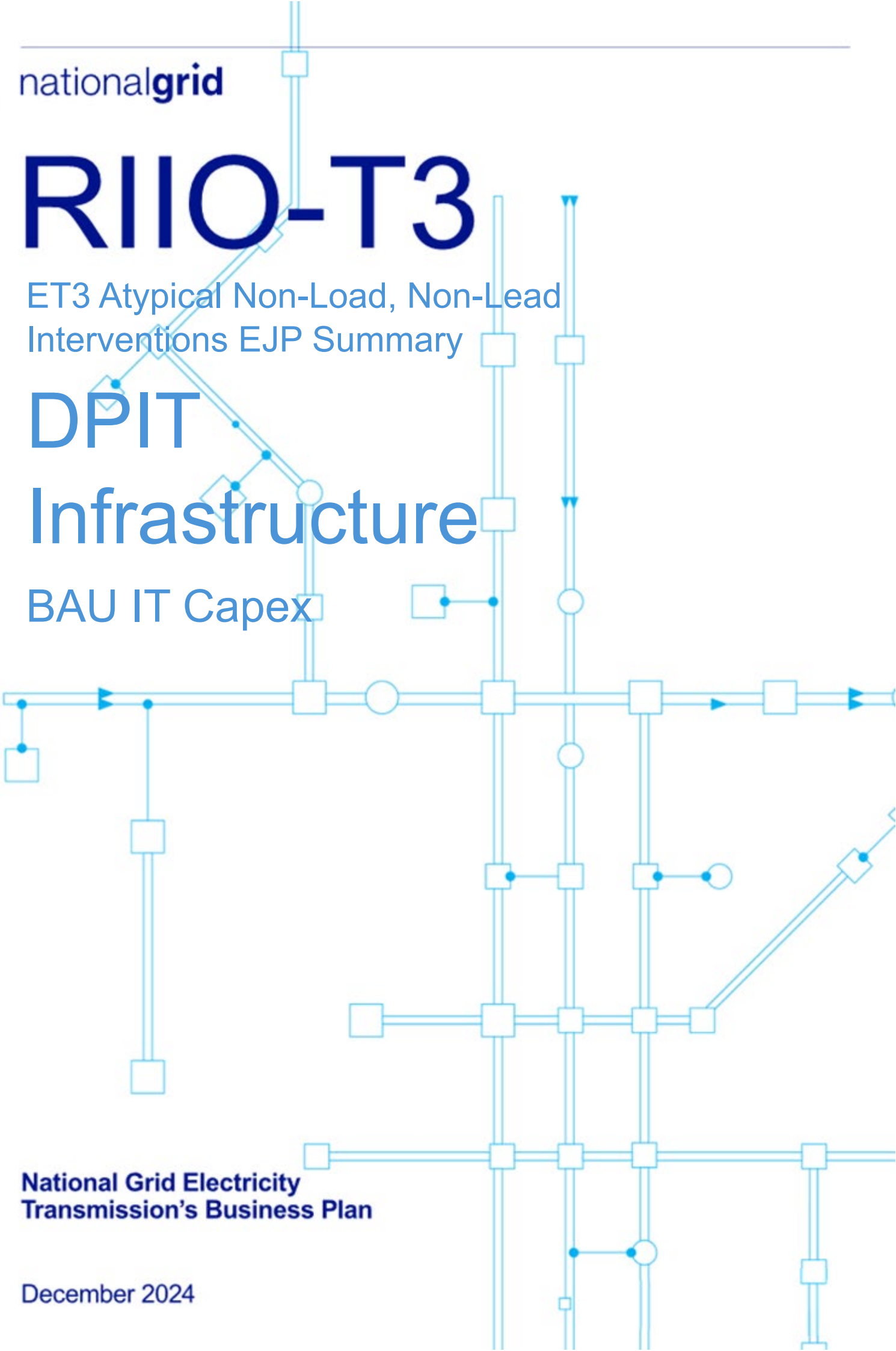
nationalgrid

RIIO-T3

ET3 Atypical Non-Load, Non-Lead Interventions EJP Summary

DPIT Infrastructure

BAU IT Capex



National Grid Electricity Transmission's Business Plan

December 2024

DPIT Infrastructure - Executive Summary

The document outlines the strategic investment by National Grid Electricity Transmission (NGET) in digital infrastructure, focusing on Cloud infrastructure and Enterprise data networks. This investment falls under the RIIO-T3 business plan, with the aim of improving cyber resilience, enhancing disaster recovery approaches, expanding data networks, and supporting demand growth. The initiative builds on previous investments made during the RIIO-T2 period, which modernised both Cloud infrastructure and Enterprise data networks.

Drivers for digital investment

The key drivers for this investment include:

- Cost Efficiency: Delivering lower operational costs for IT infrastructure by expanding cloud services and leveraging AI and automation.
- Workforce Growth: Supporting a growing workforce by enhancing data and communications capacity, particularly in distributed locations.
- Digitalisation Strategy: Enabling modern digital applications, which are increasingly Cloud-native, to improve services for employees and customers.
- Carbon Footprint Reduction: Utilizing public cloud services to reduce the IT infrastructure's carbon footprint.
- Security and Resilience: Maintaining high security and service resilience standards to mitigate emerging security risks and vulnerabilities.

Options Considered

Three primary options for both Cloud infrastructure and the Enterprise data network including minimal investment, balanced investment and asset lifecycle.

Preferred Solution

The preferred solution for both Cloud infrastructure and the Enterprise data network is the Balanced Investment option. This approach optimizes cost efficiency, risk mitigation, and supports the digitalisation strategy by enabling the deployment of the latest cloud-native technologies. Key components of this option include:

- Cloud Infrastructure: Maintaining technical currency, improving cyber resilience, cost-effective disaster recovery, and enhancing developer experience through self-service, automation, and AI.
- Enterprise Data Network: Asset lifecycle management, deployment of AI and automation, capacity expansion, and establishment of a test lab for innovation and testing new technologies.

Timeline

The delivery of the investment spans from FY27 to FY31, utilizing a Scaled Agile Framework (SAFe) methodology to manage procurement, solution design, and build phases. This iterative approach ensures early risk detection, continuous improvement, and alignment with business needs and expectations. Key milestones and objectives will be monitored and adjusted as necessary to respond to evolving requirements.

Conclusion

The strategic focus on upgrading and modernising NGET's enterprise data network and cloud infrastructure are critical to meeting the growing demands of the electricity transmission network and supporting the expanding workforce. By addressing technical debt, enhancing productivity, reducing the carbon footprint, and fostering innovation, NGET is poised to meet current challenges and embrace future opportunities. Continuous investment in cloud infrastructure is central to the digitalisation strategy, ensuring technological advancement and unlocking new products and services for staff, customers, and stakeholders. This holistic approach positions NGET for sustained success and resilience.