

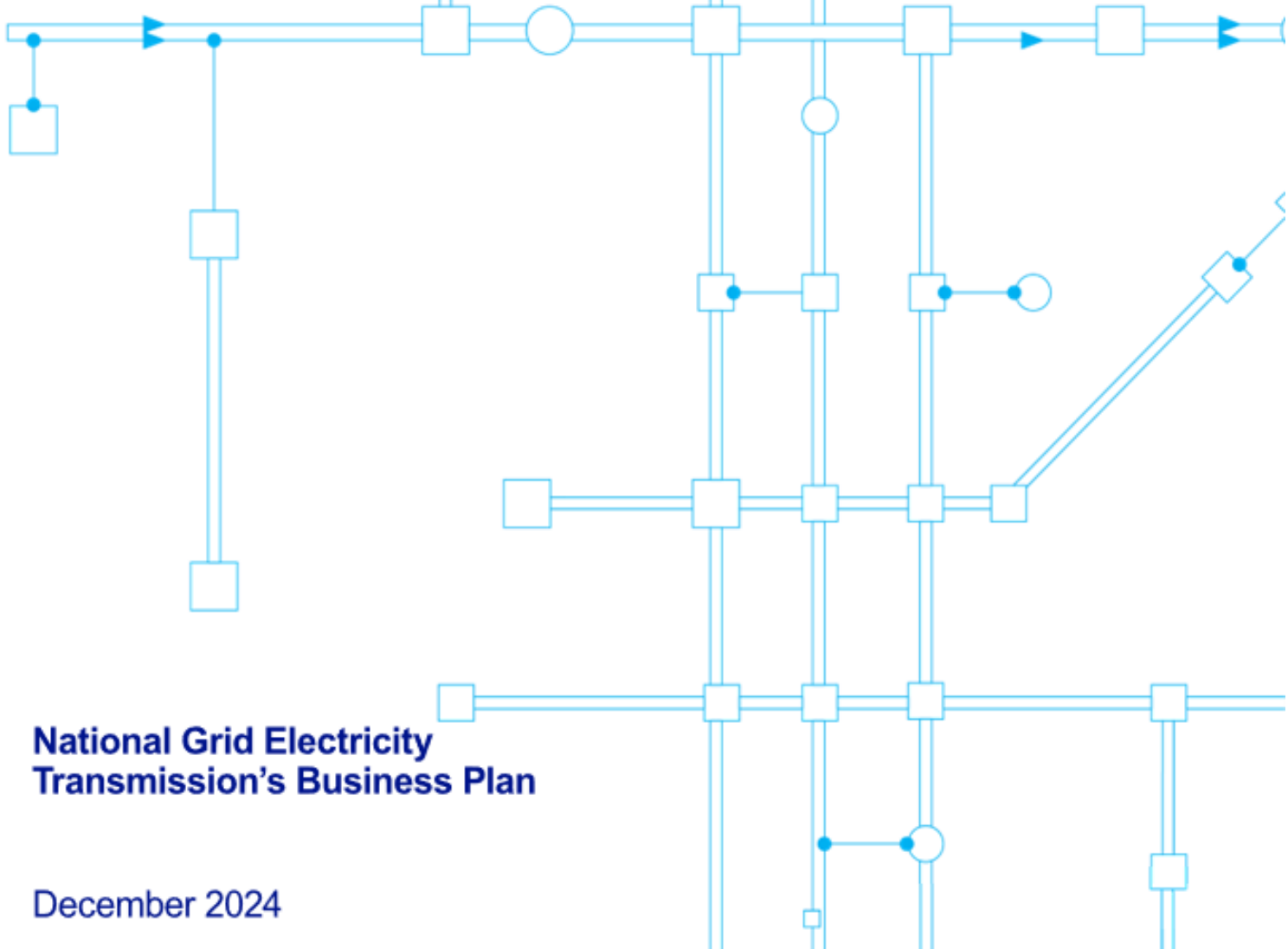
nationalgrid

R110-T3

ET3 Atypical Non-Load, Non-Lead Interventions EJP

Operational Management

Digitalization



National Grid Electricity
Transmission's Business Plan

December 2024

Operational Management – investment summary

This proposed Operational Management investment will develop a comprehensive suite of digital products aimed at optimising the management, control, and operation of our network. This investment is essential for meeting stakeholder expectations of reliable network services and efficient operational management amidst increasing system complexity.

We have invested during RIIO-T2 in our Asset Management platforms and this proposed investment builds on this technology to enhance operational efficiency by digitalizing workflows and data.

Drivers for digital investment

The primary drivers for this investment are:

- **Enhancing Operational Efficiency:** Implementing digital solutions will streamline processes, reduce manual labour, and minimize errors.
- **Improving Data Management:** Digital tools will enable better data collection, storage, and analysis, leading to informed decision-making.
- **Ensuring Compliance:** Upgrading to digital systems will help in adhering to regulatory standards and maintaining compliance with industry norms.
- **Future-Proofing:** Investing in digital infrastructure ensures sites remain adaptable to future technological advancements and market demands.

Options considered

Several options were evaluated to determine the most effective approach to digitalizing the site

Option 1: Develop in-house solutions

- **Advantages:** Lower initial costs minimized disruption to current operations.
- **Disadvantages:** Prolonged implementation period, potential compatibility issues with existing systems.

Option 2: Develop in-house solutions and fully digitalise substations

- **Advantages:** Complete modernization, alignment with latest technologies.
- **Disadvantages:** Higher initial investment, significant operational disruption during the transition period.

Option 3: Hybrid Approach

- **Advantages:** Balances costs and benefits phased implementation reduces disruption.
- **Disadvantages:** Requires careful planning and coordination, moderate initial investment.

Preferred Solution

After thorough analysis, the preferred solution is the Hybrid Approach. This strategy allows for a phased implementation of digital tools and systems, balancing the need for modernization with cost considerations and operational continuity. By gradually upgrading the infrastructure, we can manage the transition more effectively and ensure that each stage of the implementation is aligned with our overall objectives.

Timeline

Delivery will occur throughout the five-year period, with initiation activities and early development towards the beginning of the RIIO-T3 period, with continuous enhancement in the form of iterative development spanning the remaining time period

Conclusion

The digital investment project for the Operational Management EJP site represents a strategic move towards enhancing operational efficiency, improving data management, and future-proofing the site. The Hybrid Approach has been chosen as the preferred solution due to its balanced benefits and manageable implementation. By following the outlined timeline and ensuring meticulous planning and execution, we are confident that this project will significantly contribute to the long-term success and competitiveness of our operations.