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25 August 2023

[Centralised Strategic Network Plan: Consultation on framework for identifying and assessing transmission investment options](#)

Dear Konark,

We welcome the opportunity to respond to this important consultation. This non-confidential response is provided on behalf of National Gas Transmission (NGT). We provide more detailed response to the specific consultation questions in the attached annex, but our headline messages are:

- We note that the content and purpose of the consultation is electricity-focused, which is understandable given that the CSNP currently only applies to electricity transmission. Assuming the scope of the CSNP is intended to expand to include methane and hydrogen, we would expect to see specific consultations on the mechanisms for identifying and assessing the drivers for investment in the transmission network for either energy type, which are likely to differ from those for electricity given the significant structural differences between the respective sectors. We should not necessarily assume investment drivers for natural gas and hydrogen will be the same, and the development of the FSO's capabilities will be staged, with a likelihood of hydrogen being lagged to natural gas, and both lagged to electricity.
- In the light of the above, we have endeavoured to provide helpful high-level views across the range of consultation questions, highlighting areas that may not be appropriate for current state natural gas transmission network, which may also be indicative for hydrogen.
- We would like to draw Ofgem's attention to ongoing discussions with DESNZ and the Regulator regarding resilience of the National Transmission System (NTS), which centre on the criticality of ensuring we maintain a gas system which is both flexible and resilient to increasingly volatile and unpredictable demand. Our ambition is the development of a resilience standard via adaptation to existing documents such as the Transmission Planning Code, which we envisage could be a key tool for use by the FSO to support system planning and the objective determination of the level of resilience the network needs to be planned to– this would provide a clear and established set of rules to drive investment needs, supporting timely delivery, transparency and removal of subjectivity in assessment.
- We note that this consultation reiterates the previous suggestion that the CSNP should operate on a three-year cycle. We think that the CSNP needs to be considered in the context of the overarching regulatory and policy framework currently in development with Ofgem and DESNZ, which may offer conclusions as to the optimal timing and frequency of releases.



If you have any questions or comments on this response, please do not hesitate to contact Paul Sullivan, Head of System Capability and Risk ([paul.j.sullivan@nationalgas.com](mailto:paul.j.sullivan@nationalgas.com)) or Jon Dutton, Gas System Operator T3 Team Lead ([jon.dutton@nationalgas.com](mailto:jon.dutton@nationalgas.com)).

Yours sincerely

[by email]

Tony Nixon  
Regulation Director, Gas Transmission

## Annex: Consultation Question Responses

**Q1. Do you agree with our broad regulatory approach to establishing the FSO's obligations to deliver the CSNP products?**

**We agree.**

Ofgem is taking a consultative approach to establish the FSO's CSNP obligations through appropriate regulatory tools: licence conditions and associated governance and methodology documents. We agree that whilst new processes are established and bedded in, adaptability is important, and this may necessarily need to extend beyond delivery date derogations. For the longer-term whole system CSNP objective, separate and specific consideration will need to be given for any necessary natural gas and hydrogen adaptations at the appropriate juncture.

**Q2. What are your views on the types of system need that we have proposed are covered by the CSNP? Are there any gaps?**

**We agree in principle.**

We recognise that longer term planning needs to consider potential whole system integration and operability issues, although the framework through which these are assessed will need careful consideration given the challenges in forecasting these in longer timescales. Clear allocation of accountabilities is also vital in ensuring all requirements are met efficiently, this is particularly true of the different ways in which electricity, methane and hydrogen are configured.

The differences in roles and terminology between electricity and natural gas limit our ability to provide a detailed appraisal at this stage, but we suggest that the necessity and efficiency of FSO validation of TO analysis or the conducting of shadow analysis should be considered.

**Q3. Do you agree that the time horizon for system need assessment should be extended to 2050?**

**We agree in principle.**

In order to ensure efficient delivery against the Net Zero obligation, the time horizon should extend to at least 2050, recognising that the greater detailed focus will need to be on the nearer timescales both in terms of the precision of the planning and the frequency or threshold for updates. It may be necessary to consider longer timescales when seeking to evaluate the beneficial life of some investments, although this must be done within the context of ensuring an affordable and secure energy transition in terms of energy supply to the consumer.

We also note the increased workload that may be imposed on network operators to support option identification and development, and mechanisms need to be in place to ensure this is appropriately funded.

**Q4. Do you agree that the FSO should move to a year-round nodal assessment of system need as part of the CSNP?**

**We agree, and the assessment of network capability requirements for natural gas transmission already covers the range of demands on a zonal basis and is one accountability that will transfer to the FSO.**

We recognise that operability challenges and capability shortfalls may occur away from peak and may be geographical, and therefore should be assessed in such a way, as NGT does for the

methane network currently. This has been an increasing feature of the natural gas transmission network over recent years as demand has become more volatile and the shift in supply from UKCS/indigenous gas to LNG has had an impact on the geographical patterns of supply as well as its volatility.

We would also note that whilst obligations for the production of the the Annual Network Capability Assessment Report (ANCAR) will transfer from NGT to the FSO, NGT will still undertake network capability assessments to inform both operability and identify future investment requirements to meet customer needs.

**Q5. We welcome stakeholders' views on how the FSO can communicate effectively about future system needs.**

**We recognise the stakeholder communication challenges that Ofgem has highlighted in the consultation. We would also add that the FSO will need to communicate whole system matters effectively. By way of example, we believe the FSO needs to transition quickly from producing a Gas Markets (GMaP) to a Whole System Markets Plan, covering all energy vectors.**

Areas we think might be useful for the FSO to consider (not exhaustive):

- Clear process timelines for the gathering and production of information, and the points at which stakeholder input is critical.
- A mapping of information needs to stakeholder groups, which might out of necessity need to make distinctions on the criticality of stakeholder input / needs.
- Prominently placed and accessible information provision, supported by additional communication channels.
- High level schematic of the interaction of different publications.
- Supplementary user guides and methodologies for individual publications.
- Direct feedback to stakeholders to ensure continued engagement.

**Q6. What are your views on the FSO establishing minimum design requirements for high-level option designs and are there areas where exceptions are needed?**

**We agree in principle.**

We agree with Ofgem's view that the CSNP should be a collaborative process, and that consistency in high level design options will be important, therefore setting out the approach and minimum requirements as part of the CSNP methodology document seems appropriate. We suggest that less detail may be required for projects with a later delivery date that may be more speculative.

The Transmission Planning Code (TPC), which sets out publicly our process for network assessments, is a useful reference point for a natural gas transmission context. In particular, we are working towards the development of a natural gas Resilience Standard which would be a key tool for use by the FSO to support system planning and the objective determination of the level of resilience the network needs to be planned to– this will provide a clear and established set of rules to drive investment needs, supporting timely delivery, transparency and removal of subjectivity in assessment.

Q7. Do you have any views on our proposals for considering environmental and community impacts as part of high-level design of options?

**We agree in principle.**

As these factors are proposed to be components of project CBAs, we think it makes logical sense for them to be included as part of the high-level design of options, as this will help to frame and guide requirements for more detailed needs case and design options at a later stage; as well as enhancing stakeholder engagement in the decision-making process.

Q8. Do you have any views on our proposal for the FSO to independently decide which network needs it may lead the high-level design of?

**We disagree.**

In principle, we do not believe that the FSO should take the lead in designing changes to networks it does not own or have accountability for, particularly in terms of obligated outputs or performance. Specifically for natural gas transmission, accountabilities require careful and specific consideration, given:

- The integral nature of ownership and operation of natural gas network assets
- The need to ensure appropriate obligations with regards to maintaining resilient operation across the entirety of the network
- The need to optimise across assets rather than building significant volumes of new assets.

Additionally, we note that through its recent “[Hydrogen transport and storage infrastructure: minded to positions](#)” document, DESNZ has signalled its intention to have a strategic role in proposing hydrogen solutions in the interim period while the FSO develops capability in this area. This highlights the need for absolute clarity in roles and responsibilities, their duration, and how the overall ambition to achieve Net Zero is delivered. Otherwise, there may be a risk of strategic decisions being made which contradict or unwind earlier more tactical decisions by other parties or decisions that lead to unintended consequences for other parties and ultimately consumers.

The role of FSO seems more appropriately, linked to their significant advisory accountability, targeted towards what the energy networks are to achieve and by when – it is then up to the network operators to deliver this output.

Q9. Do you have any views on our proposal for the FSO to set out how and when third parties can be involved within the CSNP?

**We agree in principle, but this should be carefully controlled.**

Whilst we agree that richness of design options is valuable, we think that quality (as assessed by a range of appropriate criteria) should come before volume. We therefore think robust eligibility and evaluation criteria will be important – this should not dissuade idea generation but help to ensure that the CSNP is ultimately based on tangible, deliverable and effective design options that consolidate coherently and congruently.

**Q10. Do you have any views on our proposals on data exchange to enable the implementation of CSNP?**

**We assume that this proposal does not apply to natural gas in the short term, but should the FSO become a signatory to UNC in the longer term, this would enable the data exchange proposals to be delivered.**

The separation of electricity and gas code processes underlines the need for industry level engagement and coordination. Process differences and the trajectory of hydrogen market framework developments could mean that this needs to be an ongoing rather than a one-off exercise.

**Q11. Do you have any views on our proposals regarding the principles to be followed in the CSNP decision-making framework?**

**Broadly support.**

We think the key decision-making principles specified in the consultation are appropriate if/when extended to methane and hydrogen. We suggest that impartiality, deliverability and timeliness are also worthy principles to observe.

**Q12. Do you have any views on our proposals on the decision-making framework for selecting potential projects to address longer-term system needs?**

**Agree in principle.**

We believe that, where possible, a consistent decision-making framework should be used across network owners and the FSO, to support the consistency of the decisions being made by different parties.

The ability for multiple possible options is important, and we agree that options selection should be based on a mix of economic appraisal and qualitative analysis – in line with the specified decision-making principles, these tools should be applied objectively and consistently. Evaluation of potentially competing options, particularly in the context of whole energy system solutions, will need clear criteria for differentiation. Where the FSO is using its own judgement, this should be transparent and based on clear and consistent rationale which is fully documented.

To supplement the possible decision-making tools included in the consultation, we have found that Real Options Analysis is a useful approach that can be used in conjunction with CBA outputs and is particularly valuable to assess current options when faced with a range of possible end states, so seems particularly relevant for application within the CSNP.

**Q13. Do you have any views on the decision-making framework to bring potential projects into the 'delivery pipeline' for nearer-term needs?**

**Agree in principle.**

Evaluation and selection criteria will need to be as objective as possible, and resilient to uncertainty. The choice of investment must ensure an affordable and secure energy transition as a priority.

The methodology should be able to make clear differentiation between competing options based on transparent, consistent and repeatable criteria. Robust methodology design can limit the need for judgemental intervention, but we accept that this cannot be entirely engineered out,

particularly where qualitative assessment plays a valid role in assessment. As per our response to the previous question, where the FSO is using its own judgement, this should be transparent and based on clear and consistent rationale.

**Q14. We would welcome views on our proposal to not re-evaluate projects that are in the delivery pipeline, and whether a materiality trigger is appropriate and what criteria might be used.**

**We agree in principle.**

We agree that repeated re-assessment of projects put forwards for delivery may impede plan progression, and the objective should be to move forwards with firm decisions as far as possible. At the same time though, a material change in circumstances might invalidate the basis of previous decisions, and therefore the use of well calibrated materiality triggers may assist in a lighter touch revalidation prior to FID. As noted in our response to Q15, breadth of CBA dimensions can help to support firm decision making – the robustness of decision-making tools is critical, and the halting or cancellation of inflight projects will be untenable. It also is important to recognise the potential for forecasting assumptions to shift back and forth between plan iterations, so deselection of options should not be considered lightly.

As mentioned previously, we think Real Options Analysis could be a valuable approach to validate choices against future uncertainties and could play a role in this context.

**Q15. Do you have any views on our proposal on inclusion of environmental and community impacts in the CSNP CBA?**

**We agree in principle.**

We think these are valid and important dimensions to consider within a societal CBA approach and agree that their inclusion should widen the basis of appraisal in a manner that better supports firm decision making. As is always the case with such things, the validity of any appraisal is influenced by the quality of input assumptions, again underlining the need for objectivity and consistency as far as possible.

**Q16. Do you have any views on our proposal for the CSNP to include a methodology for assessing and taking forward system operability solutions?**

**We agree in principle.**

Please see our response to Q6. In the Transmission Planning Code, NGT sets out the processes we follow to establish the need for an investment, including how we deal with operability challenges/solutions linked to investment options and commercial solutions. We believe Ofgem is suggesting a similar approach for the FSO, on which basis we agree in principle.

**Q17. Do you agree with our proposal for the ESO to review its current approach to assessing short- and long-term solutions, and for the FSO to set out its approach in the CSNP Methodology?**

**We agree in principle.**

We think this is necessary to best support robust future processes.

**Q18. Do you have views on our proposals for FSO to develop capabilities to consider different combinations of options and how this should be implemented?**

**We agree in principle.**

We think this capability is important in order to consider optimised whole system solutions in the longer term, but also recognise the complexity attached to this, and the reality that capabilities for natural gas and hydrogen may be lagged to electricity system capability. This suggests that the output of this capability can only be effectively deployed once a whole system perspective can be realistically appraised.

We believe clarity over roles and accountabilities is essential in this whole system environment, and whilst FSO may have a view on potential options across all energy vectors the final accountability for the development, operation and maintenance of the individual network remains with the specific network operator.

**Q19. Do you agree with our proposal to introduce a requirement, as part of the new CSNP licence condition, for the FSO to make recommendations on additional interconnection and OHAs opportunities between GB and other markets?**

**In principle yes, but unclear at this stage.**

In principle, this could enhance overall system integration across energy vectors, and including onshore and offshore storage, also supporting realisation of potential export opportunities for growth markets such as hydrogen. However, it is important to note that this should not stifle the necessary commercial development of these connecting assets and/or the operation of an effective energy market.

**Q20. Do you agree with our proposal that the FSO should use reasonable endeavours to support relevant stakeholders as part of the offshore asset development process?**

**We agree in principle.**

This proposal makes logical sense against longer term whole system objectives.

**Q21. Do you agree with our proposal that the FSO assess third-party options under the CSNP and recommend delivery by competition where proposed solutions meet the relevant competition criteria?**

**National Gas remains of the view that competition should be used where there are clear, quantifiable and realisable benefits to consumers and broader society.**

This means competition may not be suitable for all circumstances.

**Q22. What are your views on whether changes to the SQSS or obligations on licensees are needed to support the CSNP – where specifically are these changes needed and when do they need to happen by?**

**We have no specific views on the SQSS, but clear roles and responsibilities are key.**

As we have previously indicated, clarity on roles and responsibilities is vital in ensuring all requirements, including security of supply and reliability, are met efficiently. It is essential that tools and techniques, such as SQSS, are implemented across all energy vectors so that the levels



of energy security provided by the networks meets consumer requirements, safety levels and operability benefits.

As mentioned in our response to Q6, we see the developing gas transmission Resilience Standard as a key tool for use by the FSO to support system planning and the objective determination of the level of resilience the network needs to be planned to– this will provide a clear and established set of rules to drive investment needs, supporting timely delivery, transparency and removal of subjectivity in assessment.

**Q23. Do you agree that the FSO should evaluate the climate resilience of the long-term whole-system CSNP?**

**Unclear at this stage.**

It is essential that the roles and responsibilities related to system resilience are clear. The impact on climate on resilience may manifest through a number of routes such as asset failure or volatility in supply and demand, and different parties may be better placed to take a view on different aspects. Network owners are best placed to take a view on the resilience of their assets, for example flood security, impact of extreme temperatures. However, it is also important that there is consistency in the climatic (and other) risks that are being evaluated, and the FSO may be well placed to provide an advisory role here.

**Q24. Do you agree with the proposed position on the treatment of connections in the CSNP?**

**We agree that individual connections should sit outside the CSNP**