



Annex A17.02 Future Balancing & Capacity Engagement Log December 2019

As a part of the NGGT Business Plan Submission

nationalgrid

ANNEX A17.02 - GAS TRANSMISSION ENGAGEMENT LOG

STAKEHOLDER PRIORITY: I want you to facilitate the whole energy network of the future – innovating to meet the challenges of the future and I want all the information I need to run my business and to understand what you do and why

TOPIC: Future Capacity and Balancing Services

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EXECUTIVE SUMMARY

National Grid transports gas on behalf of gas shippers. Shippers are required to book space (known as ‘capacity’) on the National Transmission System (NTS) in order to flow gas. They are also required to tell us when and where they are going to flow the gas, which enables us to balance the network safely.

The balancing and capacity processes and services we provide are our main interface with shippers, and are at the core of how the gas market operates. As such by delivering this service in an efficient and effective way, we are providing value to consumers. These processes and systems support the efficient functioning of the gas market by allowing market participants to balance their portfolio on a daily basis and manage their capacity bookings up to seventeen years ahead; making informed commercial decisions as well as enabling the efficient physical operation of the network.

The services we provide need to reflect the emerging market rules and requirements. Our ability to update our IT systems and services to adapt to the changing energy landscape is critical in delivering what stakeholders require. How we deliver these changes is particularly important to our stakeholders as any changes can impact their connected systems and processes.

The scope for this engagement includes an assessment of all the services we provide and the way we provide them. We are looking to improve our understanding of the way users value our services and how we can deliver change to best reflect their needs.

We targeted specific groups of stakeholders based on their high level of interest/impact and influence on this topic. We planned and implemented a range of engagement methods targeting these stakeholders, including regional events, one to one meetings and webinars.

The stakeholder feedback we obtained was predominantly from large companies in the two stakeholder segments, customer-shippers and customer-connected including shippers, traders, terminal and storage operators. There were four main themes which came out of the feedback from stakeholders:

1. Do the basics well
2. Make our lives easier through greater automation and increased reporting functionality
3. Minimise the impact of change

4. More detailed feedback on some specific services e.g. [invoicing and shipper lifecycle activities](#).

The feedback received to date appears to align, with broad agreement on the four themes, however there are potentially differing or conflicting priorities between stakeholder groups.

The next steps are to formulate an engagement plan to obtain insight from a wider range of stakeholders, particularly smaller companies in the targeted group. This will enable us to gain a broader understanding of the overall requirements from our customer base, and to ensure we do not focus on changes to services that may benefit larger customers to the detriment of smaller ones.

Version 2 of the engagement log was provided in May 2019 and was updated to include new insight generated since January 2019 and to address challenges raised through discussion at the Stakeholder Group meeting, SG5. New text added in that version is coloured purple.

This is version 3 of the engagement log and is updated to include an overview of the options developed and engagement carried out on those options. New text added in this version is coloured orange.

CONTENTS

<i>Executive Summary</i>	1
<i>Questions for the Stakeholder Group</i>	3
1. <i>PRE-ENGAGEMENT</i>	4
1.1 What is the topic and why is it being engaged on?	4
1.2 What existing insight has been utilised?	9
1.3 what are the desired outcomes for this engagement?	9
2: <i>POST-ENGAGEMENT</i>	14
2.1 What were the engagement outcomes and how has this influenced options?	14
2.2 what was the feedback on the engagement approach?	16
2.3 What were the initial National Grid conclusions	17
3. <i>STAKEHOLDER GROUP CHALLENGE & REVIEW</i>	20
3.1. What points of clarification and interest were raised?	20
3.2 What was the outcome of the Stakeholder Group challenge and review?	21
4. <i>CONCLUSIONS</i>	23
4.1 What impact has this feedback had on the business plan?	23
4.2 Business plan outputs aligned to stakeholder engagement outcomes	24
5. <i>DOCUMENT CHANGE CONTROL</i>	24
6. <i>Appendices</i>	25
Appendix 6.1: Balancing and Capacity Services	25
Appendix 6.2: Pain points	26
Appendix 6.3: Attendee list	29
Appendix 6.4: Alignment of Feedback	30
Appendix 6.5: Engagement approach -spectrum.....	31
Appendix 6.6: Stakeholder Engagement best principles.....	31
Appendix 6.7: Decision Making framework checklist	32

QUESTIONS FOR THE STAKEHOLDER GROUP

Pre engagement

- Sufficient information provided to stakeholders on which to provide input?
- Information presented in an unbiased way?
- Is rationale for engagement approach appropriate?
- Are the options/questions presented clear and unbiased?

Post engagement

- Was the engagement undertaken robust and effective?
- Have we demonstrated engaging targeted stakeholders?
- Were the outcomes of the engagement clear?
- Are the conclusions drawn from the engagement robust?
- Do you agree with the conclusions drawn from the engagement?

1. PRE-ENGAGEMENT

1.1 WHAT IS THE TOPIC AND WHY IS IT BEING ENGAGED ON?

Context

The role of the Gas System Operator is to manage the supply and demand of gas on the National Transmission System (NTS). This includes ensuring that sources of supply are directed towards areas of demand and that the gas entering the system balances the gas taken off the system whilst keeping system pressure within safe operating limits. In order to get gas from sources of supply to areas of demand, gas shippers buy gas from producers and sell it onto suppliers, using the NTS to transport gas between these two parties. Shippers are incentivised to balance their inputs and outputs on a daily basis, which supports balancing the overall NTS. A shipper must tell the Gas Network Control Centre (GNCC) through a gas flow nomination of how much gas it intends to either input or offtake at each separate entry or exit point. The balancing regime is further explained in the National Grid End-to-end balancing guide¹.

Capacity gives shippers the right to flow gas on and off the NTS and so capacity is often referred to as “rights” or “entitlements”. A shipper needs to buy one unit of capacity in order to flow one unit of energy on or off the system. This is known as the ‘ticket to ride’ principle. There are various different capacity products available to shippers to purchase in various different auctions in different timescales. The capacity regime is further explained in the National Grid Gas Transmission capacity guidelines document².

National Grid have obligations to support these balancing and capacity activities which are either directly or indirectly fulfilled by the provision of a number of services. These services can be summarised into 21 categories and are outlined in the table in Appendix 1. Some of those services National Grid pays a third party to provide (currently Xoserve), some are automatically discharged through the capacity and balancing system (currently Gemini) and some of which National Grid deliver directly.

Xoserve was formed as a result of the sale of the gas distribution networks in 2005 to deliver transportation transactional services on behalf of all the network transportation companies³. Xoserve provide a single, consistent, service point for the gas shipper companies, thereby

¹ <https://www.nationalgrid.com/sites/default/files/documents/End%20to%20End%20Balancing%20Guide.pdf>

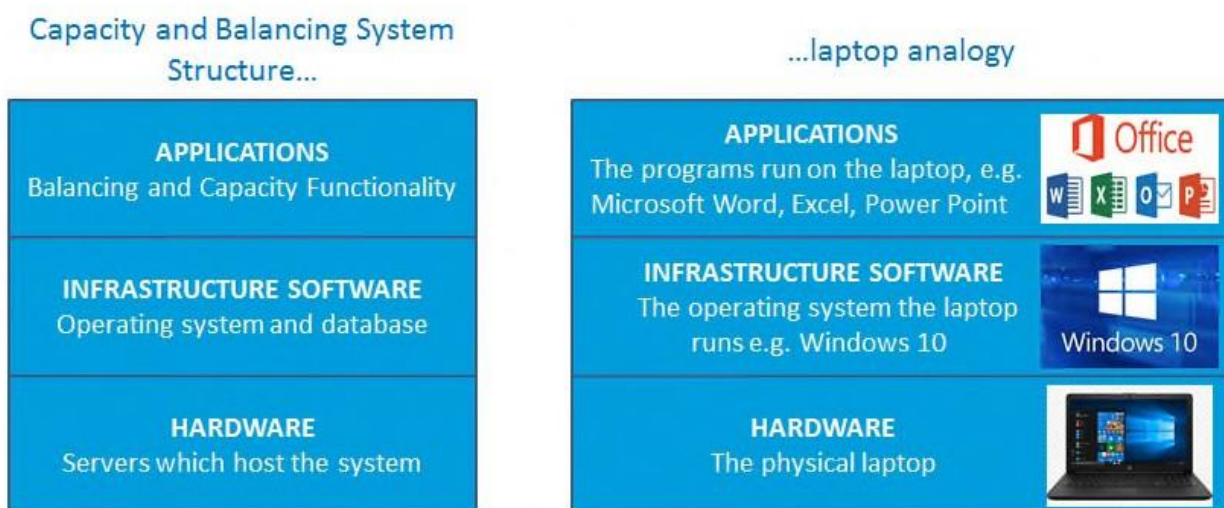
² https://www.nationalgrid.com/sites/default/files/documents/45759-Capacity%20Guidance%20Doc_v1_0-140616.pdf

³ *As part of the gas distribution network sales National Grid Gas Transmission retained ownership of the Gemini system because of its accountability for the capacity processes supported by the system*

meeting transporters' obligations for efficient, contestable, and transparent service provision to the gas industry.

Gemini System Structure

To explain our approach to the capacity and balancing system maintenance and development it is helpful to consider the Gemini system as consisting of three layers. The diagram below provides an illustration of these layers, with an analogy made to a laptop to aid understanding.

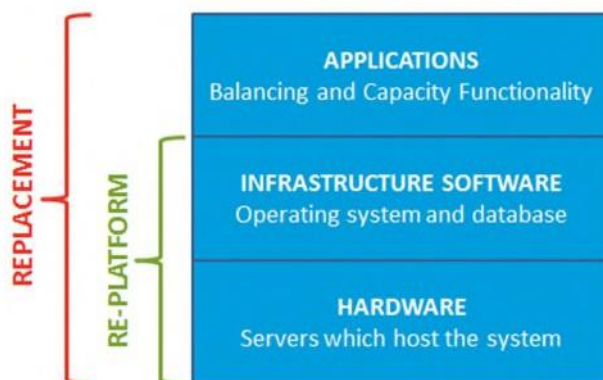


As part of our business-as-usual processes, we assess the integrity of the Gemini system on a regular basis. We rely on the after-sales services from the suppliers of each layer of the system (for example, we rely upon the hardware suppliers to provide a service to repair or replace faulty hardware within a given time period – similar to a warranty that you would expect to receive upon the purchase of a new laptop).

Periodically, suppliers withdraw support for aged or obsolescent products (for example Microsoft have withdrawn support for Windows XP and Vista operating systems) meaning that we have to periodically refresh or replace elements of the system. Analysis in 2016 investigated options to address expiry of supplier hardware support within RIIO-T1, and concluded that re-platforming the system was the most economic and efficient approach to sustain the system. This was endorsed following a review at the Gas Operational Forum⁴. As illustrated in the diagram below, a system re-platform affects the system hardware and infrastructure software only, the applications are left unchanged. This contrasts with system replacement which replaces all three layers.

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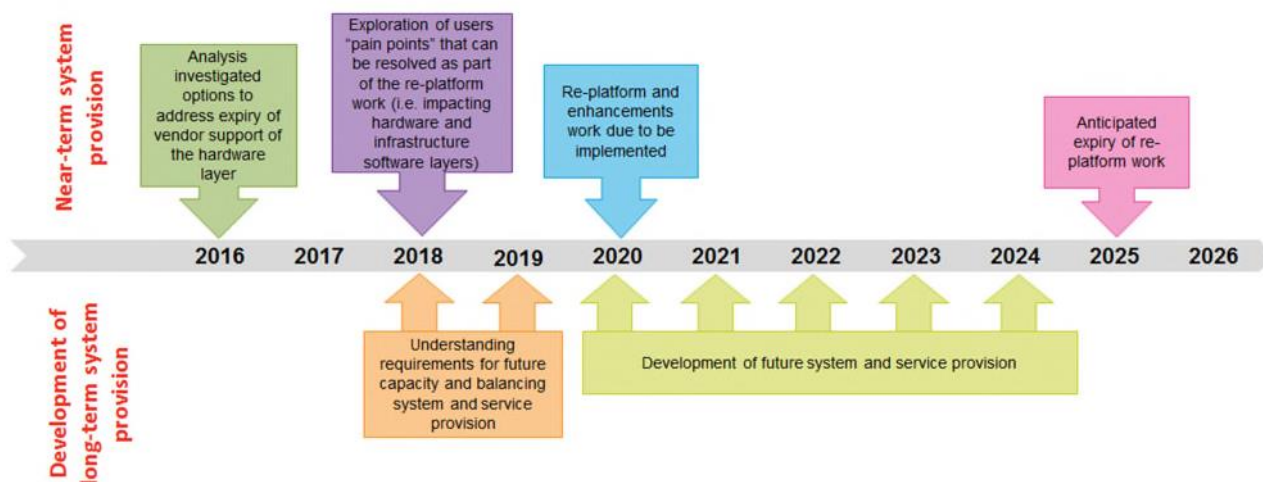
<https://www.nationalgridgas.com/sites/gas/files/documents/Gas%20Ops%20Forum%20full%20pack%20-%20February%202018.pdf>



As we carry out this work to re-platform the hardware and the infrastructure software layers, it is efficient to explore what additional system enhancements could be made simultaneously to address user “pain points”. Engagement has raised an array of “pain points” experienced by users with the current system (see Appendix 2). Some of these may be addressed as part of the re-platform work as they can be resolved at the hardware and/or infrastructure layer whereas some will require a change to the applications layer and therefore only able to be resolved by a replacement of the system.

Timeline

The diagram below provides a timeline of how the work to re-platform the hardware and infrastructure software layers, and the associated enhancements of the current system interacts with the development of the strategy for long-term system provision.



Topic Drivers

There are three main drivers to this topic:

1. Technical capability

Since its implementation in 2005, the current capacity and balancing system has been subject to constant changes due to evolving regulatory and business requirements. The result of change being delivered incrementally is that the system has become very meshed and interwoven, meaning when system change is delivered, it cannot be delivered and tested on a modular basis. This increases both time and costs of system change implementation.

We work with Xoserve to minimise the impact of system disruption on users. However, it is expected that instances of disruption are likely to increase and management of system issues will become more difficult.

The work to re-platform the hardware and the software infrastructure layers is due to be implemented in 2020 and is expected to extend the supplier support of the system until 2025. This means that we need to consider now the requirements for a future system to ensure that the decisions we take today are consistent with our glide-path to future system provision. Furthermore, depending on preferred option identified, scoping and assessment of requirements will be needed well in advance to ensure we are fully prepared to effective and efficient delivery.

2. Users' feedback

At the same time as work is ongoing to re-platform the current system it is efficient to assess what additional system enhancements could be made in order to address users' "pain points". At a workshop on 12th June (further information below), feedback was gathered and the "pain points" categorised into three themes, performance, usability and functionality. In total, there were 66 "pain points" identified, a full list of which is included as Appendix 2. The next step for that work is to understand what enhancements can be done as part of the ongoing re-platform project and which need to be rolled over to the longer-term system provision. This will be dependent on whether the enhancement to address the "pain point" is made at the hardware or infrastructure software layer or whether it would require an enhancement at the applications layer.

3. Volume of anticipated industry change

There is wide consensus that there will be a highly significant volume of change in the gas industry over forthcoming years (as highlighted in recent industry publications such as Future of Gas (FOG)⁵, Future Energy Scenarios (FES)⁶ and Gas Future Operability Plan (GFOP)⁷). Hence, the Gas Industry Change Plan (GICP) was developed. This is anticipated to be an industry lead view of the change anticipated over the next 2-10 years. Currently, the concept

⁵ <http://futureofgas.uk/>

⁶ <https://www.nationalgrid.com/uk/publications/future-energy-scenarios-fes>

⁷ <https://www.nationalgrid.com/uk/publications/gas-future-operability-planning-gfop>

of the GICP has been tested with the stakeholders within the industry with 100% agreeing with the concept⁸. Although the detailed content of the GICP is yet to be developed, it is expected that a significant proportion of the anticipated change would be delivered through implementing fundamental amendments to the capacity and balancing system. This therefore creates a further third driver for this topic, to ensure that the future capacity and balancing system is sufficiently agile and can adapt to the volume of anticipated change.

Link to Stakeholder Priorities

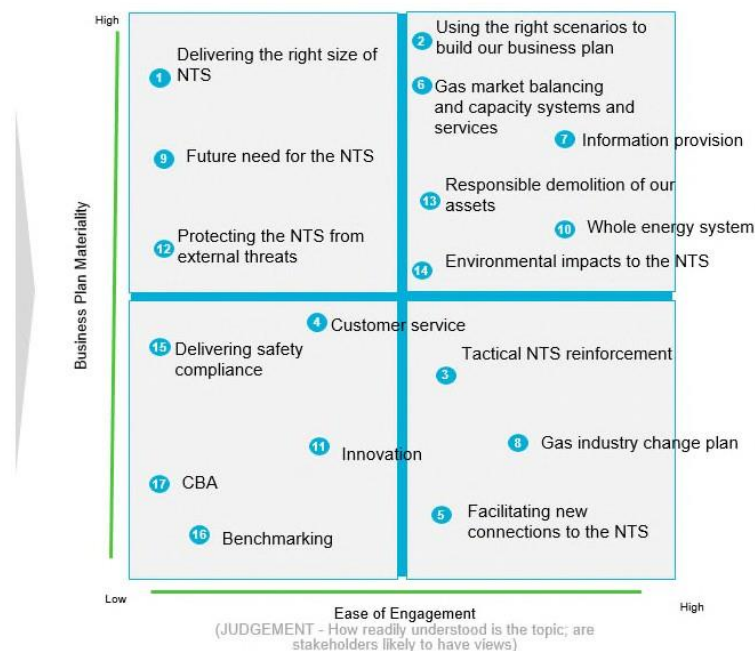
This topic on the future capacity and balancing system and services spans two of the stakeholder priorities. The first stakeholder priority being “I want you to facilitate the whole energy network of the future – innovating to meet the challenges of the future” due to this topic being about developing capacity and balancing system and services which are fit for the energy network of the future. The second being “I want all the information I need to run my business and to understand what you do and why” due to the capacity and balancing system being one of the systems used to generate the information published to the market.

Interactions with other Topics

This topic also has strong links with the Gas Industry Change Plan topic as that will inform the level of industry change anticipated, which is a key driver for this topic as it is expected that a significant element of future industry change will be implemented via the capacity and balancing system.

The drivers detailed above have led us to conclude that this is a topic of relevance for engagement with our stakeholders. At the Stakeholder Group meeting 2 it was classified as having a high materiality and ease of engagement and therefore deemed relevant for discussion at the Stakeholder Group, as demonstrated by the following matrix:

⁸ <http://youenergyfuture.nationalgrid.com/gas-transmission/get-involved/>



1.2 WHAT EXISTING INSIGHT HAS BEEN UTILISED?

We have a range of existing insight we can draw upon to feed into this topic:

- Feedback on Users “pain points” received as part of the investigation into system enhancements to be carried out simultaneously to the re-platform work
- Analysis of the topics of enquiry to the Gemini Helpdesk
- Feedback from previous system change implementation carried out in response to changing regulatory or business requirements (e.g. implementation of EU Code or project Nexus⁹)
- Analysis into causes of technical capability issues which had the potential to cause system disruption

1.3 WHAT ARE THE DESIRED OUTCOMES FOR THIS ENGAGEMENT?

Desired outcomes of engagement

As we move from the consult phase to the involve phase of the engagement (see Appendix 5), to assess the future provision of the capacity and balancing system and services to ensure it is fit for the future, we need stakeholder feedback on the following;

- the impact on stakeholders of the project drivers and their consequences
- stakeholders requirements for future capacity and balancing system and service provision

⁹ Ofgem sponsored programme to ensure the gas industry is ready to move to replacement IT systems

- stakeholder's challenge and review of the assessment criteria for the "conceptual options" which will be developed based on the above points (to be further explained below)
- where stakeholders place the trade-off between competing "conceptual option" assessment criteria.

Associated with this, a further desired outcome is to gain an understanding of whether feedback received differs according to the size and type of shipper. This feedback will then help us answer the following points;

- in light of where stakeholders have placed the trade-off between the competing assessment criteria, what is the best method to maintain functionality and requirements that our customers and stakeholders require?
- who is best placed to deliver the system solution and provide the capacity and balancing services into the future?

Engagement questions to be asked

1. What is the impact on your business if the capacity and balancing system cannot keep pace with the level of industry change?

The purpose of asking this question was to help understand what the consequence and significance of the project drivers are on any users' business. This question specifically focused on the driver around the impact of industry change as this is the one where stakeholders are most able to comment and existing feedback was lacking.

2. In an 'unconstrained' world, what are your functional and non-functional requirements for a future capacity and balancing system?

The purpose of asking this question was twofold. Firstly, to create a list of user requirements for future system provision which can be used as we start to investigate delivery options. Secondly, to form part of the basis for the assessment criteria of "ability to address stakeholders' feedback / requirements" in the conceptual options assessment.

3. What are your priorities when system change is delivered and what is the impact on your business if one of these priorities is not delivered upon?

The basis for this question was recognising the feedback received previously around system change implementation, either wholesale or incremental. The purpose of asking this question was to investigate how we should aim to deliver system change in the future, and what measures should be put in place to monitor its success. This could lead to the development of an incentive scheme around system change implementation.

4. How useful the current capacity and balancing services are (including what improvement is required)

We asked this question in order to gather feedback on the current capacity and balancing service provision and to understand:

- which services are useful,

- *which are useful but require improvement,*
- *what improvement looks like,*
- *which services aren't used and*
- *whether there are any new services required.*

In a similar way to question 2, from this we can understand which services need to be improved in the future and will form the other part of the assessment criteria of “ability to address stakeholders’ feedback / requirements”.

In the formation of these questions and the development of the feedback gathering exercises, a third party company, Frontier Economics, reviewed the proposals and gave some the following key insights;

- In order to achieve the maximum value out of the question around feedback on service provision, include a method for assessing the materiality of the impact on users’ businesses of each particular service - in response we ran the exercise so that users had to differentiate between services which are “nice to have” and “must have”.
- Develop a method to weight / prioritise issues – in order to do this, we used a method whereby users were given a definitive number of dots to place against their feedback (either all dots against one area or distributed) to indicate the materiality of that feedback and therefore which should be prioritised.
- Shape exercises to ensure that all participants had a voice – to reflect this we ran exercises using post-it notes and sticky dots so that views could be reflected by everyone, for example we compiled a pack of post-it notes with each service area for each attendee so that these could be used to indicate their views. We also mixed up the stakeholder groups and used facilitators to encourage balanced participation amongst each group.

14 WHAT IS THE ENGAGEMENT APPROACH?

The purpose of our initial phase of engagement was to introduce the topic as an area we wanted to begin to discuss in more detail with stakeholders and to begin to get initial, high level views to develop our engagement upon. We did this through a session at the National Grid Gas Operational Forum in February 2018¹⁰ and then followed this up with a Survey Monkey.

For the second phase of engagement we developed a series of open questions, as outlined above, which we asked to drill down into Users specific impacts, requirements and priorities in the provision of future capacity and balancing system and services. On 12th June 2018 we held a “Gemini Workshop” which linked the near-term system provision and the long-term system and service provision together which helped to ensure the service and system provision in the differing timescales is coherent. We used interactive exercises to ensure that

¹⁰

<https://www.nationalgridgas.com/sites/gas/files/documents/Gas%20Ops%20Forum%20full%20pack%20-%20February%20202018.pdf>

all stakeholder views could be taken into account, that they were attributable and that ranking of views could be achieved to assess prioritisation.

The third phase of engagement has begun to validate our findings from phase two. We have done this by sharing the feedback received from the second phase and asking stakeholders whether they agree or would like to provide additional comments. As part of this phase we have held 1-2-1s with shippers through July and August, attended the Midstream Gas Group on 11th September and the Gas Storage Operators Group and met with the chair of the Industrial and Commercial Shippers and Suppliers Group on 12th September.

Summary of Engagement To Date

The table below provides an overview on the engagement carried out to date. "TBC" has been included against Midstream Gas Group, Gas Storage Operators Group and the Industrial and Commercial Shippers and Suppliers Group as these groups have all indicated further engagement is required. The table below gives a breakdown of engagement activities across the three shipper categories:

		Survey Monkey	Gemini Event	Feedback Webinar	Midstream Gas Group	Gas Storage Operators Group	Industrial and Commercial Shippers and Suppliers Group	1-2-1s*			
								*(we have offered to speak about any of the 8 stakeholder priorities in 1-2-1s)			
								Targeted	Not interested	Possible	Complete
Shippers with multiple subsidiaries	16	3	10	3	TBC	TBC	TBC	16	(0)	15	2
Active Shippers	69	(0)	3	(0)	TBC	TBC	TBC	18	9	8	1
Inactive Shippers	46	(0)	0	(0)	TBC	TBC	TBC	11	4	5	2

From this it can be seen that we have been most successful in engaging with larger shippers with multiple subsidiaries whilst it has been much more challenging reaching smaller shippers.

There were 131 registered shipper organisations (after combining the companies with multiple subsidiaries) and we took the approach of targeting all the larger organisations with multiple subsidiaries and then a quarter of the other two categories. In terms of deciding which shipper should form part of that portion targeted, we used our customer intelligence database to identify those shippers who we have previously had contact with and targeted them initially.

Although the uptake on 1-2-1 meetings has been minimal, at the current time, there are some possible outstanding 1-2-1s due to the holiday period in the shipper organisations delaying the engagement. However, even with that in mind, it is the smaller shipper organisations who we have had significantly less input from to date.

To help rectify this situation we have changed our approach as we move into the next phase of our engagement. We are now going to offer 1-2-1 meetings with a much wider proportion of smaller shippers. We are also using larger shippers who have relationships with smaller shippers (for

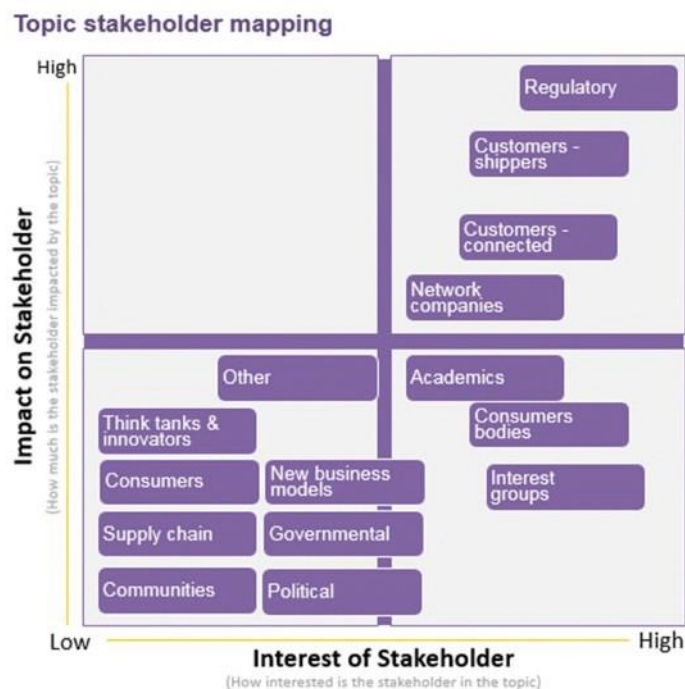
example, [REDACTED] who act as allocation agent for smaller shippers) as a way of establishing contact.

We have also started initial discussion with industry forums to speak to contacts at the following industry forums, some of which have members included the smaller industry shippers, to get a slot on their agendas including;

- Midstream Gas Group
- Industrial and Commercial Shippers and Suppliers
- Cornwall Insights Group
- Gas Storage Operators Group
- Oil and Gas UK
- Major Energy Users' Council
- East of England Energy Group

Stakeholder Mapping

The matrix below shows our assessment of key stakeholder groups impact and interest with the table below providing the detail of specific groups which we have attributed to each category for the purpose of this topic. The key stakeholders for this topic are the top right quadrant of the matrix below. They are characterised as having high impact and interests. It is primarily the customers - shippers and customers – connected groups which have been the focus of this engagement to date. We will move to focus on network companies, particularly European TSOs in the next round of engagement for benchmarking purposes as well as the smaller organisations within the customer - shipper segments.



Stakeholder Segment	Description	Organisations
Regulatory	Energy and safety regulators	Ofgem
Customers- shippers	Buy gas from producers	Active shippers, inactive shippers and shippers with multiple subsidiaries, user agents, Midstream Gas Group, Industrial and Commercial Suppliers and Shippers Group.
Customers- connected	Terminal, storage and interconnector operators, power stations	Gas Storage Operators Group
Network Companies	Other regulated energy network companies	EU TSOs
Academics	Energy specialists and researchers in academia	Cornwall Insights Group
Consumer Bodies	Members of the public, commercial & industrial	Major Energy Users Council, East of England Energy Group
Interest Groups	Groups representing special interests	Oil and Gas UK, Chemical Industries Association, Midstream Gas Group, Energy Intensive User Group
Other	Stakeholders not defined in other segments	European Federation of Energy Traders, ICE Endex, European Energy Exchange

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2: POST-ENGAGEMENT

2.1 WHAT WERE THE ENGAGEMENT OUTCOMES AND HOW HAS THIS INFLUENCED OPTIONS?

Feedback received

The feedback received to date is summarised below. This feedback is collated from the Gemini event in June 2018 and the subsequent 1-2-1s. We used this feedback as the basis for the feedback webinar held in August 2018. It is important to highlight that there were only three attendees to the feedback webinar and so further work is required to validate our conclusions.

Consequence of system change not keeping pace with industry change:

There were three main themes which came out of the feedback to this question:

1. Higher operating costs for National Grid and industry may be incurred if systems cannot support the execution of operational processes meaning that workarounds would have to be sought.
2. Increased regulatory risk if regulatory obligations cannot be implemented
3. Opportunity loss if the UK was to fall behind other European markets and resultant investments end up going elsewhere.

Future system requirements:

In response to the question which explored stakeholders’ future system requirements in an “un-constrained world” the responses can be split into 4 main categories;

1. Do the basics well

2. Improved information exchange methods, interfaces with users' systems and system security
3. Greater automation of the system and real-time processes. In a 1-2-1 conversation, one User stated that they have to employ one additional person due to the lack of automation in the current system. This is a cost which will ultimately be passed onto that stakeholders' end consumers.
4. Increased reporting functionality and granularity.

Furthermore, in a 1-2-1 conversation, a stakeholder stated that the current Gemini system is "a mess" and that there are too many screen, irrelevant information and that it requires streamlining.

Priorities for implementing system change

In response to the question around stakeholder priorities when system change is being implemented, the following areas were drawn out in order of their prioritisation;

1. Minimise impact on Users' systems
2. Quality of change and the ability to test
3. Visible timetable of change
4. Built in contingency methods

Service feedback

In the series of exercises we carried out with stakeholders to understand how they value the current capacity and balancing services and what improvement was required, feedback centred around the following areas:

- Invoicing – better granularity and explanation. In one 1-2-1 conversations, one User stated that it is cheaper for them to just pay, what they believed was an incorrect invoice than it is to investigate what the invoice is for. If this is an action which is happening cumulatively then this may have an impact on end consumers bills.
- Energy Balancing Reconciliations – quicker process rather than waiting for invoice corrections. Better query management system
- Nominations matching at IPs – Stability, speed and consistency in the matching process, recognising different balancing regimes across Europe.
- Gemini Capacity Functionality – automatic bid process, real time capacity
- Gemini change delivery
- Unidentified Gas
- Service desk

Framework for options development:

The next stage of stakeholder engagement will be to develop options. This will help us understand where stakeholders place the trade-off between the competing "conceptual options" assessment criteria and once that is established, what the best method is to deliver a solution in line with stakeholders' views.

In order to do this, we will develop "conceptual" options which will be formulated based on stakeholders' feedback to date. These conceptual options will be assessed against a set of criteria which stakeholders have said are important to them in this initial phase of engagement. Based on

stakeholder feedback there is a finite number of “conceptual” options which can be created given the inherent trade-offs between different criteria. Each of these options will be backed by a delivery approach (which will be necessary to illustrate the magnitude of costs). An illustration of the framework for these conceptual options is below; we will work with stakeholders to develop the criteria and understand how each delivery approach will meet the criteria. This will then allow stakeholders to identify their preferred option based on an assessment of each delivery option against the agreed criteria.

	Upfront cost to implement	Risk to implementation	Impact of solutions on users	Ability to address stakeholders' feedback / requirements	Longevity of technical capability	Agility to future change	Cost to implement future change	Delivery approach
Option 1								
Option 2								
Option 3								

We believe there will be three possible outcomes from the options assessment on this basis;

1. One option comes out as clear preference
2. Options have to be balanced – therefore requiring an approach to allow for an assessment of competing views
3. Cannot say which option as future too uncertain – this may mean an uncertainty mechanism is sought

This will then help us to determine the most appropriate delivery method to propose and test with stakeholders. Alongside this stakeholder engagement we are currently exploring a wide range of delivery options, some of which are innovative solutions, which back up these “conceptual options”.

2.2 WHAT WAS THE FEEDBACK ON THE ENGAGEMENT APPROACH?

- I. Was the engagement channel effective?
- II. What feedback was received from stakeholders on the engagement approach?
- III. What lessons have been learnt and has this been shared?
- IV. Has best practice been shared?

The feedback received from attendees at the 12th June workshop was as follows:

“Overall, I think it should be beneficial for all concerned and would welcome more opportunity like this going forward.”

"I liked feeling like I've had a valuable part in the future direction of a part of the Gas industry."

"It's good that Gemini are trying to understand requirements. Helping you help us."

"Interesting, Dynamic, Interactive"

2.3 WHAT WERE THE INITIAL NATIONAL GRID CONCLUSIONS

The feedback received to date appears to align. However, diverging views may appear when we have achieved engagement with smaller shippers. Our efforts to validate these conclusions at a webinar were not successful due to the lack of attendees. Following the stakeholder engagement carried out to date our initial conclusions are outlined below, and Appendix 4 illustrates how these conclusions correlate to the feedback received.

- The consequence of the three drivers for this project means that a re-platformed system won't meet the requirements of users or National Grid into the future
- The impact of this consequence on users' businesses is sufficiently significant meaning that it is right that National Grid explore this topic
- Requirements for future system provision must focus on doing things better rather than differently – i.e. improving the functionality already there rather than providing additional functionality at this time
- When system change is delivered, the key priority for users is not primarily the time taken to implement the change (which prior to engagement we thought would be the key priority for users) and more about National Grid committing and delivering to a pre-agreed timetable of change and working collaboratively to develop and deliver the change
- Consensus from users on which services require improvement and how they should be improved. This can be used to influence options development

An additional area which wasn't initially part of the scope of this project but has emerged through stakeholder engagement is consideration of the Data Exchange method between National Grid and GB shippers for booking capacity and submitting gas flow nominations. Due to its linkages with the provision of the capacity and balancing system it is appropriate to consider this at the same time.

There are a few gaps in the engagement which we plan to fill:

- Although we've extensively explained the drivers of the topic to stakeholders, we have not explicitly asked users for their view on the consequence of these drivers
- We will investigate the potential to carry out some benchmarking with European TSOs to understand their similar system and service provision
- We will continue to test our conclusions with our stakeholders in order to gain confidence in the conclusions we have reached are robust

- We will seek to engage with smaller shippers to ensure that their views are adequately reflected
- Feed all the above into the framework for options development

Following this initial phase of engagement, we acknowledge further work is required to ensure robust evidence of outcomes. We have engaged with an agency who is an expert in qualitative and quantitative validation research to support this. They will identify gaps in our stakeholder landscape; utilise evidence based research; ensure proportional weighting amongst stakeholders to report current insights; design with us any additional engagement to ensure sufficient stakeholder coverage; and ensure these insights correctly shape our business plan. This work will also help meet the clear expectations placed on us from our Stakeholder Group.

May 2019 update

We have taken a different approach to what we envisaged back in October and it has been particularly challenging to fill in the engagement gaps with small shipper organisations. However, with the insight we have gathered to date and more recently greater certainty from Ofgem on the framework for funding, our revised approach has been conducted over three stages:

- Initial stakeholder engagement has been used to generate insight which supports the requirement for a replacement solution.
- We have not proceeded with further engagement interactions on the options for service delivery as the appropriate time to engage on stakeholder service requirements is closer to the time of delivery of a replacement system when delivery of any change of RACI will be more efficient, stakeholders requirements will be more current, and stakeholders are more likely to be engaged as this becomes a greater priority.
- The appropriate time to engage on stakeholder service requirements will therefore come later on into the RIIO 2 price control. At this time, we will undertake further engagement on the specific services that we deliver. The timing of this is linked to the delivery of the solution in 2025. Engagement will be therefore more timely, more specific and can be linked to the ongoing Gas Market Plan (GMaP) activity and engagement which will be fully underway. We do not intend to consult on exactly how the replacement system will be delivered (e.g. cloud-based solution, hosting platform used etc).

Options Development

Since the presentation of this engagement log in October, we continued focus on attempting to engage smaller shippers. We undertook a range of direct engagement methods – direct telephone calls, LinkedIn message and online contact forms. We also tried to make use of other contacts into small shipper organisations through the RIIO 2 Stakeholder Group. These attempts were not successful and so we changed our approach to try and make use Xoserve to access these smaller organisations. Through

Therefore, in respect of stakeholder engagement, although further engagement will be necessary to understand users' requirements and learn from best practice, it is appropriate to carry this out at the time of scoping the new replacement system to ensure those requirements are current in the later part of the RIIO 2. This approach may also help increase engagement in this topic when it is closer to the time of delivery and therefore more of a priority for stakeholders.

As well as the RIIO 2 business plan narrative there is a separate justification report for this proposed investment which contains more detail on the solution and costs.

December 2019 update

Since May we have been working on developing options for the RIIO2 Gemini Strategy. More information on these options and their assessment is provided in the Justification Report. The options considered are;

1. Sustain
2. Hosting Modernity
3. Enhanced Solution
4. Re-write application using Commercial off-the-Shelf (COTs) products
5. Re-write with bespoke application

Our RIIO2 Gemini Strategy was shared with Stakeholders at the National Grid Gas Operational Forum in September 2019. Following an overview of the options considered and their impact, the Forum's participants were asked to indicate, on handouts, their preferred option. Out of 20 attendees, 10 attendees completed the handout. Out of this, 6 attendees stated that their preferred option was the "Enhanced Solution" option (option 3). Two attendees stated their preferred option was "Re-write with Commercial Off-the-shelf products" (Option 4). Following up on this, one of those attendees said his reason for this preference was because that attendee is from a software supplier company and so could provide the software. The other attendee that highlighted Option 4 as their preference said this was because they have experience of using the Prisma platform for capacity bookings which they feel is a "very well developed" and easier to use. Two other attendees highlighted option 5 "Re-write with bespoke application" (Option 5) as their preference. This was due to them experiencing issues with connectivity, access, reliability, automation, consistency of units of measurement used by the system, and issues with specific rules. These issues are all captured in the "pain points" previously identified by Users and will be improved by the delivery of the enhancements as part of option 3, "Enhanced Solution".

3. STAKEHOLDER GROUP CHALLENGE & REVIEW

3.1. WHAT POINTS OF CLARIFICATION AND INTEREST WERE RAISED?

National Grid circulated version 1 of this engagement log in advance of the Stakeholder Group meeting on the 19th September 2018. Pre-meeting calls were held to collect feedback on the log and any points of clarification which are captured below.

Topic specific <u>feedback</u> and <u>points of clarification</u>		
Pre-meeting calls	Feedback	National Grid Response
██████████	<p>Focus on the link to consumers – describe and evidence how this work impacts/ benefits consumers.</p> <p>There are more and more shippers and suppliers active in the market – therefore should the system become easier and simpler to use for smaller parties or should it be geared towards larger players (who might in fact be acting on behalf of small companies who don't have trading teams). Link to a more competitive market - is it better for consumers to encourage smaller players to directly engage themselves and how does this translate into smearing of costs vs cost reflective pricing</p>	<p>We articulate how this work aligns to the three consumer priorities in the RII0 2 business plan narrative:</p> <ol style="list-style-type: none"> 1. "I want to use energy as and when I want" : Our commitment is to facilitate and deliver solutions that will continue to deliver the future energy system through enabling decarbonisation and digitisation. We will collaborate with other networks and third parties to deliver innovative solutions for our customers and consumers. 2. "I want an affordable energy bill": Whole system collaboration has the potential for networks to respond to changing needs and reduce consumer costs and deliver a sustainable network. Through focussing on delivering and embedding innovation solutions to deliver the energy transition, we will ensure we are minimising consumer bills. 3. "I want you to facilitate delivery of a sustainable energy system": We are working with other networks, regulators and third parties to determine the future pathways for the energy industry which will look to minimise disruption to consumers as much as possible. We will be defining the solutions for decarbonising heat and provide the costs of these for the network and what this means for consumers.
██████████	<p>There are limitations to engaging with smaller stakeholders and they may have their own individual agenda and we may not see any common themes emerging from them.</p>	<p>Noted, and we have not successfully gathered any common themes.</p>

3.2 WHAT WAS THE OUTCOME OF THE STAKEHOLDER GROUP CHALLENGE AND REVIEW ?

- I. Capture all questions and challenges raised by Stakeholder Group
- II. Capture agreement/disagreement
- III. Executive summary for RIIO Challenge Group

At the Stakeholder Group meeting held on 2nd October National Grid presented a short overview of the topic and how the costs are reflected in the overall consumer bill. The members discussed how the balancing cycle is different for gas transmission from the electricity transmission network and whether the IT systems should be considered a network asset.

The Stakeholder Group questioned the use of the funding for systems that National Grid has received under previous prices controls. Members also commented on current projects in this area which have not delivered effectively. The Stakeholder Group also discussed the type of outcome/output that should be defined for this topic and the need to allow for flexibility around how and who delivers the new system.

The Stakeholder Group participated in an interactive session identifying the positive aspects and the limitations of the engagement log. The Stakeholder Group also considered proposals to overcome the limitations identified. The challenges identified will be incorporated in the challenge log.

Topic specific challenges from Stakeholder Group discussion. Meeting SG-03 02/10/2018		
ID	Challenge	National Grid Response
55 and 56	Be clear on users and future users - mapping stakeholders to support in next phase on design (so not by committee) and Articulate future users to ensure a wider sounding board	At the SG5 session we presented our consumer strategy including current and future consumers. The stakeholder group members had a discussion about what good would look like in this area and there were no specific examples of good engagement with future consumers that members could advise. Likewise, there have been no specific examples shared by Citizens' Advice. However, we are seeking to use trend and public attitude research e.g. involving underlying public attitudes versus attitudes likely to change; identification of trends, how are consumers going to use what we are offering differently in the future. There are a number of other workstreams including deliberative research to work with consumer research experts, using deliberative research techniques, focus groups and consumer workshops as appropriate. These sessions will explore important and relevant topics in more detail, to provide more in-depth views than the quantitative channels. Specifically, on the topic of 'pay now, pay later' we are scoping a deliberative consumer session to explore pay now versus pay later which picks up who should pay for future costs of the network and takes into consideration impacts on future consumers. We have also undertaken an innovative approach on cultural analysis – understanding culture without direct engagement with consumers. This works seeks to understand broader consumer attitudes and

		<p>trends, which are particularly useful when looking at the needs of future consumers.</p> <p>Regarding specific users of the Gemini system, insight has been taken from Project CLoCC on future connections and future customers seeking to transport different sources of gas. We also undertook an assessment of impact of the Future Energy Scenarios. Whatever the gas sources, there will still be an enduring requirement to book capacity and balance commercial positions.</p>
57	In designing system look to what good looks like for future system outside of our sector	The work to date has not identified an immediate comparative system. In order to demonstrate costs efficiency, we would look to use other benchmarks (labour rates, hardware costs etc.) rather than costs from another utility or network operator's system.
58	Be clear on level of engagement planned for determining end solution	The engagement since the presentation of the engagement log in September has been focussed on continuing to engage with smaller shippers through direct calls, and access through other representative bodies. We then tried to use Xoserve as a means to access these smaller organisations, through a joint Xoserve/ National Grid workshop planned for the end of February. Xoserve have a 'small shipper lead' - Customer Advocate - who was our main point of contact for this engagement. Unfortunately, the workshop did not result in the necessary attendance and hence insight. So, we have now developed the solution for the business plan taken a different approach, whereby the engagement for the detailed services for the replacement solution will then be part of the solution development with the RIIO 2 period.
59	Collect evidence on level of difficulty to use system (especially for new parties)	When a new user enters the market, Xoserve currently provide a pack of information to help the user set-up. This includes offering e-training on the Gemini system which consists of modules on an overview to the UK Gas Business and Gemini, Module Orientation, Entry Capacity, Energy Balancing and Exit Capacity. They are also provided information on setting up an Application Programming Interface (API) and provided a list of FAQs. There is also a helpdesk where users can raise queries or issues to be resolved in a timely manner.
60	Missing engagement with DNs	We attended an Xoserve constituency meeting (on the 6th December 2018) with the topic of future capacity and balancing services on the agenda under AOB. This was a good opportunity to share the proposals and work to date with the GDNs, however the attendees were not the right individuals within their organisations to give the required feedback and insight. Following this meeting we therefore sent an email to the chair to pass onto all the attendees for onward circulation but no responses were received. We then attended the ENA Gas Regulation Group on the 5th February in order to have further discussion. Focus of this discussion reinforced the need for a change in approach; the more detailed engagement would be more effective and better received once the overarching approach to replace is agreed and underway. GDNs are supportive of engagement on the specific services the system delivers.
61	Make clear we are ensuring we capture enhancements needed throughout process	As part of the Gemini re-platform work carried out in RIIO-1, a series of enhancements to the current system will be carried out. Users of the system identified 66 "pain points" with the current system. Enhancement work to be carried out in RIIO-1 will address a portion of these "pain points". However, 17 "pain points" will require a system

		replacement to address (as they impact the applications layer of the system) and therefore will be fed into the requirements for the replacement system.
62	Include implications of EU requirements and possible Brexit implications	At this stage in the Brexit process we do not envisage there to be any implication of Brexit on the future capacity and balancing services and system. In any Brexit scenario, we do not foresee any changes substantial enough to vastly alter the market which would require any amendments to the way capacity and balancing services are provided. More broadly, in our business plan assumptions we state: the form of Brexit has a neutral impact on our activities and costs. There are uncertainties about our post-Brexit trading arrangements that could impact RIIO-2 activity, such as industry code change workload.
63	Can we articulate additional value delivered to the market through the system upgrade?	Through the work done to date, it has not been possible to articulate the financial value to the market of the system upgrades. However, the system upgrade is required to supporting the gas market changes and the gas markets plan. In response to the question on the “impact of system change not keeping pace with industry change”, stakeholders gave the following insight: ‘inability to manage [commercial] position and balance properly’ ‘opportunity lost’ ‘shipper licence lost’ ‘Investment goes to Europe’ ‘UK falls behind other Euro markets’ ‘labour intensive as systems are not user friendly’
64	Articulate risk of scope reduction if funding isn’t in place (i.e. if funding isn’t in place but as part of a UM and then we don’t get anything as part of UM)	Ofgem’s Sector Specific Methodology document confirmed this aspect of the business plan proposals can be funded under baseline allowance. Therefore, our RIIO 2 business plan assumes a level of baseline funding with supporting justification of costs.

4. CONCLUSIONS

4.1 WHAT IMPACT HAS THIS FEEDBACK HAD ON THE BUSINESS PLAN?

- *What changes have been made to the RIIO-T2 business plan as a result of direct feedback from the Stakeholder Group? (be explicit about outputs)*
- *What changes have been made to future approach to engagement, other business processes, etc. as a result of feedback from Stakeholder Group?*

How feedback from the stakeholder group impacted National Grid and the RIIO-T2 business plan?	
Stakeholder Group feedback	Impact on RIIO-T2 Business Plan (Outputs)
Risk of scope reduction if funding isn’t in place	Engagement with Ofgem to ensure baseline funding is agreed as part of the Sector Specific Methodology consultation and mitigate any risk for the scope.
Stakeholder Group feedback	Impact on National Grid Business / Processes

<p>Be clear on level of engagement planned for determining end solution</p>	<p>This challenge ensured we continued to focus on the missing stakeholder segment – small customers. Having logged all our activities and attempts to engage, including those that were not successful, this enabled us to progress through the options assessment and costing process effectively.</p>
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4.2 BUSINESS PLAN OUTPUTS ALIGNED TO STAKEHOLDER ENGAGEMENT OUTCOMES.

The golden thread is embedded in a standalone file and illustrates how the business plan outputs align to the stakeholder engagement outcomes. This has been completed as part of the whole energy systems chapter golden thread.

5. DOCUMENT CHANGE CONTROL

Version Number	Date Updated	Updated by	Comments
1	October 2018	Tamsin Kashap	SG3
2	May 2019	Tamsin Kashap	SG9

6. APPENDICES

APPENDIX 6.1: BALANCING AND CAPACITY SERVICES

Service procured by National Grid from Xoserve
Services we rely on Gemini to deliver
Service delivered directly by National Grid

	Service	Description
1	Transportation Invoicing	Calculation of National Transmission System (NTS) capacity and commodity charges, production and issue of monthly transportation invoices
2	Energy Balancing Invoicing	Calculation of energy balancing charges, production and issue of monthly energy balancing invoices
3	Gemini Capacity Functionality	Provision of functionality on Gemini to enable NTS capacity booking, trading and allocation.
4	Gemini Energy Balancing Functionality	Provision of functionality on Gemini to enable submission of nominations, register of gas trades and receipt of gas allocations
5	Gemini Change Delivery	Production of impact assessments, procurement of IT contractors, delivery of test environments, project and risk management, release planning and outage scheduling
6	Gemini Reporting	Provision of facility to run reports from Gemini
7	Gemini Training	Provision of an on-line package which describes how to use the capacity and energy balancing functionality on Gemini
8	Gemini Code Contingency Exercise	Testing of Gemini contingency measures for capacity booking and nominations
9	Service Desk	Facility for customers to raise faults or queries with Gemini service provision
10	Energy Balancing Credit Risk Management	Application of energy balancing credit rules, including managing shipper energy balancing accounts, security requests, monitoring credit limits, cash calls, calculation of indebtedness, application of sanctions.
11	Manage Energy Balancing Neutrality	Calculation and processing of energy balancing neutrality payments / credits on shippers' energy balancing invoices each month
12	Manage Entry Capacity Neutrality	Calculation and processing of entry capacity neutrality payments / credits on shippers' NTS capacity invoice each month
13	Demand Estimation	Process to estimate consumption behaviours of different types of consumers in different weather scenarios. Outputs are used in demand attribution, determination of allocated quantities, capacity invoicing and opening meter read estimation processes.
14	Shipper Lifecycle	Administration activities to set up new shippers, new logical meter points on Gemini, and remove shippers from the market, either through voluntary discontinuance or termination
15	Non Daily Metered (NDM) Demand Attribution	Distribution Network (DN) systems feed data to automated processes within Gemini to generate nominations and allocations for NDM supply points.
16	NDM Allocation Process	Gas allocations determined for non-daily metered sites via methodology and automated processes run on Gemini
17	Nominations Matching at Interconnection Points	GB shipper nominations / renominations are matched with those submitted to adjacent TSOs.
18	Shrinkage Provider	Maintain the energy balance by a gas trading function to manage unaccounted for gas, transporter own use gas and Calorific Value (CV) shrinkage
19	NTS exit allocation agent	Process to allocate gas among shippers at NTS shared supply meter points
20	Manage Flow Weighted Average CV	Calculation of daily calorific values on behalf of DNs to be used for consumer billing in line with provisions in the Gas (Calculation of Thermal Energy) Regulations 1996

21	Meter Assurance and Energy Balancing Invoice Reconciliations	Processing of Energy Balancing Invoice reconciliations in the event of a meter error
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APPENDIX 6.2: PAIN POINTS

This appendix contains details of the “pain points” that came out of the Gemini workshop in June 2018. As mentioned in the body of this paper, analysis is currently ongoing to assess which can be resolved as part of the near-term system provision work on the Gemini re-platform and enhancements program whilst others will be required to be rectified as part of the long-term system provision.

Performance Theme	
1	Review security settings. Password resets could be requested by users, not just Local System Operators (LSOs)
2	Overall Speed
3	View requires multiple pages rather than one long table
4	Improve interfaces between Gemini and other NG IS systems
5	Slow to load data ranges
6	Slow API request processing
7	Automated testing of Gemini with other NG IS systems would be desirable
8	National Grid cannot enter measurements or allocations when the invoicing suite fails
9	Speed in which some of the screens load. The screens of interest are Measurements>NTS Energy>Query and then when you click on Inputs or Outputs
10	Slow from screen to screen and locks out if close window
11	In the entitlements screen we would like to be able to select multiple locations (like you can in the ‘bid information’ screen and ‘all active bids’ screen). Selecting one location at a time currently is time consuming.
12	Information Exchange (IX) Link
13	Pain point captured in workshop: IX outdated connected via phone line can we not have a secure internet connection?
14	Speed of response, especially for capacity reporting – capacity entitlements
15	De-scope the many redundant screens. Do these cause performance issues?
16	If IX goes down, XP1 does not work for contingency processes.
Usability Theme	
1	Better / more flexible support with setting up and testing APIs
2	Entry and exit systems should be combined, allowing shippers to view entitlements, capacity bids and checking for constraints all in one system. Even if the systems aren’t combined a more consistent menu structure would be desirable.

3	Ability to export data is restrictive – output report to Excel? Option to easily download allocation data in an Excel friendly format.
4	Accessing via citrix is not ideal - I'm not really certain why we still have to access Gemini via citrix. It takes a really long time for users to log into Gemini. They have to remember two passwords which don't have the same expiry date and we spend frequent amount of time on the phone to Xoserve resetting them!
5	Too many sections and sub-sections with not the clearest labelling
6	Test environment that shippers can access when they want when they are making changes to their systems instead of having to book a 'window'.
7	Automate Capacity auctions.
8	The procedure for releasing non-obligated capacity takes too long and requires the use of 4 different screens. this process should be cut back into a single screen
9	The procedure withholding capacity takes too long and requires the use of 4 different screens. this process should be cut back into a single screen
10	Onscreen live service updates would be useful
11	Purchased an interface as so user unfriendly
12	Representation of locational trades at IPs on Gemini which came to light on 1st March, where shipper's confirmed nomination on Gemini shows an incorrect value for the gas day. Notwithstanding that this gets corrected after the day, shippers face risk that either this doesn't happen or shift teams change and the later one mistakenly trades out the position they're seeing on Gemini – both of which could result in unnecessary exposure to imbalance cashout. As a solution, it would help shippers if Gemini could be changed such that they see the 'correct' position following a local IP trade.
13	Improved capability to download data into Excel and quality of exported data - spaces are always added before values, formatting is always required e.g. prices
14	Add ability to have more than one screen open at a time. For example: re-nominations screen, capacity auction screen and linepack information screen. All other web based applications used in the GNCC allow more than one screen to be open and used.
15	Meter set up process requires 15 screens to be completed, could this be rationalised
16	The possibility of having numerous Gemini screens open at the same time
17	BA Association - Shippers are not in alphabetical order
18	Clarity and consistency in input and output perspective
19	Enhanced interactive training package would be useful
20	Multi-browser support e.g. Chrome
21	Two factor authentication is frustrating. This is the only system we use in the industry that requires it (the attendees felt this is linked to number 5)
22	Usability – we use our own interface to avoid using it directly

23	We currently use an interface to upload into Gemini. Improvements would save money from using external interfaces
24	In the 'create bids' section we would like to be able to save favourites/template bids. This would allow shippers to create bids with the volumes they bid for regularly and just manually edit price/volume as and when
25	Would like the same download capability for entry capacity as exit capacity
26	Quality of exported data (spaces are added before values, formatting is always required - prices for example)
27	'Look and feel' is disjointed
28	More categories to search on
29	More logical, intuitive format of menus
30	Avoid multiple entry of dates when running queries, just enter once and system then references that original date
31	The number of screens you have to go through to find the data you need
Functional Theme	
1	Easier way to do Negative Implied Flow Rates - When we looked at the NIFR for the IPs, NGG said they were going to look into making the NIFR process easier – not just for shippers but for the control room too. Currently we send faxes, so not only do we have to manually type in values, but so do the control room, so the margin for error is large.
2	Quicker way to schedule and make trades - Currently we have to set up activity numbers, we then have to wait for NGG to run a scheduling batch. Also, if we haven't posted for the same hour as the counterparty (but even if we agree numbers) the trades get rejected (there doesn't seem a good reason for this and it has costed us a lot of money in the past).
3	More functionality in the allocations screens. Reports and analysis, what may be most useful is a scheduling report/screen identifying allocations which exceed the 3% and 5% tolerances, this could help solve discrepancies sooner, avoiding reconciliations.
4	Poor scheduling at IPs leads to 'adjustment invoice'
5	Bulk Upload of Measurement & Allocation adjustments to Post Close out screens
6	Activity numbers - What is the point of activity numbers and reverse activity numbers? It is quite a pain to set them up and then put them in internal systems etc.
7	Nominations take too long and manual
8	It would be useful to have reports showing mismatched trades, rejected trades
9	Introducing new meter types and categories. Eg currently biomethane sites are classified as onshore fields. Would help our compliance with reporting to Ofgem
10	Access for DNs beyond just Exit. National Grid currently doing work on their behalf. May help with Unidentified Gas, 5th and 6th May when allocations didn't run. Interface and

	timing issues between Gemini and the DN systems. Better customer focused service for shippers if they could check their own sites
11	Improved reporting capability
12	Removal of dates - able to go back within the closeout period retrospectively especially when carrying out the meter set up process
13	Allocation screens are not consistent for example the Pre close out claims and the allocation details by meter ID do not show the same data example date 20th November
14	Renominations screens are manual with no copy and paste option
15	Nominations and renominations - It is quite a painful process to nominate. Most people have to purchase or create systems that interface with Gemini as it's impossible to remember the activity numbers that you need to nominate against. It would be easier if there was a much better way of nominating (against shippers etc).
16	Pain point captured in Workshop: autoscheduling of trades nominated within 2kwh by buyer/seller because of individual roundings in shippers' systems
17	Pain point captured in workshop: allocation agent role - no easy to check values or close out volumes. Very inefficient and very risky
18	General feedback captured in workshop: many shippers to not want to use Gemini and have created workarounds like APIs to avoid it. Gemini is a backup for large shippers if API functionality fails.
19	Remove manual processes in GNCC via Gemini automation

APPENDIX 6.3: ATTENDEE LIST

This appendix contains the attendee list for the Gemini workshop held on 12th June 2018.

Company	Name
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

APPENDIX 6.4: ALIGNMENT OF FEEDBACK

The purpose of this appendix is to demonstrate the alignment of feedback received, outlined in section 2.1 of this paper, with conclusions drawn as outlined in section 2.3.

Feedback Received (Section 2.1)	Conclusion Drawn (Section 2.3)
Respondents could not say whether they agreed with the position that the consequence of the drivers means that the re-platformed system won't meet Users or National Grid's requirements into the future	The consequence of the drivers needs to be tested more widely with stakeholders
Consequences of system change not keeping pace with industry change are, higher operating costs, increased risk if regulatory obligations cannot be implemented and opportunity loss	The impact of these consequences on users' businesses is sufficiently significant meaning that it is right for National Grid to explore this topic.
Requirements for future system provision include, do the basics well, improved information exchange methods and interfaces with Users systems, increased reporting functionality and granularity	Users require doing things better rather than differently
Priorities for implementation of system change were to minimise the impact on Users systems, the ultimate quality of change, viable timetable of change and built contingency methods	The priority for when system change is delivered is less about the time taken to deliver the change and more about agreeing a timetable for change upfront and sticking to it and ensuring that the system solution is fit for purpose and has minimal impact on Users systems
Services which require improvements are, invoicing, Energy Balancing Reconciliations, nominations matching at IPs, Gemini Capacity Functionality, Gemini change delivery, unidentified gas and service desk	Largely a consensus from Users on which services require improvement and what that improvement should look like driving areas of focus for options development

APPENDIX 6.5: ENGAGEMENT APPROACH – SPECTRUM

Approach to engagement – spectrum

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
STAKEHOLDER ENGAGEMENT GOAL	To provide stakeholders with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain stakeholder feedback on analysis, alternatives and/or decisions	To obtain public feedback on analysis, alternatives and/or decisions	To partner with stakeholders in each aspect of the decision including development of alternatives and the identification of the preferred solution	To place final decision making in the hands of the stakeholder
PROMISE TO THE STAKEHOLDER	We will: <ul style="list-style-type: none"> keep you informed 	We will: <ul style="list-style-type: none"> Keep you informed Listen to and acknowledge concerns and aspirations Provide feedback on how you have influenced our decision Seek feedback on drafts and proposals 	We will: <ul style="list-style-type: none"> Work with you to ensure that your concerns and aspirations are directly reflected in alternatives developed Provide feedback on how you have influenced our decisions 	We will: <ul style="list-style-type: none"> Work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible 	We will: <ul style="list-style-type: none"> Implement what you decide

Adapted from the International Association of Public Participation – Public Participation Spectrum, 2007

APPENDIX 6.6: STAKEHOLDER ENGAGEMENT BEST PRINCIPLES

1	Define and map your stakeholders - anyone who believes they are affected by your decisions. Recognising the different threads of the public interest – stakeholders, customers, consumers, citizens, communities (geographical and interest)	
2	Be clear what you want to achieve with “engagement” – have clear policy objectives and measures of impact; (incl. where you most need to engage)	
3	Understand the “spectrum of participation” and difference between each part of that spectrum: inform, consult, involve, collaborate, empower	
4	Engage early in the process, review and improve throughout	
5	Leadership – effective stakeholder engagement must be led from the top of the organisation	
6	Commitment – to listen to stakeholders’ views and act on or respond to them	
7	Objectivity – an open approach to obtaining stakeholders’ views and to interpreting them. Seek to understand views on a range of topics and on all aspects of the business plan, rather than pre-determining their priorities or seeking to endorse your own priorities	
8	Transparency – to build stakeholder trust and show that you take their views seriously (incl. how we’ve considered views, weighted and managed trade-offs)	
9	Be inclusive: work with stakeholder groups to gather the fullest range of interests. Understand and balance the differences between different segments. Understand and balance the differences between existing and future stakeholders	
10	Be aware that those who often participate i.e. the “usual suspects” are not always representative	
11	Be accessible to all (e.g. in consideration of the tasks, timelines, contact person, tech., locations, challenges of communication, etc.)	
12	Use targeted approaches to tailor engagement to suit the knowledge and awareness of different groups	

13	An ongoing process that is embedded across the business – not just a stand-alone business planning/price control review exercise.	
14	Evidence based – use a full range of available sources of info to identify priorities, views and challenges (e.g. operational insight, bespoke research)	
15	Gather evidence through a range of methodologies and tools including willingness to pay, qualitative research, surveys, complaints intelligence, market data	
16	Be responsive – seek to adopt a flexible process to engagement, responding to the information revealed as the process progresses	
17	Demonstrate impact of engagement – ensure that the engagement design process plans for and allows evaluation of success	
18	Innovation – trying new and innovative ways of engaging	

APPENDIX 6.7: DECISION MAKING FRAMEWORK CHECKLIST

PLAN AND PREPARE	IMPLEMENT & REVIEW	ACT
Clear scope and outcomes defined <input checked="" type="checkbox"/>	Triangulate diverse views <input checked="" type="checkbox"/>	Use conclusions to build business plan <input type="checkbox"/>
Information sources identified <input type="checkbox"/>	Share outcomes and conclusions <input checked="" type="checkbox"/>	
Unbiased material produced <input checked="" type="checkbox"/>	Evidence to justify conclusions <input type="checkbox"/>	
Tailored to our diverse stakeholders; targeting those most impacted <input checked="" type="checkbox"/>	Undertake further engagement where required <input checked="" type="checkbox"/>	
Options consistent with our checklist <input checked="" type="checkbox"/>	Articulate where trade offs or no action taken and why <input checked="" type="checkbox"/>	
Ensure inclusivity of views <input checked="" type="checkbox"/>		