

Distributed Entry Gas Charging Review Update

*Distribution Workgroup
24 March 2022*

Cadent

Your Gas Network

Background and context

Aims of the work

- **We currently have a charging regime which could discourage green gas onto GDN networks with** entry reinforcement costs for new connections must all be paid by the party wishing to connect to the network ('the connectee')
- **This work is intended to consider what changes can be made to entry/exit charging arrangements to support green gas entry and allow GDNs to better meet their relevant objectives**
- **In doing so it is intended to resolve a specific identified problem with entry quickly, while recognising wider charging changes need to be considered.** We have identified a specific barrier to entry injection of green gas which this work is intended to address. Notwithstanding this, we also recognise that work will be needed across GTs and Ofgem in parallel to consider what wider charging changes are needed to support Net Zero.

Objectives of a revised charging regime

- **Cadent, along with other GDNS have agreed that a revised charging regime must support better achievement of our existing Licence conditions, namely those set out in Section 4B:**
 - 1 To properly take account of development's in the development of GTs transportation businesses** including the need for decarbonisation of the gas system to contribute to Net Zero
 - 2 To facilitate competition in the supply of gas and not restrict, distort or prevent competition in the transportation of gas** by supporting new entry connections, including for different types of gas
 - 3 To support charges that reflect (as far as practicable) costs incurred by GTs** (and a reasonable profit)
 - 4 To be consistent with, and support, GTs in discharging their obligations in line with the Gas Act (1986) and their Licences**
 - 5 To ensure that the charging methodology is consistent with wider applicable legislation and regulations** (including binding decisions of the European Commission)
 - 6 To ensure that GTs do not show any undue preference towards or unduly discriminate against any party wanting to connect to the network**

In designing new options for sharing entry reinforcement costs, it is important to recognise the trade-off we are making between key charging principles and why it is appropriate

The fundamental trade-off

- **In developing new options we are considering trading off fundamental objectives of GTs in the connection charging methodology, namely:**
 - Objective 2 – **To facilitate competition in the supply of gas and not restrict, distort or prevent competition in the transportation of gas** by supporting new entry connections, including for different types of gas
 - Objective 3 – **To support charges that reflect (as far as practicable) costs incurred by GTs** (and a reasonable profit)
- Currently levying all entry reinforcement on connectees presents a very sharp cost signal (Objective 3), but could prohibit green gas entry – promotion of competition in the supply of gas taking account of Net Zero (Objective 2). It also is unlikely to represent where benefits of new connections accrue. On the other hand, full socialisation of costs would not be cost reflective, but would support green gas entry
- **Our task therefore is to design options to balance these competing objectives**



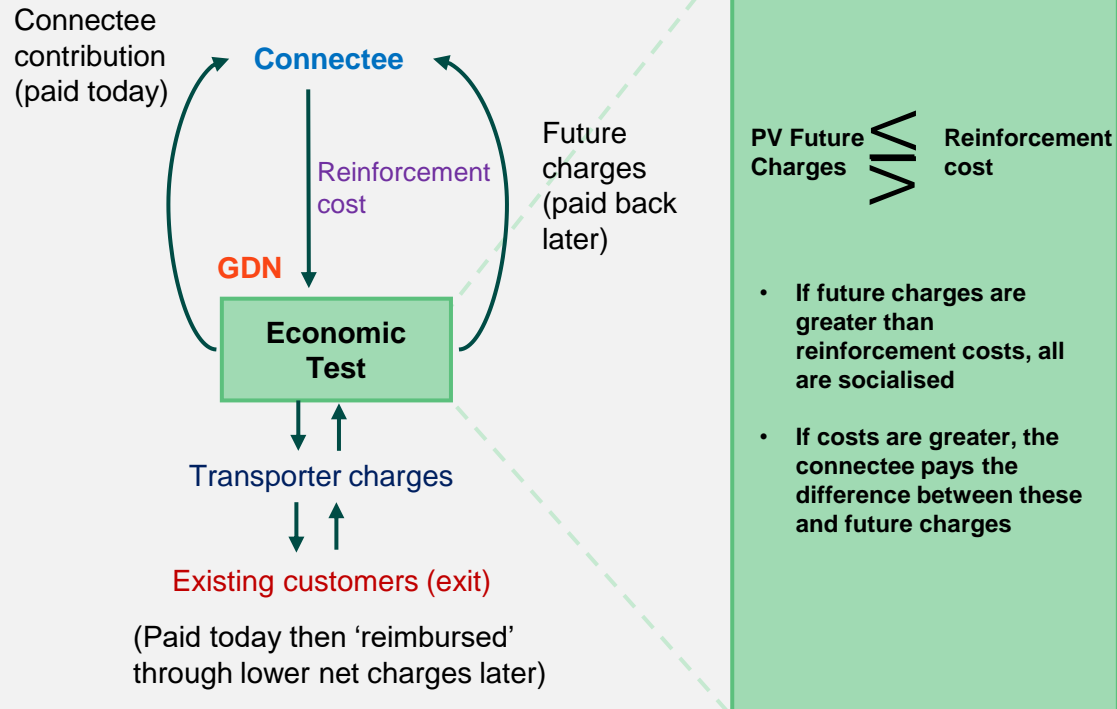
Why is trading-off against cost reflectivity appropriate?

- **Doing so supports greater competition in the supply of gas** (as above)
- **Doing so will support the delivery of wider benefits to all gas customers** through reduced fossil fuel use and the meeting of Net Zero targets
- **Introducing biomethane and hydrogen to networks would support greater consumer choice and the potential for lower long-term energy costs for customers**
- **It is consistent with the approach taken in electricity distribution**, where greater amounts of entry reinforcement have been and are continuing to be socialised
- **Expenditure for entry reinforcement over the coming years is expected to be small relative to evidence on consumer willingness to pay for benefits**

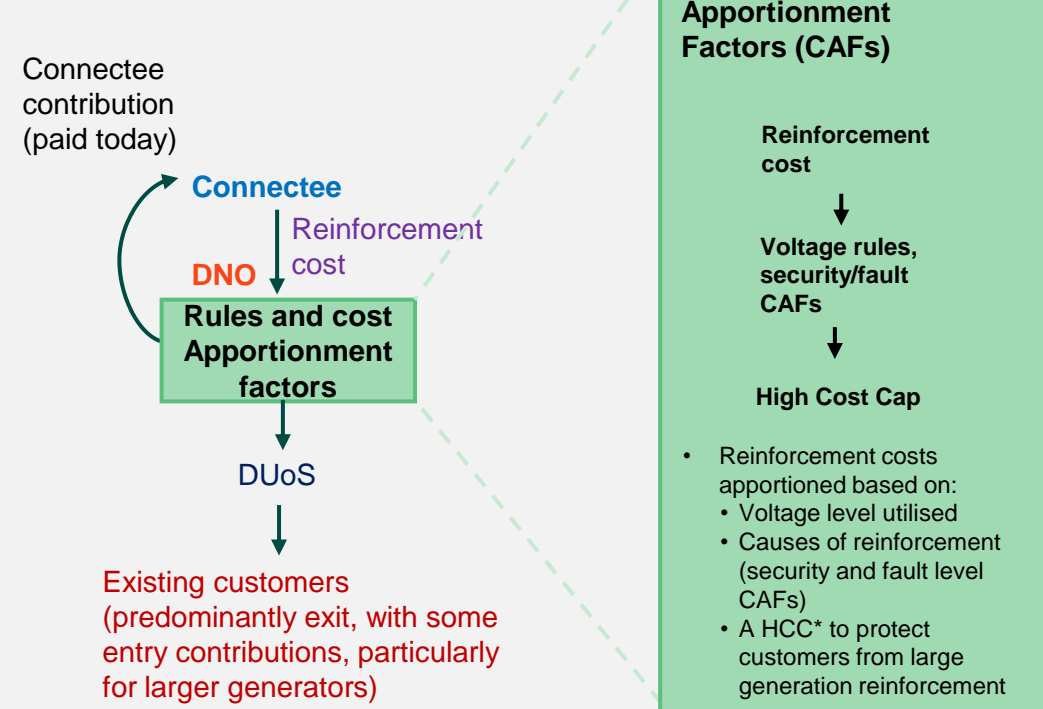
Based on the trade-off we have first considered precedent across gas (exit) and electricity distribution (entry) where alternative approaches are used

How costs flow through in the GD and ED sectors for entry/exit reinforcement

GD (exit)



ED (entry)



We have determined progressing an 'ED-like' approach for GD would be beneficial as:

- There a number of difficulties with an Economic Test for GD entry:
 - **No current entry revenues** that could be used to set against reinforcement costs
 - **Would require GDN entry charge and a major amendment to current charging framework** and would not allow for implementation of a solution at pace
- A similar approach to ED-entry is also beneficial in:
 - Supporting **consistency across energy vectors**
 - **Can be implemented without wider charging regime changes** meaning implementation at pace can occur

Summary of options developed

In implementing an ED approach for GD entry we first need to understand what factors drive reinforcement costs at different entry sites

We have identified two key drivers of entry reinforcement costs:

- **Capacity** - If there is no spare capacity this could cause reinforcement or stop development and slow things down
- The **location** of where a connectee 'plugs' on to the network and how this relates to demand

We have then designed four different approaches which could be used to apportion costs across connectees and customers:



Assessment of new options to determine the connection boundary

- Based on current charging approaches not best meeting Objective 1 we have undertaken a qualitative assessment of the four new options
- Our appraisal rates each of the four options based on how well they support Objectives 2/3 based on a simple Red-Amber-Green system

	1 Reinforcement price	2 Differential % contribution	3 High Cost Cap	4 All or nothing cap	Summary of assessment
Facilitate competition in the supply of gas	Amber	Amber	Green	Amber	<ul style="list-style-type: none"> • Socialisation of entry reinforcement supports competition in supply of gas by incentivising new connections. It also could support additional benefits as network reinforcement and can lead to follow-on benefits to other parties (positive externalities), which are harder to enable when one party pays • All options socialise greater amounts of costs than the Do Nothing, but: <ul style="list-style-type: none"> • Option 1 and 2 are rated amber may be more complex for connectees to understand and evaluate, making them less effective • Option 4 is rated amber as it is unlikely to support as much entry as Option 3 for a given amount of costs as connectees pay 'all or nothing' rather than an increment
To support charges that reflect costs	Amber	Amber	Amber	Red	<ul style="list-style-type: none"> • Reinforcement is triggered when capacity is not sufficient to flow gas in/out of the system for both entry and exit customers. This means a balance must be struck between costs socialised (on exit customers) and those paid by connectees. • Options 1, 2 and 3 all support this balance, but with no current entry charges none are rated as green as they could be improved on in future. • Option 4 is rated red as under this option either the connectee pays all reinforcement costs or all are socialised – no balance is struck between the two sets of parties that cause the reinforcement

Preferred option

Summary of assessment and preferred option

Based on our qualitative assessment of options against Objectives 2 and 3 our preferred option to take forward is Option 3 - the High Cost Cap

- **Our assessment shows that the High Cost Cap:**

- Supports greater green gas entry through socialising costs
- Ensures a balance of costs are shared between connectees and existing customers

- **It also has a number of practical advantages compared to other options:**

- It can be implemented most quickly out of each of the options put forward
- It requires less updates operationally and can be disaggregated/built on in future as needed to support entry in particular places
- It has precedent and is consistent with approaches in ED

This option also continues to meet other relevant Objectives – 4, 5 and 6

- **Objective 4 – to support GTs in discharging their duties and activities in line with The Gas Act (1986) and Licences.** The option does not create any additional impediments relative to charging regimes in place today, but better supports GTs in adapting their businesses to new conditions
- **Objective 5 – to be consistent with wider applicable regulations and legislation.** We are not aware of inconsistencies that this new charging approach would introduce, particularly given it is in place in an analogous setting: the electricity market
- **Objective 6 – to ensure GTs do not show any undue preference towards or unduly discriminate.** The High Cost Cap would apply equally to all potential connectees to the network.

Now we have a preferred option, we are moving forward in understanding potential levels for a High Cost Cap and developing consultation documentation to get feedback on proposals in April

Our forward plan

