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Technology Advisory Council

Terms of Reference Version 4 – June 2025

Introduction and Background

NESO exists to forge a sustainable energy future where everyone has access to reliable, clean and affordable energy, guided by values of trust, inclusion, innovation, and delivering value for consumers, communities and the planet. Our RIIO-2 Business Plan¹ sets out the proposed activities we will undertake to enable this. It represents a significant investment – an average of £257 million for each of the 5 years, including over £400 million in IT investment – but has the potential to deliver £2 billion consumer benefits from our transformational activities alone.

Our proposals are ambitious, and stakeholders have asked if we can deliver such a scale of change. We also recognise that we have the opportunity to be more transparent in our change delivery. Our 2025 zero-carbon ambition will need the support, insight and experience from the wider industry to help guide and inform the delivery of our transformational proposals. This includes the development of new systems (encompassing processes and technological solutions), which must facilitate greater volumes of data and more market participants.

To help develop and implement these systems, we committed in our RIIO-2 business plan to introduce a cross-sector Technology Advisory Council (TAC). It will set the guardrails for our system transformation, provide stakeholders the opportunity to be involved in our strategic decision-making, and afford greater visibility and confidence of agile, transparent delivery. In addition, it will leverage the expertise of out-of-sector of organisations who have been through similar transformations.

The TAC will also support NESO in fulfilling its broader role of providing leadership on digitalisation in the energy sector; this is in keeping with our responsibilities to advise and inform.

We engaged extensively on the creation of the TAC during the development of our RIIO-2 Business Plan. Overall stakeholder sentiment has been positive, and their comments have been incorporated to help create this Terms of Reference document.

¹ <https://www.neso.energy/what-we-do/our-strategy/our-riio-2-business-plan>

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Purpose

The overarching purpose of the TAC is to work with NESO to provide support in its ambition to establish itself as a Digital First organisation and as a Digital Leader in the energy sector.

Digital First

1. Help set the **strategic direction** of the NESO transformation journey in systems (including process and technology) development
2. Provide **stakeholder input** into the NESO transformation, ensuring the changes we make reflect wider market needs.
3. Bring **transparency** around our decision making and help NESO communicate change externally in the appropriate manner. This will help stakeholders plan their own digital system changes, including those that will interface with NESO.
4. Ensure **accountability** from NESO for delivering on its promises and proactively communicating changes.
5. Allow us to consult and engage on the experience of interacting with NESO and **invite input into key design, development and testing phases of our solutions development**. It will also provide transparency of the decision-making logic behind our systems.

Digital Leader

6. Help NESO **understand the nature and dynamics of energy system transformation** as it relates to parties and stakeholders across the energy sector and in relevant adjacent sectors.
7. Bring **good practice and leading-edge approaches** that will facilitate working with stakeholders across the sector.
8. **Communicate the progress** that NESO is making in establishing a leadership position.
9. **Support NESO** in being capable of taking a leadership view and deploying that in a way which enables other to be successful in their own digital transformation.

Structure of the Technology Advisory Council

The TAC operates at both a strategic level and a technical level. At the strategic level the TAC will focus on hard questions and issues where independent advice would be most valuable. In this capacity it supports complex decision making, especially where these decisions are enduring and hard to reverse. This may come to questions such “are we doing the right thing?” or “how should we go about this task?”. In any case the perspective should be strategic... looking forward

Public

rather than backward on delivery matters, unless there are specific delivery-related issues or risks.

At the technical level the TAC will help guide the requirements for solution development, delivery and use and oversee matters relating to design, testing and implementation when required in an advisory capacity.

The TAC addresses the strategic level and is governed by these Terms of Reference.

The technical level is delivered through task-and-finish sub-groups established by the TAC for specific topic areas. These sub-groups will have their own respective Terms of Reference, Sub-groups will report on their work to the TAC.

Roles and Responsibilities

Strategic level

- Works with ESO to translate ambition and business direction into a technological and digital transformation strategy
- Provide meaningful specific contribution to the NESO programme of work focussed on advising and offering guidance on the high-level strategies and repercussions/opportunities and challenges of the immense transformation being undertaken.
- Ensure real value/impact is being delivered. What is the line of sight to action/impact?
- Offer comment/insight on where there are gaps/opportunism or challenges on the horizon.
- Identify and advise on interdependencies and trade-offs; testing assumptions.
- Advise on priorities.
- Challenge time scales.
- Support on connecting to similar companies / individuals working on similar things

Technical level

Area	Role
Requirements and design	<ul style="list-style-type: none"> • Provide input into: <ul style="list-style-type: none"> • Understanding market participant requirements • Ensuring tools meet market participant requirements

Public

	<ul style="list-style-type: none"> Assess system level interactions, dependencies and trade-offs and their potential impacts
Development and testing	<ul style="list-style-type: none"> Review and assess development of product and associated market processes (e.g. data transfers) Advise on proof-of-concept, simulation, testing and trialling in beta.
Implementation	<ul style="list-style-type: none"> Review implementation Incorporate best practice from external organisations that have been through digital transformation Provide input into lessons learned Assess value for money/input into formal performance evaluation².

Constitution

The TAC is an independent body, comprising members with a wide range of expertise who collectively represent the views and interests of customers, service providers, consumers, technology companies and other stakeholders.

Chair and Membership

The group is representative of NESO's role and the wider industry. This is subject to change as members join/leave the TAC.

Sector	Name	Organisation
Chair	Eric Brown	Independent
Networks	Gareth Hislop	SP Energy Networks
Markets	Andy Hadland	Independent
	Alastair Martin	Flexitricity
	David Sykes	Independent
	Kate Garth	RWE Renewables
	Alvaro Sanchez Miralles	STEMY Energy
	Fred Drewitt	Shell
	Naomi Baker	EnergyUK

² Subject to discussion with Ofgem, there could be a formal input from the TAC into NESO's performance evaluation

Public

Technology & Transformation	Teodora Kaneva	TechUK
	Jo-Jo Hubbard	Electron
	Simon Pearson	Independent
	Anthony Riding	Elexon
	James Houlton	Mesh-ai
	Alex Waslin	BP
	Melissa Stark	Independent
Academia	Chris Dent	University of Edinburgh

NESO will be represented by:

- Shubhi Rajnish (CIO)
- Joseph Stepney (Head of Strategy & Architecture)
- Cameron Shade (Senior Deliver Manager - Markets) – technical secretary

Additional representation from NESO will support the meetings as required. At the technical level, NESO representation will consist of product managers / owners and, where appropriate, subject matter experts.

Ofgem may be invited to nominate individuals to attend as observers to all meetings. Ofgem will be encouraged to periodically provide feedback on how the group is performing against its purpose.

Membership can be reviewed by the Chair in consultation with the TAC and NESO from time to time and if necessary, adjusted to ensure suitable representation from across NESO's stakeholders or to add particular areas of expertise in accordance with the agreed purpose of the group.

Chair

The Chair will be appointed by NESO, in an open and transparent manner. The recruitment process will be like that used for ERSG. The Chair shall act as an individual and not represent any particular organisation.

If the designated Chair is not available for part or all of a meeting, then a formal nominee shall be agreed at that meeting with TAC members and will be responsible for convening and conducting

Public

the relevant meeting or section of the meeting. This will be facilitated by the Technical Secretary and be referred to as the Alternate Chair. The Alternate Chair is responsible for informing the Chair as to the salient points and decisions raised and agreed at the meeting.

The Chair may attend occasional meetings with Ofgem to discuss the progress of the group.

The Chair, supported by the Technical Secretary, will be responsible for producing publicly available reports at least once per year on the work of the TAC.

NESO cannot unilaterally dismiss the Chair without first notifying the TAC. The TAC will need to understand the exact reasons for dismissal and may seek further information ahead of any dismissal.

Technical Secretary

NESO will appoint a Technical Secretary who will report to the Chair. The Technical Secretary shall support the Chair in ensuring the smooth functioning of the TAC. The Technical Secretary will act as an independent support for the Chair and the TAC ensuring arm’s length interactions with wider NESO employees.

The Technical Secretary will be responsible for producing and circulating relevant materials as described in the sections below called “Inputs” and “Outputs”.

Role of Technology Advisory Council members

Members of the TAC are responsible for scrutinising and providing input and expert challenge. While members do not formally represent all of the organisations in their sector, we expect members’ views to be influenced by the type of organisation they are from, and their experience of a particular sector. Hence, we have made efforts to ensure a good range of representation across the different sectors.

In practice, this means individual members will:

- Bring their expertise, new insights and engagement skills.
- Consider and review all documentation circulated.
- Identify areas of agreement and disagreement, and input into the group’s report.
- Provide representation as an individual.

Public

- Sign on to an agreed programme of work / forward agenda for the group. This will be discussed and adjusted with agreement from the group as requirements change or are further understood.
- Be required to formally approve the group's Terms of Reference (i.e. this document).

Commitment needed

Current members of the TAC will serve from Q1 2023/24 until the completion the NESO funding cycle in March 2025. Members will be invited to review their ongoing membership of the TAC at this point. If they would like to continue as a member they will be invited to do so with an updated Terms of Reference and to continue until the end of 2025-26 funding cycle. Members must advise the Chair of any change in their circumstances at the earliest opportunity.

The expectation is that all members will make every effort to attend all meetings. If members do not attend for 3 meetings consecutively they may be asked to leave the council.

Any proposal (by NESO, the TAC or otherwise) to extend the commitment of the TAC will be discussed and agreed by the TAC.

As members should act in their capacity as an individual, they are not expected to propose delegates/ substitutes should they be unable to attend a meeting.

Meetings may take place virtually or at a suitable location and will be arranged by the Technical Secretary. Meetings are expected to be held once per quarter – this may be amended after appropriate consultation with the TAC. Members shall confirm notice of attendance or apologies of absence to the Technical Secretary no less than two weeks in advance.

Remuneration

The Chair will receive remuneration to recognise the level of commitment required.

Requests for expenses and/or remuneration from other members of the group will be considered by the Chair and NESO. Any remuneration and expenses that are agreed will be paid by NESO.

Non-disclosure and declaration of interests

Each member of the TAC is required to sign a non-disclosure agreement (NDA) that prohibits the use of information marked as "CONFIDENTIAL" that they obtain in their role on the TAC for any other purpose (including commercial purposes).

Public

Meetings shall be conducted, unless otherwise stated by the Chair or Alternate Chair (for example, where the discussion relates to information marked as “CONFIDENTIAL”), under “Chatham House Rules” – that is, information disclosed during a meeting may be reported by those present, but the source of that information may not be explicitly or implicitly identified.

Each member of the TAC is required to complete a Declaration of Business Interests form that requires them to disclose any business interests (including, but not limited to, shares, consultancy arrangements, directorships) that they or their partner or spouse have in National Grid plc. The Chair, in consultation with the NESO, shall consider any interests disclosed before making a final decision on the individuals’ appointment to the TAC and/or to share any information with them.

If there are individuals where there is an increased risk of a perceived conflict (such as individuals who work for an organisation that supplies services to NESO) NESO will on a case by case basis assess whether it is appropriate for that individual to be excluded from forming part of the team that bids for or supplies services to NESO.

At the beginning of each meeting the Chair and the TAC shall ascertain with the assistance of members the existence of any conflicts of interest. The agenda (including the participation of members with identified conflicts of interest in relevant agenda items) and circulation of materials will be managed to ensure that these issues are managed appropriately.

Presence of a quorum

At least 10 members of the TAC, including the Chair or Alternate Chair, is required for a meeting to be quorate.

Inputs

For each meeting the Technical Secretary will produce a pack consisting of:

- Agenda and apologies for absence
- Minutes from the previous meeting
- Papers and other items for discussion, decision or noting (clearly demarcated)
- Actions log

This pack will form pre-read material that will be circulated to the group at least one week in advance of each meeting. The pre-read material that supports the main items on the agenda should where possible, include a 2 -3 page summary of the material to be discussed with 3-4

Public

questions that members of the TAC should be prepared to comment on. This paper may be accompanied by presentation material or other documentation that will be used during the meeting or which provides supporting background detail.

An agenda will be distributed with pre-read material prior to each meeting and suggestions for future topics can be discussed with the Technical Secretary or during the meeting. This will be approved by the Chair through iteration and approval of inputs.

At the beginning of each meeting the Chair should confirm with the group whether the minutes from the previous meeting are an accurate and complete record of the discussion that took place.

Outputs

The Technical Secretary will circulate to the group the following materials no later than one week after each meeting, for comment:

- Meeting minutes (including decisions made, items discussed and noted, and recommendations)
- Actions log

The minutes should anonymise or redact any commercially sensitive information. They will be made publicly available³.

³ [NESO Technology Advisory Council Documents | NESO \(neso.energy\)](#)