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

Sep 2025

Project Reference Number

NIA_SPEN_0120

Project Registration

Project Title

AI Compass

Project Reference Number

NIA_SPEN_0120

Project Licensee(s)

SP Energy Networks Transmission

Project Start

August 2025

Project Duration

0 years and 8 months

Nominated Project Contact(s)

Adam Steen, Sponsor

Project Budget

£249,000.00

Summary

SPEN aims to move from isolated AI experimentation to a strategic, business-led approach to AI adoption. This project will deliver a tailored AI strategy, leadership education, insight into emerging AI trends, and rapid prototyping of priority use cases. The approach is designed to align with SPEN's operational goals, business context, and digital maturity, building capability across the organisation while ensuring practical and measurable outcomes. AI Compass supports Ofgem's vision for the responsible deployment of AI and provides a replicable model for other network operators. Outputs and learning will be shareable across GB networks to accelerate wider AI readiness and reduce duplication.

Nominated Contact Email Address(es)

innovate@spenergynetworks.co.uk

Problem Being Solved

SPEN recognises the need for a bespoke AI strategy that addresses the unique demands of its network operations, customer obligations, and regulatory environment. While early exploration has begun, current AI activity remains fragmented, focusing largely on document-centric use cases and disconnected from broader operational planning, asset management, and service delivery.

To become a future-ready, AI-enabled network operator, SPEN must move beyond experimentation and develop a coordinated, organisation-wide approach to AI adoption—one that incorporates scenario planning, risk mitigation, and seamless integration with existing systems and digital infrastructure.

Without this structured intervention, there is a risk of:

- **Inefficient investment** in unscalable pilots or misaligned technologies
- **Reduced internal alignment** between innovation, operations, and regulatory strategy
- **Missed opportunities** to improve customer outcomes, network resilience, and cost-efficiency
- **Limited confidence and capability** to lead responsible AI deployment at scale

SPEN requires targeted support and specialist expertise to co-develop a practical, context-aware pathway to AI adoption—one that builds on its existing data and digital foundations while meeting the expectations of Ofgem and wider GB stakeholders.

Method(s)

This project uses a collaborative, phased methodology that blends strategic insight, expert facilitation, practical experimentation, and leadership development. While technically informed, the method is primarily organisational and behavioural focused on equipping SPEN to adopt AI in a way that is aligned, purposeful, and enduring.

Each phase is co-created with SPEN through structured workshops and strategic inquiry. This isn't a consultant-led download or an off-the-shelf framework. The value is in the process: building internal alignment, shifting mindsets, and embedding capability through expert-led co-creation. As a result, the outcomes don't just land—they stick.

The method has been proven in other regulated industries, including financial services and education, bringing cross-sector insight to energy-specific challenges.

Phased Approach

- **Inception & Discovery:** Organisational immersion to understand SPEN's unique context, strategic goals, workforce dynamics, and operational context. This phase sets the tone—ensuring the research, strategy, and roadmap phases are deeply contextualised and deliver maximum impact.
- **AI Education Programme:** Targeted sessions designed to meet each leadership cohort where they are: strategic insight for executives, operational impact for managers, tooling and capabilities for technical teams. Delivered by expert facilitators, this phase builds a confident, common foundation for the journey ahead. This programme can be tailored to interests & focus areas.

Horizon Scanner: Bespoke, forward-looking research that identifies AI-driven change across strategy, operations, workforce and infrastructure. It creates the shared understanding and alignment needed to inform strategy development and roadmap creation, while also drawing from adjacent and regulated industries for inspiration.

- **AI Transformation Roadmap:** A structured, sequenced plan for blending human and AI intelligence across SPEN. We co-develop the roadmap together, identifying high-value use cases, key risks, organisational enablers, and workforce implications. What emerges is not just a set of artefacts—it's a strategy the SPEN leadership team will *own*, having co-created it.
- **Rapid Prototyping:** Targeted 4-week experiments to test and learn from high-priority use cases. These are tightly scoped, outcome-oriented, and focused on building evidence and confidence. Prototyping can be standalone, but when grounded in the roadmap, it delivers faster returns and higher impact.

Scope

The AI Compass project will equip SPEN with a structured, strategic, and practical pathway for adopting AI in a way that delivers measurable value across operations, workforce, customer service, and long-term network resilience.

The project focuses on identifying and prioritising high-impact AI use cases, building internal capability, and testing priority ideas through expert-led prototyping. It will result in a robust, actionable roadmap for AI adoption that balances ambition with regulatory obligations, operational maturity, and consumer expectations.

The approach is business-led, people-focused, and grounded in SPEN's real-world challenges and opportunities. It complements ongoing work on AI governance by connecting strategy with implementation, thereby bridging the gap between vision and action.

The scope includes:

- Targeted AI education for executives, senior managers, and technologists to build fluency, alignment, and confidence to lead AI driven change

- Bespoke horizon scanning and industry research, tailored to SPEN's strategic priorities, customer obligations, and regulatory context
- Co-created AI Transformation Roadmap, covering people, process, use cases and technology needs in a phased and pragmatic implementation plan
- Rapid prototyping of high-priority use cases, enabling SPEN to test feasibility, surface risks, and build momentum through early wins

This work will generate reusable artefacts and learning that can support wider GB rollout across other DNOs and TOs.

Net Benefits for Consumers

Consumers will benefit through the identification of opportunities for:

- Faster resolution of faults and reduced network downtime
- More efficient use of resources, reducing cost pressures on network charges
- Improved customer service experiences, powered by AI-enhanced engagement and responsiveness
- Smarter planning and maintenance, resulting in more resilient infrastructure and fewer avoidable interruptions

Over time, these improvements support a more responsive, lower-cost, and higher-quality energy service for end users.

Benefits to GB Electricity Transmission and Distribution

The project will identify opportunities to:

- Optimise operational and workforce planning across critical infrastructure
- Reduce the cost-to-serve through automation, augmentation, and efficiency gains
- Extend the lifespan of physical assets via predictive insights and data-led decision-making
- Act as a replicable blueprint to accelerate AI transformation across the wider electricity system

By bridging the gap between strategy and implementation, AI Compass positions SPEN and the GB network more broadly to succeed in the intelligence era.

Objective(s)

The objectives of this project are to:

1. Build AI fluency and confidence across SPEN's executive, senior leadership, and technical teams, enabling more informed, aligned decision making and laying the foundation for an AI ready organisation.
2. Generate tailored strategic insight through bespoke research that identifies emerging AI trends, sector risks, and evolving customer expectations, translating these signals into actionable intelligence for SPEN's context.
3. Identify and prioritise high-impact AI opportunities across SPEN's core business functions, with a focus on reducing human bottlenecks, improving operational performance, and enhancing network resilience.
4. Co-create an Intelligence Transformation Roadmap that integrates people, process, and technology into a phased, practical plan for responsible AI deployment, aligned with SPEN's strategy, regulatory obligations, and delivery capacity.

Validate top-priority use cases through rapid prototyping, demonstrating feasibility in real-world settings, reducing implementation risk, and providing evidence to support scale-up decisions.

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

While this project is primarily focused on strategic planning and operational AI enablement, it is expected to deliver indirect but meaningful benefits for consumers in vulnerable situations, both by improving core service reliability and by shaping future AI deployment to be fair, inclusive, and responsive.

Technical Impact:
By enhancing predictive maintenance, storm preparedness, and fault resolution, the project facilitates faster restoration times and improved network reliability. This reduces service disruption for consumers who are medically dependent on electricity or face challenges during outages.

Financial Impact:
AI-driven efficiencies in operations and asset management are expected to lower avoidable overheads and improve resource allocation. Over time, this can help ease price pressures across the customer base, including for financially vulnerable households.

Wellbeing Impact:
Improved customer engagement and smarter triaging of service requests, enabled through future AI capabilities, will help ensure vulnerable consumers receive faster, more appropriate support. The Horizon Scanner will explicitly examine shifts in customer expectations, with a particular focus on accessibility, inclusivity, and equitable service design.

Additionally, the education and roadmap phases embed a responsible AI lens from the outset, promoting fairness, bias mitigation, and inclusive decision making in future implementations. This helps ensure that as AI becomes more embedded in the network, it supports, not sidelines, those in vulnerable situations.

Success Criteria

The project will be considered successful if it achieves the following outcomes:

1. **Increased AI fluency and leadership alignment:**
   Executives, senior leaders, and technologists demonstrate improved understanding and confidence in AI-related decision-making, evidenced by feedback from tailored education sessions.
2. **Delivery of bespoke strategic insight:**
   Horizon Scanner research outputs offer SPEN-specific insights into emerging AI trends, risks, and industry shifts, as rated valuable and actionable by SPEN stakeholders.
3. **AI Transformation Roadmap produced:**
   A co-created AI roadmap is delivered, aligned to SPEN's business priorities, regulatory context, and operational environment, and endorsed by relevant SPEN directorates. This will include a clear, validated opportunity map that highlights high-impact AI-enabled use cases across SPEN's core business functions.
4. **Prototypes delivered and evaluated:**
   At least one rapid prototype demonstrates the real-world application of AI in a priority operational context, with a post-pilot review capturing lessons learned and business case potential.
5. **Improved organisational readiness:**
   Evidence that internal capability has been strengthened—through artefacts, documentation, and alignment sessions—to support AI implementation and adoption beyond the project duration.

Project Partners and External Funding

This project is being delivered by SP Energy Networks with advisory, research, and facilitation support from Owendale Advisory, acting as a contracted supplier.

There are no formal Project Partners or external funding sources involved.

Potential for New Learning

This project will generate valuable new learning across multiple dimensions of AI adoption within electricity networks, with specific relevance to operational, organisational, and strategic transformation.

Key areas of learning will include:

- Approaches for building AI fluency across different leadership tiers, and which education models are most effective in regulated, engineering led environments
- Methods for evaluating and prioritising AI use cases based on strategic value, risk, readiness, and customer impact
- How emerging AI trends intersect with challenges in storm preparedness, predictive maintenance, customer engagement, and network planning
- The technical, cultural, and governance conditions required to move from exploration to responsible, scalable AI adoption
- Early indicators of value during prototyping; helping assess whether a use case is likely to deliver measurable operational or customer outcomes
- How AI is reshaping the future of work, including emerging skills, cross-functional teaming, and the evolution of decision-making roles
- Organisational traits that enable or inhibit successful adoption, including how to build internal alignment, foster experimentation, and support the shift toward AI-enhanced ways of working
- Practical frameworks for thinking "AI-natively" in large, complex businesses, enabling the redesign of legacy processes, services, and operating models
- Techniques for spotting and shaping AI opportunities that unlock operational efficiency, productivity, and customer experience gains
- Considerations for ensuring AI-enhanced services remain inclusive, accessible, and responsive to the needs of vulnerable customers, particularly in outage management and communications

Dissemination plan:

- Findings from the Horizon Scanner and Roadmap phases will be distilled into shareable artefacts (e.g. case studies, use case libraries, strategy templates) and made available via the ENA Smarter Networks Portal
- Lessons from the education programme and rapid prototyping will be captured in a final learning report, including what worked, what didn't, and how insights can inform future initiatives
- Additional materials will be shared through SPEN-hosted briefings, innovation forums, and Ofgem working groups to support knowledge transfer across DNOs and TOs
- Templates, design patterns, and decision-support tools will be packaged for re-use by other network licensees building their own AI capability

This learning will inform both SPEN's internal AI strategy and the wider sector's approach to deploying AI responsibly and effectively bridging the gap between ambition and real-world operational value.

Scale of Project

The scale of this project reflects the ambition and complexity of embedding AI meaningfully across a critical infrastructure operator like SPEN. At £249,000, the investment enables a full-cycle programme, from education and strategic insight through to roadmap development and rapid prototyping, providing a unique combination of capability-building, opportunity validation, and delivery readiness.

The scope spans multiple business functions (construction, maintenance, storm preparedness, customer engagement) and engages stakeholders from the executive level through to operational and technical roles. This cross-functional breadth is essential to ensure that AI adoption is not siloed, but instead aligned across strategy, operations, and delivery.

Reducing the scale would significantly limit the opportunity for new learning. For example:

- Without the education phase, SPEN's leadership may lack the confidence or context to steer AI investment meaningfully
- Without the Horizon Scanner, SPEN would risk replicating generic industry trends rather than targeting opportunities that reflect its own regulatory, geographic, and customer realities
- Constraining the roadmap and use-case development would undermine the ability to align AI opportunities with business priorities, limit stakeholder engagement, and reduce the quality of prioritisation, resulting in lower strategic clarity and less replicable learning
- Without prototyping, the organisation would lose the chance to test feasibility and surface learnings tied to delivery risk, technical integration, and cultural fit

By combining strategic, technical, and organisational elements, the project maximises the potential for transferrable insight, supporting SPEN's goals and enabling replication across other network licensees facing similar transformation challenges.

Technology Readiness at Start

TRL2 Invention and Research

Technology Readiness at End

TRL5 Pilot Scale

Geographical Area

The project will be delivered through a combination of in-person and remote collaboration. Key activitie, including stakeholder workshops, leadership education sessions, and prototyping discussions, will take place at SPEN's headquarters in Glasgow. Additional work, including research, analysis, and development of deliverables, will be conducted remotely by both SPEN and Owendale Advisory teams.

This hybrid model ensures broad participation across business units while minimising disruption to day-to-day operations.

Revenue Allowed for the RIIO Settlement

Indicative Total NIA Project Expenditure

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 supports the energy transition by accelerating SPEN's ability to deploy AI across critical operational areas, enhancing forecasting, planning, asset management, customer engagement, and storm response. These improvements will enable more responsive, data-driven infrastructure management, helping SPEN operate a smarter, more adaptive network, critical to managing the increasing electrification and distributed energy resources. The project also builds internal capability for future AI adoption, creating conditions for scale.

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

While not directly focused on consumer interventions, the project enables improvements that indirectly benefit vulnerable consumers. AI-enabled fault prediction, response, and customer triaging can reduce outages and improve service for those with medical or accessibility needs. Enhanced operational efficiency may also contribute to cost savings over time, helping to ease financial pressure on households. Notably, the project embeds fairness and inclusivity into AI education and roadmap planning, ensuring that future implementations consider the needs of vulnerable groups from the outset.

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)

Not applicable (RIIO-2 project)

Please provide a calculation of the expected benefits the Solution

n/a

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

The method, comprising the AI Education Programme, Horizon Scanner, Intelligence Transformation Roadmap, and Rapid Prototyping, is highly replicable across the GB energy sector. It is non-site-specific, modular, and designed to flex across varying organisational structures, maturity levels, and strategic priorities.

- **Replicable across**: All DNOs and Transmission Operators
- **Relevant for**: HQ-based leadership, operational planning teams, innovation functions, digital and technology teams, and People/HR functions
- **Applicability**: 100% of electricity transmission and distribution licensees could apply this method with minimal modification

That said, **contextualisation is critical to impact**. Each DNO operates with unique goals, regulatory nuances, systems, and workforce dynamics. Our approach ensures these local realities are reflected throughout each engagement, maximising relevance, ownership, and long-term value.

The artefacts, frameworks, and templates used within this method are already well-established and tested across other regulated sectors. They are designed for ease of reuse and adaptation, enabling each licensee to move faster while avoiding duplication.

Owendale has successfully applied this approach in industries such as financial services, education and health, bringing broader experience, diverse perspectives, and transferable insights. This cross-sector expertise helps DNOs avoid common pitfalls, challenge assumptions, and accelerate progress with confidence.

As each organisation applies the method, collective insight deepens, contributing to a more informed, coordinated, and future-ready network across GB.

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

The table below outlines indicative costs for each core component of the proposed method. These figures reflect Owendale's experience delivering similar engagements and are intended to provide a realistic and transparent view of the investment required for a full rollout across GB DNOs.

Costs vary depending on the depth, scope, and complexity of each engagement. Our approach is modular and scalable, enabling tailored delivery that aligns with each licensee's strategic priorities, operational maturity, and specific areas of focus. In all cases, our emphasis is on practical value, organisational alignment, and measurable impact.

The AI Education Programme is estimated to cost between £15,000 and £25,000, with variations depending on the number of leadership layers involved, the depth of content delivered, and whether additional modules are required for technologists. The Horizon Scanner ranges from £40,000 to £65,000, influenced by the scope of scanning—whether the Distribution Network Operator (DNO) prefers broad coverage or targeted deep dives into specific areas such as Automate, Enhance, or Experience. The AI Transformation Roadmap is projected to cost between £60,000 and £110,000, shaped by the breadth of ambition, the number of stakeholders engaged, and the level of planning across the Automate, Enhance, and Experience dimensions. Lastly, Rapid Prototyping is priced at £45,000 to £60,000 per month for part-time support, with costs varying based on the complexity of the use case—for example, developing an AI agent embedded within business processes versus creating an AI-enhanced customer-facing application.

Some components, such as the AI Education Programme and Horizon Scanner, can be commissioned individually, depending on a DNO's immediate needs. The Intelligence Transformation Roadmap, however, builds on insights from the Horizon Scanner and is best delivered as a follow-on to ensure strategic coherence. Rapid Prototyping can also be commissioned as a standalone initiative, though we recommend it forms part of a broader programme to ensure the right use cases are selected and the highest-ROI opportunities are prioritised.

This modular approach supports flexibility in rollout while maintaining a coherent, joined-up strategy across licensees. It also enables knowledge sharing, reduces duplication, and promotes adaptation to each organisation's unique operational and regulatory context.

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

n/a

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

Please demonstrate how the learning from the project can be successfully disseminated to Network Licensees and other interested parties.

This project will generate significant new learning for electricity distribution and transmission licensees across GB as they navigate the complex challenge of AI adoption. The learning is practical, transferable, and directly applicable to a wide range of operational, strategic, and regulatory contexts.

Key areas of new learning include:

1. **A replicable methodology for AI adoption**
   A phased, evidence-based approach, combining education, foresight, strategic planning, and prototyping—that other licensees can adopt or adapt to accelerate their own AI readiness. This includes learning how to align AI strategy with operational maturity, regulatory constraints, and customer obligations.
2. **Sector-specific use case identification and prioritisation**
   Insight into how AI can be applied in electricity networks to improve efficiency, resilience, workforce productivity, and customer outcomes. This includes a library of high-potential use cases and a repeatable process for prioritising based on impact, feasibility, and risk.
3. **Human and cultural considerations in AI adoption**
   New understanding of how to address workforce impacts, skills gaps, and customer trust when deploying AI in a regulated utility environment. This learning is especially valuable for ensuring the responsible and inclusive adoption of practices across the sector.
4. **Evidence from real-world prototyping**
   Practical insight into what works (and what doesn't) when AI solutions are tested in live operational contexts, helping other licensees avoid duplication of effort and de-risk their own implementations.

All outputs from the project, including frameworks, artefacts, insight reports, and lessons learned, will be made available in a form that supports knowledge transfer across GB licensees. The method is explicitly designed to be non-site-specific, ensuring that learning is both actionable and widely applicable.

Please describe how many potential constraints or costs caused, or resulting from the imposed IPR arrangements.<

Please justify why the proposed IPR arrangements provide value for money for customers.

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.

AI Compass has been reviewed against existing innovation projects under IFI, LCNF, NIA, NIC, and SIF portfolios, and no unnecessary duplication has been identified.

While there are several ongoing and past projects exploring AI use cases or technologies in energy networks, AI Compass is distinct in both its method and intent:

- It introduces a new methodology for AI adoption that is strategic, organisation-wide, and business-led—not simply the technical exploration of individual tools or systems.
- It focuses on human-centred transformation, embedding AI through leadership capability, cultural readiness, cross-functional alignment, and regulatory sensitivity. This is not the focus of any existing NIA or NIC project.
- The project is technology-agnostic and does not seek to develop or deploy a specific AI platform. Instead, it provides a repeatable framework for identifying and prioritising AI opportunities, creating strategic roadmaps, and testing use cases via rapid prototyping.
- While some past innovation projects have explored AI in isolated areas (e.g. outage detection, asset monitoring), AI Compass is unique in its scope: connecting leadership education, horizon scanning, strategic planning, and applied prototyping in a single, end-to-end method.

This project builds on rather than duplicates existing work by creating a replicable, strategic approach that can guide AI investment across the entire GB electricity network. It will also help unlock greater value from previous and future AI-focused innovation by improving prioritisation, coordination, and implementation readiness.

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

AI Compass is innovative because it introduces a new, replicable methodology for responsibly and strategically adopting AI within the electricity distribution sector. While AI is being explored in isolated pilots, there is currently no end-to-end, business-led, and operationally grounded approach for DNOs to identify, prioritise, plan, and prototype AI in a way that aligns with regulated outcomes, customer obligations, and workforce readiness.

The project combines:

- A tailored AI education programme that addresses leadership-specific needs (a first in the sector);
- A structured foresight process through the Horizon Scanner;
- A co-created, cross-functional Intelligence Transformation Roadmap;
- And real-world testing of use cases through Rapid Prototyping.

This integrated, capability-building method has not been tried before in the GB energy sector. It goes beyond typical innovation projects that focus on isolated technologies by tackling organisational alignment, people change, strategic planning, and operational readiness, areas often overlooked in AI programmes.

Relevant Foreground IPR

This project is focused on strategic advisory, facilitation, research, and organisational capability-building. As such, no technical tools, software, or patentable innovations will be developed.

The outputs, including the Horizon Scanner insights, AI Transformation Roadmap, and use case recommendations, will be tailored to SPEN's specific context and are not intended for commercial exploitation. These deliverables may contain know-how and structured methodologies contributed by the delivery partner (Owendale Advisory), but no new standalone IPR is expected to be created.

No Background IPR is required to access or use the project outputs for SPEN's internal purposes.

Data Access Details

This project does not involve the collection or processing of personally identifiable information (PII), customer usage data, or operational network telemetry. Any information gathered, such as internal stakeholder insights or strategic documentation, will be qualitative, anonymised, and context-specific to SPEN's internal processes.

As such, no datasets are expected to be generated that would be relevant or appropriate for public release. Should any shareable artefacts arise during the project (e.g. case studies, opportunity frameworks, prioritisation models), these will be disseminated via the ENA Smarter Networks Portal as part of the project's knowledge-sharing commitments.

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

AI Compass addresses a problem that is not yet mature enough for business-as-usual funding. It explores how AI can be adopted in a way that is scalable, responsible, and strategically aligned, but the business case is still unproven, and the operational, cultural, and regulatory challenges are significant.

SPEN's current internal work on AI governance lays a foundation, but additional capability, insight, and structured experimentation are required to move from principles to practice. Funding this under business-as-usual would be premature and difficult to justify in the absence of validated use cases, frameworks, and stakeholder buy-in.

We recognise that this initiative must be firmly rooted within the framework of Ofgem's 'Ethical AI Use in the Energy Sector', first published during the T2 price control, and which will serve as the guiding principle for all related use cases and foreseeable scenarios. Through this Discovery project, we will ensure that every AI-driven application aligns with SPEN's Business Transformation AI strategy, placing ethical integrity at the forefront. All potential outcomes and scenarios will undergo thorough evaluation to guarantee full compliance with established ethical standards.

Furthermore, the project explores organisational models, behavioural shifts, and cross-functional operating models for AI of which aren't established areas of investment within existing BAU budgets.

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

The project carries multiple layers of risk that make it appropriate for support via the NIA:

- Commercial risk: The business case for scaling AI adoption within a regulated network remains unproven. The value of use cases, implementation effort, and ROI are uncertain and must be tested in practice before internal investment can be justified.
- Operational risk: Introducing AI into critical planning and operational contexts (e.g. outage response, customer triage) requires validation to ensure safety, effectiveness, and workforce acceptance.
- Cultural and organisational risk: The transformation required involves shifts in mindset, skillset, and cross-team collaboration. These are inherently uncertain and difficult to manage under BAU conditions.
- Regulatory risk: DNOs are still establishing how AI aligns with obligations related to transparency, fairness, and customer protection, particularly for vulnerable groups. Testing this within a structured, risk-managed project provides a safe and auditable path forward.
- During the T2 planning phase, our primary focus was on engineering, with limited emphasis on AI. We are now shifting towards exploring AI through an engineering lens, examining how it can drive value and innovation across our broader digital, business, and technical strategies. This initiative sits firmly under our Innovation agenda, aiming to unlock new opportunities and enhance strategic impact.

NIA support enables SPEN to test this methodology, de-risk future investment, and generate valuable learning for the wider GB network, without prematurely committing to full-scale rollout before confidence is built.

This project has been approved by a senior member of staff

☑ Yes