

## Annex 1 – Cadent independent CEG - impact and cost

#### Introduction

The Cadent CEG's primary aims are to improve the overall quality of the company's business plan and ensure it is better aligned to the interests of its current and future customers. The following provisional note outlines our key impacts and cost for the period June 2018 to December 2019. Its publication is part of our commitment to be transparent and to maximise our effectiveness and value for money. This will be followed by a more comprehensive assessment in the new year.

#### Costs

The CEG is paid for by Cadent from its existing RIIO-1 regulatory allowances. The CEG costs to date total £663k², including members fees, travel and subsistence, project management and secretariat support. This is about 0.06% of Cadent's average annual RIIO2 Totex³. On a per network basis it equates to £242k for East of England, c.£163k for North West, £139k for North London and c.£119k for West Midlands⁴. The customers' share of this (after sharing factor) amounts to about 1.5p per household.

#### **Evaluating our impact**

Inevitably, the impacts of our work come from our interactions with the company, its Board and its regulator. These interactions include feedback, questions, discussions and informal encouragement and formal challenges. We made a total of 224 challenges to the company during this period of which 204 are now closed, seven are unfulfilled and 13 are ongoing (see Annex 2). Where value has been created, we are often only part of the story so measuring and capturing effectiveness can be hard. That said, while it is difficult to establish the counterfactual had we not existed, Cadent reports that it has "a significantly better plan as a result of the CEG".

### An emphasis on culture and governance

Cadent's description of the CEG's impact in section 5.14 of its business plan identifies that the CEG is "not only influencing our plan, but also our business operation today' and this is clear in the examples below. The section in the plan indicates that the CEG was instrumental in prompting the company's new vision statement and improving the company's enhanced engagement programme, both with significant relevance to the company's culture and governance. We have also been strongly encouraging Cadent to be more ambitious, more innovative, more data centric, to take the opportunity of this business plan to redefine itself as separate from National Grid and in the setting of performance targets, holding it to the new ambition it has set itself 'to deliver standards customers love and others aspire to'. We have also encouraged Cadent

<sup>&</sup>lt;sup>1</sup> Although Ofgem hasn't provided any additional allowances to companies to set up and run the CEG's, Cadent's spend on the CEG would be subject to the sharing factor. Taking tax into account, the consumer share will be small, but not insignificant.

<sup>&</sup>lt;sup>2</sup> This is the latest estimate of cost from June 2018 to November 2019, noting that members billing is slightly behind in some instances.

<sup>&</sup>lt;sup>3</sup> Average RIIO2 totex as per page 131 of Cadent's Dec-19 business plan.

<sup>&</sup>lt;sup>4</sup> Allocated based on the number of customers per network, as stated on page 11 of Cadent's Dec-19 business plan.



to grasp the importance of playing an active and open-minded role in the delivery of net zero carbon by 2050. This involves more work on whole systems solutions rather than assuming a hydrogen future and driving forward options for lower emissions gas. This is a big shift in attitude from the company, which was rather gas-centric in its approach even a year ago.

We think it is relevant to see our role as a potentially important new component of the company's customer-focused culture and governance.

This emphasis on culture and governance indicates the CEG may have been helpful, at a formative time of cultural change for the company, in prompting a new level of responsiveness towards the company's customers and its regulatory responsibilities. Our experience is of a pervasive change in the company's thinking. This would be relevant to Principle B in The UK Corporate Governance Code<sup>5</sup>, which starts: "The board should establish the company's purpose, values and strategy, and satisfy itself that these and its culture are aligned."

A much cited, but now quite old, McKinsey study<sup>6</sup> surveyed the views of investors, CEOs and senior executives on comparable companies with differences only in the quality of governance. The study found that, on average, the participants would pay an 11 per cent premium for the stock of a well-governed company.

Consistent results were shown in a later study in the US<sup>7</sup>, which concluded that "The results for both stock returns and firm value are economically large and are robust to many controls and other firm characteristics."

These studies were, of course, focused on shareholder value. The impact of the CEG is, by contrast, focused on consumer value, but a stronger emphasis on consumer value in corporate governance would have an analogous impact on value, albeit consumer value rather than shareholder value.

Taking 11% of stock value as a reference point for the value of good governance, we can translate that into an annual impact of 11% of RoRE. With a RAV of about £11 billion, gearing of 60%, and Ofgem's estimate of the cost of equity at 4.8%, that translates to a gross annual impact of £23 million.

It would therefore seem plausible that the value of the CEG to consumers would be an appreciable proportion of the benchmark value of good governance, £23 million annually over the five-year RIIO-2 period. This judgement is amplified by recognising that customer value created by a successful company can sometimes be multiples of the shareholder value origin of the benchmark. This is a starting point for us to think about value.

<sup>6</sup> Felton, Robert F., Hudnut, Alec, Heeckeren, Jennifer van, 1996, 'Putting a Value on Board Governance', The McKinsey Quarterly Autumn 1996

<sup>&</sup>lt;sup>5</sup> Issued by the FRC, most recently in July 2018

<sup>&</sup>lt;sup>7</sup> Gompers, Paul A, Ishii, Joy L., Metrick, Andrew, February 2003, 'Corporate Governance and Equity Prices, Quarterly Journal of Economics 118, No 1: 107-55,



## **Bottom-up impacts**

To build on this top-down starting point, below we have pulled together the individual bottom-up benefits we have identified in our working impact log. Some of these are quantified, but many are qualitative. Their quantified impacts total to amounts which are substantially greater than our benchmark value. Those impacts would not be solely attributable to the CEG, and the Board's and Ofgem's challenging of a counterfactual plan might have secured some of those benefits anyway.

However, taken together, we consider our top-down and bottom-up analysis supports a cautious assessment that the CEG impact for customers over the RIIO-2 period is likely to exceed £10 per annum. A value for the whole of RIIO-2 might be in the range of £50m to well in excess of £100m.

## **Quantified impacts**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)
Minimum standards	CEG meeting with assurance providers, hundreds of comments on the business plan/appendices and clear 'route map' to green	The CEG challenged Cadent to ensure it was able to demonstrate that its plan complied with Ofgem's <b>business plan requirements</b> and to undertake specific assurance on this. This has now been completed. While it will be for Ofgem to decide if its own minimum standards have been met, the company feels it has a significantly clearer and more robust plan as a result of CEG feedback and challenge and this assurance process.	Failure to meet minimum requirements would prevent Cadent obtaining any benefit from the Business Plan Incentive (up to 2% of totex)
Steel pipe replacement	Appendix 09.02 Appendix 09.35	The CEG identified the risk that some of the <b>steel pipes proposed for replacement</b> may have deteriorated as a result of a failure to properly maintain some cathodic protection systems	Up to £15m over RIIO-2 Potential for additional pipes via proposed UM Cadent's approach to Cathodic protection is described in appendix 09.35
Accessible and inclusive service beyond existing industry standards	CEG meeting – May 2019	Upon the CEG pointing out that Cadent's customer helpline charged customers money, Cadent made this service free of charge.  Cadent was encouraged to provide an accessible and inclusive service including communications beyond the current industry standard. In the December business plan Cadent has committed to become BS 18477 (inclusive service provision) certified and the company has made a further commitment to work with an independent expert go beyond this to establish an index which measures the transparency, accessibility and inclusivity of communications.	c.£50k per annum cost of calling saving to customers  c.£1m per annum worth of improvements which will be absorbed by Cadent and delivered as part of Cadent's efficiency challenge.
		Following challenge Cadent made improvements in accessibility of its website, including a website translation service called 'Recitetime', 4 customer videos so far (and developing more) all available in BSL and subtitles	



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)
		in multiple languages, and it is working with the Digital Accessibility Centre to ensure maximum ease of use for people with visual impairments, dyslexia, mobility impairments and learning disabilities (implementation of proposed improvements will allow Cadent to achieve AA accreditation).	
Cost justification of new areas of investment	CL176, CL178, CL179 Meetings of the Finance and Investment Working Group	We have strongly challenged the underlying assumptions that feed into the overall cost model. <b>Cost forecasts</b> have reduced as the BP has evolved and we believe our challenge has played a part in this, alongside the refinement of the models and internal challenge. On Output Cases and CVP, CEG has ensured that the cost benefit underlying Cadent's plans has been tested and explained	Total cost reduction between V1 and final BP is £438m. If CEG delivered 1% of this reduction this would value our input as £4.38m
Plan justification / Costs	CL85 CEG July Draft BP feedback and Cadent Responses Comparison of July and October draft plans	Significant reduction in network resilience totex between July and October draft plans following CEG challenge, e.g. in relation to mains replacement insertion rates, albeit partly eroded by increases in the December plan linked to industry wide updates in MRPS scoring.	£94m p.a. reduction in repex between July and October draft plans  £10m p.a. reduction in capex between July and October draft plans  Further reductions in capex between October and December. For example, Heaters investment reduced by ~£3m pa
Cadent to consider whether further action can be taken after the meter to improve customer outcomes	CL41 Y – See main plan (pages 87-89 and 92-94) and appendices 07.03.10 and 07.03.12	CEG asked Cadent to consider further services beyond the meter to support customers in Vulnerable situations. Probe what it was doing in this area and what innovative approaches exist. Cadent since developed proposals on going beyond to never leave a customer vulnerable without gas and sought feedback from customers during the business options testing phase of engagement. In the final December plan, Cadent have committed to deliver bespoke outputs, including supporting customers with repairing or replacing unsafe appliances that are condemned following an emergency gas escape or CO incident.	Potential SROI for never leaving a customer vulnerable off supply/repairing or replacing appliances £28.5 +£15m



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)
Engagement: strategy, vision, aims, prioritisation, resourcing, evaluation and quality of activity	CL54; CL26; CL30; CL4; CL35/43 (merged); CL44/65 (merged)	The importance of effective ongoing engagement is now well-recognised and this has been a key focus of the CEG. The Group has influence a) the ongoing and business plan engagement b) its engagement Strategy for RIIO-2.  Cadent says we had a key role in the development its 'centrally-designed; regionally delivered' stakeholder engagement strategy which should enable it to be better aligned to the communities it serves and is core to service across its organisation. Also that the strategic basis (the six staged process and Maslow's Hierarchy of Needs) emerged during the business plan development. The latter has now been threaded into the company's ongoing engagement processes.  Cadent say that it has "learnt a lot during this process and this is reflected in its future approach to engagement, which is more strategically-framed." P31, Chapter 5 'Stakeholder Engagement Strategy has been updated to reflect our new company vision, the strategic direction of the business and our RIIO-2 Plan commitment' The forward looking RIIO-2 engagement strategy is more clearly articulated (Chapter 5). The Engagement programme is more clearly shown (page 28-29 BP) and now evidenced by the Decision-Making Tracker (Appendix 05.03) which shows the what, who, how, where and when for every one of the 180 engagement projects." Stakeholder and customer journey mapping is referenced and has been demonstrated through component Output Cases. Significant improvements have also been made to the RIIO  We challenged the board (and it responded), to articulate what it sees as the value of engagement to the business, to set clear aims, and to sign up to a programme of engagement where Board members speak face to face with customers and hear their concerns. Cadent says it now has "Significant Board and company support for RIIO-2 engagement strategy".	£2m per annum direct cost committed to ongoing Engagement.  More engagement work will be undertaken as part of on-going BAU commitments up to and across RIIO-2 (ie utilising existing and enhanced resources)
Whole systems/Fuel poverty	CL11	Cadent was challenged to demonstrate how it ensures that, when discussing end use energy efficiency, they are considering the best option for customers not just connecting them to the gas network. Cadent's proposal for fuel poverty interventions trialling a whole systems approach delivered with partners demonstrates this and going way beyond Ofgem's proposed FPNES approach - CEG is supportive of the company's approach.	Social Return on investment of enhanced approach to fuel poverty is estimated at £102m



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)
Customers shouldn't have to pay!	During November CEG  Verbal communication during the CVP deep dive webinar in October 2019 and at Output Case deep dive sessions in November 2019	<ul> <li>There have been a number of areas where we've objected to consumers footing the bill:</li> <li>The October draft Business Plan Cadent included a cost of c.£6m for proposals to establish and raise the bar for all customer and stakeholder experiences. CEG challenged why customers should pay for this which resulted in Cadent absorbing the costs for this proposal as part of its efficiency challenge.</li> <li>In total seven items that were included in the October CVP calculation were removed from the December calculation. While we don't know if Ofgem would have removed theses elements anyway from the CVP, the total monetary value associated with these items was £119.2m.</li> <li>Uncertainty mechanism removed following challenge</li> <li>Cadent changed their proposal from having a symmetrical financial incentive to reduce MOBs interruptions to a negative financial incentive only.</li> </ul>	c.£1.26m per annum  N/A – although it will make it easier for Ofgem to make a quantifiable assessment of comparative CVP assessments
Whole systems	CL160 - closed with second part now incorporated under CL155	Feedback from July 1 BP: Cadent is challenged to ensure that proposed projects and activities are shown to have been tested against and informed by engagement and insight, plus CBA, risk assessment etc. This was addressed in the output cases. In addition, pressed to better define baselines and ambition (comparative data, historic). There was an extension to challenge following October Bus Plan and in output case review Cadent is challenged to consider the proposed project on connecting off gas grid communities carefully to ensure there is clarity on the purpose of and learning expected from the project and ensure adequate consideration of interaction with future development for the customers such as hydrogen readiness or alternative options to net zero. When setting out the cost benefit case ensure this is from the customer perspective, considered their costs as well as network extension costs and considers 'whole life' for their domestic or commercial energy system (e.g. 20-30 years rather than just the RIIO-2 period). See impact relating to CL155 below.	Off grid output case re-written, SROI estimated at <b>£7.3m gross</b>



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)
FRoG &	CL59 - closed	If Cadent intend to make the case for modifications to the charging regime for	Entry enablement CVP delivers an estimated
role of competition in		gas injection in the Business Plan, show how you have engaged with	social return on investment of <b>£145.6m</b>
the delivery of		customers in building this case. Addressed to in A07.02.08	
hydrogen trials and	CEG Session on Competition	CEG challenged Cadent to consider other commercial and regulatory models	This could affect c <b>£200m of</b> investment
projects	FRoG WG sessions	for investment in H networks. Cadent has set out its commitment to do this in	
		its Business Plan and it has highlighted the need for wider stakeholder input to	
		this.	
Extent of spend	CEG Session on Competition	CEG challenged Cadent to consider competition in other areas of spend	Three new specific areas where competition
subject to native	Plan	Cadent has considered whether it can increase the extent of competition in its	could be used have been identified with total
competition		December plan.	spend of c£65m across RIIO2

Below we outline some more qualitative benefits for customers by business plan chapter in addition to above.



## **NB. WORKING DOCUMENT**

## Business plan commitment (track-record, culture, governance, assurance and deliverability)

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Customer viewpoint of risks	CEG deep-dive session	CEG challenged Cadent to widen its assessment of risk to encompass risk to customers as well as risk to Cadent itself. It has responded positively and customer impacts are now incorporated both into its assurance framework and its BAU risk management process.	N/a	N (BAU)
Deliverability MR	CEG Session on Assurance	CEG challenged Cadent to <b>develop and articulate</b> its approach to ensuring that its <b>proposals are will be deliverable</b> . This appears to have resulted in a more structured approach to this which has now been explained.	N/a	Y
Assurance during RIIO2 MR	CEG session on assurance	CEG challenged Cadent to explain how it would <b>provide assurance</b> over its delivery of plans in RIIO2 period, which they have responded to	N/a	Υ
Development of vision	CEG challenge (CL3, CL69)	CEG strongly challenged Cadent, at a working and Board level, on the articulation of a vision and ambition. The outcome was a vision that was better able to resonate with Cadent people and stakeholders and better able to link together the themes of its business plan.	N/A	Y (BP 5.14)
Cultural transformation	CEG challenges (CL55, CL99, CL102)	CEG challenged Cadent to <b>set out a bigger story of its transition</b> out of National Grid, a candid view of <b>its cultural transformation journey</b> setting the context for the challenges facing it and the various themes in the plan. This is now a theme running through the plan, and prominent in the Executive Summary	N/A	Y NAR
Framing of affordability in finance chapter MR	CEG challenges (CL98, CL152) and report on October draft	CEG challenged Cadent to present a more balanced analysis of affordability in its finance chapter, recognising the needs of future consumers and the disproportionate issues around affordability for economically vulnerable customers. The final version of the plan now reflects this.	N/A	Y NAR
Historical performance MR	CEG challenges (CL101, CL99)	CEG challenged Cadent to set out a clearer analysis of its historical RoRE, totex outperformance and the regional differences in customer experiences. Cadent's response was not comprehensive (as highlighted in our report), but the chapter is now substantially stronger.	N/A	YNAR



# Giving consumers a stronger voice - quality of engagement:

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Robustness of research and triangulation of insight management and strengthening of output cases	CL24; CL28	Output Cases to have stronger evidence bases and better processes for triangulation. Encouraged Cadent to clearly list inputs, including a robustness score and RAG rating, which have been subject to detailed discussion with R&IWG members. Two Appendices have been submitted by Research Partners - Sia (05.05) and Savanta (05.06).  Prompted Cadent to set up the Insights Forum. R&IWG members met with Cadent four times to review Insight Forum; discuss approach to triangulation; witness Director-lead conflict triangulation, and review the end to end process and robustness scoring.	N/A	YNAR
Improvements to qualitative engagement with customers incl businesses, CIVS, CiFP etc	Lessons learned reviews after each event. Identification of changes to the way the sessions were run; materials used; question themes. Followed up by observation sheets completed by CEG attendees at 23 events.	Shaped the development and improvements in engagement events following observation of activities fed back on the contents and processes, representativeness and inclusivity to help support improvements in the qualitative research.	N/A	YNAR
Feedback on quantitative studies incl WtP, BOT and AT	Extensive review of content of these studies, including adequacy of outputs and reports as part of on-going CEG (& especially R&IWG) scrutiny.  CL74 re Bill Impacts	Helped to ensure that key pieces of quantitative research were robust, independently framed, and tested appropriately for cognition. All three major programmes of quant work were subject to detailed deep-dives with R&IWG members. Cog testing witnessed and commented on in detail. These programmes have been assured as fit for purpose by NERA (WtP - not appended to BP), Savanta (see Appendix 05.06, especially regarding BOT and AT). These are significant components of the BP development and delivery, and have greater weighting. CEG have expressed some concerns about WtP and BOT, around framing and contextualisation (largely picked up in development); delivery (responded to draft instruments), and usage.	N/A	N NAR



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Segmentation	CL5; CL38 Ensure effective groupings, and that groupings would identify those most affected for outcome areas	Extensive on-going dialogue between Cadent and CEG through R&IWG.  Supported Cadent to improve presentation of feedback from different customer segments and relevance to / inclusion in Output cases now strengthened in the BP and appendices. Chapter 5 and Appendix 05.03. See also CL38	N/A	Y NAR
Golden thread - definition, presence and effective linkage	Raised in CL process early on - see CL34	Improved presentation of segmentation and golden thread- Criteria and mapping on page 35 of BP, requested by CEG, provides clearer overview of the relative positioning of the key components. The detailed. Output Cases, discussed at length with CEG Nov 19 reveal more inputs and considerations of the insights gathered.	N/A	Y in diagrammatic form on page 31, paragraph 5.6.2 figure 05.04
Databases and enhanced analytical capability	On-going feedback. Lack of effective data and personnel resources to manage and enhance the engagement outputs	Cadent to develop and recruit new relevant expertise to support engagement role. Lack of in-house engagement expertise led to overreliance on consultants (ten used in total). CEG not convinced Cadent getting good value. see Appendix 05.04). This has been recognised during the BP development, and the future engagement approach now fully recognises this (see Appendix 05.01 p18 Commitment 9)	N/A	Y NAR
Partnerships	CL16 - wanting Cadent to clearly demonstrate where partnerships could deliver effective and efficient outcomes, especially regarding vulnerability CL92	New partnerships strategy, in part a response of feedback.	Clearer articulation in the plan	YNAR
Engagement - longer- term issues	CL29 - how are Cadent engaging with people on long-term debates (beyond RIIO-2 framing?)	Cadent now given strong commitments to continuing engagement on issues beyond hydrogen. There are touchpoints in the existing engagement programme, but these have yet to materialise into a more coherent longer-term action plan (use of sprints; innovation focus etc)	N/A	Y NAR



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Transparency	CL66. Cadent to clearly demonstrate when meeting statutory / regulatory requirement; expected, and going above and beyond when engaging with customers	Challenged to provide <b>independent comparative performance information</b> to frame what good looks like during research. BOT included this requirement. Challenge and response noted as being in BP Chapter 5	N/A	Υ
Closing the loop- playback	CL42; CL94	Challenged to play back to customers how their views are influencing Cadent's decisions. Response on CL demonstrates that playback has been used and will continue to feature through future of engagement.	N/A	Y NAR

# **Net Zero and a whole system approach:**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Whole system/FRoG – quality plan – better quality plan	CEG feedback to June bus plan	Chapters re-written and improved - FRoG/Whole system chapter written in response to CEG feedback on June Business Plan (ref responses to CEG feedback - June 2019 documents). Also rewritten for December plan in response to CEG feedback to the Cadent Board on Oct plan.	Chapter 6 significantly augmented from feedback	Yes
Whole System/FRoG engagement- better quality plan	CEG feedback to June bus plan	Cadent separated information about the engagement on Future role of gas and whole systems, which was mostly stakeholder rather than end customer, from other engagement sources. This resulted in them developing an engagement spreadsheet with different tabs for different types of sources. (ref responses to CEG feedback - June 2019 documents)	Chapter 6 significantly augmented from feedback	Yes - in dialogue on engagement evidence
Enabling whole systems solutions /FRoG	Cadent Response to CEG comments 191122	Shift in focus from 'gas centric' perspective to more inclusive energy industry perspective. Further progress has been made in output cases presented in the Dec plan with a good presentation of how whole systems (and consideration of net zero) flows throughout all day to day, planning and innovation activities and is a consideration in developing all output cases. Consideration of energy efficiency improvements as a part of whole systems is better acknowledged.	Appendices	Yes - in written response to CEG comments doc and demonstrated in plan



<b>Golden Thread</b>				
Whole systems – strengthen proposals	CEG feedback to July bus plan	A range of feedback given regarding the quality of this chapter – presentation of projects, optioneering and justification let do improvements.  CEG commented that selection and justification of projects and initiatives urgently needs to be improved to set all relevant activities in clear, business justified context. Some progress was made on this in the October draft and, following a challenging session focusing on WS output Cadent has committed to rewriting its WS / FROG chapter and associated output cases to address this point. A substantial rewrite of this chapter for the December plan has made a huge improvement, addressing all CEG concerns to some extent with most now being fully addressed.	Qualitative benefits of whole system approach commitments set out in chapter 6 Table 6.03	Y - chapter rewritten
Whole systems – Strengthening approach	CL133 - closed	Following challenge Cadent has set out in the business plan, its process for developing, evaluating and selecting projects and initiatives in the whole systems area; evidence of how this has been used to identify the projects being put forward in the business plan (Costs, benefits, timescales, certainty etc.)	Appendices 07.02.05 and 07.02.04, 07.04.09 and 07.03.02	Y and covered in plan
Whole systems	CL160 - closed with second part now incorporated under CL155	Feedback from July 1st bus plan: Cadent is challenged to ensure that proposed projects and activities are shown to have been tested against and informed by engagement and insight, plus CBA, risk assessment etc. This was addressed in the output cases.  Extension to challenge following October Bus Plan and output case review Cadent is challenged to consider the proposed project on connecting off gas grid communities carefully to ensure there is clarity on the purpose of and learning expected from the project and ensure adequate consideration of interaction with future development for the customers such as hydrogen readiness or alternative options to net zero. When setting out the cost benefit case ensure this is from the customer perspective, considered their costs as well as network extension costs and considers 'whole life' for their domestic or commercial energy system (e.g. 20-30 years rather than just the RIIO-2 period). See impact relating to CL155 below.	Off grid output case re- writtten, SROI estimated at £7.3m gross	Y
Engagement to inform the Plan			Chapter 6 reshaped to include clear evidence on engagement, strategy and plan	Y in its overview section on CEG challenge



Whole systems/FRoG	CEG feedback to July bus plan (row 104)	In the context of Cadent having led the debate around the future role of gas, CEG felt that the company should be more active in communicating and engaging with domestic customers on this topic, combining both informing and soliciting views. This relates also to domestic customer engagement on hydrogen. Cadent feels it has engaged as far as possible on this topic, receiving general support for Cadent to be active in moving the sector towards a lower carbon future, but that domestic consumers are not sufficiently knowledgeable on the topic to offer informed, meaningful views. CEG believes that this is an area where Cadent could be more active using innovative approaches and this is reflected in our report. Cadent has taken this on board for future engagement, as evidenced in its engagement strategy.	Y - in plan but CEG pushing for more in future
Enabling whole systems solutions /FRoG	Cadent Response to CEG comments 191122	CEG expressed concern that engagement on whole systems appears inconsistent, often ad hoc and not guided by strategy or specialist input. The development and testing of options for inclusion in the bus plan was not well linked to and derived from engagement.  Cadent has justified the historical stakeholder engagement with specialist stakeholders, explained the difficulty in engaging with end customers on whole systems solutions and provided satisfactory linkage between engagement and proposals. A very helpful diagram has been incorporated in the Dec plan chapter 6 which sets out the categories and types of stakeholders. This illustrates the contribution being made through engagement at industry, government and regional/local level as well as with groups representative of customer categories. Its future engagement strategy on whole systems promises a more structured approach henceforth. Cadent is still encouraged to consider adopting engagement tools and aids that have been successfully used elsewhere to inform and capture lay customers' views, preferences and suggestions. In specific output cases, better links are made between engagement and options considered.	Yes - in response to CEG comments doc
Decarbonisation/EST	CL157 - closed	Feedback on July 1st Bus Plan: The FROG WG has challenged Cadent to bring together its information from situations where consumers' use of gas is changing Engagement around decarbonisation can be troublesome and emotive, with gas customers placing different priorities on this. Cadent was challenged to explain its positioning w.r.t. decarbonisation and how it is engaging to	Y and covered in plan



		ensure that it elicits useful insight that supports the accepted decarbonisation time frame. This is now covered in Cadent's stakeholder engagement strategy presented in the Bus Plan which includes engagement across all aspects of decarbonisation.	
Environment - stakehol der engagement	CL109 - closed	Generated via May 2019 Board Report:  Environment stakeholder mapping - Stakeholder engagement - who are the key stakeholders and how is Cadent engaging with them:  On Stakeholder Engagement, Cadent's plans were more limited than might have been expected. There was little evidence of engagement with key stakeholder groups such as Friends of the Earth, WWF, the Green Alliance and FRoG stakeholders in relation to the Gas Pathways work. In response, this was covered in the EAP and in chapter 6 of the Dec Bus Plan.	Y and in plan
Environment - net zero	CEG feedback to July bus plan	The CEG question whether the balance between speed on achieving net zero and customer willingness to pay has been considered. Cadent has responded by setting out its own ambition for environmental leadership and consideration of tension between this and customer w.t.p., adequately justifying its approach.	Y and clearly covered in the plan
Whole systems	CEG feedback to July bus plan	CEG commented that the engagement on whole systems was still not clearly articulated, identifying the stakeholder and group that had been engaged with on various aspects of this, accepting that many engagement activities would be in the form of industry working groups and forums.  Cadent revised and better explained its stakeholder engagement on whole systems in its October draft.  Improvements in whole systems engagement have been made in the Dec plan w.r.t. output cases and separately in engagement matrix and slides.	Y -and now covered in pla
Whole systems	CL57 - closed	Undertake customer engagement with other gas networks, electricity networks, third parties, etc to map the landscape for potential wholesystem options, including response, and what would be required from Cadent to support them. Consider how to publicise successful wholesystem solutions to other local authorities and networks to make such 'whole system thinking' business as usual.	Y but publicity to spread information no covered
Whole systems engagement	CL22 - closed	Horizon scanning and monitoring changing attitudes - How are Cadent capturing the wider green conversations and shift in public attitudes on environment in their approach. Cadent should consider how they can reflect the environment as customers see it.	Y and covered plan



Future users	CL32 - closed	Pushed to demonstrate cross-region engagement - CEG posed an early challenge that Cadent demonstrate engagement across all regions and future of gas variations. This was demonstrated through its engagement programme, observed by CEG members and mapped in its engagement decision tracker.		Y and in supporting material
Driving efficiency through innovation and competition	Cadent Response to CEG comments 191122	CEG commented that there had been less engagement with emerging partners on external innovation. Cadent explained that the whole system approach involves working with DNOs and LAs to establish requirements and then engage with the market on innovation and supply. New partnerships are developed in this way. This is set out more fully in chapter 6, and in chapter 8 of its Dec bus plan.	Appendix 07.02.05	Y and no covered more fully in plan
Customer Segmentation				
Whole systems/FRoG/ Vulnerability	CEG feedback to July bus plan	Better segmentation of future gas customers - In feedback on the July Business plan the CEG questions whether the company has adequately considered the implications of changing gas futures especially for customers in vulnerable situations and impacts are likely to rise after RIIO-2. Cadent did not respond to this directly in its response to CEG feedback. However, projects for MOBs energy exchange, Fuel poverty support service and, potentially, the off-gas grid project will help explore and develop options. The December plan demonstrates this is now fully addressed.		Y - and covered in plan
FRoG	CL70 -	Distributional impacts of different energy scenarios - Cadent to demonstrate they have understood how the different future energy scenarios impact different customer, stakeholder and consumer segments, both in the short/medium term and the future.		Y and covered ir the plan
FRoG	CL2 -	Cadent to carry out <b>horizon scanning and forecasting</b> of requirements for different connection activities (e.g., domestic connections, biomethane, power generation, shale etc.)?		Y and covered in plan
Future users	CL1 - closed	Cadent to review and map current and potential future gas network users and stakeholders and how it understands their needs and priorities, particularly in relation to future of gas and EST.  This is set out well in chapter 6 of the Bus Plan, together with key milestones and decision points.		Y and in plan
FRoG	CL77	Cadent to <b>set out the 'customer journey' for</b> each of its customer groups including gas entry customers, local authorities. Cadent has covered all future customer groups in its whole systems strategy and in its engagement strategy.		Y and in plan



Regional				
Whole systems/FRoG	CEG feedback to July bus plan	Consideration of local and regional difference in FROG plans. In feedback on the July Business plan the CEG questions whether local and regional context and differences had been considered when setting out long term FRoG plans. The Dec plan acknowledges the existence of regional and subregional differences, citing some examples and commits to engaging and acting more locally e.g. through enhanced engagement on LAEPs to respond. We would have like this to go a bit further e.g. w.r.t setting out some of these current and projected (through growth and development) differences, but accept this information is not available at this time. Enhanced engagement should improve this knowledgeand enable more nuanced approached sensitive to local context.		Y and some reference in the plan
FRoG	CL60 - closed	21.03.19 - FROG refocused:  Cadent to explain how it can use new regional relationship managers for major customers to compare and contrast regional needs. Do they have consistent aims and objectives and is there a process for them to help drive innovation and make it BAU?		Not directly covered in the plan
FRoG	CL79 - closed	Cadent to consider how it could publicise whole-system solutions to other local authorities and networks to make such 'whole system thinking' business as usual. This is to make sure initiatives such as the 'Joint Energy Network Planning Office' are well known outside Cadent so they are effective.	Information provided through the Joint planning office initiative now linked with digitalisation strategy in main plan	Not directly covered in plan or in 07.02.06
FRoG	CL58 - closed	Articulate Cadent's strategy with regard to 'enabling the energy transition' for local and regional bodies in a way that brings together single initiatives (such as getting local bodies to underwrite investment) as coherent whole. Show how the strategy has been driven by customer engagement.		Y - and in plan
Whole Systems	CL105 - closed	Bring together initiatives on whole systems thinking into a coherent and ambitious programme so that Cadent can place its own offers to existing and new customer groups within whole system solutions context. Create relationships with other infrastructure providers that enable local authorities, local enterprise partnerships as well as new types of businesses to deal on a consistent basis when seeking energy solutions.		Y - has introduced new chapter to the plan
Future users	CL33 - closed	Cadent challenged to explain what its role is in helping regions to realise their energy solution (Enabler, facilitator?).  Cadent has explained how it has been working with various regions and sets out its plan for the future to support and collaborate to provide Local Area Energy Plans.		Y and in plan



Hydrogen		lt .		
Environment/innovation/energy system transformation	CEG feedback to June bus plan	Company has stated that, in response to feedback, will include how they are using <b>environment and innovation projects</b> to monitor customer attitudes w.r.t. energy system transformation. (ref responses to CEG feedback - June 2019 documents). This has been included in Dec plan.		Yes and now in plan
Environment / Hydrogen deployment	CEG feedback to June bus plan	In response to CEG feedback on June bus plan draft Cadent stated that it will now cover engagement on hydrogen deployment in the new introduction to this section. (ref responses to CEG feedback - June 2019 documents) In CEG feedback to the July bus plan, the CEG again raised the need to show engagement with customers regarding their views on hydrogen and the investment in it. In the December plan, Cadent explains more effectively what engagement has occurred on hydrogen, the reasons why domestic customers have not yet been included in engagement (which includes Government pressure not to engage at this stage) and the plans to move to domestic customer engagement once trails evidence can be used to inform and support this engagement.		Y - and covered in plan
Decarbonisation/EST	CL 167 - closed	Cadent to <b>set out clearly its dependencies in relation to</b> its plans to deploy hydrogen; how it will manage this activity in a way that means low/ no regrets spend; and what its Plan B is if Government support for hydrogen does not happen. <b>Cadent has reworked the HyNet sections of Chapter 6</b> and the EAP to discuss a range of options for funding, and the criticality of BEIS and Ofgem establishing a framework that would allow the project to proceed.		Y - and changes to plan
Future users	CL31 - closed	Cadent to consider and demonstrate how future of gas pilots have and can capture the customer experience (behavioural values), especially w.r.t. hydrogen. Evidence of early engagement with customers re hydrogen trials has been provided and future approach set out.		Y and addressed in plan
Biomethane			We have established a cross- GDN distributed entry gas stakeholder group as part of BAU which is being used to consult and develop future policy	
FRoG	CL59	If Cadent intend to make the case for modifications to the charging regime for gas injection in the Business Plan, show how you have engaged with customers in building this case.	Entry enablement CVP delivers an estimated social	Y - and set out in 07.02.08



		Addressed to in A07.02.08	return on investment of £145.6m	
FRoG	CL76	Map consultees, customers and stakeholders in AD (i.e. entry customers) and show what that tells you about the project pipeline.  This is now clearly mapped out in the December plan and further in the engagement spreadsheet.		Y and changes made in plan
Decarbonisation/EST	CL158	Feedback on July 1st Bus Plan  Cadent was challenged to provide specific information on its biomethane stakeholder engagement. CEG need to understand that this is ongoing and enables biomethane customers to make maximum contribution to decarbonisation. Cadent covered this in its output case for entry enablement.		Y and addressed in plan (output case)
Giving customers a stronger voice/Enhanced Engagement	Cadent Response to CEG comments 191122	Cadent asked to clarify how future strategy supports biomethane stakeholders. In its Dec plan this is now well articulated in chapter 6, especially in respect of net Zero and the stakeholder map. Cadent have already established an entry gas stakeholder forum and plan to continue this alongside three other key forum areas in RIIO-2. Connection standardisation responds to the needs of biomethane stakeholders across gas networks. Future billing methodology is focussed on low CV gases covering both biomethane and hydrogen.		Y and changes made to plan
Business Plan and its Delivery			Chapter 6 redrafted to cover ongoing delivery monitoring and setting out a timetable of how the output commitments are likely to be progressed	
Whole systems/FRoG	CEG feedback to July bus plan (row 105)	CEG called on Cadent to develop a customer communications strategy for the future of gas around the gas pathways project after the 2019 revision of the FES. Stakeholder engagement strategy presented in the bus plan addresses this.		Y and addressed in plan
Whole systems / FRoG	CEG feedback to July bus plan (row 106)	<b>CEG called for Cadent to play an active role in pressing for the consistent view of the future to be a 'live document',</b> updated as the context changes. And to incorporate a 'peak flow' based demand forecasting approach.		No response was made to this by Cadent.
Whole systems/FRoG	CEG feedback to July bus plan	In feedback on the July Bus plan the CEG noted that it could not yet see a clear plan for how Cadent proposed to manage its projects under different policy and funding scenarios that may emerge. In the Oct		Changes made in plan



		business plan Cadent set out much more clearly in the plan and appendices the four end states and demonstrated testing their proposals against each of these, including the pathways towards them. Note they have updated their risk and uncertainty analysis around third party driven changes including Ofgem proposed measures around future of heat strategy and legislative uncertainty and this is set out in chapter 10.		
Whole systems	CEG feedback to July bus plan	CEG pointed out that Ofgem is looking for clear evidence of benefits from projects in whole systems which should be quantified and profiled over time wherever possible in order to support their inclusion in the business plan. Whilst Cadent responded that qualitative benefits had been provided for some options and SROI on the wider outputs (including in its CVP), these will now be further quantified and profiled in the Dec plan materials. Some quantification and profiling has been provided in the 'Optimising Capacity between transmission and distribution' but in 'connecting off gas grid communities' trial this is not profiled. Information is provided on timing related to net zero milestones and government policy decisions.	Qualitative benefits set out in Table 06.03 in chapter 6	Changes made in plan
Whole systems	CEG feedback on July Bus plan	CEG highlighted that whole systems context activities require the consent or more active partnership of other bodies and the extent to which this has been confirmed and the risk to initiatives if such consent/partnership is not forthcoming or is subsequently withdrawn should be considered. Cadent explained that it had considered the risks associated with this and sought to cover these in its approach to risk and uncertainty. However, in the Oct bus plan there still seemed to be an exposure associated with unconfirmed partnerships. Cadent was encouraged to include more evidence of partnership agreement where these were in place or well advanced and to demonstrate alternative partnerships/options could be brought in should such partnership arrangements not be secured with the identified participants or where, say one or two trial areas were required so a much larger number of possible options were being explored. Cadent has committed orally to setting this out more comprehensively in the Dec plan to demonstrate such risks are well managed.  This is now addressed in Dec plan - better confidence of established partnership and further incentive through proposed enhanced engagement		Y and changes apparent in plan
Whole systems	CL134 - closed	Cadent to provide evidence including firm or provisional agreements		Some identified
i		regarding collaborative initiatives in whole systems arena to give		in plan



		confidence that these initiatives are really expected to happen. This should include the extent of the collaboration, commitments made on each /all sides, expected or projected outcomes.  Further narrative - The Open Networks Whole System workstream WS4 - 2019 should be included in this. It should also seek to provide evidence that the commitments to work with DNOs made in page 9 of chapter 6 draft business plan, are deliverable by providing evidence of agreement reached with DNOs.  This has been addressed in output case on whole systems solutions - network planning.	
Whole systems	CL164 - remains open	The <b>financial upside ODI for enhanced engagement</b> on whole system needs greater justification and explanation, including what topics or type of research may be considered in such engagement. Also, the shape of the incentive needs to be justified - why could this not be a PCD / use it or lose it allowance? The issue with justifying an ODI(F) is that you need to anticipate the benefits to consumers of the engagement which is harder than suggesting a possible budget/allowance. This has been addressed in output case on enhanced engagement on whole systems output case, A 07.03.02, but remains an area requiring further scrutiny - recommended for hearings.	Y and changes made in plan
Enabling whole systems solutions /FRoG	Cadent Response to CEG comments 191122	CEG advised that case for the proposed common financial ODI on enhanced stakeholder engagement, targeted on whole systems (for energy transition and vulnerable customers) had not been adequately justified in the oct draft. This was satisfactorily addressed in Dec output case with RIIO-1 evidence of effectiveness of similar incentive, need for further, more focussed action and hence incentive, golden thread, cost justification and monitoring/reporting mechanism to assure delivery.	Yes - in response to CEG comments doc and changes made to plan
Whole systems	CL204 - closed	Reflecting disruptive triggers - Governance and Assurance during delivery: Cadent to set out how the progress of initiatives and activities under whole systems and future of gas area will be tracked during the business plan period, how disruptive triggers (such a policy decisions) will initiate review of activity and plans to revise the programme during the RIIO-2 period. This should include stopping or initiative new activity, accelerating current activity and ensuring overall activity aligns fully with the energy system transition. This should include the approach applied to all activity wherever conducted (e.g. regional or central) and of all scales and value.	Y and clearly addressed in changes made to plan



		Monitoring and delivery arrangements provided in Dec plan chapter 6 and WS output cases.	
Whole systems	CL159 - closed	Feedback from July 1st Business Plan. Cadent to ensure that a whole systems approach is considered in all aspects of its BaU activities as well as in its future development projects towards decarbonisation.	Y - now in many places across plan
Decarbonisation/EST	CL169 - closed	Crystallise an expanded internal network whose role is to follow policy development on the future role of gas throughout GD2 and ensure that the engagement, business plan and choices made remain 'least regret' against a changing future landscape. Now included references in bus plan to internal governance including cross business representation for Future Heat Strategy Group.	
Enabling whole systems solutions /FRoG	Cadent Response to CEG comments 191122	CEG commented that <b>Cadent does not seem to have fully met Ofgem guidance on WS solutions</b> . Discussed CEG concerns through deep dive sessions. This is now satisfied in Dec plan.	Yes - in response to CEG comments doc and changes in plan
Enabling whole systems solutions /FRoG	Cadent Response to CEG comments 191122	In the October plan the costs for WS/FROG activities and outputs were poorly explained and not correlated with commitments, CVP benefits. In the December plan, individual output cases set this out much more clearly and better correlated with commitments, such that it is now straightforward to understand costs, CVP and regulatory treatment proposed. In the Net Zero/ WS chapter, and in the commitments chapter, the costs associated with relevant activities and commitments are also covered.	Yes - in response to CEG comments doc
Enabling whole systems solutions /FRoG	Cadent Response to CEG comments 191122	In the October plan there were very few baseline metrics or benchmark comparators against which ambition could be judged and progress measured. In its December plan chapter 6, Cadent has provided a timeline for development of the joint planning initiative and a broader timeline relating WS activities to key decision points and policy areas. Some metrics have been cited although benchmarking is minimal.	
Driving efficiency through innovation and competition	Cadent Response to CEG comments 191122	Cadent was asked to <b>show that whole systems solutions are a standard part of the innovation process,</b> either at an early stage to broaden innovation scope and competitive approaches, or as a counterfactual to ensure optioneering is comprehensive.  This is now covered in innovation chapter and is an innovation gateway test at every assessment stage.	Changes made to plan



# **Cadent's Consumer Value Proposition:**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Adding an additional stage of assessment based on objective criteria when developing the CVP	Verbal communication provided during CVP deep dive webinar in October 2019	The initial assessment of CVP items was based on Ofgem's list of 9 categories of potential CVP areas to consider, plus a management decision based on several factors such as comparisons to other companies and regulatory requirements. Following the challenge we developed 5 additional criteria to use as a second stage qualification for our CVP, which we tested all items of the CVP against. We have captured evidence to this assessment per CVP item in the annex of 07.01.00.	N/A	Y
Removal of several items that were in the October CVP calculation	Verbal communication during the CVP deep dive webinar in October 2019 and at Output Case deep dive sessions in November 2019	In total 7 items that were included in the October CVP calculation were removed from the December calculation. The total monetary value associated with these items was £119.2m.	N/A – although it will make it easier for Ofgem to make a quantifiable assessment of comparative CVP assessments	Υ
Time bound appointments inclusion in the CVP	Through verbal challenge and written summary of the October plan (including gaps to 'green status') CEG challenged Cadent to provide greater detail of the cost and benefit breakdown	Appendix 07.01.00 was <b>updated to provide detailed annexes</b> of the calculations made for each item of the CVP, including time-bound appointments.	N/A	Y NAR



# **Cadent's approach to determining outputs**

Challenge / Impact Theme	Evidence Base (Include as required: forum where raised, challenge log refs, feedback report refs etc)	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Cadent systematic approach to determining outputs	Various discussions including at August CEG	Cadent developed a structured assessment framework taking account of Ofgem's business plan guidance and CEG's challenge, which it has applied in developing its output proposals. This approach was further refined to draw out information on customer testing and triangulation following feedback provided at August CEG.  The BP includes more detailed and better-quality information on the judgements Cadent has made in determining the outputs, allowing greater scrutiny of their proposals. See figure 07.02 in Chapter 7 'Our commitments' for Cadent systematic approach to determining outputs.  Also see section 3 of Appendix 07.00.00 'An introduction to our output cases'.	N/A	Y
Structure of, and information presented in, commitments chapter	Feedback provided following review of July and October plans.  Specific session held with Cadent 13/08/19	In their July business plan Cadent summarised their customer commitments. We reviewed this against Ofgem's, and our own, criteria and provided feedback that it was not clear how the commitments chapter met minimum requirements. We provided details of what should be included in commitment summaries which Cadent used to develop the template included within their October plan. We then provided further feedback which Cadent used to further refine their commitment summaries included in Chapter 7 'Our Commitments' of their December business plan.  The BP includes more detailed and better quality information on the judgements Cadent has made in determining the outputs, allowing greater scrutiny of their proposals.	N/A	YNAR



# Meeting the needs of consumers and network users including those in vulnerable situations: (need to reorder all of these)

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
		Following challenge board have appointed three vulnerability champions		
Cadent's strategic approach to innovation	CL114 CL234	Encouraged Cadent to be more innovative including linking up with consumer vulnerability team. Final plan mapped against the Sustainability First vulnerability innovation road map. The CEG felt that Cadent's ambition on innovation appeared to be low. The CEG group encouraged Cadent to expand its view of innovation with a stronger link to consumer vulnerability.  Cadent's innovation strategy (detailed in appendix 08.00) builds on the success of RIIO-1 and is based on key themes informed by extensive engagement to understand customer priorities. Cadent are already extending and developing their culture of innovation via a broad cultural transformation.  This strategy works closely with Cadent's vulnerability strategy detailed within their main Business Plan 'RIIO-2 Business Plan December 2019 – Transforming Experiences' and appendix 07.03.00 'Customer Vulnerability Strategy'. A number of innovative approaches have been applied to the customer vulnerability strategy, including the Locking Cooker Valve, Heated Seat Covers, their future holistic approach to tackling affordability and fuel poverty and how they are going beyond to ensure that customers are never left vulnerable without gas.	N/A	Y – see main Business Plan 'Transforming Experiences', appendix 08.00 'Detailed innovation strategy', appendix 07.03.00 'Customer Vulnerability Strategy', appendix 07.03.09 Identifying your needs and joining up support services', appendix 07.03.11 'Tackling Affordability and Fuel Poverty' and appendix 07.03.12 'Going beyond to never leave a customer vulnerable without gas'



		In winter 2019, Cadent held a collaborative Innovation Day with local innovators where they explained some of their operational challenges, focusing mainly on customers in vulnerable situations. Innovators have taken this away to consider what options and solutions they could deliver for Cadent. This is an example of Cadent's working with partners and industry experts to co-create and deliver innovative solutions that will benefit the lives of customers in vulnerable situations.  Original text from CEG: Innovation - stronger focus on innovation and consumer vulnerability linking up with wider innovation strategy		
Developing a Consumer Vulnerability Strategy	CL15 and CL89 - Closed	Development of separate vulnerability strategy following challenge — not regulatory led but customer led. Also not just about safeguarding any more . Following feedback have focus on empowerment too. In October 2018, Cadent's approach to vulnerability was regulatory not outcomes led. Group had had concerns about paternalistic nature of the company. To meet this challenge, we asked for evidence that Cadent had started with customer need/wants and priorities and to demonstrate that they understand who their customers with additional needs are across all four networks. Cadent developed their Consumer Vulnerability Strategy and the CEG are comfortable that the new Strategy reflects what customers and stakeholders want and need. Cadent's key aims are to 'keep customers safe, warm and independent in their homes and also to provide inclusive services - via it's service for all approach. There is a strong focus that the approach goes beyond BAU or minimum standards on a) Protection b) Affordability/tackling fuel poverty c) Accessibility of services which is line with customer and stakeholder expectations. The strategy goes beyond the areas mentioned in the challenge and is truly aiming to deliver significant levels of enhancements for customers e.g. going beyond to never leave a customer vulnerable without gas and revolutionising the funding approach to tackling fuel poverty across the UK.	N/A	Y – see main Business Plan 'Transforming Experiences', appendix 07.03.00 Customer Vulnerability Strategy, appendix 08.00 'Detailed innovation strategy', appendix 07.03.09 Identifying your needs and joining up support services', appendix 07.03.11 'Tackling Affordability and Fuel Poverty' and appendix 07.03.12 'Going beyond to never leave a customer vulnerable without gas'
Future vulnerability trends	CL91-Closed	CEG encouraged Cadent to carry out a more systematic PESTEL analysis to identify future vulnerability trends (opportunities and risks) and reflect the learning from this in their safeguarding/affordability and vulnerability strategy. As part of this work they should		Y – see appendix 07.03.00 Consumer vulnerability strategy



		consider the distributional impacts of the future energy scenarios and their role in this short-to medium term world in terms of social support.  Cadent carried our a basic PESTEL analysis and have demonstrated awareness of the need to consider distributional impacts of their approach to zero carbon. They participate in the Fit for Future Sustainability First activity. Their approach to fuel poverty is future looking – acknowledging likely changes in policy with their proposals for in-house solutions. Their approach to identifying vulnerability, vulnerability training, and inclusive service will place them in good stead for the introduction of Ofgem's proposed treating customers fairly licence condition. Their partnerships approach should help them to identify new and emerging trends and technology.  Following challenge they have also undertaken some distributional analysis on bills. They do however need to improve their horizon scanning generally. Future needs is one of their weaker areas. Given the steps taken we are content to close this challenge but with the		
Cadent to make a commitment around reporting PSR customer satisfaction separately in RIIO-2	CL212	caveat that further activity will be needed to embed future insight into their approach.  Following challenge now monitoring customer satisfaction and complaints broken down by vulnerability needs codes. Cadent has made a commitment to this effect (P74 of the main plan confirms this plan, and the 'setting standards' output cases cover this (07.03.05 and 07.03.01 especially)).	N/A	Y – See main plan and appendices 07.03.01 and 07.03.05
Develop best practice customer journeys	CL47	CEG asked to what extent has Cadent thought in a structured way about how to improve customer journeys (home visits being one specific part of such a journey). Cadent's proposals in both the MOBs and non-MOBs space to improve the service levels provided to customers based on the insights received through BAU data gathering, targeted engagement, willingness to pay and the extensive work completed during business options testing. Cadent's business plans now represent the outcome of these engagement activities such that we are confident that they represent the customer journey that customers would like and are willing to pay for.	N/A	Y – see appendices 07.03.05, 07.03.07, 07.03.08, 07.03.12.



Identification of key	CL52	CEG asked Cadent to provide evidence on the identification of key processes/pathways to	N/A	Y – see appendices 07.03.05,
processes / pathways		deliver primary outputs (services) for (different) customers. This should clearly show the		07.03.07, 07.03.08, 07.03.12
to deliver services for		mapping of these processes, identification of stakeholders and engagement with them to		
different customers		co-create improved processes to deliver better customer outcomes. As an example,		
		interruptions may affect different stakeholders and customers, from those domestic and		
		non-domestic customers who have supplies interrupted to building owners, councils,		
		highway users, local businesses and entry customers who might not be able to inject gas		
		during an interruption. All these stakeholder categories (and more) need to be considered,		
		with their different needs. When devising service improvements, they should demonstrate		
		how they address the needs of these groups and consider any unintended consequences.		
		The company has engaged with a wide variety of customers and stakeholders on		
		different areas of service and their output cases show they have responded to insights		
		and feedback including how they have managed any conflicts. On interruptions		
		specifically, the company received feedback across customer and stakeholder groups		
		focusing on communication, additional support that can be provided and additional		
		services that can be provided during an interruption. This has led to the company		
		developing additional outputs and output cases including:		
		07.03.05 Measuring and enhancing accessibility and inclusivity		
		07.03.07 Providing time-bound appointments		
		07.03.08 Minimising disruption from out works		
		07.03.12 Going beyond to never leave a customer vulnerable without gas		
Bring more learning	CL90 and CL186	The CEG has encouraged the company to take steps to bring more learning and expertise	N/A	Y – see appendices 07.03.11
and expertise from		from AWS into the business. Including, capturing their customer insight, building on their		and 07.03.00
Affordable Warmth		stakeholder and community relationships and fuel poverty mapping.		
Solutions (AWS) into				
the business		Examples are provided clearly in the plan throughout the output cases and the		
		Vulnerability Strategy. The most clear example is in the development of the approach to		
		a more holistic funding arrangement for supporting customers in fuel poverty across the		
		<b>UK.</b> This was developed following a series of meetings and workshops with AWS, plus a		
		round table discussion hosted by AWS that included Ofgem and other GDNs. Additionally,		



		Cadent are working with AWS through their community fund on a trial to support 2,000 customers with first time central heating through a centrally managed fund that AWS coordinate.		
Tailored service for customers in vulnerable situations	CL96	Some (though not all customers) like choice, therefore the CEG has asked Cadent to explore the potential to provide a more tailored service to both domestic and business customers.  Cadent has provided evidence of tailored options within their Vulnerability Strategy (e.g. tailored options to support customers out of fuel poverty based on individual	N/A	Y – see appendices 07.03.00 and 05.01
		circumstance), different level of welfare service (for MOBs and non-MOBs customers during interruptions), the option of 2-4 hour appointment slots, tailoring services for household connections customers, setting performance standards and measuring performance for all our customer and stakeholder services etc. Cadent's ongoing engagement approach will identify other opportunities (detailed within Engagement strategy approach).		
Accelerate connections improvements	CL142	Cadent is proposing to pilot the provision of information on connections over the course of RIIO-2. CEG supports this idea but challenged Cadent as to whether it could accelerate these plans so that information could be provided earlier than proposed (e.g. from the start of RIIO-2).	N/A	Y – see appendix 07.03.04
		Much of the connections transformation programme has already been accelerated. Cadent have already moved to a single point of contact for all customers in London, providing additional proactive communications and the principles of account management. London is now the top performing GDN in connections C-sat scores and is looking to transfer this learning across all networks. Cadent has addressed this challenge and shown a demonstrable outcome improvement as a result.		
Consider connection improvements beyond 'quick quotes'	CL143	In relation to the quick quotes proposal, the CEG are not clear that this is tackling the wider set of issues with the connections process being raised by customers, such as: reactive rather than proactive approach, lack of commercial mindset, poor understanding of requirements, inconsistency of approaches, lack of flexibility, failure to set clear	N/A	Y – see appendix 07.03.04



		expectations as well as lengthy and complex processes. It is clearly important that Cadent addresses these issues but there is a credible risk that focusing on speed of quotation and delivery will exacerbate rather than improve matters.  The output case now sets out the intention to improve speed of quotation amongst other initiatives to improve the connections service such as, offering to arrange site visits within 3 days following quotation acceptance, increasing compensation payments and performance targets for connections GSOPs, and also updating the scope, questions and increasing the number of response channels for the connections CSAT survey. This makes it clear that offering a speedy quotation service is just one part of an overall service delivery improvement for connections customers.		
Board leadership commitment to vulnerability	CL229	Encouraged Cadent to consider nominating a) a vulnerability champion to help ensure the voice of seldom heard customers is heard in senior level decision making and b) A director with clear responsibility and accountability for consumer vulnerability. This is best practice recognised by Ofgem and stakeholders such as Citizens Advice and Sustainability First. Cadent's Board has since adopted consumer vulnerability as a flagship area within its business plan and appointed a new Director of Customer Strategy with direct accountability for customers in vulnerable situations. Three Board members have effectively been appointed as 'champions' for the vulnerability strategy and have attended the CEG and are open to engagement with us. The Board has a Sustainability and Safeguarding Committee which monitors performance in this area — we encouraged Cadent to change the name of this committee and review the TOR to reflect its broader commitments in this area beyond Safeguarding. i.e. to reflect a focus on delivering accessible services and affordability. Cadent has confirmed that they will review the name in line with this suggestion. However, the ToR indeed covers a broad perspective, including accessibility, affordability and general oversight across the customer vulnerability strategy	N/A	Y – See 07.03.00 Cadent's consumer vulnerability strategy
Deliverability of customer vulnerability strategy	CL230	We encouraged Cadent to ensure ongoing deliverability of its vulnerability strategy. We have mapped Cadent's approach against the embedding consumer vulnerability and vulnerability innovation good practice outlined in Ofgem's Consumer Vulnerability Strategy. The Sustainability First 'flight path' outlined, has four pillars. Cadent is making steady progress against these and we will scrutinise this further during 2020.  • Pillar 1 – the company proposes good mechanisms to understand the experiences and additional needs of its customers. This includes BAU engagement insights,	N/A	Y – See 07.03.00 Cadent's consumer vulnerability strategy



	1			
		learning from partners, and bespoke research — much of this is already in operation. It is proposing new ways to train and support staff including contractors. There is scope to better draw upon staff experiences, so they are agents of change within the organisation and to externally benchmark e.g. against BSI's inclusivity standard (Cadent have committed to achieving this), or Action on Hearing Loss' — Louder than Words Charter  • Pillar 2 - we aren't yet clear of the decision-making pathway for vulnerability ideas from the grass roots staff and partnership to management, but steps have already been taken to provide front line staff with more autonomy in decision making (see p.6/7 Vulnerability Strategy, operational principles)  • Pillar 3- Available resource - Cadent has a dedicated vulnerability team and trains all frontline staff who deal with customers. Vulnerability is also starting to be embedded as part of its wider customer segmentation and transformation programme to deliver quality experience for all. Resource will be dependent on the Ofgem settlement, but the company has also committed resource from its profits via its Community Fund — reflecting customers desire that the company also makes a contribution.  • Pillar 4 — we welcome the increasingly committed leadership in this area. There are cross departmental mechanisms to share insight. There is a named Director responsible for consumer vulnerability and board vulnerability champions.  • Pillar 5 — Feedback loops — the company has mechanisms in place to monitor customer satisfaction and respond to issues arising, this includes breaking down insights to capture the views of those on the PSR. Cadent is proposing to monitor the impact of its initiatives using a social return on investment tool approach, and progress is measured against its outlined targets. In addition, it has mechanisms for assessing the effectiveness of partnership and piloting new ideas (see p.7/8 of the Consumer Vulnerability Strategy). See also p.18-19 of the Strategy.		
Vulnerability data and	CL231 - Closed	We asked Cadent to review and articulate more clearly the aims and intended use of	N/A	Y – embedded within appendix
mapping - encourage		their CSE data tool and challenge. Also to press CSE to develop something innovative for		07.03.09 'Identifying your
CSE to develop		it, which CSE did. CSE to deliver and articulate how their approach is exemplar, building		needs and joining up support
something more		on current best practice e.g. WPD, SSEN, and South East Water; addresses information		services'
innovative		gaps/challenges such as the private rented sector.		
		Cadent's CSE data mapping tool displays a series of social indicators and their distribution		
		across the regions in which Cadent operates. The tool enables Cadent to visually identify		
		areas with higher levels of certain characteristics, over-laying several layers of data at the		



same time, it also enables the current registered PSR customers to be geographically mapped based on specific needs codes.

The tool enables Cadent to target areas for promotion of services that will benefit individuals, an example of this will be the roll-out of the Easy Assist ECV that will benefit individuals with restricted hand movement to allow them to make themselves safe in a gas emergency situation.

The flip side to this mapping tool is that it enables Cadent to compare their PSR registrations to potential gaps based on statistics built in to the database such as disability benefits. This will then enable Cadent to do focused and geographically target larger gaps to promote the PSR and other services they offer.

Other key elements of note are that tool is loaded with data around the property include elements such as EPC ratings, household income detailed in the data which enables Cadent's affordability and safety campaigns to be targeted geographically too.

The data within the tool is currently being utilised for Cadent's winter safety campaign via brandwalk to increase awareness of the PSR and the services they offer.

Following the initial challenge in April, the subgroup was presented the tool in the May meeting and formally closing the challenge in early June, giving a full overview of the tool, its features and its core data, plus how new data can be added.

"The Cadent Customer App developed by CSE for Cadent Gas Ltd uses a unique combination of data sets compiled from a variety of open data sources. All the data sets have been are sourced from national statistics. The map allows uses to profile the Cadent network area by a broad range of social indicators including age, health, disabilities, rural isolation, household types (lone pensioner, lone parent), deprivation indicators, and energy situations (e.g. fuel poverty, energy efficiency of dwellings and off-gas status) by Lower Super Output Areas (LSOAs)\*. The tool is unique in allowing users to combine several of these situations to highlight areas across Cadent's network areas where multiple vulnerabilities are prevalent. We are unaware of any other existing data or mapping tools covering Cadent's network area that allows users such a flexible approach to understanding such a broad range of social situations simultaneously. Flexibility has also been built in to the design of the tool and additional data sets have been and will continue



		to be added to the map as and when they become available and are deemed to add further value to the map."  Finally, the tool also enables Cadent staff to profile the latest Priority Service Register (PSR) data, showing both existing coverage of the PSR as well as estimating where the largest PSR enrolment gaps currently exist.		
Sharing of learning within Cadent	CL233	CEG encouraged Cadent to consider how they can better disseminate vulnerability learning and insight throughout the organisation e.g. on paper staff attend a number of forum where best practice would have been shared but we see no indication of how this learning has been proactively shared to those that might find it useful throughout the organisation. In Cadent's vulnerability strategy they have demonstrated how vulnerability learning will be embedded across the organisation and have specific commitments to provide annual vulnerability training for all front-line staff. This training will continually evolve to consider learning and best practice from real life examples.		Y – See 07.03.00 Cadent's consumer vulnerability strategy
Board customer and stakeholder engagement programme on vulnerability	CL235 and CL236	CEG encouraged the Cadent board to commit to undertake a programme of stakeholder engagement to ensure they hear first-hand from those they serve. Cadent has committed to do this as part of its RIIO-2 Engagement Strategy	N/A	Y – See RIIO-2 Customer Engagement Strategy
PSR Awareness Conversations	CL238	While the CEG recognises the need to raise awareness of the <b>PSR and the services</b> available, the Group had different views on whether it supports Cadent's proposed measure to have a target of 2 million face to face conversations with customers on the PSR. Some members prefer a more outcomes-based measure such as 'number of customers referred onto the PSR'. Others, like the proposed approach as it enables and encourages a broader conversation about more than signing up to the PSR services. To address concerns, we challenged Cadent to articulate how it will monitor the effectiveness of these face to face conversations including tracking the numbers referred in practice onto the PSR, to ensure a step change in historic performance in this area and to monitor that its approach is effective. Cadent explained that their approach is significantly linked to their vision in this area where the sting is removed from people in vulnerable situations and that people feel comfortable about referring themselves on and off the PSR as their personal situations change. As Cadent don't own a PRS directly and there is one that covers energy networks and soon to be one covering energy networks and water networks, it is almost impossible to directly link every sign up with a quality face to face conversation. Cadent will directly measure the effectiveness of each of their	N/A	Y – See 07.03.09 'Identifying your needs and joining up support services'



		partners in terms of the number of sign ups that have supported customers in following their work, but the power of quality face to face conversations is the network that advice is spread through		
Clarity on Vulnerability service provision	CL239	CEG encouraged Cadent to more clearly demonstrate for each of its consumer vulnerability outputs how the proposed approach is an improvement on what was delivered for customers in RIIO1. In the updated output case Cadent added further detail around proposals in this area including a list of welfare provisions that could be provided and articulated why their proposals on welfare provisions go over and above what is offered today in four ways; increased choice of products/services, development of on-site decision making application, provisions offered to beyond those registered on the PSR and development of a systemised process to procure and deliver products effectively and efficiently to customers. This challenge was been partially answered. We welcome the greater clarify around service provision and acknowledge it would be hard to measure 'no worse off'. However, Cadent did not address the concerns around timeliness.	N/A	Y – See main plan (pages 84-95 and appendices 07.03.09, 07.03.10, 07.03.11 and 07.03.12
GSoPs – Go beyond the minimum standards	CL120	<ul> <li>Before the July BP submission, CEG encouraged Cadent to go beyond the minimum GSoP standards. Cadent developed specific output commitments that go beyond the minimum requirements across most GSoP.</li> <li>Commitments that go beyond GSoP1 can be found in appendix 07.03.06 Getting customers back on gas and 07.03.07 Providing timebound appointments.</li> <li>Commitments that go beyond GSoP 2 can be found in appendix 07.03.08 Minimising Disruption.</li> <li>Commitments that go beyond GSoP3 can be found in appendix 07.03.12 Going beyond to never leave a customer vulnerable without gas.</li> <li>Commitments that go beyond the connections GSoP 4-11 can be found in appendix 07.03.04 Improving our connections services.</li> <li>Commitments that go beyond GSoP 12-14 can be found in appendices 07.03.01 establishing and raising the bar for all our customer and stakeholder experiences, 07.02.03 Rapid response to enquiries and complaints, and 07.02.05 Measuring and enhancing accessibility and inclusivity.</li> </ul>	N/A	Y – See section 7.3 of the main plan (pages 70-83) and appendices 07.03.01, 07.03.03 07.03.04, 07.03.05, 07.03.06, 07.03.07, and 07.03.08
GSoPs – Making it easier to claim	CL121	Encouraged Cadent to provide greater clarity on how they will make it easier to make customers aware of their rights in this area and to claim compensation and raise awareness of minimum standards. Cadent have committed to providing automatic payments across all the GSoP and will provide customers with greater awareness of the standards as part of the proposals to enhance accessibility and inclusivity.	N/A	Y – See appendix 07.03.01



GSoPs – Increased payments and Caps	CL122	CEG asked Cadent to provide more information on GSoP payments, including payment caps, voluntary payments and proactive payments. All payment amounts will be increased in line with inflation and the payment cap on GSOP1 (interruption restoration) will be removed. Where it is identified that customers are likely to be interrupted for more than 7 days, Cadent will offer to pay the first £300 of their potential GSOP compensation upfront to help minimise the impact of the supply interruption (i.e. going to buy extra blankets, take-away meals etc.). Cadent do not propose to pay additional voluntary payments as all GSOPs payments will be increased in line with inflation, and customers have encouraged Cadent to focus on getting the service right first time rather than thinking about compensation levels.	N/A	Y – See appendix 07.03.01 and 09.04
Clarify connections outputs	CL209	In October, we asked Cadent to clarify whether household connections service improvement are indeed a standalone output and if so, a) how they complement the CSAT sent to connection customers, b) how performance will be measured, and c) your targets in this area. As part of CEG deep dives in November and the final December business plan submission, Cadent have clarified that there will be two output commitments for connections, including 90% target for providing 15-minute household connections quotes and 85% target for arranging a site visit following quote acceptance. These will be reputational measures that will be reported along with the CSAT financial incentive.	N/A	Y – See page 74-76 of main plan and appendix 07.03.04
Establishing and raising the bar: challenged the idea that customers should pay for this	During November CEG	In the October draft Business Plan, Cadent included a cost of c.£6m to establish and raise the bar for all customer and stakeholder experiences. CEG challenged why customers should pay for this which resulted in Cadent absorbing the costs for this proposal as part of their efficiency challenge.	c.£1.26m per annum	Y – See business plan section 7.3
Better communication: July proposals lacked a commitment to improving customer comms - one of the strongest areas of feedback from customers	July CEG report (customer service sub chapter)	CEG report on July Business Plan: there has been consistent feedback from customers and consumers, across various pieces of engagement, that Cadent needs to improve the way it communicates: that people wanted personalised and instant updates, that they want to choose the way they communicate with Cadent and how often.  Since the submission of the July Draft Business Plan, Cadent have split out how they plan to commit to improving how they communicate across all areas of their business. Cadent want to focus on the key areas across their business and ensure that they meet the needs of all customer segments, treating every customer individually, knowing that a one-size-fits-all approach is not what is required.	N/A	Y – see main Business Plan 'Transforming Experiences', appendix 07.03.01 Establishing and raising the bar for all our customer and stakeholder experiences, 07.03.08 'Minimising disruption from our works' and 07.03.09 'Identifying your needs and joining up support services'
		In establishing and raising the bar for all customer and stakeholder experiences Cadent explain how, alongside the other GDNs, the existing CSAT mechanism will be reformed to		



		provide greater customer choice on how to respond to the survey (amongst other enhancements). Cadent also describe how they plan to establish measures for all service offerings, introducing separate measures/targets for different customer types (e.g. business customers and customers in vulnerable situations. Cadent will also introduce a stakeholder satisfaction score and a MOBs balanced scorecard to improve the service for those living in MOBs impacted by Cadent's works.  To minimise the impact of disruption, Cadent plan to provide better communication around road works. This could include digital/non-digital information on:  Start and end of roadworks Roads/streets affected (e.g. closed, traffic management) Alternative routes/diversions Access routes to homes/businesses Information on the other partners/utilities we are working with (during multiutility works)  Cadent already have a number of innovative products and services that are either being tested, in pilot across networks or will be developed in RIIO-2 that will help to minimise the impact of disruption specifically for customers in vulnerable situations. These include Bluetooth Beacons and Sightline Barrier Rumble Strips.		
Measure stakeholder satisfaction	CL21	Cadent to consider both a customer satisfaction measure and a stakeholder satisfaction measure for vulnerability given the importance of partnership working.  In our December Business Plan within appendix '07.03.01 Establishing and raising the bar	N/A	Y – reputational ODI included within December Business Plan
		for all our customer and stakeholder experiences', we are proposing to enhance our		
		existing measurements. This includes GSOP, CSAT and complaints handling, and establish		
		measures against all core services, allowing us to set robust performance baselines and continually improve the experience for all our customers, including those on the PSR and		
		our stakeholders. We will seek to measure stakeholder experiences including local		
		authorities and councils, highway authorities, other utility providers, the Government,		
		press/media organisations, housing associations, and emergency services. The measure		
		will take the form of a reputational ODI in RIIO-2.		



Disruption – Is one-day reinstatement what customers want?	Response to CEG July Draft BP feedback	July Draft BP feedback from CEG: The CEG challenged the proposal to complete private reinstatement within a day based on customer feedback that quality went over speed. Cadent initially included the commitment to complete private reinstatement within one day in their July draft business plan based on initial insights from engagement. However, following further targeted, willingness to pay and business options testing customer engagement on the area of disruption, customers preferred a lower cost, lower delivery target option to complete private reinstatement within 3 days following engineering works to ensure quality of work is not compromised. This was reflected within in the October business plan where the commitment is to offer private reinstatement within 3 days on average. In addition to this, Cadent have included commitments to provide better roadworks information and collaborate with others in order to minimise disruption	N/A	Y – option preference and commitment updated in Business plan and appendix 07.03.08
Disruption – Tailored service for streetworks communication	CL213	Raising the bar on streetworks and tailoring approaches to different areas - The company has experience of delivering good communication in this area and sensitively working with communities, reflected in its best practice example in Stratford upon Avon, work in London and awards. The proposals put forward seemed basic in comparison and we cannot see how this option of service was decided upon. We challenged Cadent to be more ambitious in this area and to draw on its existing learning and pockets of good practice. In particular to consider a tiered or tailored service for street works in some areas (a gold, silver and bronze service) depending on the potential detriment e.g. a more gold-plated service in those areas such as tourism hotspots, economic/business centres where failure to communicate or deliver effectively could result in particular detriment to both communities and Cadent's brand. Cadent since updated their commitment in this area, providing greater clarity on how streetworks communication will be delivered via a tiered and tailored approach which considers the number of customers impacted, the duration of the work, business impact and tourism impact. Cadent's delivery partners have a decision-making process that considers these impacts and is informed in part through desktop analysis (as much of this can easily be identified) and also through ongoing proactive engagement in this area. For example, Network Directors maintain ongoing relationships with LEPs, local authorities and planning departments – this good practice will be incorporated into their new contracting model.	N/A	Y – See appendix 07.03.08  Minimising disruption from our works.
MOBs: Justification of proposed symmetrical financial incentive for	Feedback in May 2019 meeting	Cadent changed their proposal from having a symmetrical financial incentive to reduce MOBs interruptions to a negative financial incentive only.	Difficult to quantify	Y



interruption reductions in London MOBs				
MOBS: Explanation of the problem and articulating it with a customer lens	CL127 Responses to CEG BP Feedback June 2019 CEG July Draft BP feedback and Cadent Responses Cadent October BP - references to CEG interaction and impact (P53)	Greater clarity of the challenges posed by MOBs in the business plan, particularly in Appendix 09.04	N/A	YNAR
MOBS: Horizon- scanning / future of heat	CL126 CL190	Improved coverage of implications of future of heat, and associated strategic engagement with Ofgem and central Government, and specific implications of potential hydrogen conversion	N/A	Y NAR - 09.04
		The CEG encouraged Cadent to consider appointing Board vulnerability champions.  Whilst this was already being considered and unofficially two members of the Board took this role, this was made 'official' through the process.	N/A	Y NAR – 09.04
		Board commitment to undertake a consumer engagement programme - hear first hand from customers.	N/A	Y – this is described in 05.01 – Stakeholder Engagement Strategy
MOBS: Overarching strategy and vision	CL87 CL125 CEG July Draft BP feedback and Cadent Responses	Significantly improved explanation of the strategy for MOBs and clear links to a delivery plan	N/A	Y – NAR – 09.04



	Cadent October BP - references to CEG interaction and impact (P52)			
MOBS: Links between engagement and proposals	CL130	Greater clarity of how proposed service improvements stem from customer feedback, particularly in relation to welfare provision, compensation payments and ongoing communications	N/A	Y – NAR – 09.04
MOBS: Strategic engagement plan	CL131	Significantly improved articulation of strategic stakeholder strategy in December plan	N/A	Y – links build across 09.04 into 05.03 – stakeholder engagement strategy

#### Maintaining a safe and resilient network

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Customer/stakehol der engagement	CL83 Responses to CEG BP Feedback June 2019 CEG July Draft BP feedback and Cadent Responses October draft plan	Business plan and appendices have a clearer narrative for how customers and stakeholders have been engaged on network resilience and how their views have been taken into account in the proposals	For example, inclusion of Appendix 7 in 09.02. Refined approach to description of 'problem statements'	YNAR
Optioneering	CL85 Responses to CEG BP Feedback June 2019 CEG July Draft BP feedback and Cadent Responses	Improved explanations in business plan and appendices for the options that have been considered, how modelling and analysis has been undertaken (including assumptions and constraints) and how Cadent has arrived at chosen options	For example, improvements in 09.07 (heaters) options decription.	YNAR
Plan justification / Costs	CL85 CEG July Draft BP feedback and Cadent Responses Comparison of July and October draft plans	Significant reduction in network resilience totex between July and October draft plans following CEG challenge, e.g. in relation to mains replacement insertion rates, albeit partly eroded by increases in the December plan linked to industry wide updates in MRPS scoring.	£94m p.a. reduction in repex between July and October draft plans £10m p.a. reduction in capex between July and October draft plans	Y



			Further reductions in capex between October and December. For example Heaters investment reduced by ~£3m pa	
Compliance with Ofgem guidance on EJDs	October CEG report Comparison of October and December plans	In our October report we encouraged Cadent to take a structured approach to compliance with Ofgem requirements and note that this has been addressed in the assurance programme	Appendix 9.02 (mains) and 9.04 (Mobs) restructured to align with Ofgem template whilst providing additional information.	YNAR
Stranding risk	CL242 Comparison of October and December plans	Improved account in business plan of how Cadent has sought to minimise the risk of asset stranding through analysis of investment payback periods	Appendix 09.02, Appendix 4. Also in Appendix 9.00	YNAR
Plastic network	CL82 Comparison of December and earlier plans	More considered treatment in the plan of the idea of moving towards an all plastic network following CEG challenge over whether this is was an appropriate vision and what the implications were for RIIO-2	Appendix 09.02, section 11.6	Y
Scope for windfall gains from repex programme	CL180	Cadent has provided helpful analysis that has allowed us to better understand the (relatively limited) scope for windfall gains in RIIO-2.	Discussed as part of regulatory treatment within 9.02	Y NAR
Steel pipe replacement	Appendix 09.02 Appendix 09.35	The CEG has identified the risk that some of the steel pipes proposed for replacement may have deteriorated as a result of a failure to properly maintain some cathodic protection systems	Up to £15m over RIIO-2 Potential for additional pipes via proposed UM Cadents approach to Cathodic protection is described in appendix 09.35	Y
Workforce resilience	March 2019 scrutiny session and CL136, CL137	Cadent challenged to develop a holistic workforce resilience strategy, covering existing and emerging skills requirements, full spectrum of channels against insight gained from employees and stakeholders; baseline for its own performance and benchmarking with specific focus on diversity, inclusion and groups currently under-represented in its own and wider workplace. Cadent responded to these points in its October	N/A	Y



		draft plan and built upon this to provide a comprehensive strategy as an appendix to its December plan.  See appendix 07.02.03		
Workforce resilience	September 2019 scrutiny session and CL193,195,196, 197,198	Cadent was further challenged to improve the detail of its baselining, benchmarking, metrics and to provide a full summary of its current engagement with relevant stakeholders. This was fully addressed in the December plan.	N/A	YNAR
Workforce resilience	September 2019 scrutiny session, some questions in March 2019 scrutiny session and CL194	CEG pressed Cadent to identify the full range of future workforce related challenges stretching forward at least ten years. Cadent has done this qualitatively in the final workforce resilience strategy appendix where it argues that the level of uncertainty regarding future heat policy and future role of gas, together with other organisational uncertainties (such as Brexit) mean that any quantification of future need or its timing, would be no more than guesswork in these highly uncertain areas. Cadent has put in plans to track and review through continuing engagement to enable it to identify upcoming needs and take appropriate action as soon as is feasible.	N/A	YNAR

#### **Cyber Resilience**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Engagement - increase breadth of Cyber engagement for RIIO2	CL111 Nov-19 CEG meeting Q&A and minutes	Cadent were receptive to our suggestion to engage with a wider range of stakeholders on cyber resilience issues going forward.	N/A	N BAU
Threat Landscape -articulation of key risks and mitigation plans	CL112 May-19 progress report Nov-19 CEG meeting Q&A and minutes	Cadent have revised their <b>Business IT Security appendix to set out in more detail the risks that they manage (section</b> 2.1) and the Cyber Resilience appendix to explain the OT/IT convergence risk.	N/A	Yes - via change tracking and challenge log response NAR



<b>Key Risks</b> - articulation of potential consequences for different stakeholder groups	CL112 May-19 progress report Nov-19 CEG meeting Q&A and minutes	Cadent have revised their Business IT Security appendix to set out in more detail the risks that they manage (section 2.1) - subsection 3 'determining risk to our customers and business operations' describes the consequences to different stakeholder groups of each major risk identified.	N/A	Yes - via change tracking and challenge log response NAR
Strategy - consideration of customer impacts as part of the decision-making process	CL112 May-19 progress report Nov-19 CEG meeting Q&A and minutes	Customer and stakeholder perspective is better articulated in the final the Business IT security and cyber resilience plan appendices than in earlier versions	N/A	Y NAR
Optioneering - justification for the options selected	CL113 Nov-19 CEG meeting Q&A and minutes	Cadent have revised how they have set out their options analysis in the December plan (vs. the draft shared with the CEG in Nov-19). References to potential customer impact levels and frequency of incidents have been removed.	N/A	Yes - via change tracking and challenge log response NAR
Costs - improved narrative on process to arrive at costs	May-19 progress report Nov-19 CEG meeting Q&A and minutes	Cadent have expanded section 2.4 of the business IT security appendix to provide more detail on how they have assessed their costs.	N/A	Yes - via change tracking and challenge log response NAR



#### **Delivering an environmentally sustainable network:**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Cadent's level of ambition on its own business sustainability performance, including whether Cadent had covered the full range of issues that should be in a company	CL108, 36, 110, 200, 201, 157, 156, 174, 166, 226, 227 CEG - Oct 2018, Feb, May, Jul, Sep 2019 Environment Outputs meeting - Nov 2019	The company's level of ambition has increased:  - Covering a wider range of issues in the EAP and Commitments chapter;  - Setting clear targets across most of these areas, with plans to set targets before the start of RIIO2 for the remaining areas where consultancy work is outstanding.	N/A	Y – NAR - See 07.03 and Environmental Action Plan
environmental plan and the level of the targets it was setting itself		Following challenge by the CEG in the context of the October draft plan,  Cadent amended its proposed shrinkage target. The target proposed in the  December plan is a range between figures that reflect seasonal normal and peak conditions. The CEG continues to believe that a target reflecting seasonal normal conditions would be appropriate, with some mechanism put in place to recognise more severe conditions if they occur.		
The extent and quality of <u>customer</u> and stakeholder engagement that had informed the Plan	CL 109, 201, 157 As above	Cadent has undertaken significant further engagement to fill what had been a gap and it has described the conflicting views it has received as well as its decisions on how to manage this (in BP Appendix 7.4). We have some concerns about the quality of engagement that has been carried out, in particular the clear connection between customer feedback and options for action. However, ultimately Cadent chose to adopt its most ambitious package, regardless of the customer view, as a part of its goal to do the right thing and to be trusted.	N/A	Y – see 07.04.00 - EAP
The commitment to continuing engagement with customers and stakeholders in RIIO2	As above	Cadent's Stakeholder Engagement Plan now included clear plans for ongoing engagement through GD2, including with expert stakeholders who will test and challenge their thinking	N/A	Y – see 05.03
We asked for greater clarity on the	As above	The BP and EAP now include clear information on carbon emissions and how Cadent is seeking to reduce them during RIIO2	N/A	Y - see 07.04.00



company's carbon		
emissions, their		
sources and how the		
company would tackle		
each area		

#### **Trusted to act for communities**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Responding to changing social climate	TBC	Company prompted to respond to changing narrative and bring some learning from its SF project into the business.		
Introduction of Cadent's community fund	Verbal communication at CEG and Board sessions	CEG members <b>verbally supported the introduction</b> of Cadent's community fund, reinforcing the Board's intent to introduce one and potentially leading to an earlier introduction. Discussions with Chair at January board on profit sharing.	N/A	Y BAU
Need to strengthen the strategy to cover more topics and commit to more action	CL138, CL165, CL139, CL140, CL141 CEG meetings - Apr, Jun, Jul, Aug 2019	Encouraging Cadent to be more ambitious in its overall objective in relation to its role as a responsible business in society;     Encouraging Cadent to commit to additional reputational measures to demonstrate its commitments;     Identification of good practice and benchmarking	Inclusion of specific chapter and Trust Charter reflects feedback given on earlier lack of ambition	Υ
Need for focus on the Stakeholder Engagement Plan, with clearly defined activity across all of the business and a broader range of	CL162	Engagement has been carried out in recent months to understand customers views better and to get input from a wider range of stakeholders. Cadent has found this challenging because it does not have established relationships with some stakeholders who could give valuable feedback and challenge. These relationships are now being created and are included in the Stakeholder Engagement Plan.	Removal of proposal for the financial incentive for regular stakeholder engagement which has been made BAU	Υ



stakeholders consulted		CEG questioned an early proposal to ask for a financial incentive for regular stakeholder engagement which we believed was BAU activity. This was removed in later drafts.		
Internal culture change to follow the commitments in the chapter	CL163	Cadent has committed to developing firm targets associated with the measures in the Charter. This will help drive delivery in the organisation. Staff engagement has already taken place on the shift in strategy to deliver "standards that customers love". Clearly this will take time to feed across the whole business.	N/A	Y
Framing of the Trust outpcome area	Verbal communication	In the July draft Plan, Cadent captured this outcome area in a similar manner to the other three outcome areas – i.e. set against a regulatory framework of outputs. Following challenge from the CEG and feedback from customers through their ongoing engagement programme they changed their approach to establish a Trust Charter with commitments not underpinned by regulatory outputs	N/A	Y
		, , , , ,		

### Innovation, data and digitalisation:

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Innovation	Challenge log 145	Demonstrate the process used to bring forward innovation		Y (NAR)
		Now clearly explained in business plan		
Innovation	Challenge log CL114	Raise the level of ambition on innovation  CEG has seen clear expansion of ambition across the company activities		Y
Innovation	Challenge log 116	Develop a broad approach to innovation 'entry'		Υ



		Process calls on all business units and uses new depot structure, invites staff to be 'entrepeneurial'	
Innovation	Challenge log CL170	Take feedback from staff at 'pilot' depots on how and why costs have fallen and develop a plan to include early learning as the depot-based approach is rolled out	Y – BAU
		This approach has been expanded to all depots and a competitive spirit developed between depots	
Innovation	Challenge log CL171	Challenge: create a strategy to reveal and highlight existing innovation during the remainder of GD1 to help build an innovation culture.  Involve staff to highlight ideas that have been most beneficial to them, as well as to the company.	Y – BAU and in Plan
		Feedback and reward structures are being implemented across the business and are clearly set out in BP	
Innovation	Challenge log CL172	Challenge: With input from staff, develop a 'seed' forum where they can float ideas on innovation, put forward problems to be solved and cross-fertilise across business functions. Take a 'no idea too small' approach and use fast 'push' messaging to get staff response quickly.  Use of innovation 'laboratory'	Y – NAR
Innovation and data	Challenge log CL181	Cadent to set out a 'release schedule' for its data. First any data outside the GDN task force area that can be used (in suitably anonymised, aggregated etc form) on request by other parties, then details of the sources covered by the working group as it becomes available with the aim of making it available as soon as possible and in advance of RIIO2.	Y - NAR
		Challenge remains open but schedule is under development and metadata is to be provided to users - part of iterative data strategy. In response CEG Cadent has increased focus on speed of release	



Innovation	Minutes 11 July	The Innovation Strategy had been refreshed following CEG feedback	Y - NAR
		that previously this had been more from a technology innovation	
		perspective. This now was broader including, for example, culture.	
Innovation	Minutes 7 August	Discussion pressed Cadent to flow innovation culture to GDSPs and new tier 2 contracts	Y – NAR
Innovation	July BP feedback log	Included data strategy in the "Develop a resilient network" outcome area which include a theme to develop digitalisation options in line with the energy data task force recommendations. More work on this will be provided in the December Plan	Y – NAR
Innovation	July BP feedback log	Is innovation informed by engagement? There are a number of references in this plan that join these two aspects together. The October stakeholder engagement strategy includes a section about how innovative approaches will be identified, shared and rolled out for example. Our customer vulnerability strategy includes an approach to innovation in this area too. We note in the plan how our approach has shifted because of customer feedback suggesting that a less aggressive / speculative approach to innovations should be applied, which we have	Y - NAR - see 05.01 and 07.03.02 - Customer Vulnerability Stratefy
Innovation/Whole systems approach	CL124 make information available to new CNG entrants	Changes in customer journey to include open tees information	Y – BAU
Innovation and digitalisation	Minutes 3 October	Cadent committed to expand the innovation and digitalisation strategies  - strategic review of innovation, looking at decarbonisation.  - Dedicated specialists looking at fuel poverty, vulnerability, working with external parties, and  - Business as usual innovation  .	Y - NAR
Innovation		CEG challenged Cadent to better articulate 'a culture of innovation'. This resulted in improvements to the Innovation chapter and appendix	Y – NAR – 08.01



	Innovation	A challenge was made for Cadent to define what it means by innovation. This	Y – BAU
		challenge encouraged a review of the structure of the chapter and improve	
		the articulation of an innovation culture and continuous innovation	
		(improvement)	
L			

# **Competition:**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Role of competition in the delivery of hydrogen trials and projects	CEG Session on Competition FRoG WG sessions	CEG challenged Cadent to <b>consider other commercial and regulatory models</b> for investment in H networks. Cadent has set out its commitment to do this in its Business Plan and it has highlighted the need for wider stakeholder input to this.	This could affect c£200m of investment	
Extent of spend subject to native competition	CEG Session on Competition Plan	CEG challenged Cadent to consider competition in other areas of spend Cadent has considered whether it can increase the extent of competition in its December plan.	Three new specific areas where competition could be used have been identified with total spend of c£65m across RIIO2	
Articulation of competition strategy	CEG Session on Competition Plan	CEG challenged <b>Cadent to better set out how the competitive strategy</b> related to its overall strategy, its rationale and how it would deliver benefits to customers. The articulation of its competitive strategy is much improved but further articulation of the wider strategic context would be helpful.	N/a	
Proving the benefits	CEG Session on Competition Plan	CEG challenged Cadent to use its trials to evaluate the deliverability of its transformation programme and contracting strategy and the realisation of benefits from additional competitive pressure as a result. This theme has been taken up by the Board of Cadent. The BP now includes information about the outcomes of trials.	N/a	

#### **Costs and efficiency:**



Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Are Cadent's efficiency assumptions sufficiently challenging?	CL61 FIWG meetings - January to October 2019 Cadent meetings - June, July, October 2019	See below	N/A	Y - NAR
Does Cadent have a robust approach to improving efficiency during GD2?	CL61, CL62, CL107, CL175, CL80 Meetings as above	The BP sets out a series of measures under the transformation Plan to deliver enhanced efficiency and customer service. We believe the business was highly motivated to do this without CEG input because of its relatively poor performance in GD1. However, we have encouraged the company to remain ambitious and we have tested how they are managing delivery risks. We have also encouraged them to use the BP to explain their approach from a business rationale perspective, not just in terms of the regulatory approach e.g. to benchmarking. The final BP is clear about the commitment and drive in the business to deliver these plans.	N/A	Y - NAR
Are the base-plan costs efficient and is benchmarking carried out with appropriate external organisations?	CL62, CL100 Meetings as above	See above Also see our "Maintaining & Safe & Resilient Network" chapter and other Commitments chapters	N/A	Y – NAR
Are new areas of investment well-justified and costed?	CL176, CL178, CL179 Meetings as above	We have strongly challenged the underlying assumptions that feed into the overall cost model. Cost forecasts have reduced as the BP has evolved and we believe our challenge has played a part in this, alongside the refinement of the models and internal challenge.  On Output Cases and CVP, CEG has ensured that the cost benefit underlying Cadent's plans has been tested and explained	Total cost reduction between V1 and final BP is £438m. If CEG delivered 1% of this reduction this would value our input as £4.38m	Y
Has a robust assessment of cost confidence been carried out?	FIWG October 2019, conference call, November 2019 (and supporting slides)	Cadent has explained its approach to cost confidence clearly (it may or may not match Ofgem expectations)	N/A	Y – NAR



## Managing risk and uncertainty:

Challenge / Impact Theme	Evidence Base (Include as required: forum where raised, challenge log refs, feedback report refs etc)	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Cadent's risk management processes and controls - with focus on how perspective of customer is integrated	CL 135 FIWG - May and October 2019 FIWG reports to CEG, FIWG minutes CEG - October 2019	Cadent's <b>risk management systems</b> have been changed during the period that CEG has been operating and it now includes a specific customer-focused element that all managers must apply	N/A	Y BAU – Not mentioned in the BP but SH "we absolutely acknowledge that the CEG has had this impact on our business risk management framework"
Lack of customer engagement on risk and uncertainty	CL72, CL97, CL123, CL161 FIWG - February, April, May, September and October Joint FIWG/ FROG - July 2019 CEG - March, July, October 2019	Engagement has taken place that would not have happened otherwise. However its impact has been limited by its lateness in the process and the high level and non-specific approach taken to the topic. See Chapter 10 'Managing risk and uncertainty' (inc. key messages, 10.2 & 10.6.5) and Appendix 10.00 'Our approach to managing risk and uncertainty'  Upon challenge Cadent have also expressed an openness to continued discussion on whether additional areas could be included in their base plan as PCDs rather than uncertainty mechanisms. This is discussed in the key messages of Chapter 10.	N/A	Y NAR
Lack of customer engagement on specific Uncertainty Mechanisms proposed	As above	As above	N/A	YNAR
Identification of the UMs including clarity about what uncertainty is; who controls it; materiality;	As above	Cadent developed a structured assessment framework taking account of Ofgem's business plan guidance and CEG's challenge, which it has applied in developing its UM proposals.	CEG scrutiny has made the cases better- evidenced and more rigorously defined	Y NAR



and ability to cost accurately		The BP includes more detailed and better-quality information on the judgements Cadent has made in determining the UMs, allowing greater scrutiny of their proposals.  Cadent approach to managing uncertainty and risk shown in figure 10.01 of Chapter 10 'Managing risk and uncertainty'  Example of more detailed information includes section 3.2 of Uncertainty Mechanism cases detailing the operation of the uncertainty mechanism in practice.		
		We challenged whether materiality and controllability tests had been met for all potential UMs.  One proposed UM was removed (on the Medium Combustion Plant Directive) following CEG feedback on the poor justification for it)	N/A	Y
Design of the UMs including type of UM selected; how the risk will be managed during GD2; how the risk will be triggered; and how the company will manage any potential perverse incentives created by the UM	As above	Inclusion of material on risk mitigation and consideration of perverse incentives.  Descriptions provided in section 10.5 of Chapter 10 'Managing risk and uncertainty' and within sections 2.3 and 3.3 of Uncertainty Mechanism Cases	Customers' exposure to cost risk over RIIO2 will be reduced	Y
Appropriate share of risk between Cadent and customers	As above	We challenged Cadent to describe the share of risk between them and customers.  Figure 9 in appendix 10.00 illustrates, at a high level, the sharing of risk between company and customer under three differing approaches to risk and uncertainty.  Figure 8 in appendix 10.00 provides further detail on the approach adopted by Cadent.	N/A	YNAR
		The costs associated with individual UMs have changed considerably, although it is not possible to say what parts of this are due to a reallocation of risk from customers to Cadent, given the other recalculations being made at the same time.	Not possible	Y



Cadent approach does, however, include a step (step 4) which describes how cost ranges have been calculated. An overall description is provided in appendix 10.00 (section 5) and details for each proposed uncertainty mechanism are provided in the relevant UM Case (section 4).		
We have identified areas that we recommend Ofgem explores further on the determination of costs associated with specific volume drivers that are high cost UMs.	N/A	N
We have also identified that some steel pipes may go above the risk threshold as a result of Cadent's failure to properly maintain cathodic protection systems and question whether these should be included in the PAST UM.		

### **Affordability and financing:**

Challenge / Impact Theme	Evidence Base	Business Plan Impact	Quantified Impact (where applicable)	Acknowledged by Cadent in Dec BP (Y/N)
Framing of affordability in finance chapter	CEG challenges (CL98, CL152) and report on October draft	CEG challenged Cadent to <b>present a more balanced analysis of affordability</b> in its finance chapter, recognising the needs of future consumers and the disproportionate issues around affordability for economically vulnerable customers. The final version of the plan now reflects this.	N/A	