

Ref: 25032



13 October 2025

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Dear Ben

UNISON INTSA APPLICATION – GRIDAWARE LITE

This is an Innovation and Non-Traditional Solutions Allowance (INTSA) proposal from Unison Networks Limited (Unison) to the Commerce Commission (Commission) consistent with Schedule 5.3 of the Default Price-Quality Path Determination (Determination)¹

This application consists of:

- Summary of Unison allowance and INTSA application
- Introduction
 - Purpose of this report
 - INTSA requirements
 - Unison's commitment to innovation in asset management.
- Project Information: GridAware Lite
 - Project purpose and steps to achieve the purpose
 - The outputs and consumer benefits
 - Eligibility criteria
 - Project phases and forecast costs
 - SAIDI and SAIFI
 - Parties to this project and collaboration
 - Eligibility criteria
 - Voluntary Information
- Preparing this application and meeting schedule 5.3 requirements

¹ Commerce Commission, Electricity Distribution Services Default Price-Quality Path Determination 2025 [2024] NZCC 28 20 November 2025, Schedule 5.3

- Addressing the Schedule 5.3 criteria
- Liaison with the Commission
- Reporting on competed projects and sharing lessons
- Conclusion
- Appendix 1 – Check of application against Schedule 5.3 requirements

Summary of Unison Allowance and INTSA applications

A summary of the proposed recovery in this application is provided in Table 1, along with a cumulative allowance recovery through the DPP4 period. Unison's INTSA allowance limit is \$7.1 million with 25% of that for collaborative project only.

Summary table

Table 1: Recovery proposal capex and opex

Recovery in this application	\$610,086
Allowance recovery approved in previous applications - Unison	\$0
Allowance recovery approved in previous applications - collaborative	\$237,000
Remaining allowance - EDB	\$5,325,000
Remaining allowance - collaborative	\$927,914
Total allowance	\$7,100,000

2. Introduction

2.1 Purpose of this report

This is Unison's application for the INTSA, for one project planned across FY26 and FY27. This report collates the information required for the Commission to be satisfied that the project meets the requirements for recovery of the nominated allowance for FY26 and FY27.

This application covers the following projects/programmes:

- The effectiveness of the tool across a variety of EDB assets.
- The actual financial savings compared to conventional inspection methods.

The project spans two financial years in the set up and rollout of the project. This application seeks approval for the costs forecast in FY26 and FY27. The project is a collaborative project.

We are happy to discuss any aspects of this application with the Commission. The first point of contact for this application is Jason Larkin, General Manager Customer, Commercial & Regulatory, [REDACTED]. No parts of this application are confidential.

2.2 INTSA requirements

Electricity Distribution Businesses (EDBs) may make an application to the Commission for approval of recovery of the allowance under Schedule 5.3 of the Determination. This application is guided by the requirements in Schedule 5.3. We have provided a check list against Schedule 5.3 in Appendix 1.

The GridAware trial is exploratory in nature focused on building an image library, training machine-learning models, and developing organisational capability in AI-based asset inspection. The full Unison allowance available under Schedule 5.3 is \$7.1 million (with 25% for collaborative projects only). This application is for drawdown of \$615,095. A breakdown of our allowance is provided in Table 2.

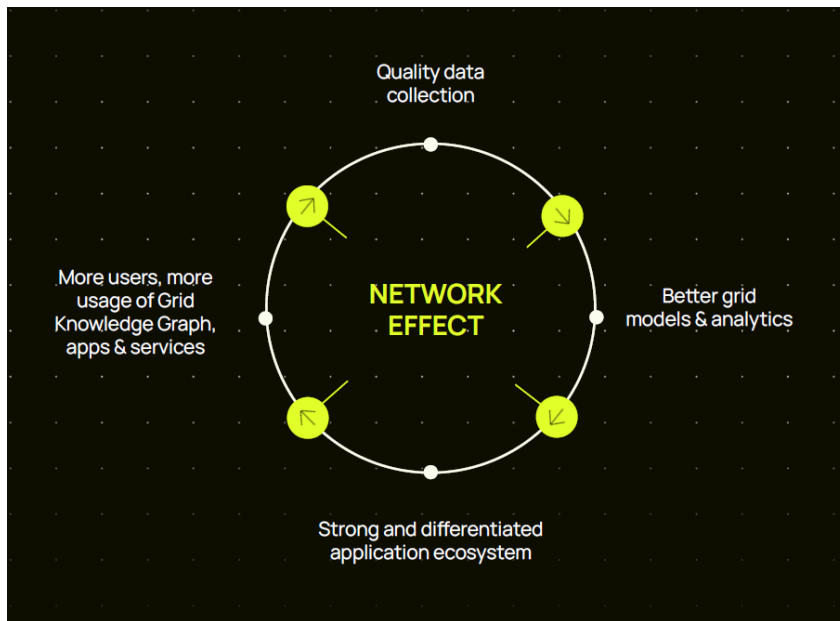
2.3 Unison's commitment to innovation in asset management

Where and when energy is consumed is changing. As sectors decarbonise, we anticipate increasing peaks in demand driven by the uptake of electric vehicles (EVs), industrial electrification, and distributed energy resources. These shifts will require a more flexible and resilient network, capable of accommodating new demand profiles and bidirectional energy flows.

To support this transition, we are investing in:

- Modernised network architecture to integrate and optimise new energy technologies.
- Smart grid solutions that enhance visibility, forecasting, and real-time network management.
- Targeted capacity upgrades to support increasing electrification where needed.
- Enabling flexible energy use, including demand response and local energy trading.

The GridAware trial exemplifies this commitment: it is an exploratory project focused on building an image library, training machine-learning models, and developing organisational capability in AI-based asset inspection. While the anticipated benefits such as improved data quality, inspection efficiency, defect detection, reliability, lifecycle optimisation, and capital expenditure deferrals are expected to accrue gradually over many years, Unison's willingness to invest in such initiatives demonstrates a genuine dedication to long-term innovation, sector collaboration, and delivering greater efficiency, reliability, and value for customers.



The benefits of the GridAware trial are sufficiently uncertain that Unison would not proceed with the project without the ability to recover a portion of the costs through INTSA. The application outlines several key uncertainties:

- The effectiveness of the tool across a variety of EDB assets.
- The actual financial savings compared to conventional inspection methods.

The number and timing of assets that can be safely deferred for renewal.

3. Project Information

To maintain a safe and reliable electricity lines service, inspecting assets and integrating the results of these inspections into asset management is essential. For most Electricity Distribution Businesses (EDBs) in New Zealand, this has traditionally been quite a manual process.

During 2023 – 2025, Vector trialled implementing Google X’s Tapestry’s GridAware, an asset and defect detection tool which aims to help EDBs enhance inspection data to improve condition-based and asset risk assessments so that they can optimise design, maintenance and replacement practices to minimize defect-related outages.^{2 3}

In November 2024, Vector shared their experience with GridAware with other EDBs. A group of EDBs have since been in discussions with Google to trial GridAware ‘Light’ collaboratively.

² Vector [innovation-project-allowance-application-gridaware.pdf](#)

³ [Vector-GridAware-innovation-project-allowance-report-Received-18-September-2025.pdf](#)

In September 2025, four EDBs (North Power, Orion, Unison Networks and WEL Networks) received a proposal and statement of works from Google for a collaborative trial and have agreed in principle to contribute asset imagery, share the cost of the trial, and share learnings with each other, and other EDBs.

3.1 Vector GridAware Innovation Trial

The Vector GridAware trial was a comprehensive, fully integrated deployment of an AI-driven overhead network inspection platform. Developed in collaboration with Google X's Tapestry project, it combined high-resolution aerial imagery (from drones and helicopters) and street-level images to create a detailed, time-stamped visual record of every overhead asset.

The system used advanced machine learning to automatically detect defects, predict asset health, and flag potential failures, integrating all imagery, GIS, and maintenance data into a central dashboard for engineers.

Key Features:

- Centralised image repository and dashboard
- Automated AI defect detection and predictive analytics
- Full integration with Vector's asset management and maintenance systems
- Continuous improvement of AI models through expert annotation
- Large-scale, automated inspections (e.g., 170,000 inspections every 2.5 years)
- Demonstrated significant operational efficiencies, cost savings, and reliability improvements

Innovation and Sector Impact:

The trial was funded under the Commerce Commission's Innovation Project Allowance, with a focus on delivering long-term consumer benefits, sector-wide knowledge sharing, and building internal AI/ML capability.

3.2 GridAware Lite

GridAware Lite is a **scaled, non-integrated version** of the full GridAware platform, designed for broader industry adoption at a lower cost and with reduced complexity. Rather than full system integration, GridAware Lite allows participating EDBs to manually upload their own GIS data and imagery to a shared platform.

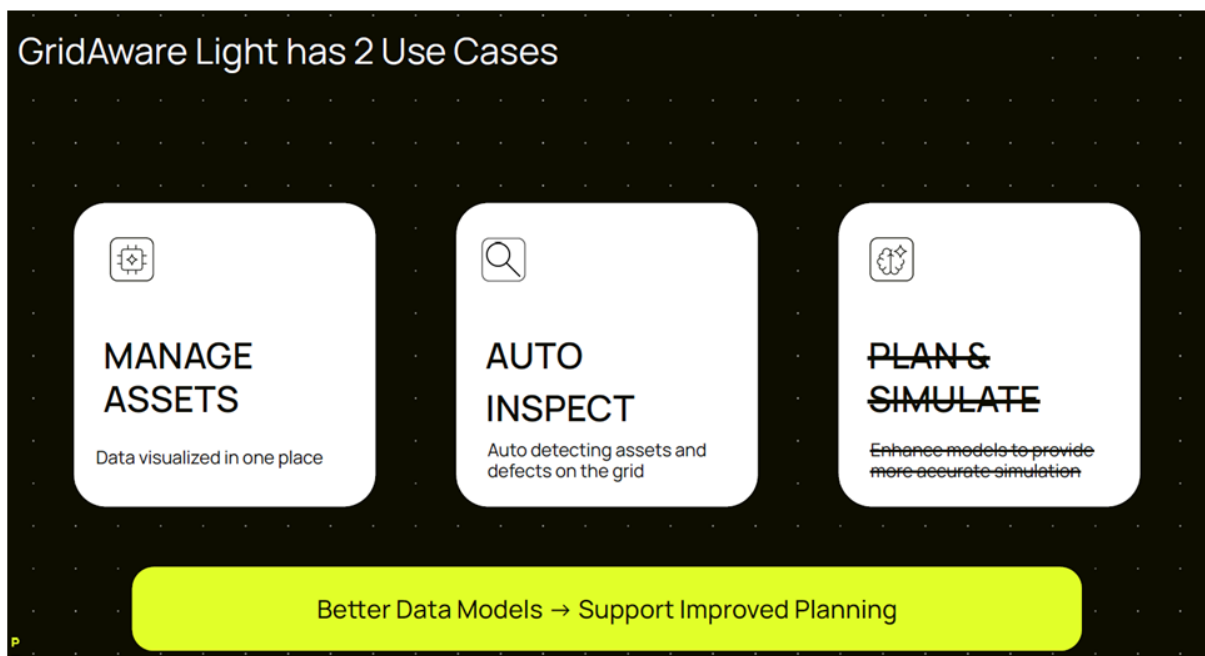
Key Differences from Vector's Full Trial:

- **Not fully integrated:** Operates as a standalone and/or semi-manual tool, not embedded in existing asset management or defect systems

- **Manual processes:** Requires more manual checks and data uploads, with less automation in defect detection and workflow integration
- **Lower cost and risk:** Reduces upfront investment and technical complexity, making it accessible for smaller EDBs or those wishing to trial the technology before full adoption
- **Collaborative learning:** EDBs benefit from shared infrastructure, collective AI model improvements, and sector-wide knowledge transfer

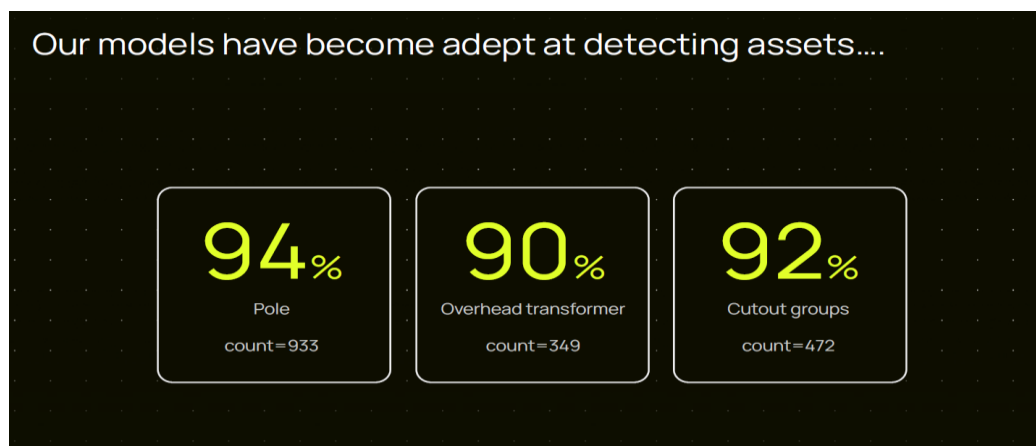
Why GridAware Lite is Appropriate:

- **Proven technology:** Builds on Vector's trial, leveraging validated AI models and processes
- **Adaptable:** Allows each EDB to test and adapt the technology to local needs
- **Sector-wide benefit:** Facilitates collaborative innovation and spreads the benefits and learnings across the industry
- **Supports regulatory objectives:** Aligns with Commerce Commission expectations for innovation, efficiency, and quality improvements, while managing uncertainty and cost



A core strength of the GridAware Lite approach is the deliberate design of its outputs for seamless integration into any generic asset management system. The platform generates standardised, high-quality datasets including annotated imagery, asset condition

registers, and defect detection reports that can be exported and ingested by a wide range of asset management and maintenance planning tools. This interoperability ensures that the insights and intelligence derived from AI-driven inspections are not siloed within a standalone platform but instead become an integral part of day-to-day asset management processes. By enabling direct data flows into existing GIS, asset registers, and maintenance systems, GridAware empowers electricity distribution businesses to enhance their condition-based maintenance, optimise capital planning, and improve risk management regardless of the specific asset management software in use. This flexible, system-agnostic approach maximises the value of innovation, supporting sector-wide adoption and ensuring that the benefits of advanced analytics are accessible to all participants.



4. Eligibility criteria

4.1 Relates to the supply of electricity distribution services

This project relates to the supply of electricity distribution services because it will help predict the health of electricity distribution assets on the EDB's networks.

4.2 Promotes the Part 4 Purpose of the Act

This project promotes the purpose of Part 4 under s 52A(1) of the Commerce Act by:

- enabling efficiency gains related to better asset management practices through one comprehensive asset database, and lower inspection and maintenance costs
- enabling consumers to benefit by lower costs overall and/or better quality of service if the project would result in widespread roll-out of this technology
- supporting sector-wide innovation and knowledge sharing.

4.3 Unlikely financial benefit/ sufficiently uncertain benefits

Under clause **12.3.1**, a straightforward financial return to Unison within the five disclosure years following delivery of the INTSA outputs is extremely unlikely. The GridAware trial is exploratory in nature focused on building an image library, training machine-learning models, and developing organisational capability in AI-based asset inspection. While the benefits we anticipate (e.g. improved data quality, inspection efficiency, defect detection, reliability, lifecycle optimisation, and capex deferral) are real, they are expected to accrue gradually and incrementally over many years. These gains are measured in improved KPIs, deferred renewals, and qualitative enhancements to our processes not in immediate, quantifiable financial returns. As such, the project does not meet the threshold for a positive ROI within the five-year disclosure window.

Under clause **12.3.2**, the benefits of the GridAware trial are sufficiently uncertain that Unison would not proceed with the project without the ability to recover a portion of the costs through INTSA. The application outlines several key uncertainties:

- The effectiveness of the tool across a variety of EDB assets.
- The actual financial savings compared to conventional inspection methods.
- The number and timing of assets that can be safely deferred for renewal.

4.4 Benefits

It is anticipated that there may be many operational, financial and quality benefits to EDBs and their customers of the GridAware Lite approach to asset inspection and defect detection. Many of these benefits are uncertain from a financial and quality perspective. The purpose of this two-year trial is to test and quantify this approach and reduce the uncertainty of the anticipated benefits for each EDB.

The benefits of this project or programme are sufficiently **uncertain** that the EDB would not carry out the project or programme if it could not recover some or all of the forecast costs of the project from its INTSA.

The key uncertainties include:

- The effectiveness of the tool across a variety of EDB assets.
- The actual financial savings compared to conventional inspection methods.
- The number and timing of assets that can be safely deferred for renewal.
- INTSA support is essential to offset these uncertainties and enable the trial.

The Benefit Realisation Plan reinforces this uncertainty, noting that many of the projected gains such as avoided outages, deferred capex, and improved reliability are long-term, contingent, or qualitative. Without regulatory support, it would be challenging to justify a

~\$1M investment in a trial where the financial payback is unproven and indeterminate. This is why Unison is seeking to recover 75% of forecast costs through INTSA.

4.5 Project-specific Information

GridAware Lite is an advanced image analytics platform that aggregates and analyses visual data of overhead assets to transform asset management practices. The solution uses a combination of high-resolution aerial imagery (from drones, helicopters) and existing street-level images to create a comprehensive, time-stamped visual record of each pole and line asset.

Machine learning models then process these images to identify assets and defects, with the potential to predict asset health, and flag potential failures before they occur.

Data Quality: Improved asset data accuracy through imagery validation, reducing manual field audits and unnecessary site visits

Inspection Efficiency: Faster, more efficient inspections using aerial imagery and AI, with significant reductions in operational costs

Defect Detection: Proactive identification of defects, enabling earlier interventions and reducing unplanned outages

Lifecycle Management: Supports condition-based maintenance, deferring unnecessary replacements and optimising capital expenditure

Capability Building: Develops internal skills in AI/ML and data analytics, and improves data governance

Collaboration: Enables knowledge sharing and collective improvement across participating EDBs

By moving from traditional inspections to this data-driven approach, the GridAware trial aims to demonstrate multiple improvements in how we manage overhead assets. The subsequent sections break down these expected benefits and how we plan to realise and measure them

4.6 INTSA outputs, delivery dates, and expected benefits of the project for consumers

Output(s)	FY/Date delivered
Platform configuration and data integration – deployment and integration of the GridAware platform with each EDB’s GIS, asset registers, and imagery repositories.	FY26
Annotated imagery dataset Collection and annotation of high-resolution imagery (drone, helicopter, street-level) for overhead assets, with at least 5,000 images per EDB to train and validate AI models.	FY26
AI model deployment and validation Training and deployment of AI models for automated asset and defect detection (e.g., pole condition, cross-arm cracks, vegetation encroachment). Validation of AI outputs against manual inspections.	FY26/27
Asset Condition Register and Reporting Creation of a comprehensive register of assets and their condition, including detected defects, confidence scores, and geolocation. Regular and final project reports summarizing findings, learnings, and recommendations.	FY27
Sector Knowledge Sharing dissemination of learnings, model improvements, and operational insights across participating EDBs and the wider sector (e.g., via EEA forums).	FY27

4.7 GridAware Trial – Benefit Realisation Plan

Benefit Area	Benefit	Why it Matters / Expected Outcomes	Metrics / Illustrative Results	Additional Notes
Data Accuracy & Asset Information Improvement	High-confidence asset data through automated imagery validation	Accurate asset data is foundation of effective asset management and planning; automates verification, avoids tedious field audits	Number of discrepancies found and corrected; target >90% alignment between GIS records and field reality in trial areas	Comprehensive image library for each asset; reduces unnecessary site visits; track usage statistics and anecdotal reports, aim to reduce site verification trips by ~30% in trial area
Inspection Efficiency & Cost Savings	Faster, more efficient inspection cycles; lower operational costs	Accelerates inspection process using drones/helicopters and AI; reduces manual field work	170,000 inspections in 2.5 years; 96% reduction in effort (320 hours vs 12 hours); goal of >50% reduction in cost per inspection, increase in inspection throughput	Extended inspection coverage; improved resource allocation; reduced contractor costs; monitor staff feedback and redeployment of skilled workers
Defect Detection & Reliability Improvements	Proactive identification of defects between inspection cycles; reduced unplanned outages	Machine learning analysis catches defects early; enables planned maintenance and reduces outages	Number of defect conditions detected by AI; track critical defects found outside normal inspections; monitor SAIDI/SAIFI impacts; aim for	Faster restoration after storms; doubled “visibility” of network problems; volume of actionable issues uncovered increases; case studies with before/after imagery

			observable drop in fault-related outages	
Lifecycle Optimisation & Capex Deferral	Enhanced condition-based asset management; defer unnecessary replacements; targeted renewals	Supports smarter decisions on maintenance and replacement; enables deferred renewals and targeted refurbishment	Count of assets with adjusted maintenance strategies; estimate CAPEX savings from deferrals (e.g. 10 poles at ~\$5k deferred = ~\$50k capex avoidance); NPV of deferred capex vs project cost	Track changes in maintenance plans; highlight evidence of avoided capex; link to customer benefits (lower future replacement spend, reduced tariff pressure)
Organisational Capability & Innovation Spillovers	Building internal AI/ML expertise and data infrastructure	Hands-on experience with AI/ML tools; improved data governance; encourages culture of innovation	Number of team members trained; new internal processes (image annotation guidelines, AI result validation); document lessons learned and share insights	Positions organisation for future analytics projects; enables extension to other asset types; benefit realisation plan to capture enablers and follow-on projects

Note: The outcomes outlined above will be substantiated in the post-trial close-out report. A combination of quantitative data collected through the GridAware system and maintenance records, and qualitative analysis will be employed to demonstrate the realisation of benefits. Evidence from Vector's deployment and WEL Networks' forecasts indicates that these benefits are attainable within the designated two-year trial period, with numerous advantages and reliability enhancements expected to increase further over the long term.

4.8 Estimated annual forecast costs of project

The forecast costs of the project for each disclosure year as outlined in Table 2. All costs are GST exclusive.

The costs of the platform development, testing and reporting are based on a draft agreement and forecast provided to Unison by Google. This cost is established based on their knowledge of international experience in platform development, sources of funding contributing to this project, and the parties engaged in this project. Unison is satisfied that this cost is appropriate for the project.

The proportion of the forecast project costs proposed to be recovered is 100%. As outlined in section 3 and 4, this project, while potentially significantly beneficial to our customers, will represent an ongoing cost to Unison, with no direct financial benefits. Therefore, the full risk of the project is sought to be recovered from the INTSA.

Table 2: Forecast Costs

Item	Forecast costs FY26 (US\$)	Forecast costs FY27 (US\$)	Total
GridAware Lite software, built by Google engineering, data science, and machine learning teams including features for image uploading, annotation tooling, a central repository for all images and annotations, and image and data visualization.	\$305,043	\$305,043	\$ 610,086
Total	\$305,043	\$305,043	\$610,086

Cost Allocation Methodology

- Costs are allocated in proportion to the number of ICPs for each EDB, ensuring fairness and reflecting the scale of each network's participation.
- All costs relate directly to the delivery of regulated electricity distribution services, including platform development, data collection, AI model training, and internal project management.
- Staff costs are included in proportion to their allocation to the INTSA project.

4.9 Collaboration with EDBs

The GridAware trial represents a collaborative effort across the industry, bringing together EDBs who share a commitment to driving innovation and delivering tangible benefits for consumers.

By working in partnership, we collectively anticipate a positive return on investment within the 2-year term, achieved through operational efficiencies, enhanced reliability, and the development of shared analytics capabilities. This joint initiative ensures that learnings, validated data, and process improvements are not siloed but disseminated widely, enabling all participating EDBs and the wider sector to build on these advancements.

Our joint participation in the innovation trial enables a sector-wide transformation in asset management practices. Each identified benefit will be measured and transparently reported, providing the Commerce Commission and all stakeholders with clear evidence of the value generated through collaboration. The GridAware initiative is designed to deliver consumer benefits that extend beyond what could be accomplished by individual networks acting alone, fully aligning with the purpose of the innovation allowance.

We are confident that, together, our industry partners can demonstrate how embracing new technology and working collaboratively fosters a smarter, more efficient, and resilient electricity network creating lasting value for consumers and setting a strong precedent for future cooperative innovation across the sector.

4.10 Quality standards exclusion

No SAIDI or SAIFI exclusions are sought. The project is not expected to negatively impact quality standards. Any reliability improvements will be reported as part of project outcomes.

Reliability Improvement	SAIDI/SAIFI on trial feeders (trend, qualitative due to scope) Count of outage-preventing fixes from AI alerts	Measurable reliability enhancement in trial area (e.g. 10–20% fewer faults over period, if conditions allow). Documented cases where proactive repairs saved an outage (narrative examples for Commission).
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5. Voluntary Information

5.1 Scope

The scope is to pilot an AI-driven overhead network inspection platform aimed at transforming asset management in electricity distribution. Developed in collaboration with Google X's Tapestry project, the trial involves capturing high-resolution aerial and street-level imagery, centralising asset data, and applying machine learning to detect defects and predict asset health. The project seeks to demonstrate tangible and intangible benefits such as cost reduction, improved reliability, and enhanced service quality. It aligns with the Commerce Commission's innovation criteria and includes a collaborative initiative to enable broader industry participation and knowledge sharing among electricity distribution businesses.

5.2 Scale

The scale is significant, involving the inspection and analysis of potentially up to 170,000 overhead assets over a 2.5-year cycle, transitioning from traditional five-year inspection intervals to near-continuous monitoring. This large-scale deployment is enabled by high-resolution aerial and street-level imagery combined with machine learning to detect defects and predict asset health. The project is not limited to a single network it is designed for sector-wide scalability through a collaborative “GridAware Lite” platform, allowing multiple electricity distribution businesses (EDBs) to participate and benefit from shared infrastructure and AI models. This consortium approach amplifies the reach and impact of the trial across New Zealand’s electricity distribution sector.

5.3 Geographical area

The geographical area of the project is being piloted by Unison, Orion, WEL Networks and Northpower primarily in Hawkes Bay, Christchurch, Whangarei and Kaipara and the Waikato District. The project spans multiple regions across the country through shared participation and infrastructure.

5.4 How does project build on prior learning

The project builds on prior learning from earlier innovation efforts particularly Vector’s Innovation Project Allowance (IPA) application⁴ and its implementation under DPP3 by refining and scaling the AI-driven asset inspection platform. Keyways it builds on prior work include:

- **Leveraging existing AI models and infrastructure:** The trial uses machine learning models trained during earlier phases to detect defects and predict asset health more accurately.
- **Collaborative learning across EDBs:** The “GridAware Lite” consortium allows multiple electricity distribution businesses to benefit from shared data, infrastructure, and insights, amplifying sector-wide learning.
- **Skill development and internal capability uplift:** Teams involved in the earlier pilot are now expanding their expertise in AI/ML through hands-on annotation and analytics, creating a foundation for future innovation.
- **Knowledge dissemination:** Lessons learned are being documented and shared with the wider industry, including through the Electricity Engineers’ Association (EEA), aligning with the Commerce Commission’s goal of sector-wide benefit.
- **Strategic innovation roadmap:** The trial is expected to spark follow-on projects and inform an AI roadmap, enabling future applications in areas like underground asset monitoring or predictive load analytics.

This continuity ensures the trial is not a standalone initiative but a strategic evolution of prior innovation, with tangible and intangible benefits that build on proven foundations.

⁴ Vector’s [innovation-project-allowance-application-gridaware.pdf](#)

Potential for new learning

The GridAware Trial project offers substantial potential for new learning across multiple dimensions:

- **AI/ML Capability Development:** Teams involved in the trial gain hands-on experience with machine learning—training models, annotating images, and interpreting AI outputs. This builds internal expertise and lays the foundation for future analytics initiatives.
- **Data Governance and Infrastructure:** The project drives improvements in data integration and quality, such as aligning GIS records with imagery and consolidating asset data. These enhancements support broader digital transformation efforts.
- **Operational Innovation:** By shifting from manual inspections to AI-driven analysis, the trial introduces new workflows and decision-making processes. Staff roles evolve from routine fieldwork to strategic oversight and analysis, fostering a culture of innovation.
- **Sector-Wide Knowledge Sharing:** As part of a multi-EDB consortium, the trial promotes collaborative learning. Insights and lessons are shared with other participants and the wider industry (e.g., through the Electricity Engineers' Association), amplifying the impact.
- **Strategic Enablement:** The trial is expected to spark follow-on projects, such as applying AI to underground assets or load forecasting. It positions the organisation to pursue more advanced analytics with reduced risk and greater confidence.
- **Cultural Shift:** Demonstrating success with GridAware encourages openness to non-traditional solutions and experimentation, embedding innovation into asset management practices.

These learning outcomes not only benefit the participating EDBs but also contribute to a smarter, more resilient electricity sector in New Zealand.

5.5 Parties to this project and collaboration

The GridAware Trial project is designed to foster sector-wide innovation in overhead asset management. The consortium model requires involvement from electricity distribution businesses (EDBs) such as Unison, Orion, WEL Networks and Northpower.

Here's how these partners contribute and are involved:

- **WEL Networks:** Actively engaged in shaping the trial's expectations and benefit realisation. Their feedback informs the project's design and measurement framework.
- **Unison, Orion, and Northpower:** As prominent EDBs in New Zealand, well-positioned to participate in the **GridAware Lite consortium**, sharing GIS data, aerial imagery, and operational insights. Their involvement would help scale the platform, refine AI models, and ensure the benefits like defect detection, cost savings, and reliability improvements are distributed across the sector.
- **Shared Infrastructure and Learning:** The consortium approach allows these partners to leverage a common platform, reduce duplication, and accelerate learning. It also

supports the Commerce Commission's goal of enabling projects with general application across the industry.

In essence, the GridAware Trial is a collaborative innovation ecosystem, where EDBs WEL, Unison, Orion, and Northpower can jointly advance asset management practices, share costs, and build collective capability in AI-driven inspection.

We are now ready to enter into the development and testing of the platform. Unison will enter an agreement with Google. The same agreement will be entered into separately by Orion, WEL and Northpower and/or potentially other EDBs. Each EDB engaged in the project will contribute through the same funding structure with Goggle (Tapestry).

Google will project manage the project with the EDBs including establishing appropriate governance structures. The project scope, process and funding is established by Google to enable additional EDBs, or other parties with an interest to pilot, to join the project during the development phase.

5.6 Alignment to sector programmes

The GridAware Trial aligns strongly with sector programmes in New Zealand's electricity distribution industry through several key mechanisms:

- **Commerce Commission Alignment:** The project directly supports the goals of the INTSA (Innovation and Non-Traditional Solutions Allowance) framework and Part 4 of the Commerce Act, which emphasize innovation, efficiency, and long-term consumer benefits.
- **Multi-EDB Collaboration:** Through the GridAware Lite consortium, the trial enables multiple electricity distribution businesses (EDBs) to participate, share infrastructure, and benefit from refined AI models. This ensures the project has general application across the sector, meeting regulatory expectations for broad relevance.
- **Knowledge Sharing:** The trial commits to disseminating insights and lessons learned via the Electricity Engineers' Association (EEA), contributing to the sector's collective knowledge base and encouraging replication and scaling of successful innovations.
- **Sector-Wide Capability Building:** By fostering AI/ML skill development and data infrastructure improvements, the project supports a step change in asset management practices across the industry, laying the groundwork for future digital initiatives.
- **Strategic Fit:** The trial complements other sector programmes focused on data quality, reliability, and cost efficiency, positioning itself as a model for how regulatory support can unlock transformative technologies.

In essence, GridAware is not just a standalone innovation it's a strategically integrated initiative that advances the sector's shared goals for smarter, more resilient electricity networks.

5.7 Replicable in New Zealand

The GridAware Trial is highly replicable across New Zealand, due to its collaborative design and scalable infrastructure. Here's how replication can be achieved:

- **Consortium Model – GridAware Lite:** The project includes a shared platform that allows other electricity distribution businesses (EDBs) to upload their own GIS data and imagery. This lowers the barrier to entry by providing access to established infrastructure and refined AI models.
- **Vendor Partnership:** The platform is developed in collaboration with Tapestry (Google X), which has already built the core technology. New participants can integrate with this vendor rather than starting from scratch.
- **Standardised Data Inputs:** The system uses common data types high-resolution aerial imagery, GIS records, and asset maintenance logs which most EDBs already collect or can easily obtain.
- **Documented Learnings and Processes:** The trial includes a robust Benefits Realisation Plan and commits to sharing insights with the wider industry, including through the Electricity Engineers' Association (EEA). This ensures that other EDBs can learn from the trial's successes and challenges.
- **Regulatory Alignment:** The project is aligned with the Commerce Commission's INTSA framework, making it easier for other EDBs to seek similar funding and regulatory support for replication.
- **Scalable Technology:** The AI models improve with more data and annotations, meaning each new participant enhances the system's accuracy and value for all.

In short, the GridAware Trial provides a ready-made blueprint for other EDBs in New Zealand to adopt AI-driven asset inspection, with shared tools, proven benefits, and sector-wide support.

6. Preparing this application and meeting schedule 5.3 requirements

6.1 Addressing the Schedule 5.3 criteria

In Appendix 1, we have outlined the criteria for the innovation allowance in Schedule 5.3. confirms each criterion has been addressed and identifies where in this application the relevant information can be found. We are satisfied that all the criteria have been addressed.

6.2 Liaison with the Commission

We understand that Orion have been in discussions with the Commission about this project, explaining its intent and scope. If the Commission requires further information for its evaluation of the project, we will happily provide more details or arrange further meetings with the project partners, including Orion.

6.3 Reporting on completed projects and sharing learnings

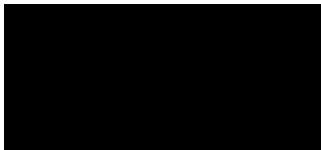
The Commission has emphasised the focus of the INTSA to encourage projects with learnings that will benefit NZ Inc. We acknowledge that reporting on the projects and sharing learnings with other EDBs is critical. Should this application be successful, Unison anticipates the following activities to share learnings:

- Prepare report as required by Schedule 5.3 (14). The report will be made available on our website and also to Goggle for further dissemination.
- Share updates on our application, key findings and related reports on our website and social media channels
- Present an overview of the project and key learnings to a suitable ENA or EEA or other industry forum to raise awareness amongst all EDBs. For example, an ENA Future Networks Forum Innovation meeting would be an ideal venue.
- On the successful implementation of the platform, we will inform our wider customer base of this. This is to encourage flexibility offers and help develop an active market for flexibility services.

7. Conclusion

Unison has an active strategy, to ready ourselves for the changes in the energy sector ahead. This includes taking an active role in identifying and testing non-traditional solutions and new technology. This will not only be an integral part of operating our future network, but it will also provide longer-term outcomes for our customers.

Yours sincerely



Jason Larkin
General Manager
Customer, Commercial & Regulatory

Appendix A

Schedule 5.3 requirement		How the requirement is met
(2)	A non-exempt EDB may at any point prior to six months before the end of the DPP regulatory period submit an INTSA proposal to the Commission.	This application is made before the stated deadline
(3)	If a non-exempt EDB proposes to work together with 1 or more other EDBs to carry out the project or programme in an INTSA proposal, each non-exempt EDB carrying out the project or programme that proposes to recover any of the forecast costs from the non-exempt EDB's innovation and non-traditional solutions allowance must submit an INTSA proposal.	Refer to section 5.5. This project is a collaborative project.
(4)	An INTSA proposal must set out the following:	
(a)	the purpose of the project or programme in the INTSA proposal, and the steps that the non-exempt EDB intends to take to achieve that purpose if the Commission approves the INTSA proposal	Refer section 3
(b)	the INTSA outputs and expected benefits of the project or programme for consumers	Refer section 4.4, 4.6, 4.7
(c)	the date by which the non-exempt EDB expects all of the INTSA outputs for the project or programme to have been delivered	We will deliver a report within 50 days of completion of outputs. We do not currently request an extension to the time for submitting a close-out report but reserve the option of making this request at a later time. Refer to section 4.7
(d)	the forecast costs of the project or programme for each disclosure year up to the date by which the non-exempt EDB expects all of the INTSA outputs to have been delivered	Refer section 4.8
(e)	the proportion of the forecast costs of the project or programme that the non-exempt EDB seeks to recover from the non-exempt EDB's innovation and non-traditional solutions allowance (e.g., 75% of the forecast costs of the project or programme)	Refer section 4.8, Table 2
(f)	an estimate of any anticipated SAIDI INTSA values or SAIFI INTSA values that the non-exempt EDB expects to exclude under Schedule 3.1 or 3.2	Refer section 4.10
(g)	the cause or causes of the interruptions for the SAIDI INTSA values and SAIFI INTSA values referred to in subparagraph (f)	Refer section 4.10
(h)	any steps that the non-exempt EDB has taken, or proposes to take, to reduce the likelihood or impact on consumers of any interruptions referred to in subparagraph (f)	Refer section 4.10

(i)	whether the non-exempt EDB intends to work together with 1 or more other EDBs to carry out the project or programme in the INTSA proposal and, if so, how it intends to work together with the other EDBs	Refer section 5.5
(j)	sufficient information to enable the Commission to decide under paragraph (7) whether the project or programme meets the eligibility criteria under paragraph (6)	Refer sections 1, 2, 3, 4,5
(14)	Within 50 working days of the delivery of all of the INTSA outputs for the project or programme in a non-exempt EDB's INTSA proposal that the Commission has approved under paragraph (7), the non-exempt EDB must submit a closeout report to the Commission [...]	We will deliver a report within 50 days of completion of outputs. We do not currently request an extension to the time for submitting a close out report but reserve the option of making this request at a later time. Refer section 4.6
(19)	Subject to paragraph (20), the limit on the innovation and nontraditional solutions allowance for each non-exempt EDB for the DPP regulatory period is specified in Table 5.1 [...]	Refer to table 1
(21)	Where a non-exempt EDB considers that it has a right to confidentiality in any information that it provides to the Commission under this Schedule and the non-exempt EDB does not waive the right, the non-exempt EDB must—	This application does not contain any confidential information