
- Understanding/consistency of where NExAs are/are not required and what their obligations are

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Workstream 4 – New Materials

In collaboration with **EUA, IGEM and HSE** review the range of processes across all network owners impacting the following areas:

- Hexel one (19 bar)
- Soluforce (100 bar)
- Issues such as need for NRV, easement widths, building proximity distances
- Link to NIAs
- Link to connections (eg Soluforce in built-up area instead of steel)
- Review/impact assessment on TD/1

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Workstream 5 – Connection Pipelines

In collaboration with **EUA, IGEM and GIRS** review the range of processes across all network owners impacting the following areas:

- Easement widths
- Treatment of other assets in the easement
- Technical standards consistency
- Streetwork related design issues
- Reinforcement works
- Link to new materials (eg Soluforce for sections in highway that would need steel)
- Review/impact assessment on TD/1

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Workstream 6 – Above 7 Bar Adoption

In collaboration with **IGEM** establish common rules and processes for adoption of >7 bar pipelines/connections (based on Transco >7 bar NTS/LTS 1999 SLO/1 process that have not been used much prior to recent biomethane/CNG/power developments:

- Scope
- Simpler process for connection only
- Process for pipeline
- Standard designs
- Materials and valve standards
- Audit regime
- Deviation process
- Contract between >7 bar competitive connections company and GT

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Outline Proposal

- Governance and Workstream structure
 - Stakeholder engagement and support from wider industry bodies and trade groups across the proposed 'Develop the Network' process
- Reduce unnecessary and costly differentiation in processes across GB and industry fragmentation in areas of common interest
- Provision of funding (via NIA?) to encourage the right representation on the groups and the capability to evaluate proposed solutions, with specific consultancy in technical areas to develop new solutions
 - Details of these to be developed
- Aim to create spin off NIA's to take forward initiatives that have pan industry support
 - Co-ordination of NIA's is an important objective so they are seen as part of coherent strategy