ofgem Making a positive difference for energy consumers

RIIO-2 Costs & Outputs Working Group

Gas Transmission

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20/11/18

Agenda

This is a big slidepack, and we will park some issues.
Also many slides are for info only

10:00 – **Introductions**

10:10 – **Recap of previous working group**

10:30 – **Cost Assessment Toolkit**
- NGGT presentation on cost drivers
- Ofgem Cost Assessment approach

11:30 – **Break**

11:35 – **Business Plan Data Templates**
- NGGT presentation on cost drivers
- Ofgem Cost Assessment approach
- Business plan content & incentives

12:30 - **Lunch**

13:15 – **Business Plan Continued**

14:00 **– Investment Planning Overview**
- Presentation from NGGT for discussion

15:00 – **Break**

15:05 – **Cost Benefit Analysis**
- Ofgem presentation on CBA principles
- NGGT presentation on CBA application

15:50 – **Cost Definitions**
- NGGT presentation on Capability
- NGGT presentation on Flexibility

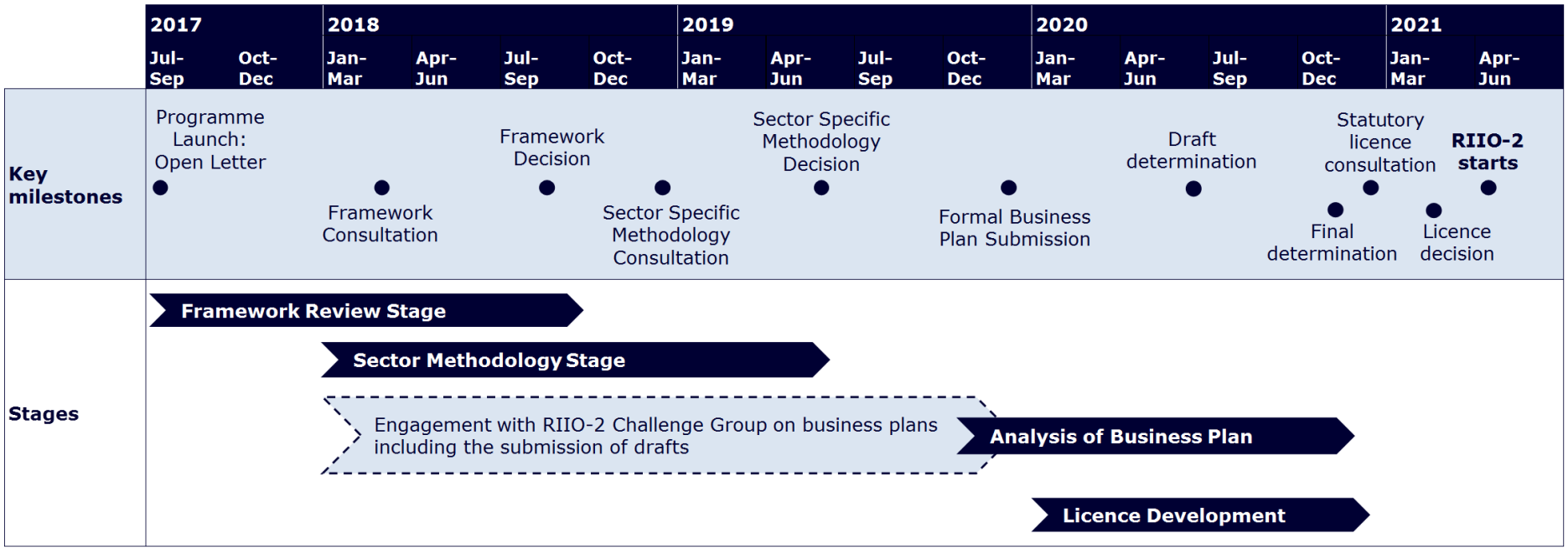
16:40 - **AOB**

17:00 - **Close**

Recap

Timeline for activities and deliverables (1 of 2)

Indicative High-Level RIIO-2 Plan for ET, GT, GD and ESO Sectors



Timeline for activities and deliverables (2 of 2)

Initial thinking only – further development/consultation to follow

Table 1: Indicative high-level milestones for developing sectoral price controls for electricity transmission, gas transmission, gas distribution and electricity system operator

Indicative high-level milestones ET, GT, GD and ESO	
March 2018	RIIO-2 framework consultation
April 2018	RIIO-2 enhanced engagement guidance
July 2018	RIIO-2 framework decision
December 2018	Sector specific methodology consultation
May 2019	Sector specific methodology decision
Q4 2019[41]	Companies Business Plan formal submission to Ofgem (along with RIIO-2 CCG and user group reports on Business Plan to Ofgem)
Q1/2 2020	Open hearings
Q2 2020	Draft determination
November 2020	Final determination
December 2020	Statutory Licence consultation
February 2021	Licence decision
1 April 2021	Start of RIIO-2 price control for ET,GT,GD and ESO

Objectives – Purpose of working group

- **Inform GT business plan submissions**

  - ✓ **Content**
  - ✓ **Form**
  - ✓ **Evidential base required**

- **Inform development of analytical techniques for assessment of business plan**

- **Forum for Ofgem, NGGT and stakeholders to jointly inform the development of a toolkit approach for assessing efficient costs in the RIIO2 business plan.**

- **Forum for working out the practical implementation of performance monitoring through course of RIIO-ET2**

Terms of reference

- Group is an advisory body, not a decision making body. Ofgem is under no obligation to accept views raised by the group

- While consensus is welcome in some areas, it is not the aim of the CAWG

- Membership comprises Ofgem, NGGT representatives and other interested parties

  - ✓ Expectation that members will be active participants
  - ✓ Chatham House Rules apply
  - ✓ Discussions not binding on GEMA
  - ✓ The meetings will be minuted
  - ✓ Minutes will be disseminated to those who could not attend and published on Ofgem's website

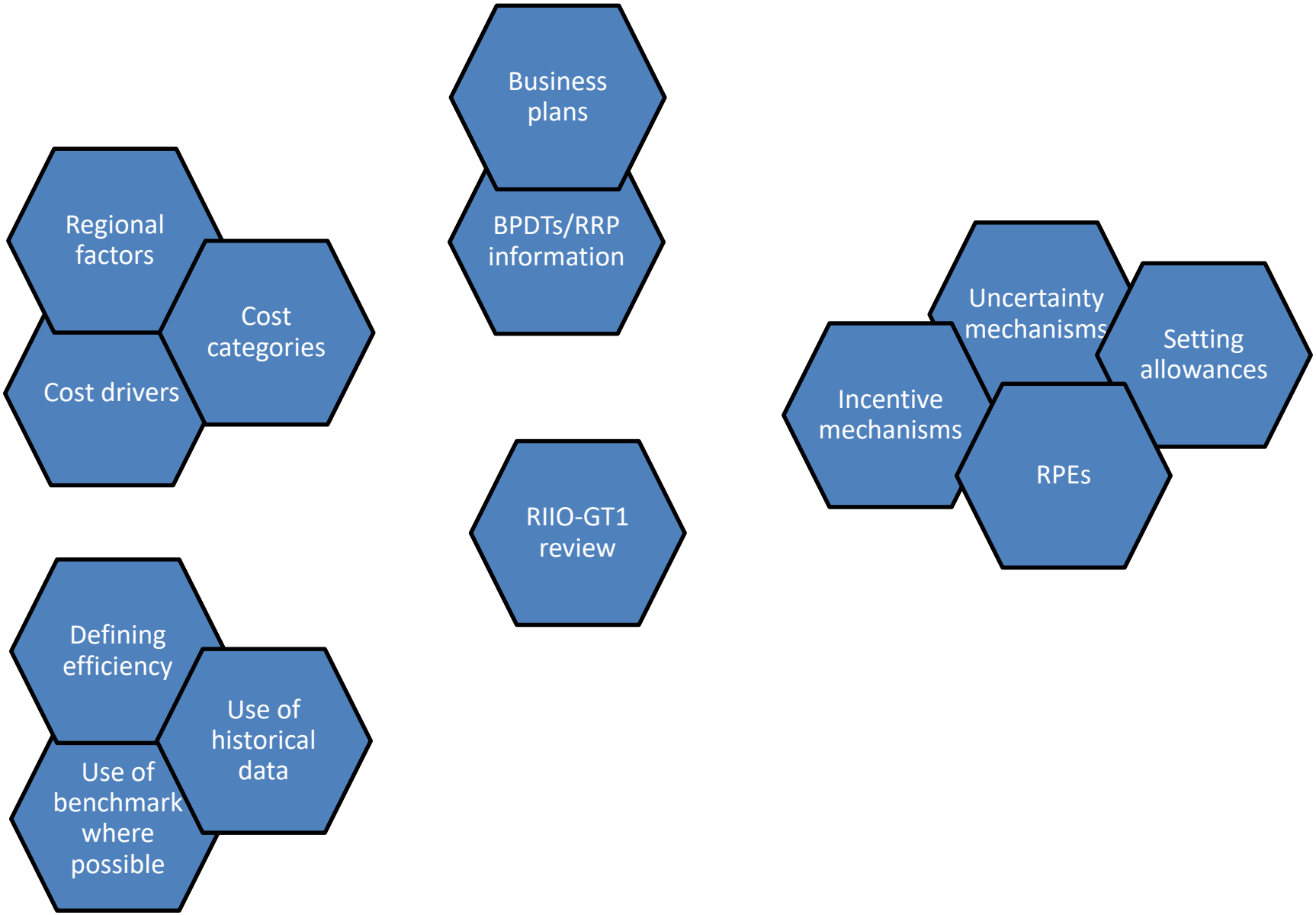
Terms of reference

- **Meet at ~ 5 week intervals - Scope of additional ad hoc meeting if unanimous agreement within the group.**
- **Run through to business plan submission (late 2019)**
- **Publish brief, non-attributable minutes**

Scope of workgroup activities

- Review RIIO-GT1 cost analysis work program
  - ✓ Determine what is still suitable, what needs to be changed
- Review Cost Drivers and Assessment methods for
  - ✓ Totex
  - ✓ Capex
  - ✓ Opex
- Consider the approach to and treatment of:
  - ✓ Business support costs
  - ✓ Contractor modelling
  - ✓ Whole life costs
  - ✓ Innovative solutions
  - ✓ Investment avoidance
  - ✓ Associated investment costs
- Cross Sector WG to discuss specific common areas

Themes


Business plans
BPDTs/RRP information
Regional factors
Cost categories
Cost drivers
RIIO-GT1 review
Uncertainty mechanisms
Setting allowances
Incentive mechanisms
RPEs
Defining efficiency
Use of historical data
Use of benchmark where possible

Initial thinking only – further development/consultation to follow

- We will specify outputs as a set of **consumer-facing outcomes** that we expect network companies to deliver.
- We are proposing to consolidate existing output categories into three new proposed categories as described below.
- We have incorporated early feedback on these from our various sector-specific working groups.

Improve the consumer and network user experience

- *Network companies must deliver a high quality and reliable service, to all network users and consumers, including those who are vulnerable*

Support the energy system transition

- *Network companies must enable the transition to a low carbon, consumer-focused energy system*

Improve the network and its operation

- *Network companies must deliver a safe, sustainable, and resilient network that is more responsive to change*

BPDTs

- Stakeholders wanted transparency, in particular of SO and TO expenditure. Also a desire to link BDPTs to PCDs and ODIs as well as maintain a clear link to annual monitoring (RRP).

Cost category summary

- NGGT presented a summary of cost categories, including possible cost assessment approaches, the investment drivers and approximate materiality. This raised the issue of flexibility and the need to clearly define this term in the context of RIIO-GT2. It also included a discussion on CBA, cost comparisons and transparency.

Cost Assessment toolkit

NGGT to present cost drivers for SO and TO activities

Questions for discussion

- Do you have any additional cost drivers that you think should be considered?
- Is there other data sources that we should be considering as part of our cost assessment?
- Are there other areas where we can apply benchmarking?
- Should we be considering other tools/techniques?

Cost Drivers

Our models need to take account of the key cost drivers of the network companies. There are several principles that we believe should be considered in developing appropriate cost drivers.

A good cost driver should:

- make economic and/or engineering sense
- be measurable and/or quantifiable
- have a relatively stable relationship with the costs over time
- be beyond the control of the network company
- promote long term efficiency (rather than, for example, current network condition).

Do you agree with our principles for cost drivers?

Compressors

RIIO1
~£200m - £400m

RIIO1 Approach

- Unit costs with fixed and variable elements
- Gas Transmission Benchmarking Initiative data
- Cross check vs outturn of recent projects

What do we need to consider for RIIO2?

- Unit cost modelling (what are the cost drivers?)
- Effects of other outputs eg. Emissions reduction?
- How are different interventions assessed (re-furb vs. replace)?

Business Support Costs

RIIO1
£200m - £400m

RIIO1 Approach

- Cross industry benchmarking
- Top down approach using composite cost driver

Comprising – Revenue, end users, employees, spend

What do we need to consider for RIIO2?

- Are there issues with comparability?
- Are the cost drivers appropriate?

Business Plan content and incentives – cross sector workshop overview

Cross sector workshop held on 5th November

Scope

- Approach to business plans
- Proposed content
- Timelines for submission
- Characteristics of BP's
- Assessment Process
- Incentives

Proposed approach to business plans

- We want to standardize core elements of business plans to limit superfluous information and to facilitate benchmarking
- We want a clear line between past and future performance, and a complete contract between expenditure and what's being delivered
- We want to limit our reliance on forecast information – unless accompanied with tangible commitments
- We want to encourage companies to reveal useful information to us that we may not otherwise get
- We want to understand the risks and uncertainties
- We want the plan to reflect stakeholder requirements

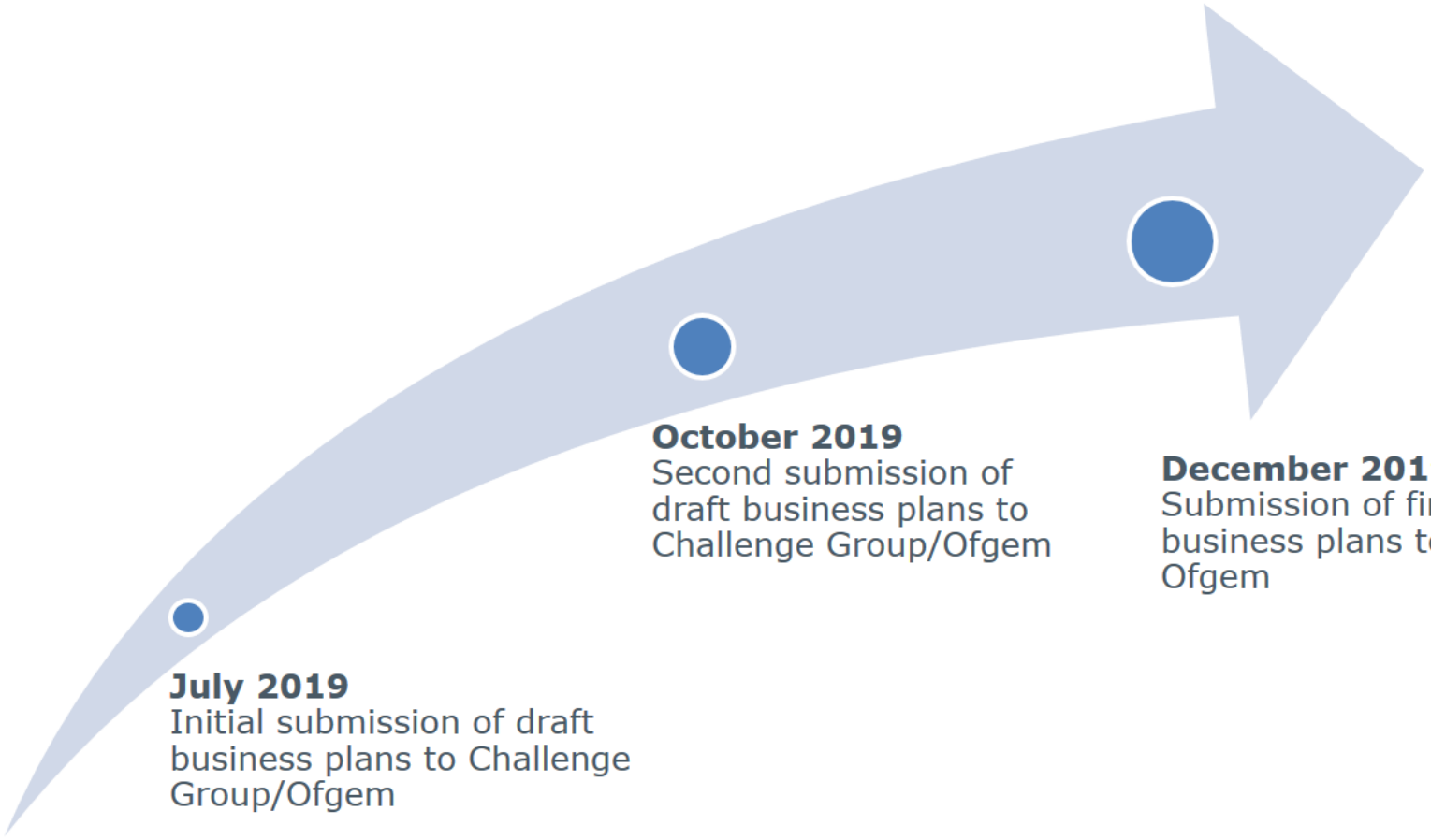
Core Scenario

- We intend to require all companies in a sector to use a core and common view of the future scenario

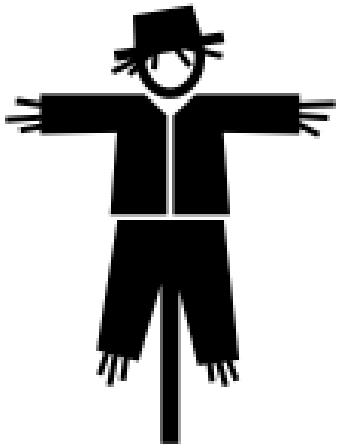
Proposed Content of Business Plans

- Background
- Base scenario
- Forecast expenditure
- Managing uncertainty
- Outputs
- Innovation
- Whole system
- Competition
- Finance
- Workforce resilience
- Stakeholder engagement

Timescales for Business Plan Submission



An indicative strawman on business plans



In brief:

- A four stage assessment process
- Upfront penalties are levied for low quality business plans
- Upfront payments are given when companies submit a high quality business plans in terms of both the qualitative and quantitative elements of the business plans
- Distinguishes between incentives on business plans and incentives on delivery
- Focus on rewarding information revelation and alignment of risk and reward
- Introduces a competitive dynamic on the reward side but individual penalties on the downside

Business plan characteristics

Poor x

- Not meeting minimum criteria
- Costs are higher than our view
- Information requested not provided/provided late/provided inaccurately
- Proposed uncertainty mechanisms overly biased on risks to companies
- Little/no consideration of non-network solutions
- Outputs proposed without credible justification, targets at too low a level, incentives requested where baseline funding already provided
- Innovation strategy with limited roll-out into BAU/overly focus on operation/maintenance
- Insufficient engagement in developing the plan – limited stakeholder access to information, resource, personnel, time to properly input to and challenge the plan

Good √

- Meeting minimum criteria — Stage 1
- Costs are lower than our view — Stage 2
- Proposed uncertainty mechanisms highlight risks to consumers – that we may not be aware of
- Extensive consideration of non-network solutions and demonstrable benefits incorporated into plan. Mechanisms developed to ensure BAU approach
- Outputs proposed with more ambitious targets than we would otherwise set. Clear demonstration of additional risk company is taking on & value created
- Innovation strategy that addresses strategic energy issues, with tangible commitments, tracking, updating (and consequences for non-delivery)
- Engagement informing tangible commitments to deliver and report on additional consumer benefit and on performance against these (and consequences for non-delivery)

Stage 3

Overview: Business plan incentive strawman

1 Compliance check

Determines whether companies pass a minimum bar in terms of the process leading to the making of the business plan and its completeness

Yes – Pass company continues to the next stage of the assessment
No - Fail company is required to resubmit elements of it business plans and enters a penalty regime

2 Evaluation of costs

Looks at companies' forecasts vs our baseline and assigns a score depending on how lower/higher they are. This stage could build on the proposal on the totex incentive mechanism

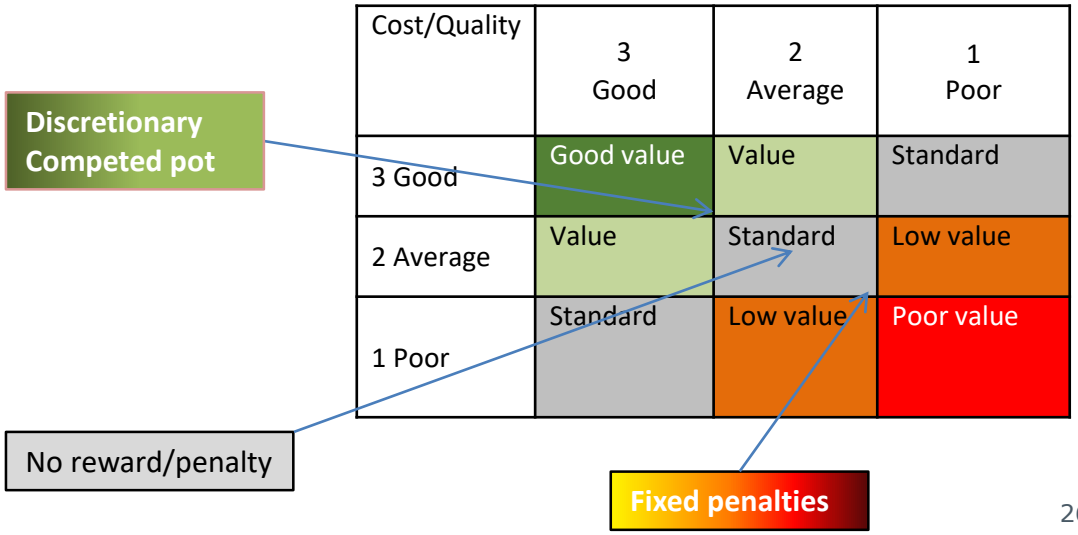
3 Evaluation of quality

Assesses companies' overall business plans and grades it accordingly. This takes into account

- Output ambition and value for money
- Endorsement from stakeholders
- Tangible commitments to innovation & whole system thinking
- Identification of uncertainties and mitigation

We assign a score of 1-3 based on our assessment of quality

4 Upfront reward/penalty determination



Cost/Quality	3 Good	2 Average	1 Poor
3 Good	Good value	Value	Standard
2 Average	Value	Standard	Low value
1 Poor	Standard	Low value	Poor value

Stakeholder Views

Content

- Why focus on workforce resilience? – look at it in the round
- Difficulties in agreeing a common future scenario
- More detail required on assessment approach and information required (as well as purpose)
- There is no link to Ofgems three outcomes
- 'Whole system' needs more clarification - what does Ofgem want in BP?

Timescales

- Concerns expressed over timescales & need good understanding of data requirements soon

Assessment

- Clarification required on costs vs outputs
- Innovation should be linked to delivery
- Financability needs to be part of the assessment and how improvements have been considered
- Recognise value in highlighting where consumers face risk
- Clarification on what is 'good' competition process and 'native' competition
- There needs to be flexibility to develop ambitious plans reflecting differences in requirements
- What if companies propose great business plans for incentive and don't deliver?

Engagement

- Stakeholder engagement and how this has affected the BP need to be demonstrated
- Strong focus needed on enhanced engagement in defining what is good/standard/poor

Business Plan Data Templates

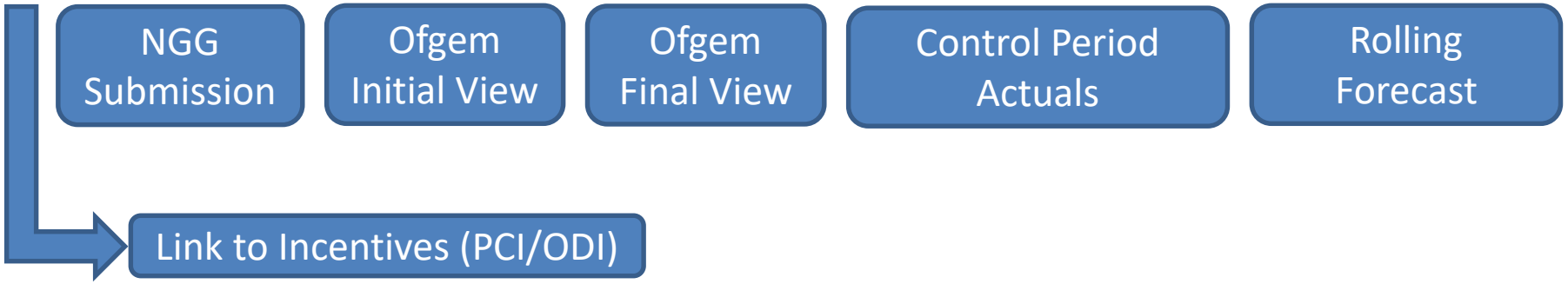
NGGT to present on BPDT principles

- Does this link to the BPDT to PCDs and ODIs?
- Does this provide sufficient transparency of SO/TO expenditure?

Business plan data template – proposed structure

Each sheet in template

Cost Category



Aim

Simplify BPDT & RRP – one document

Promote consistency & transparency

Lunch

Investment Planning

NGGT to present one-pager on investment plan.

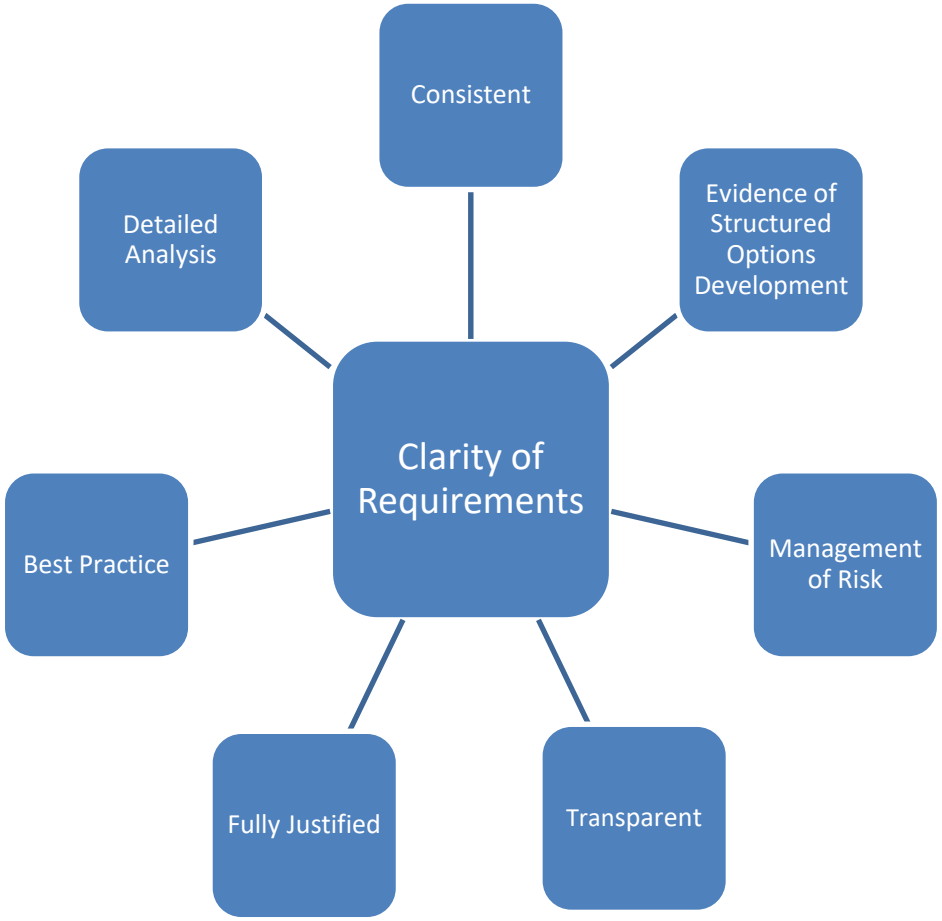
Break

Cost Benefit Analysis

NGGT to present on CBA decision making process.

Key Principles

Based on stakeholder feedback and working group outputs across sectors using ED1 as a basis for development



Do you agree with the principles we have developed?

Asset Standing Risk

Framework Decision – '*we intend to ensure that company business planning processes subject new investment to higher hurdles'*

- How do we best account for this within our cost benefit analysis process?
- How do we ensure fair comparison of differing options?
- What about the timeframe for benefits to be realised?
- Can this risk be captured throughout the needs case?
- How do we approach situations where the NPV is negative but the work is required?
- Balance between simplicity and complexity?

Cost Definitions

NGGT to present on definitions of Capability and Flexibility.

AOB?

Next steps

ofgem Making a positive difference for energy consumers

Our core purpose is to ensure that all consumers can get good value and service from the energy market. In support of this we favour market solutions where pratical, incentive regulation for monopolies and an approach that seeks to enable innovation and beneficial change whilst protecting consumers.

We will ensure that Ofgem will operate as an efficient organisation, driven by skilled and empowered staff, that will act quickly, predictably and effectively in the consumer interest, based on independent and transparent insight into consumers' experiences and the operation of energy systems and markets.

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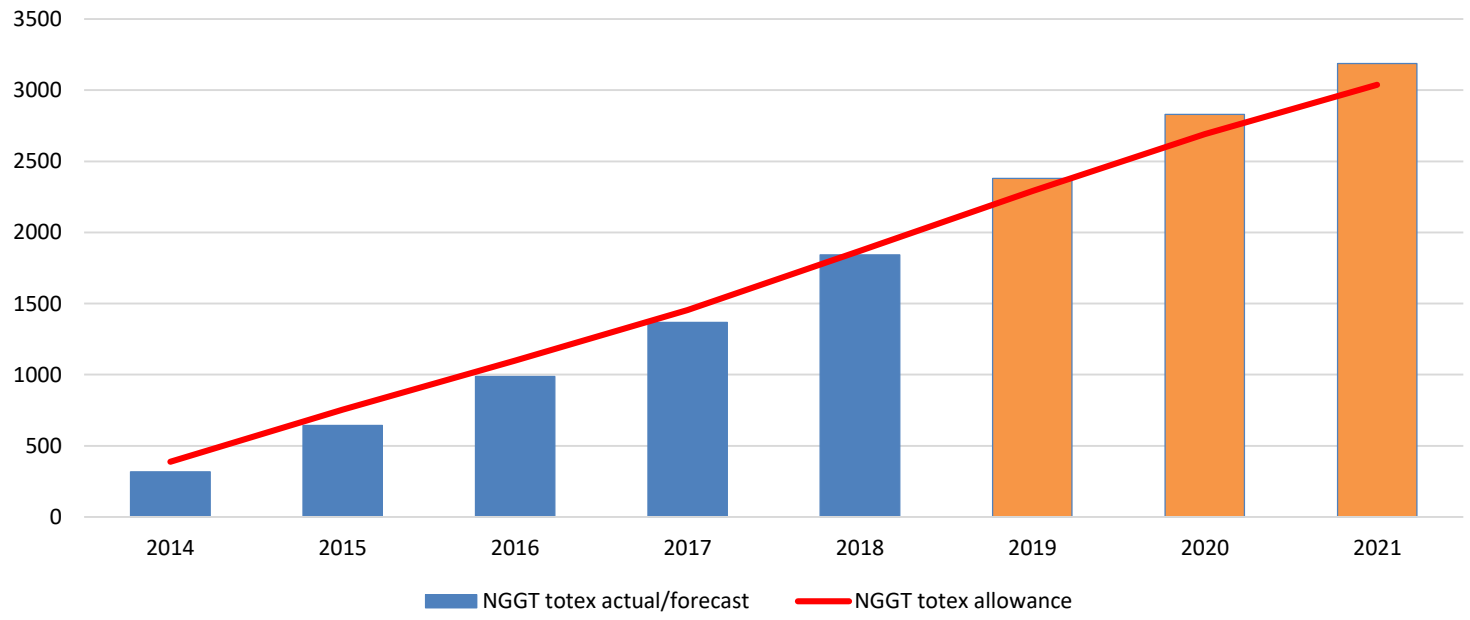
NGGT TO & SO combined performance summary

Overall

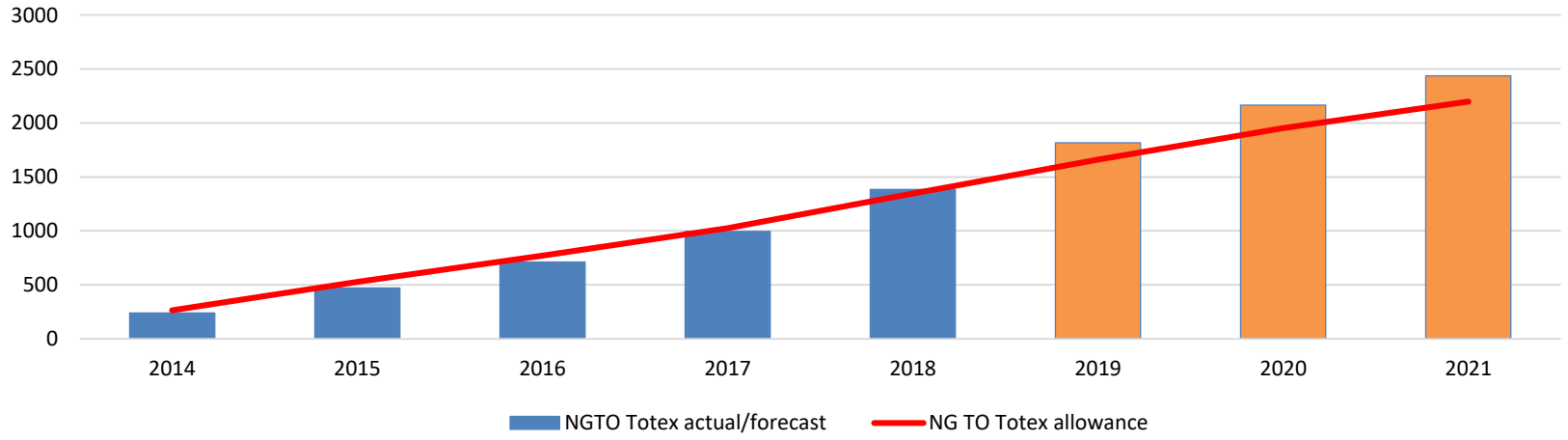
Across RIIO-T1 the Totex is forecast to be £3.2bn against an allowance of £3.04bn. This results in a forecasted spend above allowances of £151m



NGGT TO performance summary

TOs

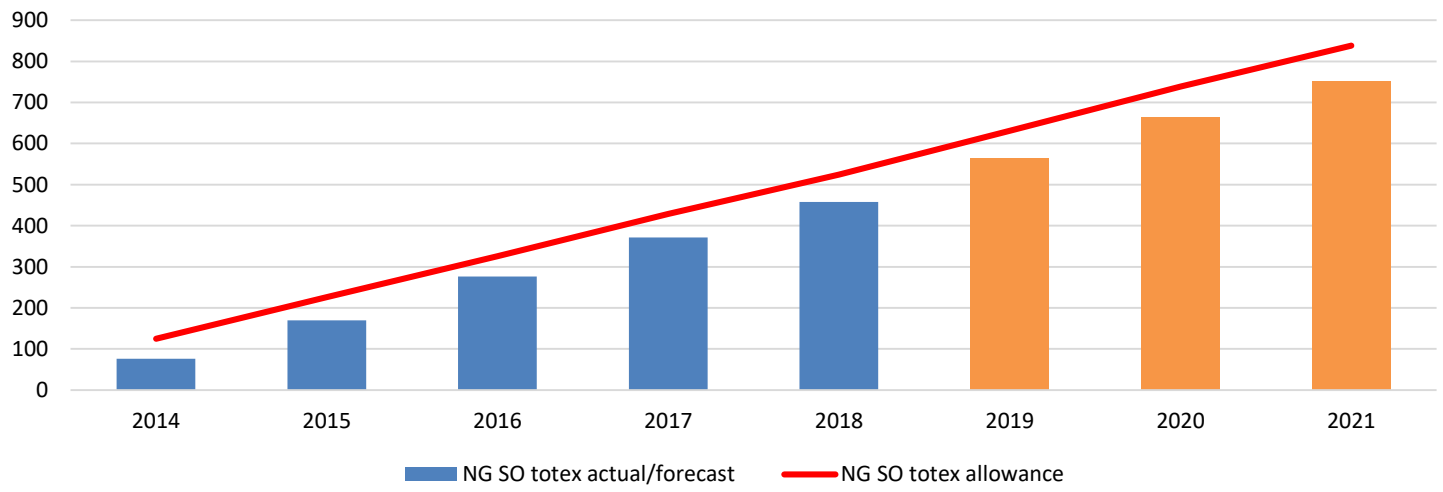
- Overall total expenditure forecast for the RIIO T1 period is £2.20bn set against forecast allowances of £2.44bn which is an overspend of allowances of (11%).



- The forecast Overspend is comprised of:
  - Non - Operational Capex (primarily driven by data and technology upgrades)
  - Closely Associated Indirect
  - Business Support Costs

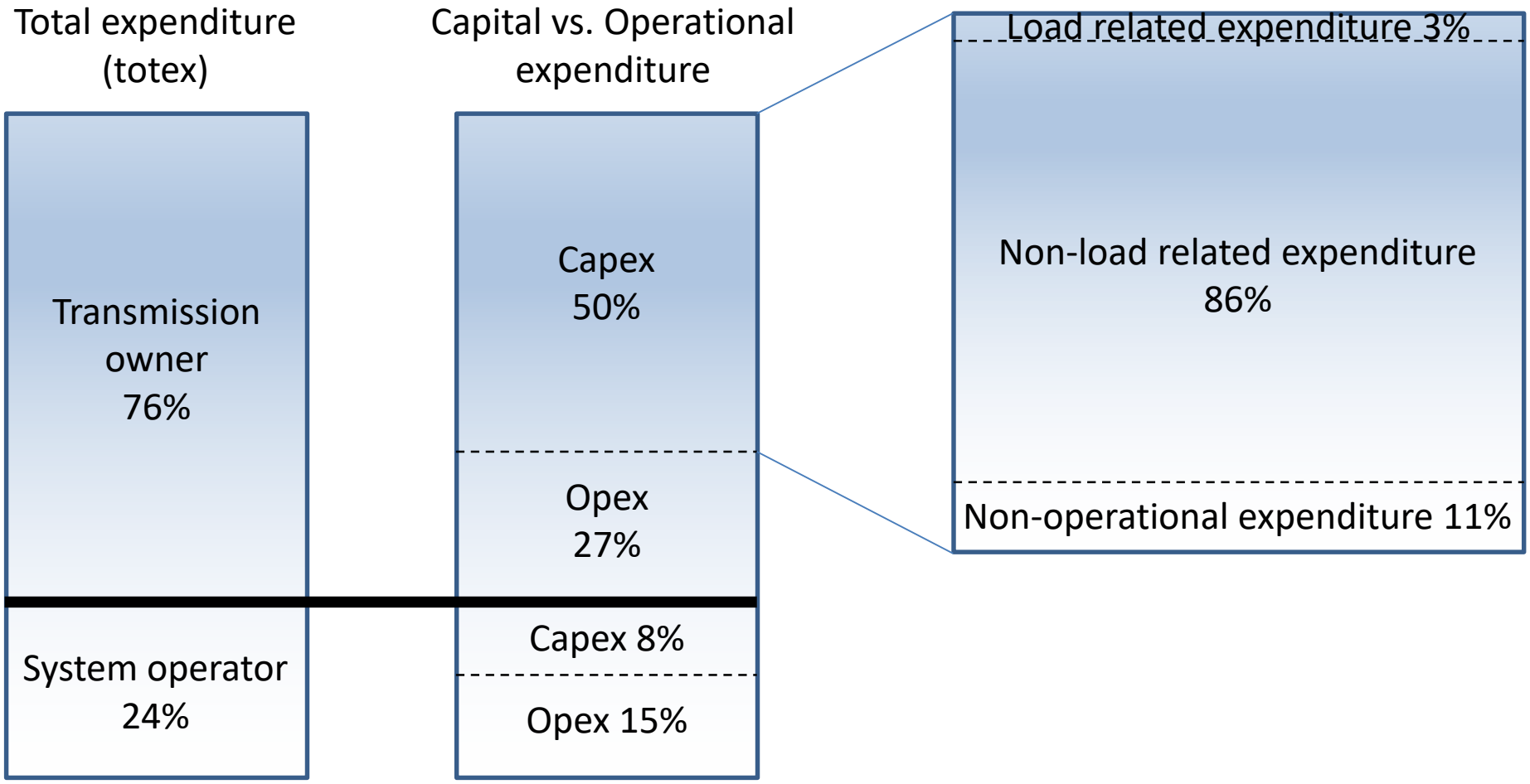
NGGT SO performance summary

- Overall total expenditure forecast for the RIIO T1 period is £750.8m set against forecast allowances of £838.2m which is an £87.4m underspend below allowances.



- The forecast underspend is comprised of:
  - Non-operational capex
  - Business support

NGGT TO and SO: Overview



NGGT TO: Cost approach: Capex load related expenditure

	Cost name	RIIO-GT1 calculation approach
Baseline	Entry, Exit, Bi-directional	Unit cost assumptions External consultancies, NGG's historical project costs, and internationally available data (e.g. Gas Transmission Benchmarking Initiative, Alaskan compressor stations costings).
	Network flexibility	Project dependent Ex ante allowance for projects that maintain the 1-in-20 obligation: other projects dealt with via uncertainty mechanisms.
	Offtakes	Pass-through (confirmation required) External consultancies and NGG's historical project costs.
Incremental	Entry, Exit, Bi-directional	Uncertainty mechanism: Revenue driver Used to adjust NGG's baseline revenue in response to demand for additional capacity that is backed by a financial user commitment. Calculated upon receipt of relevant signals and based primarily on efficient unit costs for compressor stations and pipeline reinforcement work.
	Network flexibility	Uncertainty mechanism: Options available Majority of investments handled by the uncertainty mechanism as this expenditure is difficult to accurately forecast over the whole RIIO-T1 period.

NGGT TO: Cost approach: Capex non-load related expenditure

	Cost name	RIIO-GT1 calculation approach
Baseline	Emissions reduction	Unit cost/uncertainty mechanism/cost benefit analysis Liaised with agencies, consultancies, used NGG's historical project costs and international data. Reviewed costs such as compressor units parts, retrofit vs replacement, compliant vs non-compliant gas turbines, technological choices.
Baseline	Asset health (condition driven)	Unit cost and benchmarking Engineering consultants assessed forecast expenditure, accompanying justification, underlying costs, and feasibility studies.
Baseline	Quasi-capex	Ofgem agreed with NGG's forecast This was anticipated and relates to the disconnection of Feeder 1 as well as for the decommissioning of some secondary assets.
Uncertainty Mechanism	Emissions reduction	As per emissions reduction above Note: non-compliant compressors to be covered by uncertainty mechanism.
Uncertainty Mechanism	Asset health: Feeder 9	Ex ante and uncertainty mechanism (reopener) Majority of investments handled by uncertainty mechanism as this expenditure is difficult to accurately forecast over the whole RIIO-1 period.
NOE	Non-operational expenditure	IT & telecoms analysis and costing Combination of questioning NGG's forecast, gaining more information, and using consultants as required.

NGGT TO: Cost approach: Opex expenditure

	Cost name	RIIO-GT1 calculation approach
Controllable	Direct opex	Engineering consultants: Report and proposals Driven to some extent by age and condition of network and by proposed capex. Overall ongoing efficiency applied to NGGT's forecasts was 1.5%. NGGT are investing in new IT systems in RIIO-T1 and therefore should be able to drive out increased efficiencies above those already identified.
	Indirect opex	Engineering consultants: Report and proposals Largely driven by capital and maintenance support, operational training, operational IT, and gas drawings. Increased the efficiency assumption to 1.5%.
	Business support	Composite cost driver Consultants did a top-down assessment using a composite cost driver. The main costs in business support are data/technology, realigning UK Assurance team to focus on UK work, consultancy/staff costs, and RIIO-T2 prep.
Non-Controllable	Quarry & loss of development	Uncertainty mechanism: Reopener - Ofgem agreed with NGG's forecast NGG would need to demonstrate that not only have they negotiated on respective claims in order to reduce the cost where possible, but that one-off claims also relate to specific project requirements.
	Non-controllable	Ofgem agreed with NGG's forecast Used NGG figures. Ofgem to check if future costs are outside of NGG's control.

NGGT SO: Cost approach: Capex/Opex expenditure

	Cost name	RIIO-GT1 calculation approach
Capex	Capex (excl. data centre)	Ex ante and uncertainty mechanism External consultancies and open dialogue with NGG to provide clarification on proposed expenditure so that Ofgem fully understands NGG's planned capex.
Capex	Data centre	Ex ante and uncertainty mechanism Consultants/Ofgem: fund £30m baseline investment for refurbishments and data centre upgrades. Further expenditure subject to uncertainty mechanism.
Opex – Controllable (Ctrl)	Direct opex	Engineering consultants: Ex ante and uncertainty mechanism Cost increases due to changing flow patterns and supply dynamics, demand pattern variation, operational changes, headcount growth, and IS projects.
Opex – Controllable (Ctrl)	Indirect opex	Engineering consultants: Ex ante and uncertainty mechanism Cost increases due to changing flow patterns and supply dynamics, demand pattern variation, operational changes, headcount growth, and IS projects.
Opex – Controllable (Ctrl)	Business support	Composite cost driver Consultants did a top-down assessment using a composite cost driver. Upward cost pressures due to management initiatives and one-off costs.
Opex – Non-Ctrl	Xoserve	Ex ante allowance and uncertainty mechanism Consultants commissioned by Ofgem reviewed the current arrangement. Ofgem providing ex ante allowance with a further review in due course.