



# NGGT\_Annex\_ Asset Health Uncertainty Mechanisms Proposal September 2020

As a part of the NGGT Draft Determination Response

**nationalgrid**

## Initial draft straw man proposal on asset health

To be updated further to any discussion with Ofgem

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### 1. Overview of UM proposal for asset health reopeners

- 1.1 Following the draft determinations in July 2020, which included high level Uncertainty Mechanism proposals, we have been in discussions with Ofgem to agree a process for asset health reopeners to provide regulatory certainty over critical investment. The purpose of these discussions is to learn from other RIIO-2 reopener processes and set out explicitly a plan for asset health that works for both National Grid and Ofgem.
- 1.2 In this paper we are proposing a process for asset health investments (selected interventions within Plant & Equipment, Cabs and Civils) reopeners for RIIO-2 aligned to relevant decision points within the Gas Network Development Process, known as GNDP or ND500. This process is the existing Gas Transmission process for managing network investments from inception through to closure. The only exceptions are vehicle fleet, property and IT investments. We are not proposing significant changes to the ND500 process itself as part of this proposal.
- 1.3 There are six stages of the ND500 process (4.0, 4.1 to 4.5), each separated by a technical and/or financial stage gate. The stage gates represent go/no go check points to ensure we are progressing with an acceptable level of risk. The aim of the process is to assist Gas Transmission in delivering the best value, fit for purpose solutions to problems or opportunities on our network. Solutions that meet our needs as well as those of customers and stakeholders, and ultimately the consumer.
- 1.4 To reflect differences in asset types to be addressed by the uncertainty mechanisms there will be two streams of the asset health uncertainty mechanism.
  - “Project” type where a high degree of certainty can be achieved through the surveys undertaken at early stages of ND500.
  - “Unit cost” type where the rolling completion of works will provide outturn data upon which future volume and cost can be forecast from.
- 1.5 Our proposals relating to asset health uncertainty mechanisms relate to stage gates 4.2, 4.3 and 4.4 of the ND500 process. A detailed outline of the processes undertaken for each type through these stages can be found in the associated PowerPoint.
- 1.6 We propose one touch points for “project” asset health uncertainty towards the end of 4.2, prior to contract award – seek Ofgem final approval of costs for remainder of projects.

- 1.7 We propose one touch points for “unit cost” asset health uncertainty early in 4.5, when outturn costs flow back from delivery – provide Ofgem outturn volume and costs for completed works. Seek Ofgem approval of incurred costs and future costs.
- 1.8 We anticipate that the following specific asset health interventions would be covered by this new process. With the need case for investment confirmed through the business planning process.
  - Cabs
  - Plant & Equipment
  - Civils, Security and Fencing, Access and Buildings, Site Access Roads and Paths Major Refurb
  - Civils, Security and Fencing, Access and Buildings, Security - Fences and Gates - AGI (Minor Works)
- 1.9 This proposal is underpinned by two key assumptions. Firstly, that a suitable mechanism will be found to ensure that National Grid are appropriately remunerated for efficiently incurred costs between decision points in the process. We are proposing that for project type that work to get to the touch point be funded through ex-ante allowances agreed as part of the price control. Secondly, that whilst solutions evolve over time, significant changes in solution would not take place without Ofgem oversight.
- 1.10 The purpose of this document is to set out
  - High level deliverables to be included in a reopener submission, and asks of Ofgem
  - How this translates into proposals for individual asset health themes
  - Proposals for how we envisage the funding mechanisms to work
  - Assumptions our proposals are based on
- 1.11 This draft document will be updated following further discussion with Ofgem if required.
- 1.12 Associated documents include process flowcharts for
  - proposed new reopener process for “project” type
  - proposed new reopener process for “unit cost” type

## **2. High level overview of ND500 stages 4.1 to 4.4 and key deliverables**

### **Projects:**

#### **Stage 4.1 (Establish Scope and Options)**

- 2.1 The Establish Scope and Options phase is where potential works are developed with provisional milestones and costs.
- 2.2 Outputs of this for will include
  - Reconfirmed needs case
  - Project Scope Document (PSD)
  - Signed T2 and F2 stage gates and associated evidence

- Scope and general direction from the initial option evaluation. (The capability requirement (including 'Do Nothing'), options considered, the reasons for narrowing the options and final option evaluation in order to define the scope.)

#### Stage 4.2 (Option Selection)

The Option Selection phase is where works are completed to increase knowledge of possible solutions to the needs case, viability, strengths and weaknesses of all possible options, before they are reviewed and the preferred one selected. Once this decision has been made, further detail surrounding the preferred option is developed, including its Estimated Cost to Complete and a programme of works.

#### 2.3 Outputs for this phase would include

- Survey reports
- Options finalised with costs, risks and timescales for each established
- Next stage of selected option planned with a financial forecast and programme for the rest of the investment established
- Signed T4 and F4 checklists and associated evidence

#### Stage 4.3 (Conceptual Design Development)

#### 2.4 Not applicable to this project type.

#### Unit Costs:

#### Stage 4.1 (Establish Scope and Options)

2.5 The Establish Scope and Options phase is where potential works are developed with provisional milestones and costs.

#### 2.6 Outputs of this for major projects will include

- Reconfirmed needs case
- Project Scope Document (PSD)
- Signed T2 and F2 stage gates and associated evidence
- Scope and general direction from the initial option evaluation. (The capability requirement (including 'Do Nothing'), options considered, the reasons for narrowing the options and final option evaluation in order to define the scope.)
- CBA if ECC > £20m

#### Stage 4.2 (Option Selection)

The Option Selection phase is where works are completed to increase knowledge of possible solutions to the needs case, viability, strengths and weaknesses of all possible options, before they are reviewed and the preferred one selected. Once this decision has been made, further detail surrounding the preferred option is developed, including its Estimated Cost to Complete and a programme of works.

#### 2.7 Outputs for this phase for major projects would include

- Options finalised with costs, risks and timescales for each established
- Next stage of selected option planned with a high-level programme for the rest of the investment established
- Lessons Learnt register, risk register updated

- Signed T3 and F3 checklists and associated evidence

### Stage 4.3 (Conceptual Design Development)

2.8 The conceptual design phase builds upon the option selected during stage 4.2. The design is developed to the level of accuracy needed to tender the work and develop a programme and estimate of works with a quantified risk register which provides the business increased certainty.

2.9 Outputs for this phase for major projects would include

- Long Lead items procurement commenced
- Defined scope, programme and forecast costs
- Completed Conceptual Design Study
- Risk and opportunity register to minimum requirements
- Completed T4 and F4 stage gates including activity schedules and output tables.
- Financial approval from GT Investment Committee for onward progression to delivery (approved sanction paper).

### Stage 4.4 (Delivery)

2.10 Completion of physical works and records updated

2.11 T6 gate completed

### Stage 4.5 (Closure)

2.12 Project review to capture lessons learnt, refine unit cost information

2.13 F5 gate completed.

## 3. Key deliverables and asks of Ofgem at each stage

3.1 We propose one touch point for “project” asset health uncertainty towards the end of 4.2, prior to contract award – seek Ofgem final approval of costs for remainder of projects.

3.2 In the table below we set out key deliverables asks of Ofgem:

	<b>Information we will give to Ofgem</b>	<b>Ask of Ofgem</b>
4.2 prior to tender	<ul style="list-style-type: none"> <li>• Updated scope documents including output tables and cost</li> <li>• Confirmation of NG approval of the above</li> </ul>	Approve final costs for remainder of works from 4.3 stage.

3.3 We propose one touch points for “unit cost” asset health uncertainty early in 4.5, when outturn costs flow back from delivery – provide Ofgem outturn volume and costs for completed works. Given these programmes are rolling ones with surveying and design occurring ahead of the delivery year we will also have maturing detail on the specifics of the planned works for the later years. This will give a strong package of data to seek Ofgem approval of incurred costs and future costs.

3.4 In the table below we set out key deliverables asks of Ofgem:

	<b>Information we will give to Ofgem</b>	<b>Ask of Ofgem</b>
4.5 outturn cost	<ul style="list-style-type: none"> <li>• <i>Outturn output tables and unit costs</i></li> <li>• <i>Remaining years works based on planned sites and observed intervention rates</i></li> <li>• <i>Request for future funding based on outturn outputs and cost</i></li> </ul>	Approve incurred costs and future cost request

3.5 The detail of the documentation will be developed with Ofgem ahead of any submission.

3.6 All regulatory submissions to Ofgem would be signed off by the gas transmission leadership team prior to submission.

## 4. List of projects and key touch points

4.1 We anticipate that the following specific asset health interventions would be covered by this new process. With the need case for investment confirmed through the business planning process.

- Cabs
- Plant & Equipment
- Civils, Security and Fencing, Access and Buildings, Site Access Roads and Paths Major Refurb
- Civils, Security and Fencing, Access and Buildings, Security - Fences and Gates - AGI (Minor Works)

4.2 We deliver these works in annual projects that each go through ND500 independently. Various stage gates and milestones will be achieved every year.

4.3 Project milestones most relevant to the uncertainty mechanisms for these interventions are captured below.

<b>Year</b>	<b>One</b>	<b>Two</b>	<b>Three</b>	<b>Four</b>	<b>Five</b>
Cabs	<ul style="list-style-type: none"> <li>• Deliver work.</li> <li>• Survey required sites</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work.</li> <li>• Survey required sites</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work.</li> <li>• Submit re-opener</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work.</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work.</li> </ul>
Plant & Equipment	<ul style="list-style-type: none"> <li>• Deliver work, capture cost.</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work, capture cost.</li> <li>• Submit re-opener?</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work, capture cost.</li> <li>• Submit re-opener?</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work, capture cost.</li> <li>• Submit re-opener?</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work, capture cost.</li> </ul>
Civils	<ul style="list-style-type: none"> <li>• Deliver work.</li> <li>• Survey required sites</li> </ul>	<ul style="list-style-type: none"> <li>• Submit re-opener</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver work</li> </ul>

## 5. Funding proposal principles

- Project type interventions are proposed as baseline variant funded as needs case has been agreed as part of the RIIO-2 business plan process. This means that the projected project costs are set up front in the baseline and adjusted at the 4.3 reopener.
- At 4.3 reopener point funds are approved for the rest of the project. We would expect risk. We anticipate this point is also when the PCD is firmed up and that there are no further reopener points.
- Unit cost type interventions as proposed by Ofgem will be funded for the first 3 years of RIIO-2. These outturn cost will be reviewed as part of the re-opener with unit cost set in line with those agreed for future works.