



**St Fergus Terminal: Consultation on  
the range of future charging and  
commercial solutions that should be  
considered ahead of any proposed  
investment options**

August 2021

# Executive summary

This consultation has been written by National Grid Gas (NGG) in its role as owner and operator of the National Transmission System (NTS) in Great Britain, the consultation builds upon the extensive feedback we had from our stakeholders during RIIO T2 and forms part of a wider piece of work to establish both the most appropriate level of future entry capability at the St Fergus gas terminal and the most appropriate charging regime. The latter being the focus of this specific consultation.

The St Fergus gas terminal, which accepts gas in from three sub-terminals, is currently one of the highest utilised sites on the NTS. It is a site of fundamental importance to the UK in that it currently provides flexibility, supports security of supply and supports access to UK Continental Shelf (UKCS) gas, helping to keep gas prices low. The access to UKCS gas also allows access to oil production, another benefit to the UK economy.

The terminal has been in continuous operation for over 40 years and requires a level of investment to both re-life a number of assets on the terminal and (subject to establishing the future operation) to make the compressors that receive gas from the North Sea Midstream Partners (NSMP) sub-terminal compliant with new environmental legislation<sup>1</sup>. The consultation comes as part of our RIIO-2 price control and the need for a re-opener in June 2025 to agree the funding for the capability that is needed for customers and consumers.

**Given the importance of the terminal the issues presented in this consultation affect a broad spectrum of users in the UK, as any potential change in entry capability at St Fergus may result in the need to make or accelerate other consequential investments. We would like to hear not just from St Fergus users, but users at all terminals, storage users, LNG terminal users, consumers and others across the UK energy industry.**

During the RIIO-2 process and in our Business Plan<sup>2</sup> we set out the investment proposals and also showed how we had considered alternative commercial options. Ofgem set out the next steps in Draft Determinations and Final Determinations and have asked us to do further (feasibility) studies on the most appropriate option and also look at who should pay for any investment. We are consulting with stakeholders now to ensure we haven't missed anything as part of the RIIO-2 process, seek views as to whether we should include the wider market impact in our assessment of final options and how to recover assumed funded works via charges.

Funding has been provided for essential asset health works whilst the studies are in progress and we have agreed with Ofgem a Project Assessment Process, which provides a two-step process whereby Ofgem would review a Final Option Selection Report (FOSR) and then a separate cost submission once a project had gone through our Front-End Engineering and Design (FEED) and tender process.

Ofgem requires that the Final Preferred Option in the FOSR should contain both the investment proposal and supporting commercial arrangements e.g. UNC modification(s). As part of that decision Ofgem will approve or reject the Final Preferred Option, approve another of the options or reject the Final Preferred Option and set out the additional information that is required to identify the best option ahead of resubmission of the FOSR.

This initial consultation will form a key part of our FOSR and will be utilised to set out the forward engagement plan associated to any changes required to the commercial arrangements, such as including potential changes to the Uniform Network Code (UNC) provisions relating to the recovery of St Fergus compression costs. These requirements are set out Special Condition 13 of our Gas

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<sup>1</sup> Industrial Emissions Directive <https://ec.europa.eu/environment/industry/stationary/ied/legislation.htm>, and Medium Combustion Plant Directive <https://ec.europa.eu/environment/industry/stationary/mcp.htm>, see Section 3

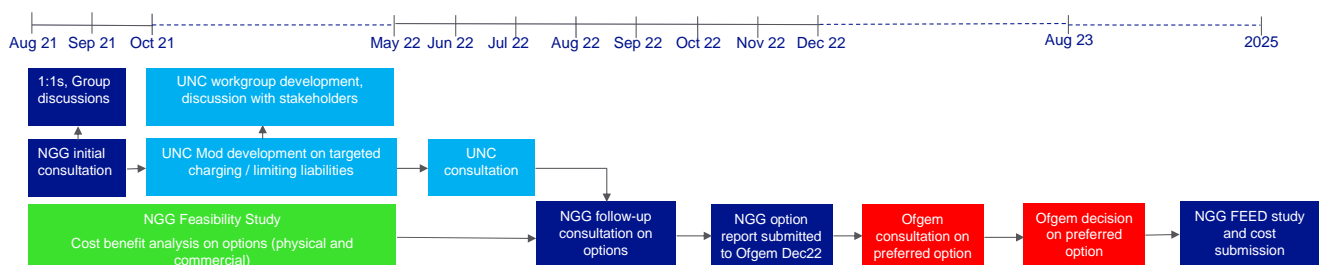
<sup>2</sup> <https://www.nationalgrid.com/uk/gas-transmission/document/129016/download> (p122-125)

Transporters Licence<sup>3</sup>. We will also consider potential changes to UNC provisions for limiting liabilities where there was a lack of investment to make the compressors compliant with environmental legislation and the liabilities would reflect asset availability.

Following this initial consultation, the outcome of the feasibility studies and the future commercial arrangements in mid-2022 we anticipate there will be an NGG follow-up consultation that will revisit the wider requirements of the site. This follow-up consultation will ask stakeholders for input into the future operation of the site, asking whether they support that the existing compressors should be replaced with units compliant with applicable emissions legislation, who would be best placed to build, own and operate such assets and who should pay for such assets and how associated capital and operational costs should be recovered.

Then both the decision on any investment and requirements regarding future commercial arrangements will be set out in an Ofgem consultation, which will provide a further opportunity for stakeholders, customers and consumers to input into the decision. It is then anticipated that Ofgem would make a decision on the final option mid-2023 ahead of a price control reopener in June 2025.

The high-level timeline is shown in the schematic below.



The timeline also shows the opportunities for stakeholders to input into this process, with the formal consultations: NGG initial consultation, UNC modification(s) consultation, NGG follow-up consultation and an Ofgem consultation on the preferred option and informal consultation through 1:1s and group discussions.

This consultation provides background to the history, current and future use of the St Fergus terminal, the environmental legislation, RIIO-2 arrangements and our current view of the level of investment required and timescales. Our initial analysis is provided plus some options for how investment could be funded, work that was presented as part of the RIIO-2 process but summarised again here. Sections 2-5 provides background to the site and the RIIO-2 process, if you are familiar with the site and RIIO-2 then Section 6 is where discussion on the potential charging arrangements starts in detail.

The potential impact on charges is presented together with some high-level examples of indicative charges. The mechanism for implementing changes in charges is presented with the expectation that UNC modification(s) will be raised in conjunction with this consultation. The associated workgroup development and consultation process will be part of further stakeholder engagement, details of which are provided.

Through this consultation we are now asking for stakeholder input as to whether we should include the wider market impact in our assessment of final options, how to recover assumed funded works via charges and are also asking for stakeholder input into the potential range of commercial remedies that may be available as an alternative to investment that we haven't yet considered.

<sup>3</sup> <https://epr.ofgem.gov.uk/Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf>

**A list of questions for stakeholders to consider is provided in Section 14 and below:**

1. Do you wish your response to remain confidential (Y/N)?
2. Following on from the RIIO-2 process do you agree with our approach to address the requirements of Final Determinations?
  - a. is there anything else we should consider?
3. We would be interested in stakeholder views on whether we should include the wider market impact in our assessment and, if so, what robust method could we utilise?

**Cost targeting**

4. Do you support targeted charging where there is demonstrable localised benefits that should be borne by a targeted group of parties / customers?
  - a. Please give your reasoning for your answer
5. If you believe the charge should be targeted, to what degree should this targeting take place i.e. users at entry, users at exit, users at NSMP sub-terminal or some distance-related charge?
6. In terms of the costs that should be reflected in the charge, do you think this should cover all of the following or specific categories. Cost categories are emissions driven, asset health, cyber security, physical security and decommissioning of redundant assets?
  - a. Please give your reasoning for your answer, including which categories
7. Do you believe the introduction of a targeted charge will change shipper behaviours such that flows could be redirected to avoid paying the additional charge?
  - a. Please give your reasoning for your answer

**Other commercial remedies**

8. Other than the changes to the UNC discussed i.e. cost targeting and limiting liabilities, are there other changes to the UNC that could be made to protect GB consumers?
9. Are there any other commercial options i.e. other than capacity buybacks and turndown arrangements that could be used as a solution?

**Please email your responses to [box.operationalliaison@nationalgrid.com](mailto:box.operationalliaison@nationalgrid.com) by 13<sup>th</sup> September.**

Following this consultation, we will publish a consultation report [here](#) that will summarise the responses received, our response to the issues raised and set out our proposed next steps. We will publish all consultation responses that we receive on our website [here](#) unless a party specifies that their response or part thereof should be treated confidentially.

We will also be hosting an industry webinar to explain our thinking on this topic and answer any questions you may have on Tuesday 10<sup>th</sup> August at 09.00. You may register for this webinar via the following [link](#). If you would like to discuss the content of this consultation on a bilateral basis; please contact [mark.freeman1@nationalgrid.com](mailto:mark.freeman1@nationalgrid.com)

## St Fergus Gas Terminal

### 1 Overview

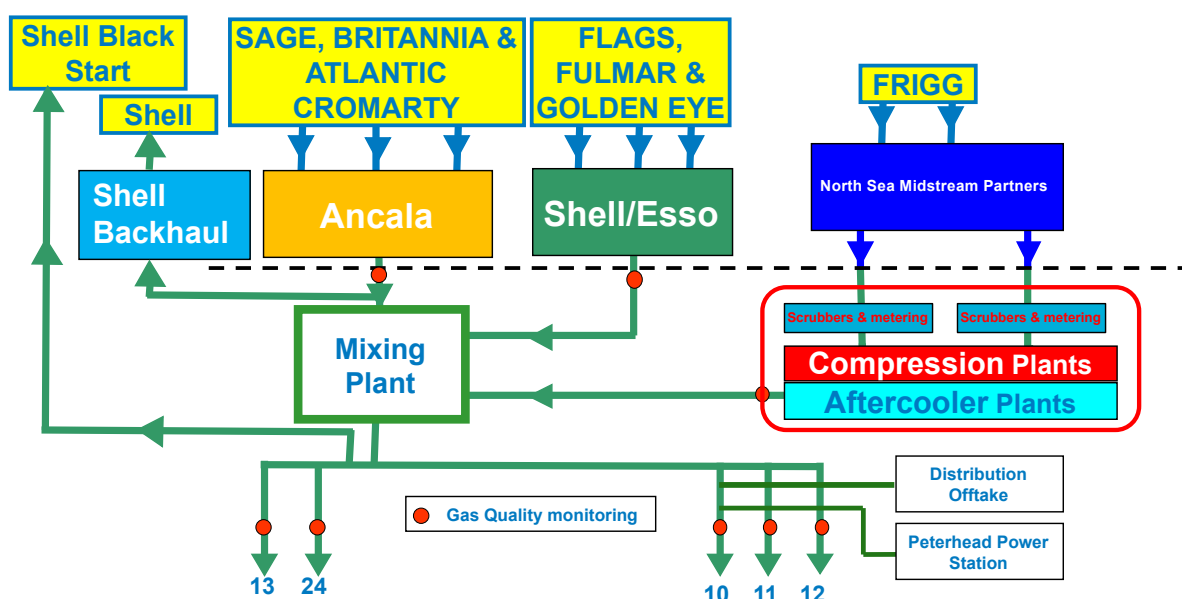
- 1.1 The St Fergus gas terminal, which accepts gas in from three sub-terminals, is currently one of the highest utilised sites on the NTS. It is a site of fundamental importance to the UK in that it currently provides flexibility, supports security of supply and supports access to UK Continental Shelf (UKCS) gas, helping to keep gas prices low. The access to UKCS gas also allows access to oil production, another benefit to the UK economy.
- 1.2 The terminal has been in continuous operation for over 40 years and requires a level of investment to both re-life a number of assets on the terminal and (subject to establishing the future operation) to make the compressors that receive gas from the North Sea Midstream Partners (NSMP) sub-terminal compliant with new environmental legislation. The consultation comes as part of our RIIO-2 price control and the need for a re-opener in June 2025 to agree the funding for the capability that is needed for customers and consumers.
- 1.3 Given the uncertainty for the long-term operation of the site a robust process needs to be undertaken to ensure the most efficient economic solution, ultimately addressing what needs to be done to deliver a level of entry capability stakeholders require, who should pay for any associated works to deliver this capability and who should manage any constraint cost risk beyond the investment levels that can be justified as being in the interests of GB consumers. Under the current regulatory and commercial framework, the risks around these decisions are borne by GB gas consumers.
- 1.4 During the RIIO-2 process and in our Business Plan we set out the investment proposals and also showed how we had considered alternative commercial options. Ofgem set out the next steps in Draft Determinations and Final Determinations and have asked us to do further (feasibility) studies on the most appropriate option and also look at who should pay for any investment. We are consulting with stakeholders now to ensure we haven't missed anything as part of the RIIO-2 process, seek views as to whether we should include the wider market impact in our assessment of final options and how to recover assumed funded works via charges.
- 1.5 Any costs need to be recovered and we are engaging with stakeholders about which parties and by what nature the recovery of these costs are potentially targeted to some or all users. The configuration of the site is presented in Section 2. The changes to charges relate only to works at the NSMP sub-terminal, this consultation does not cover works at any other of the customer inputs at Ancala and Shell.
- 1.6 In this consultation we have set out the history and background to the site, and key considerations to be taken into account in deciding future investments. We have set out both the stakeholder engagement process and the potential next steps based on stakeholder input. This will form a key input to the St Fergus emission reopener uncertainty mechanism that is due to be submitted in June 2025. Specifically, this consultation will form a key part of our FOSR to be submitted to Ofgem in December 2022 and will be utilised to set out the forward engagement plan associated with any changes required to the commercial arrangements, such as including potential changes to the Uniform Network Code (UNC) provisions relating to the recovery of St Fergus compression costs.

## 2 History of St Fergus gas terminal

2.1 The National Grid St Fergus gas terminal was commissioned in 1978 and handles between 25% and 50% of the UK's gas supplies. The site has been in continuous operation since commissioning. The terminal receives gas from three sub-terminals, currently owned by;

- Ancala
- Shell
- North Sea Midstream Partners (NSMP) – operated by PX

2.2 The configuration of the site is shown below. The scope of this consultation covers the works shown in the red square on the NSMP sub-terminal.



2.3 For each sub-terminal it is a UNC requirement that a Network Entry Agreement (NEA)<sup>4</sup> is in place between NGG and the operator of the sub-terminal. The NEA between NGG and NSMP specifies that NSMP should deliver gas between 41-44 barg. This is a legacy arrangement reflecting the commercial arrangements in place at the time British Gas was privatised in 1986.

2.4 Other NEAs require gas to be delivered to the NTS at a higher minimum pressure. As a result, where required, other sub-terminal and delivery facility operators will operate and pay for compression to meet the higher minimum pressure requirement for delivery to the NTS.

<sup>4</sup> Standard contractual terms to allow a customer to bring gas onto the existing transmission system and covered under rules of the Uniform Network Code (UNC)

- 2.5 Other NEAs also include a maximum operating pressure (MOP) based on the pressure rating of adjacent NTS equipment. For the other sub terminals at St Fergus this is a maximum operating pressure of 72.39 bar, the same as NSMP sub-terminal.
- 2.6 Shippers delivering gas to the NSMP sub-terminal are required to pay charges to cover the additional variable costs (which do not include the capital costs of replacement facilities) incurred by NGG in respect of compression of gas at the NGG terminal prior to delivery to the NTS. This charge is described in Section Y of the UNC and our statement of Gas Transmission Transportation Charges<sup>5</sup>.

### 3 Environmental Legislation

- 3.1 The key pieces of legislation that affect our compressors are:
- **The Industrial Emissions Directive (IED) 2010** which combines the Large Combustion Plant Directive (LCP) 2001 and the Integrated Pollution Prevention and Control Directive (IPPC) 2008. The IED has driven much of the RIIO-1 compressor work
  - **The Medium Combustion Plant Directive (MCPD) 2015** applies specific limits on emissions to air from combustion plant from 2030 and is the major driver behind our RIIO-2 emissions investment programme.

### 4 The RIIO-2 arrangements

- 4.1 During preparation of the RIIO-2 Business Plan two workshops were held at St Fergus and two were held in Edinburgh to get input and feedback on our business plans. These were attended by a broad spectrum of stakeholders including regulators, government, consumer interest bodies, independent user group members, shippers, upstream operators and producers, Gas Distribution Networks (GDNs), consumers, parts of the supply chain and consultants.
- 4.2 As part of the RIIO-2 price control a number of investments have been funded and three specific uncertainty mechanisms<sup>6</sup> to obtain additional funding have been put in place for St Fergus.

### Asset Health works

- 4.3 Our Business Plan includes specific Asset Health works that we identified at St Fergus site. As part of Ofgem's Final Determinations a level of asset health spend was set for the NTS. We have included the associated proportions for St Fergus totalling £73.26m. We do, however, anticipate additional asset health spend related to the emissions reopener at St Fergus. This spend is directly related to the yet to be determined proposal for complying with emissions legislation and will form part of the reopener process.

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<sup>5</sup> <https://www.nationalgrid.com/uk/gas-transmission/document/135121/download>

<sup>6</sup> Licence Special Condition 3.14 - Asset Health reopener, Licence Special Condition 3.11 St Fergus emissions reopener and Licence Special Condition 3.2 cyber resilience OT reopener

- 4.4 The table below outlines the allowances (£m, post-efficiency) made for asset health and cyber resilience works at St Fergus, it specifically does not include emissions investment.

	Baseline (ex-ante)	Uncertainty Mechanism <sup>1</sup>	Sum Theme Spend
Plant & Equipment	-	18.67	18.67
Cyber <sup>2</sup>	14.71	12.28	26.99
Valves	2.07	0.57	2.64
Redundant Assets	4.55	-	4.55
Cab Infrastructure	-	1.50	1.50
Civils	0.86	-	0.86
Electrical	0.43	-	0.43
Actuators <sup>3</sup>	-	15.47	15.47
ISS	2.15	-	2.15
<b>Total<sup>4</sup></b>	<b>24.77</b>	<b>48.49</b>	<b>73.26</b>

<sup>1</sup> Estimated value at time of submission subject to increase or decrease

<sup>2</sup> Cyber use it or lose it ("UIOLI") funding mechanism

<sup>3</sup> Actuator investment value based on estimated value at time of Final Determination

<sup>4</sup> All values are post efficiency

- 4.5 Ofgem have therefore provided a route to cover specific asset health issues through reopeners once we have further clarity on the scope and a greater certainty over the costs.

### St Fergus compressors and subsidence

- 4.6 In respect of the additional investment requirements to meet the requirements of the new environmental legislation we have agreed with Ofgem a Project Assessment Process<sup>7</sup>, which provides a two-step process whereby Ofgem would review a FOSR and then a separate cost submission once a project had gone through our Front-End Engineering and Design (FEED) and tender process.
- 4.7 Ofgem agreed the need for us to develop options for emissions compliance at St Fergus and have provided a baseline allowance of £19.98m which will be adjusted to reflect actual costs for the options selection process.
- 4.8 Ofgem also confirmed they are considering the issue of who should pay for compressor capital costs at St Fergus NGG terminal given that the assets provide compression for the NSMP sub-terminal only.
- 4.9 As part of the FOSR the specific requirements are as follows in relation to St Fergus charging assessment and the more detailed requirements are set out in full in the Gas Transmission Project Assessment Process.

<sup>7</sup> [https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/pcd\\_gtpap\\_guidance\\_v2.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/pcd_gtpap_guidance_v2.pdf)



- A detailed statement setting out the steps taken to ensure a fair outcome for current and future consumers in terms of the impact of the proposed capital investment on charges, including potential modifications to the UNC charging provisions; and
  - A re-worked constraints model that demonstrates realistic levels of TPD Section I3.7 liability costs incurred when compared with the historical operation of the site. This must use the Network Capability Model as the basis to build a view on TPD Section I costs and follow a common method used across the network.
- 4.10 This consultation will form a key part of our FOSR and will be utilised to set out the forward engagement plan associated to any changes required to the commercial arrangements, including potential changes to the UNC charging provisions.
- 4.11 We anticipate that both the decision on any investment and requirements regarding future commercial arrangements will be set out in an Ofgem consultation, which will provide a further opportunity for stakeholders, customers and consumers to input into the decision.

## 5 Level of investment required and timescales

- 5.1 This section covers our latest view of works that are required over the RIIO-2 period related to the general asset health of the site and separately views on the costs to either maintain or reduce capability post 2030 when the environmental legislation requires us to change the operation of our four gas driven Rolls Royce Avon compressor units located at the NGG terminal.
- 5.2 NGGT\_A16.16\_St Fergus Investment Programme Engineering Justification Paper<sup>8</sup> was submitted as part of our 2019 Business Plan. It considered a number of different physical options with supporting cost benefit analysis.
- 5.3 The options were:
- a) Derogating to 500hrs runtime the Avon compressor units
  - b) Retaining current equipment, returning to service some units and significant asset health interventions
  - c) Redeveloping plant by removing current assets and rebuilding with new assets
  - d) New greenfield plant

The options, included sub-options, the details of which are included in the paper with cost benefit analysis (CBA) and net present value which included assessment of operating costs, constraint costs and capex.

- 5.4 Each of the options was considered against the 2018 Future Energy Scenarios (FES) in our analysis, with the Steady Progression pathway as our central case for the CBA with sensitivities being run against the other three scenarios. Maximum flows at the NSMP sub-terminal do vary depending on the FES pathway. Despite this, the CBA outcomes were not sensitive to changes in FES pathways. Going forward, further CBA analysis will be tested against the most up to date FES.

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<sup>8</sup> <https://www.nationalgrid.com/uk/gas-transmission/document/129596/download>

- 5.5 In our Business Plan the preferred option was option a) redevelopment of the plant by removing current assets and rebuilding new assets and for the period to 2030 the estimated costs for emissions work are £180m and associated asset health costs of £64m, asset health costs from 2031-2050 were estimated to be £127.3m. There is a cost tolerance of +/- 30% around these figures. These costs have been used as a starting point for the indicative charge impacts in section 10, but it should be understood that these costs will change when the outputs from our Feasibility study become known.
- 5.6 The analysis does not take account of the wider market and upstream impacts as we do not believe we are best placed to determine these costs.
- 5.7 In terms of timescales, following the decision on FOSR in mid-2023, detailed design and procurement can start in earnest with construction scheduled to start in mid-2024 and commissioning mid-2027.

## **6 Who should pay for investment?**

- 6.1 Based on the engagement through the Ofgem RIIO-2 process and to-date, there is an argument that investment should be funded by parties who will benefit most from the investment – i.e. NSMP, NSMP shippers and related upstream parties.
- 6.2 It is clear from our analysis that there is uncertainty in using the FES and there is uncertainty in the length of time St Fergus will continue to be operated for to compress natural gas. We also do not have access to important production costs or savings that are made by these parties from the NTS providing the compression service.
- 6.3 In addition, as all other entry point customers on the National Transmission System need to make their own decisions on compression investment, targeting costs would be consistent with all other entry points, who have to deliver gas at NTS pressure and therefore may need to invest to achieve this.
- 6.4 The above cost targeting approach is not the current contractual arrangements, where we have liabilities if we do not invest and a potential stranding risk if we do invest (there is no long-term signals or commitment from NSMP shippers, NSMP or PX that would protect consumers). Equally, we are unable to assess the potential GB market impact on gas prices to GB consumers should the capability at the site reduce.
- 6.5 It should be noted that GB consumers also bear the risks of constraints where there is lack of investment and these costs being socialised. Equally GB consumers may be impacted as any potential change in entry capability at St Fergus may result in the need to make or accelerate other consequential investments.
- 6.6 In our final determination Ofgem have made it very clear that we must take reasonable steps to ensure any solution represents a fair balance between consumers and terminal users.
- 6.7 We would be interested in stakeholder views on whether we should include the wider market impact in our assessment and, if so, what robust method could we utilise?

6.8 A schematic is provided in Appendix 1 which summarises the investment options, commercial options where there is lack of investment, how these options would be facilitated and the rationale for discounting the options. This is discussed further in the following Sections, 7 and 8.

## **7 What contractual routes could be used for funding investment?**

7.1 There are a number of options that have been explored to protect GB consumers and we would like to obtain stakeholder input into these so that we can propose the right set of remedies alongside the funding request.

7.2 These involve potential change to the Network Entry Agreement or the Network Code.

### **Network entry agreement options**

7.3 A number of options have been explored involving changing the arrangements in the Network Entry Agreement that would alleviate exposure for GB consumers. These involve amending the NEA such that NSMP fund investment in compression or transfer of asset/obligations to NSMP or a third party.

7.4 Options for amending the NEA such that NSMP fund investment include:

- Changing the pressure range in the NEA such that gas is delivered to NTS facilities at network pressure – compression would be required upstream of St Fergus
- Use a UNC modification to change the pressure range – this would still require change to the NEA
- NGG terminate the NEA such that upstream compression arrangements would be required at St Fergus
- These changes are only viable if both parties (and in some cases NSMP users) to the NEA agree to them.

7.5 Options for Asset transfer to NSMP / third party – the transfer of the compression assets at the NGG terminal to NSMP / third party would mean NGG would not need to provide compression. This would require agreement by NSMP/PX and a change to the NEA. Given the environmental legislation and the nature of the compression service we do not believe a third party would be willing to provide this.

7.6 In conclusion, as these options require agreement to an NEA change, presently we do not believe there are any options involving changing the NEA that are viable, but as part of this consultation we will consider and discuss these options with customers and include any views in our consultation report.

### **Potential Uniform Network Code (UNC) modification options**

7.7 There are a number of options that have been explored to protect GB consumers and we would like to obtain stakeholder input into these so that we can propose the right set of remedies alongside the funding request.

- 7.8 UNC modification to introduce a targeted charging methodology – this will introduce a targeted charge to a specific set of Users for operation of the St Fergus compressors to also capture investment costs and target short payback periods if asset stranding is a potential risk. This is discussed further in section 10.
- 7.9 UNC modification to limit liabilities – By way of background, In the event of failure to accept gas into the NTS the following can occur;
- NSMP Shippers are compensated under Network Code<sup>9</sup> rules, with compensation funded by all shippers
  - National Grid Gas is exposed to costs through the Constraint Cost Management Output Delivery Incentive which applies until 2026
  - There is no compensation from National Grid Gas to North Sea Midstream Partners or any upstream parties
- 7.10 if there were a lack of investment to enable the gas compressors to be compliant with environmental legislation then they would have to be limited to 500 hours / annum run time and therefore over and above this NGG would be unable to accept gas tendered for delivery from the PX facility and NGG would be at risk of incurring potentially significant liabilities under UNC TPD Section I and/or constraint management costs under UNC TPD Section B. Shippers will also bear exposure to these costs. The modification would limit the liabilities based on the availability of the assets.
- 7.11 It is envisaged that any UNC modifications would be actively discussed following this consultation and will go through the normal UNC process of workgroup development and consultation ahead of Ofgem’s decision on the Final Options Selection Report.

## **8 Other Commercial Options as an alternative to investment**

- 8.1 As well as an option to limit liabilities through UNC modification a number of other commercial options have been explored including capacity buybacks and turndown arrangements.
- 8.2 Buyback capacity at St Fergus – by buying back capacity at St Fergus there is potential that flows could be restricted such that the compression requirement could be reduced. However, entry capacity is sold at an aggregated system entry point (ASEP) level so there would be a need to buy back all St Fergus capacity to impact NSMP flows – this would not be an efficient solution. There is a potential sub-option to split the aggregation at St Fergus so that capacity could be sold and bought back at NSMP specifically but previous experience at Bacton indicates this to be difficult, contentious and requiring compliance with European legislation.
- 8.3 Turndown arrangement with shippers – also where compensation would be provided when compression is not available. There would be a need to negotiate agreements with all shippers at the sub-terminal which is likely to be extremely complex and expensive. A similar arrangement with the sub-terminal is also likely to be very complex and NSMP/PX would need to develop and secure agreement with shippers.

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<sup>9</sup> UNC TPD Section I 3.7

8.4 In conclusion we do not believe there are presently any other commercial options that could ensure protection for GB consumers but as part of this consultation we will consider and discuss these options with customers and include any views in our consultation report.

## 9 Stakeholder process

9.1 Several meetings have been held with PX / NSMP most recently during 2021 to understand the needs case at NSMP sub-terminal. We anticipate these meetings will be on-going through the development of the Final Options Selection Report.

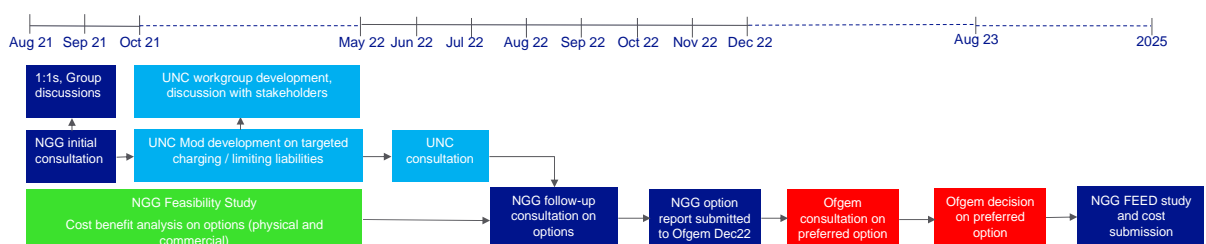
9.2 Bilateral update meetings with Ofgem take place on a monthly basis.

9.3 Most recently we have raised the issue of a potential charging methodology change at the NTS Charging Methodology Forum on 4<sup>th</sup> May 2021 and with Oil & Gas UK on 7<sup>th</sup> May 2021 and 15<sup>th</sup> July 2021 and signalled that we would present back to these forums updates as they progress.

9.4 Going forward there will be an extensive stakeholder engagement programme starting with a webinar, 1:1 meetings and group discussions to support this consultation. The report on the consultation will be published on our website. As the UNC modification(s) are raised this will entail further engagement through the UNC forums and targeted engagement based on stakeholder interest. Although any NGG decision on options would presently be made in the interests of GB consumers and not factor in wider implications e.g. maximising recovery of oil and gas, security of supply impacts, disruption to offshore oil and gas production (cost and environmental impacts) and potential lost tax revenues we would be very interested in how these factors could be taken in to account in any investment decision. This includes how to demonstrate that any figures used are reflective of the costs incurred and that can be relied upon to make an investment decision.

9.5 We envisage that there will be further consultation building on this consultation and pending outcome of the Feasibility study and future commercial arrangements in mid-2022 and we anticipate that both the decision on any investment and requirements regarding future commercial arrangements will be set out in an Ofgem consultation, which will provide a further opportunity for stakeholders, customers and consumers to input into the decision.

9.6 The engagement process is set in the timeline below shows the many opportunities for stakeholders to input into this process, with the formal consultations: NGG initial consultation. UNC modification(s) consultation, NGG follow-up consultation and an Ofgem consultation on the preferred option and informal consultation through 1:1s and group discussions.



**9.7 Given the importance of the terminal the issues presented in this consultation affect a broad spectrum of users in the UK, as any potential change in entry capability at St Fergus may result in the need to make or accelerate other consequential investments. We would like to hear not just from St Fergus users, but users at all terminals, storage users, LNG terminal users, consumers and others across the UK energy industry.**

## **10 Impact on charges – indicative examples**

- 10.1 If changes could be made to the NEA such that NSMP fund compression or if the existing assets and obligations to increase gas delivery pressure were transferred to NSMP then there would be little impact on NTS users. However, as discussed previously, these are presently not viable options.
- 10.2 In terms of targeted charging and as discussed in section 7.8 it is envisaged that a UNC modification will be discussed with industry and will go through the normal UNC development and consultation process. However, in order to help stakeholders understand the potential impact of a targeted charge we have put together some example scenarios which are purely on an **indicative basis** – the underlying costs on which the charges are based will change together with a number of other assumptions which will need to be considered as part of the UNC development process.
- 10.3 Full consideration of any targeted charge would be discussed and developed through the UNC change process.
- 10.4 There are a number of variables that need to be considered, for instance:
- What costs that are to be recovered
  - Over what time period should these costs be recovered?
  - From what date should the charge commence?
  - How should any charge be targeted? For example, should the costs be recovered at entry, exit, or a combination? Should it be based on capacity, flows or as a standing charge?
  - For entry, should the charge be socialised across all entry users, targeted at St Fergus users or just NSMP sub-terminal users?
  - For exit, should the charge be socialised across all users offtaking from the NTS, targeted at those who may be considered direct beneficiaries of the works at the NSMP sub-terminal (for example, related to distance from the St Fergus terminal)?
- 10.5 In terms of the costs to be targeted the indicative figure is provided from our 2019 Business Plan for the estimated costs covering emissions work (£180m) and associated asset health costs (£64m) out to 2031 and asset health costs from 2032-2050 (£127.3m). The figure does not presently include costs to decommission redundant assets.
- 10.6 An important aspect to consider is whether introducing a charge will change shipper behaviours such that flows could be redirected to avoid paying the additional charge. This could potentially result in underutilisation of the site capability and therefore charges for the capability being funded from all users. Any degree of targeting carries risks around recovery. For example, it may be that the charge is targeted at an ever-

decreasing user population at the sub-terminal and is why the time period the cost should be recovered over needs to be agreed. In such a scenario it would be necessary to consider how remaining costs are recovered also ensuring that the methodology drives the balance between users and GB consumers. Any such recovery would need to be considered in any enduring solution and to what degree this is covered in the UNC or other contractual routes.

10.7 In Appendix 2, two tables of five scenarios are presented, the two tables differing in the time period over which costs are recovered – Table 1 for the period 2024-2050 and Table 2 for the shorter period 2024-2040; shorter time periods are potentially important if it is thought there is potential for underutilisation of the site capability during these periods. For Table 2, estimated on-going asset health costs beyond 2040 are not included in deriving these indicative examples.

10.8 In terms of being used for comparison there are:

- Two entry scenarios based on fully socialised (A), targeted at NSMP sub-terminal Users (B)
- One wholly exit scenario socialised across all exit users (C)
- Two scenarios split 50:50 entry:exit; one a combination of a socialised entry charge and exit charge (D) and the second a combination of a socialised exit charge and an entry charge targeted to NSMP sub-terminal users only (E)

10.9 The scenarios cover different degrees of targeting and range from fully socialising at entry to fully socialising at exit or something in between the scenarios and therefore show a different risk balance between users of the sub-terminal and GB consumers.

10.10 As the rates presented in Tables 1 and 2 are purely indicative it is too early to comment on the absolute values presented. However, for reference the 2021/22 St Fergus entry capacity reserve price is 0.0521p/kwh.

10.11 In relative terms, as expected the lowest rates are when the charge is fully socialised and highest when targeting is more focussed.

## **11 Summary of the current position**

11.1 We have provided the latest information in terms of the issue that the environmental legislation creates at St Fergus. We have laid out the current position in terms of funding to get us to the next step of producing our final options selection report including no regrets asset health works and shared our view that we believe investment should be funded by parties who will benefit most from the investment – i.e. NSMP, NSMP shippers and related upstream parties.

11.2 Through this consultation we are now asking for stakeholder input to whether we should include the wider market impact in our assessment of final options, how to recover assumed funded works via charges and are also asking for stakeholder input into the potential range of commercial remedies that may be available as an alternative to investment that we haven't yet considered.

## 12 How to provide feedback and next steps

- 12.1 A list of questions for stakeholders is provided in Section 14. Please email your responses to [box.operationalliaison@nationalgrid.com](mailto:box.operationalliaison@nationalgrid.com) by 13th September.
- 12.2 Following this consultation, we will publish a consultation report [here](#) that will summarise the responses received, our response to the issues raised and set out our proposed next steps. We will publish all consultation responses that we receive on our website [here](#) unless a party specifies that their response or part thereof should be treated confidentially.
- 12.3 We will also be hosting an industry webinar to explain our thinking on this topic and answer any questions you may have on 10<sup>th</sup> August at 09.00. You may register for this webinar via the following [link](#).
- 12.4 We also invite stakeholders to discuss the content of this consultation a bilateral basis; please contact [mark.freeman1@nationalgrid.com](mailto:mark.freeman1@nationalgrid.com)

## 13 Glossary

Term	Meaning
ASEP	Aggregated System Entry Point, means the aggregation of individual points at which gas flows from the Delivery Facility Operator (DFO)'s system into the NTS
FEED	Front End Engineering Study
FES	Future Energy Scenarios, which outlines four different credible pathways for the future of energy between now and 2050.
FOSR	Final Options Selection Report,
GDN	There are eight gas distribution networks (GDNs), each of which covers a separate geographical region of Great Britain.
NEA	Network Entry Agreement, contractual arrangement between the Delivery Facility Operator and NGG
NGG	National Grid Gas, owner and operator of the NTS in Great Britain
NSMP	North Sea Midstream Partners
NTS	the pipeline system for the time being designated by National Grid NTS as such, and described in National Grid NTS's Ten Year Statement.
TPD	The Transportation Principal Document, part of the UNC
UNC	Uniform Network Code, this is a legal document which sets out the terms for conveyance of gas. National Grid Gas, the Distribution Networks and all Shippers have signed the Uniform Network Code Framework Agreement



## 14 Consultation Questions

1. Do you wish your response to remain confidential (Y/N)?
2. Following on from the RIIO-2 process do you agree with our approach to address the requirements of Final Determinations?
  - a. is there anything else we should consider?
3. We would be interested in stakeholder views on whether we should include the wider market impact in our assessment and, if so, what robust method could we utilise?

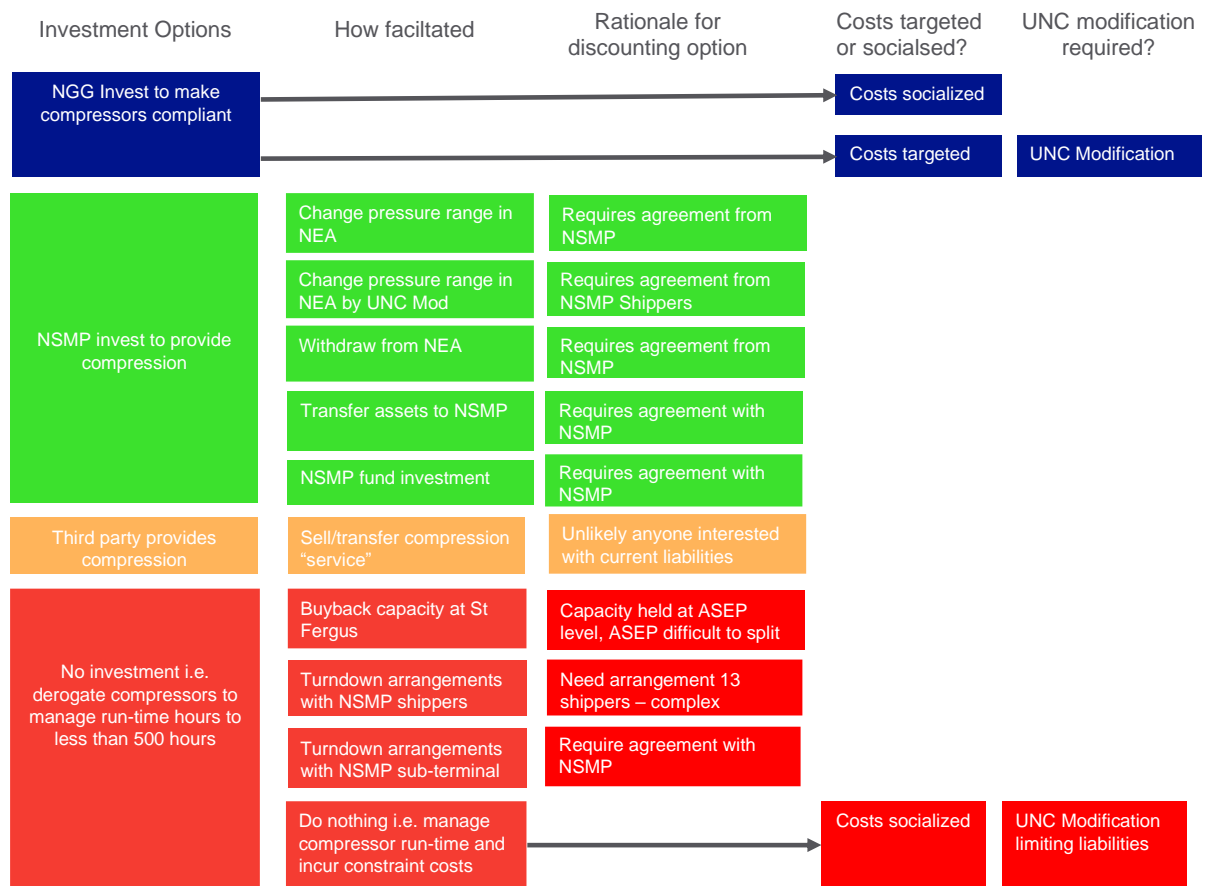
### Cost targeting

4. Do you support targeted charging where there is demonstrable localised benefits that should be borne by a targeted group of parties / customers?
  - a. Please give your reasoning for your answer
5. If you believe the charge should be targeted, to what degree should this targeting take place i.e. users at entry, users at exit, users at NSMP sub-terminal or some distance-related charge?
6. In terms of the costs that should be reflected in the charge, do you think this should cover all of the following or specific categories. Cost categories are emissions driven, asset health, cyber security, physical security and decommissioning of redundant assets?
  - a. Please give your reasoning for your answer, including which categories
7. Do you believe the introduction of a targeted charge will change shipper behaviours such that flows could be redirected to avoid paying the additional charge?
  - a. Please give your reasoning for your answer

### Other commercial remedies

8. Other than the changes to the UNC discussed i.e. cost targeting and limiting liabilities, are there other changes to the UNC that could be made to protect GB consumers?
9. Are there any other commercial options i.e. other than capacity buybacks and turndown arrangements that could be used as a solution?

## Appendix 1 – Schematic showing Funding Options



## Appendix 2 - Example Charging Scenarios

Table 1: Costs recovered 2024-2050 (p/kwh)

Scenario	Entry Rate	Exit Rate	Charging Base	Entry	Exit
A	0.0016		Costs split across all Entry Points	Socialised Costs	N/A
B	0.0621		Costs split across all Entry Points	Targeted to NSMP	N/A
C		0.0016	Costs split across all Exit Points	N/A	Socialised Costs
D	0.0008	0.0008	Costs split across Entry & Exit 50:50	Socialised Costs	Socialised Costs
E	0.0306	0.0008	Costs split across Entry & Exit 50:50	Targeted to NSMP	Socialised Costs

Table 2: Costs recovered 2024-2040 (p/kwh)

Scenario	Entry Rate	Exit Rate	Charging Base	Entry	Exit
A	0.0021		Costs split across all Entry Points	Socialised Costs	N/A
B	0.0822		Costs split across all Entry Points	Targeted to NSMP	N/A
C		0.0021	Costs split across all Exit Points	N/A	Socialised Costs
D	0.0010	0.0011	Costs split across Entry & Exit 50:50	Socialised Costs	Socialised Costs
E	0.0406	0.0011	Costs split across Entry & Exit 50:50	Targeted to NSMP	Socialised Costs

Reference: 2021/22 St Fergus Entry capacity reserve price = 0.0521p/kwh