

10 March 2023

## **Network Asset Risk Methodology (NARM) Consultation**

### **Consultation Scope**

In compliance with our licence obligations, we are consulting on the proposed changes to the NARM Methodology to other Network Licensees and any other interested stakeholders, allowing them a period of 28 days within which they can make any representations. **The closing date for the consultation period is 7<sup>th</sup> April 2023.**

We will compile and report on the responses received to this consultation as part of our regulatory obligations.

We are intending to use the feedback received to shape the methodology, revising the documents as necessary before submitting to Ofgem a summary of any representations made and an explanation of any changes to the modification proposal, as a consequence of the feedback received. Ofgem will either approve without amendments, approve with amendments, or reject the proposed modifications.

### **NARM Methodology Overview**

Electricity Transmission Owners (ETOs)<sup>1</sup> have their performance assessed under the RIIO regulatory model covering a set of outputs to measure how well they have delivered end services to consumers, customers, and stakeholders.

As part of a regulatory framework, the Network Asset Risk Metric (NARM) methodology is intended to show that the three Electricity Transmission Owners are providing long-term value for money with their investment decisions and how these decisions are made for the benefit of maintaining the network. NARM is intended not only as a regulatory reporting and monitoring tool, but also as a decision-supporting tool for Electricity Transmission Owners' asset management investments.

The NARM Methodology is formed of the following documents:

- [NARM Common Methodology](#). This overarching methodology document provides an overview of the NARM Methodology for the three ETOs.
- [Network Asset Risk Annexes \(NARAs\)](#). The NARA documents describe the details of the calculation methodologies to derive the Network Asset Risk Metrics. There are two different NARA documents, one for SSEN Transmission and SP Transmission, and another one for National Grid Electricity Transmission (NGET). These documents form part of the NARM Methodology.
- [Licensee Specific Appendices \(LSAs\)](#). The LSA documents contain ETO specific parameters used in the calculations. There are currently three LSA documents, each ETO has its own LSA document and those are not publicly available and remain confidential.

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<sup>1</sup> National Grid Electricity Transmission, SSEN Transmission, and SP Transmission

## NARM Methodology Overview

The NARM objectives are set out in special licence condition 9.2 of each ETO RIIO-T2 licence. The ETOs should have in place a NARM Methodology that facilitates the achievement of those objectives and keep that Methodology under continuous improvement. The Licence indicates the ETOs must review the NARM Methodology to identify scope for modifications that would better facilitate the achievement of the NARM Objectives.

The NARM Objectives are:

- a) to provide transparent, logical links between:
  - i) the Asset Data that the licensee collects through inspections, maintenance, and other asset management activities;
  - ii) the data that the licensee inputs into its Asset Management Systems
  - iii) the licensee's asset management decisions; and
  - iv) where relevant, the licensee's whole system investment decisions;
- b) to enable the Authority<sup>2</sup> to establish the licensee's Baseline Network Risk Outputs and to undertake an objective assessment of the licensee's Baseline Network Risk Output delivery;
- c) to enable the robust estimation of Current Monetised Risk, Forecast Monetised Risk, Single-year Monetised Risk, and Long-term Monetised Risk of asset failure for:
  - i) each NARM Asset Category;
  - ii) individual NARM Assets within each NARM Asset Category; and
  - iii) the licensee's Transmission System;
- d) to enable the robust estimation of the Current Monetised Risk and Long-term Monetised Risk benefits delivered, or expected to be delivered, through interventions on specific assets or groups of assets;
- e) to provide inputs to help explain and justify, through Cost-Benefit Analysis:
  - i) the licensee's investment plans for managing and renewing its NARM Assets; and
  - ii) the licensee's outturn delivery of investment options;
- f) to enable the identification and quantification of drivers leading to changes in Monetised Risk over time;
- g) to enable the comparative analysis of Monetised Risk between:
  - i) different NARM Asset Categories and between individual NARM Assets on the licensee's Transmission System;
  - ii) geographic areas of, and NARM Assets within, the licensee's Transmission System;
  - iii) the licensee's Transmission System and other networks within the same sector;
  - iv) the licensee's Transmission System and networks outside Great Britain with similar assets should similar approaches as set out in the NARM Methodology be applied to estimate Monetised Risk for those networks; and
  - v) the Transmission Systems and Distribution Systems within Great Britain; and
- h) to enable the communication to the Authority and other interested parties of relevant information about the licensee's Transmission System in an accessible and transparent manner.

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<sup>2</sup> Ofgem

## NARM Methodology Overview

The Electricity Transmission Owners (ETOs) have been working with Ofgem in auditing the Methodology with the purpose of identifying areas of improvement and/or further development of the NARM Methodology. This process was initiated in 2022 and it is aiming to have a clear development Road Map for the NARM Methodology with effective prioritisation of areas of the development process. This process has provided the ETOs and Ofgem with clarity of the necessary work, allowing resource planning and ensuring transparency in the process.

Following the methodology audit, there have been identified areas for improvement and/or further development and those have been classified in three different categories related to the scale of work and timescales associated with the changes, those are:

- Category 1. Short term methodology modifications, focus on facilitating transparency and completeness of the Methodology documents.
- Category 2. Short to medium term methodology modifications, this includes a focus on improving alignment within and across sectors as well as updated financial Consequence of Failure (CoF) values, reviewing long-term benefits calculation and a range of other updates to asset modelling.
- Category 3. Medium to long term methodology modifications, focus on expanding the NARM methodology to incorporate new assets and refining the calibration values to ensure comparability analysis of Monetised Risk between different networks. Also, reflecting longer term trends with respect to the energy transition including changes driven by innovation and digitalisation.

**This consultation corresponds to the Category 1 agreed modifications.** The changes across the NARM Methodology documents are noted below. As well as the document they have been applied to, it also references which of the latest round of updates the change refers to and gives a brief description of where it can be found and how the necessary outcome has been met.

[Document: NARM Common Methodology](#)

### 1. Calibration, Testing and Validation (CTV) and Uncertainty:

Sections 2.2 and 2.3 have been added to improve the description of how uncertainty has been considered as part of modelling the deterioration of Transmission assets and the approach to Calibration, Testing and Validation exercise.

The above proposed modification would better facilitate the achievement of NARM Objective (b).

### 2. Innovation and Future Development:

Section 2.4 provides an overview of the Methodology future development and how innovation can be embedded into the Methodology. This current view is not intended to restrict further development and all ETOs will continue monitoring for further opportunities.

The above proposed modification would better facilitate the achievement of NARM Objective (f).

### 3. Introduction of a change control process in the methodology with respect to potential rebasing activities

Section 2.5 has added detail on the procedure and timeline for methodology modifications to be made, including annual reviews as required by our licence. This section also explains that any rebasing of the Baseline Network Risk Outputs, and subsequent updating of the methodology should then also inform other reporting requirements.

The above proposed modification would better facilitate the achievement of NARM Objectives (f) & (h).

### 4. Stakeholder Engagement:

Following on from section 2.5 on the timeline for methodology modifications, section 2.6 explains how we will use feedback from this consultation. This includes working with other Network Licensees and

conducting a mapping exercise to identify other relevant stakeholders who are well placed to provide insight on the proposed updates.

The above proposed modification would better facilitate the achievement of NARM Objective (h).

## **5. Alignment with NARM framework and calculation of Long-term Monetised Risk**

In addition to the changes presented above, this consultation includes the previous update of this document to align the definition of the Risk Outputs measures and NARM Objectives with the NARM framework as defined for the RIIO-T2 price control. During RIIO-T1, ETO's developed the NOMs Methodologies (NOMs, Network Output Measures) that included the derivation of Monetised Risk.

The NARM Methodology builds upon the NOMs Methodology by introducing a measure of Monetised Risk over the long term. These changes have been captured in sections 3.2 and 3.3 of the new NARM Common Methodology document that supersedes the NOMs Common Methodology document since the start of RIIO-T2.

The above proposed modification would better facilitate the achievement of NARM Objectives (c), (d) and (e).

### Document: NGET Network Asset Risk Annex (NARA)

#### **1. Document structure and content updates to improve transparency.**

The document has been renamed to NARA-T2 to reflect applicability to the current RIIO-T2 price control. This is in anticipation of NARA development underway within T2, but applicable to future price controls.

Legacy documentation references to NOMs (Network Output Measures) have been retired as these were a feature of RIIO-T1.

Brief summaries of each major section of the document are highlighted at the opening of each section of the text intended to inform and direct the reader to features of interest.

Earlier releases of the NARA were accompanied by several separate licensee-specific appendices. These are fully incorporated into the main text, improving readability and transparency.

The above proposed modification would better facilitate the achievement of NARM Objective (h).

#### **2. Material concerning the application of Long-term Risk Benefit**

NGET has previously consulted on this material in NARA issue 5. This material is required in order to fulfil the obligations of section 3.1 of the License Special Conditions. It is applicable to the funding adjustment and penalty concerning the delivery of Baseline Network Risk Outputs.

The above proposed modification would better facilitate the achievement of NARM Objectives (c), (d) and (e).

#### **3. Include worked examples of calculations of monetised risk:**

Examples were previously given in the Licensee Specific Appendices. These have been incorporated into the main text.

The above proposed modification would better facilitate the achievement of NARM Objective (h).

#### **4. Forward looking methodology development:**

Section 16 provides details on the differences between the NGET NARA and other network methodologies, and background on some of the reasons for differences.

Section 17 notes future development opportunities for NARM, with reference to section 16 and the opportunities for further alignment within the sector.

The above proposed modification would better facilitate the achievement of NARM Objective (f).

[Document: SSEN Transmission and SP Transmission Network Asset Risk Annex \(NARA\) and Licensee Specific Appendices \(LSAs\)](#)

These documents do not form part of the NGET NARM Methodology Documents; for further details of the proposed changes on these documents, that are part of this consultation, please visit the below web pages:

[www.ssen-transmission.co.uk/information-centre/Network-Asset-Risk-Metric/](http://www.ssen-transmission.co.uk/information-centre/Network-Asset-Risk-Metric/)

[www.spenergynetworks.co.uk/pages/narm\\_methodology\\_modification\\_march\\_2023.aspx](http://www.spenergynetworks.co.uk/pages/narm_methodology_modification_march_2023.aspx)

## Consultation Questions

### QUESTION 1

Do you agree the new structure and additional content of the NARM Methodology Documentation suite improves readability, transparency and understanding of the NARM Methodology?

### QUESTION 2

Do you have any further suggestions on how to facilitate transparency of the NARM Methodology?

### QUESTION 3

The Methodology incorporates the definition of the Long-Term Risk Benefit, calculation method and uses to achieve the NARM objectives. Do you find that comprehensible? Do you have any further suggestions on the approach used?

### QUESTION 4

Do you consider that the proposed modifications better facilitate the achievement of the NARM Objectives? If not, please explain your reasons.

## Next Steps

With the proposed changes now drafted, we are looking to receive comments on these proposed changes. Responses should be made via email to [narmconsultation@nationalgrid.com](mailto:narmconsultation@nationalgrid.com) by **7<sup>th</sup> April 2023**.

Once the period for responding has closed, these responses will be used to shape the Methodology as necessary and shared with Ofgem. This will be used to inform their own expected review and consultation of the methodology updates.

Dan Penny  
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