Notes on Completion: Please refer to the appropriate NIA Governance Document to assist in the completion of this form. The full completed submission should not exceed 6 pages in total.

NIA Project Registration and PEA Document

Date of Submission

May 2024

Project Reference Number

NIA2_NGET0064

Project Registration

Project Title

New Aspects of Trading to Understand Risks to the Environment (NATURE)

Project Reference Number

NIA2_NGET0064

Project Licensee(s)

National Grid Electricity Transmission

Project Start

June 2024

Project Duration

0 years and 7 months

Nominated Project Contact(s)

Muhammad Shaban

Project Budget

£197,950.00

Summary

Following the UN Biodiversity Conference (COP15) and the subsequent approval of the Post 2020- Global Biodiversity Framework (GBF) in Dec 2022, there will be more stringent requirements on business to assess and disclose their impacts and dependencies on Biodiversity. This project aims to examine the supply chain risks and dependencies in terms of its impacts on nature across the full value chain. As an Electricity Transmission and Distribution sector, National Grid, SSEN and SPEN will draw from many of the same global suppliers, and therefore share many of the risks, upstream and downstream impacts to nature. There is an ambition as part of this project to develop a consistent approach and robust methodology for assessing the biodiversity impacts risks and dependencies across the global supply chain (supplying UK based activities) using innovative approaches that align with best practice frameworks in this area.

Nominated Contact Email Address(es)

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Problem Being Solved

To support the sustainable transition to net zero, electricity networks must seek to minimise the impact that their businesses have on the environment, particularly with regards to their global supply chains. To enable them to do this, they need to fully understand both the current and future impact of purchases they make and of the upstream (production) effects of the products in their supply chains. This will allow more environmentally conscious decisions to be taken within their respective businesses as they endeavour to become responsible net zero organisations.

Following the UN Biodiversity Conference (COP15) and the subsequent approval of The Kunming Montreal Global Biodiversity Framework (GBF) in December 2022, compliance with Target 15 within the GBF requires businesses to comprehensively evaluate and disclose:

- Their biodiversity dependencies and impacts.
- The associated biodiversity risks from their operational, supply and value chains.

These issues within the electricity network global supply chain are currently not well understood or assessed, our network partner is therefore looking to improve its engagement with key suppliers and contract supply chains to better recognise these issues.

Approval of the GBF has contributed to the recent launch of the Taskforce on Nature-related Financial Disclosures (TNFD) and Science Based Targets for Nature (SBTN). These initiatives aim to improve transparency and accountability around an organisation's impacts and dependencies on nature. Whilst both initiatives are currently optional, it is expected that TNFD will become mandatory in the future. Whether these initiatives remain optional or not, the networks are keen to support this project.

Method(s)

To facilitate the decarbonisation of the UK Energy Network, as a sector we must work together to ensure that we meet our Net Zero commitments whilst taking steps to reduce our collective impact on Nature and the fundamental benefits and services it provides to the global population.

We have an innovation-led approach to sustainability, bringing together design thinking approaches with significant investments in acquiring quality nature datasets and developing 15+ best-in-class nature accelerators. Our Data & AI capabilities, including experience in operating clean rooms, can ensure insight generation whilst protecting any commercially sensitive procurement / finance data across the Network Partners.

The project will involve several innovative elements, including:

1. Co-creation of a first-of-its-kind, bespoke solution for the electricity T&D sector, consolidating relevant datasets and nature measurement frameworks into a streamlined toolkit.
2. Mapping of the upstream supply chain for material focus areas, by bringing together leading-edge data sets, or potentially using Accenture's innovative supply chain mapping tool.
3. Expansion of Accenture's collaborative nature risk and opportunity identification approach and innovation methods, to co-create a set of T&D sector-wide risks and actionable opportunities.
4. Extensive socialisation of the outcomes and learnings within NG, SPEN and SSEN, and broader industry fora (e.g. via the ENA) if desired, catalysing broader innovation and nature action.

Scope

The scope of the work is detailed below to be completed in several stages:

Stage 0: Discovery

The aim of this stage is to kick off the project and prepare for the data collection period. This involves:

1. Prepare and mobilise: Identify relevant stakeholders, review the latest nature guidance, and prepare for kick-off workshop.
2. Kick off project: Conduct kick-off workshop to align on outcomes, plan, and governance, define the data requirements and issue the data requests.

The Network Partners will have a 6-week period to collect the requested data, with the Accenture team on hand to answer any questions and guide the Networks to support the data collection.

Stage 1: Design and Develop

The aim is to design the innovative approach and assessment tool, and to conduct the materiality and location assessment. This involves:

Design and develop innovative approach and methodology:

1. Ideating use cases and metrics and agree on user requirements.
2. Exploring options to map electricity T&D sector's upstream value chain based on available supply chain data.
3. Developing approach, via 2 co-creation workshops, for:
   - Identifying and prioritising focus areas, suppliers, risks and influential factors for further assessment.
   - Assessing nature dependencies, impacts, risks and opportunities, and agree actions to address.
   - Integrating relevant learnings from other sectors.

Develop assessment tool:

1. Conceptualising and building assessment tool, based on defined use cases, requirements, and method.

Conduct nature materiality and location assessment:

1. Identifying priority focus areas, suppliers, risks, and influential factors for further analysis, using agreed method.
2. Gathering feedback from network partners (and integrate learnings into nature materiality assessment tool).

Stage 2: Evaluate, assess, and Socialise

The aim of this stage is to use the tool developed in Stage 1 to evaluate and assess nature-related impacts, dependencies, risks, and opportunities, and to socialise the results. This involves:

1. Use of innovative tool developed in Stage 1 to evaluate the size and scale of nature dependencies and impacts for priority focus areas, suppliers, risks, and influential factors.
2. Assessment of upstream nature-related risks and opportunities and refining via validation workshop with network partners and key suppliers.
3. Refining the assessment approach, methodology and tool based on evaluation and assessment, and feedback from teams.
4. Ideating and prioritising actions to reduce nature-related dependencies, negative impacts and risks, and capture nature-related opportunities.
5. Developing recommendations on high-level targets, metrics, strategy and reporting implications, in line with GBF, TNFD, and other sustainability frameworks (to be explored and agreed upon with NG, SSEN and SPEN teams).
6. Run up to 3 end-of-project knowledge sharing sessions with NG, SSEN and SPEN teams, key shared suppliers, and broader industry fora if desired (e.g., via the ENA), to disseminate project conclusions and agree on next steps.

Objective(s)

Stage 0: Discovery

- To reach a unified vision on the project outcomes and data-sharing approach.
- To gain an understanding of the key stakeholders across the Network Partners.
- To gather the data requested, ready for the subsequent analysis.

Stage 1: Design and Develop

- To design an innovative, holistic, and transferrable approach, methodology and tool for assessing material supply chain nature impacts and dependencies.
- To draft a list of material focus areas, suppliers, risks, and influential factors for the electricity T&D sector.
- To agree on potential assessment metrics for use in Stage 2, in alignment with key nature frameworks.

Stage 2: Evaluate, assess, and Socialise

- To produce a detailed assessment report of material upstream nature dependencies and impacts.
- To produce a list of near- and long-term nature-related supply chain risks (physical and transitional) and opportunities, including consideration of risks arising from the energy transition.
- To develop recommendations on nature actions, strategies, high-level targets, and associated metrics, to support T3 planning.

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

Adopting actions recommended to reduce the Partners' impacts and dependencies on nature will result in cost savings (e.g., through reduced procurement costs, higher resource efficiency, and lower cost of capital). Learning from the project will reduce impacts on nature with positive impacts on health to those in proximity to the projects (both physical and mental) – e.g., reduction in pollution can have a direct impact on health, and having access to nature can have impacts on mental wellbeing. This will have indirect customer benefit through improved transparency and trust, because of an improved perception of the Partners' way of working, and potentially increased ESG scores for their businesses. Adopting actions to reduce the partners' negative impacts and dependencies on nature may have a positive community impact – e.g., if actions are around nature restoration, this can improve quality of life (e.g., through the enjoyment of higher quality natural environments for communities local to the projects). Nature and carbon are inextricably linked – therefore actions to reduce the Partners' negative impacts on nature are likely to have a positive effect on carbon reduction (e.g., actions involving reducing deforestation can increase carbon sequestration). Many minerals required for the energy transition are mined in key biodiversity areas. Improved understanding of where this happens in the Partners' supply chains can help to direct nature-positive actions towards the area's most at risk of biodiversity loss. This can, in the long-term, improve security of these mines' licenses to operate, and thus improve the security of supply of these critical minerals. Engaging suppliers on the topic of nature (a possibly recommendation which could emerge from this work) can help to strengthen relationships and build new shared values. This can improve security of supply and reduce risk of disruptions.

Success Criteria

The project will be considered successful if all the objectives mentioned above are achieved, and other desired success specifications are:

- Highlighting key links between climate and nature related risks and dependencies within supply chain.
- An assessment methodology that can be applied across other business within the relevant organisations.
- Transferrable methodology applicable to other utilities and Energy Networks Association (ENA).
- Alignment of method with global approaches to managing biodiversity and best practice, for example TNFD framework and GBF.
- Alignment with Science Based Targets for Nature process.
- Development of Excel tool and power BI dashboard developed at the end of the project with Interactive map showing where and how upstream supply chain locations interface with nature, across various 'state of nature' indicators.

Project Partners and External Funding

The following project partners will be supporting the project:
Accenture will conduct the study and deliver all the milestones of the project.
NGET is providing all the funding for the project and is the lead project partner.
SSEN and SPEN are also partners on the project with no additional funding however providing critical data required to complete the study.

Potential for New Learning

Throughout the project, it is expected that there will be continuous learning for the Network Partners, given the nascency of this topic in the industry. We will aim to support the development of their understanding throughout the project, through project check-ins and the deliverables, ensuring that all Network Partners are upskilled (where necessary) in this area. Areas with potential for new learning include understanding of the Networks' own nature-related impacts, dependencies, risks and opportunities, and how these can be addressed in BAU using the tool we will develop.

Scale of Project

All work is strategically linked and designed to deliver the defined objectives. Therefore, the scale of the project is as specified, and the studies will be undertaken to explore our supply chain for risks and dependencies.

Technology Readiness at Start

TRL4 Bench Scale Research

Technology Readiness at End

TRL6 Large Scale

Geographical Area

Study will be conducted virtually, and the overall geographical area is the UK.

Revenue Allowed for the RIIO Settlement

N/A

Indicative Total NIA Project Expenditure

£178,155

Project Eligibility Assessment Part 1

There are slightly differing requirements for RIIO-1 and RIIO-2 NIA projects. This is noted in each case, with the requirement numbers listed for both where they differ (shown as RIIO-2 / RIIO-1).

Requirement 1

Facilitate the energy system transition and/or benefit consumers in vulnerable situations (Please complete sections 3.1.1 and 3.1.2 for RIIO-2 projects only)

Please answer **at least one** of the following:

How the Project has the potential to facilitate the energy system transition:

The project facilitates energy system transition by helping NGET to understand biodiversity risks and dependencies within the NG global supply chain and identify several clear opportunities for future focus to assist in commitments to reduce scope 3 emissions. To deliver our Net zero commitments, it is essential that we understand the associated impacts of our supply chain and work together as a sector to influence positive change.

How the Project has potential to benefit consumer in vulnerable situations:

Developing an understanding of our supply chain risks is important to reduce the impact of our activities.

Requirement 2 / 2b

Has the potential to deliver net benefits to consumers

Project must have the potential to deliver a Solution that delivers a net benefit to consumers of the Gas Transporter and/or Electricity Transmission or Electricity Distribution licensee, as the context requires. This could include delivering a Solution at a lower cost than the most efficient Method currently in use on the GB Gas Transportation System, the Gas Transporter's and/or Electricity Transmission or Electricity Distribution licensee's network, or wider benefits, such as social or environmental.

Please provide an estimate of the saving if the Problem is solved (RIIO-1 projects only)

N/A

Please provide a calculation of the expected benefits the Solution

A network operative, once trained, can make an onsite decision by using the new tool, negating the need to call in specialist contractors at a cost of £150 an hour. It must be taken into account that by performing this additional test the operative will reduce his daily output between 10-30%. Outputs of the project may include recommendations on initiatives that result in cost savings, health and safety improvement, positive environmental impact, risk reduction, and improved supply chain resilience.

Please provide an estimate of how replicable the Method is across GB

The Networks will need to assign an internal data owner who can collect / refresh the tool's source data (e.g. yearly), in order to run refreshed dashboard reports. These results are then used to support ongoing business decision making. The developed methodology is of generic nature and would be applicable to all electricity network Licensees across GB, this would be inclusive of transmission and distribution owners.

Please provide an outline of the costs of rolling out the Method across GB.

If the project is successful, the method/tool can be further developed to roll out across GB. The estimated cost will be reviewed at the completion of the project. Conservative estimates of costs have been made for the purposes of assessing the value of this project, they are based on the cost of completing different project stages.

Requirement 3 / 1

Involve Research, Development or Demonstration

A RIIO-1 NIA Project must have the potential to have a Direct Impact on a Network Licensee's network or the operations of the System Operator and involve the Research, Development, or Demonstration of at least one of the following (please tick which applies):

☐ A specific piece of new (i.e. unproven in GB, or where a method has been trialled outside GB the Network Licensee must justify repeating it as part of a project) equipment (including control and communications system software).

☐ A specific novel arrangement or application of existing licensee equipment (including control and/or communications systems and/or software)

☐ A specific novel operational practice directly related to the operation of the Network Licensees system

☐ A specific novel commercial arrangement

RIIO-2 Projects

☐ A specific piece of new equipment (including monitoring, control and communications systems and software)

☐ A specific piece of new technology (including analysis and modelling systems or software), in relation to which the Method is unproven

☑ A new methodology (including the identification of specific new procedures or techniques used to identify, select, process, and analyse information)

☐ A specific novel arrangement or application of existing gas transportation, electricity transmission or electricity distribution equipment, technology or methodology

☐ A specific novel operational practice directly related to the operation of the GB Gas Transportation System, electricity transmission or electricity distribution

☐ A specific novel commercial arrangement

Specific Requirements 4 / 2a

Please explain how the learning that will be generated could be used by the relevant Network Licensees

All TOs have partnered together and will provide critical data to explore supply chain hence the learning generated through the project will be used by all relevant network licenses.

Or, please describe what specific challenge identified in the Network Licensee's innovation strategy that is being addressed by the project (RIIO-1 only)

N/A

Is the default IPR position being applied?

☑ Yes

Project Eligibility Assessment Part 2

Not lead to unnecessary duplication

A Project must not lead to unnecessary duplication of any other Project, including but not limited to IFI, LCNF, NIA, NIC or SIF projects already registered, being carried out or completed.

Please demonstrate below that no unnecessary duplication will occur as a result of the Project.

This project explores supply chain risks and dependencies for not only National Grid but all TOs which have not been explored or implemented before. NGED has done a similar study earlier but with a focus on distribution only. There are no other projects in development looking at supply chain risks or other related issues. The risk of duplication will be addressed through dissemination of progress with other licensees and being open to co-operate and collaborate with licensees working in this space.

If applicable, justify why you are undertaking a Project similar to those being carried out by any other Network Licensees.

N/A

Additional Governance And Document Upload

Please identify why the project is innovative and has not been tried before

We will adopt innovative approach to assess upstream nature impacts & dependencies. The project will create a bespoke and robust nature assessment methodology for the sector, aligned with leading nature frameworks (GBF, TNFD, SBTN, CDP), consolidated into a streamlined toolkit. The project will co-create a first bespoke solution for T&D sector while consolidating relevant datasets and nature

measurement frameworks into a streamlined useable toolkit. Such a solution has not been developed before by National Grid or other energy partners hence we will create a transferable solution to be adopted by other network providers.

Relevant Foreground IPR

The foreground IPR will be the knowledge gained about the supply chain risks. The learning will be brought together which will help us in developing a tool to be used by procurement.

Data Access Details

Data for this project and all other projects funded under the Network Innovation Allowance (NIA), Network Innovation Competition (NIC) or the new Strategic Innovation Fund (SIF) can be found or requested in a number of ways:

- A request for information via the Smarter Networks Portal at https://smarter.energynetworks.org, to contact select a project and click 'Contact Lead Network'. National Grid already publishes much of the data arising from our innovation projects here so you may wish to check this website before making an application.
- Via our Innovation website at https://www.nationalgrid.com/uk/electricity-transmission/innovation
- Via our managed mailbox box.NG.ETInnovation@nationalgrid.com

Please identify why the Network Licensees will not fund the project as apart of it's business and usual activities

Exploring supply chain, identifying the risks, and developing a solution in the form of Excel or a Power BI tool is not a business-as-usual activity as there is considerable risk associated with the development and implementation. There is a risk factor involved that may be the developed tool is not well defined or does not include all the required data. A strong test data along with validation data is required to develop the tool hence this needs a research phase.

Please identify why the project can only be undertaken with the support of the NIA, including reference to the specific risks(e.g. commercial, technical, operational or regulatory) associated with the project

There is an uncertainty if the project findings are found not effective, the project will not proceed to BAU, and current practices will not change. The project is anticipated to generate sufficient benefit to justify the expenditure over 10 years. So, the success of the project will only become truly apparent over a longer period. During that time alternative, currently unforeseeable, solutions may arise that provide greater benefit. Therefore, considering the risks associated with the success of the project, NGET believes NIA funding is the best route for the project.

This project has been approved by a senior member of staff

☑ Yes