

## Electricity Distribution Price Review FY2027 to FY2031 (EDPR 2027-31)

### Resubmission Addendum: Network Model Management

Date: 1 December 2025



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## Document history

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18/11/2025	V1.0	Draft business case addendum
28/11/2025	V2.0	Final addendum for submission

## Related documents

DOCUMENT	VERSION	AUTHOR
Revised Proposal Digital Program NPV model	V2.0	AusNet Services
Network Model Management Business Case Cost Estimation Addendum	V1.0	IBM

## Approvals

POSITION	DATE
Digital & Technology – Strategy, Regulatory and Partner Management	November 2025
Digital & Technology – Architecture	November 2025
Distribution – Network Operations & Delivery	November 2025
Distribution – Strategy and Regulation	November 2025

# Executive Summary

The Network Model Management program represents AusNet's non-recurrent investment to enhance our network models and geospatial capabilities to enable more effective operation and management of our distribution network. By integrating network models, and consolidating and enhancing geospatial data and layers, the program enables more accurate visibility and control of the distribution network, and supports key business functions such as safety, emergency management, and asset management.

AusNet's initial's proposal included \$42.7M capex and \$1.4m opex (\$real 2026) for the network model management program. The AER's Draft Decision did not approve this proposal, with a \$10.6m adjustment to capex and removal of opex step change as detailed in **Table 1** below.

**Table1 AER Alternative Forecast Expenditure (\$m, real FY2026)**

Cost item	Initial Proposal	AER Alternative	Adjustment
<b>Capex</b>	\$42.7m	\$32.1m	-25%
<b>Opex</b>	\$1.4m	-	-100%

The AER details reasons for the Draft Decision adjustments, which AusNet has addressed in Revised Proposal;

AER Draft Decision Feedback	How this has been addressed in AusNet's Revised Proposal
Cost estimates not based on referenceable bottom-up assessments, with potential for over-estimation bias	<ul style="list-style-type: none"> <li>The HV/LV Network Model project is currently in detailed design, which has enabled AusNet to revalidate the project estimate</li> <li>Additionally, we engaged IBM to provide cost estimates for geospatial initiatives leveraging their in-house experience and industry expertise</li> </ul>
Allocation of project costs between AusNet's distribution, transmission and gas network businesses	<ul style="list-style-type: none"> <li>AusNet's initial proposal reflected only distribution network allocated costs, as per our Cost Allocation Methodology. Distribution related allocations have been more clearly documented in our revised proposal</li> </ul>
An alternative option to defer some of the work to the next period and focus on the highest value-adding components needs to be considered	<ul style="list-style-type: none"> <li>AusNet has reviewed and reprioritised the network model management program, targeting initiatives with greatest need and highest benefit</li> <li>Revised Proposal sees descope of demand forecasting initiative, reduced scope of geospatial consolidation and enhancement initiatives, and incorporation of detailed design developments for HV/LV Network Model to include of LV Management</li> </ul>
The direct capex improvement is overestimated and when corrected, the project NPV becomes negative.	<ul style="list-style-type: none"> <li>AusNet has revalidated the program benefit quantification aligned to the revised program scope. Specifically for the Network Model (HV/LV) and additional LV Management projects, detailed design outputs have ensured all productivity gains across access planners and controllers are included</li> </ul>
Risks appear to be overstated, and there is little quantitative evidence to support AusNet's risk assessments	<ul style="list-style-type: none"> <li>Consistent with the revised program scope and AER feedback, we have re-evaluated the program risk assessment and risk reduction to ensure evaluations are valid and appropriate</li> </ul>

In addressing the AER's Draft Decision feedback, AusNet evaluated two options for the Revised Proposal program. This evaluation assessed the relative cost and benefits of two alternative program scopes. The results of this assessment are details in **Table 2**, with the preferred Option 2 providing the highest NPV and mitigation of material risks.

**Table 2 – Options assessment results (\$m, real 2024, distribution network cost allocation)**

#	OPTION NAME	COST (TOTEX \$M)	NPV (\$M)	PREFERRED
1	Implement only data foundations and network operation capabilities	\$36.4m	\$4.8m	No
2	<b>Implement all data foundations, network operation and geospatial data visualisation</b>	<b>\$41.6m</b>	<b>\$12.0m</b>	<b>Yes</b>

Based on this assessment, AusNet's Network Model Management revised proposal consists of \$40.7m capex, \$0.2m non-recurrent opex for SaaS product implementation, and \$0.6m recurrent opex for incremental licences and support (\$real 2024). All costs represent distribution network allocation. Expenditure profile through the RY2027-31 regulatory period is detailed in Table 3 below. Acknowledging the AER's feedback regarding offsetting business opex benefits, incremental licences and support opex is not included AusNet's revised step change proposal.

**Table 3 - Forecast expenditure for Option 2 (\$m real 2024, distribution network allocated costs)**

Cost item	FY2027	FY2028	FY2029	FY2030	FY2031	Total
<b>Capex</b>	\$3.9m	\$10.4m	\$13.9m	\$8.9m	\$3.6m	<b>\$40.7m</b>
<b>Opex</b> (Implementation)	-	-	\$0.1m	\$0.1m	\$0.1m	<b>\$0.2m</b>
<b>Opex</b> (Licencing and Support)	-	-	-	\$0.3m	\$0.3m	<b>\$0.6m</b>
<b>Total expenditure</b>	<b>\$3.9m</b>	<b>\$10.4m</b>	<b>\$14.0m</b>	<b>\$9.3m</b>	<b>\$4.0m</b>	<b>\$41.6m</b>

# 1. AusNet's proposal and AER Draft Decision

Operational network models and geographical information systems provide the digital representation of our assets, their connectivity, operational state, and geospatial location. This information is critical to network planning, operational performance, emergency response and asset management. As our network grows in complexity and customer expectations continue to rise, particularly in response to more frequent extreme weather events, there is increasing requirement on these digital systems and data sets to enable our access planners and controllers to swiftly respond to outages and efficiently manage the network.

This section summarises AusNet's initial FY2027-31 regulatory period proposal for Network Model Management investments; the digital tools use to coordinate and improve our network operations. Also detailed is the Australian Energy Regulator's (AER's) Draft Decision, alternative forecast, reasons for adjustments to AusNet's proposal, and feedback to be addressed in revised proposal.

## 1.1. Initial Submission Summary

AusNet currently experiences a number of deficiencies in our network model and geospatial capabilities, including:

- The lack of integration between our ADMS and the master GIS system, which creates a risk of network model discrepancies.
- The absence of a geospatial view of the network model within ADMS.
- The exclusion of the low-voltage (LV) network from the ADMS network model.
- Limited integration and capability of current geospatial systems, preventing a consolidated single view of network and broader geospatial information, including overlays for bushfire risk, planning, or 3D data such as LiDAR.
- Current GIS network model data not aligned to the latest industry standard (GDA2020).
- A lack of capability for detailed demand forecasting, with the current reliance on spreadsheets for top-down forecasting.

To address these needs, AusNet's initial Network Model Management program proposal comprised of seven initiatives to be undertaken in the FY2027-31 regulatory period. These initiatives addressed the identified capability gaps to deliver improved network visibility, operational efficiency and geospatial data accuracy.

- **Preparedness (Bushfire Risk):** Consolidating and analysing disaster management including bushfire risks, flooding and earthquakes information (e.g. location, boundaries, areas) into (C-I-C) for integrated geospatial visualisation. These addresses fragmented data sources that limit informed decision making for vegetation management and emergency response (e.g. REFL replacement).
- **Hazard, Environment, Access, Easement Overlays:** Centralising hazard and access data into (C-I-C) for easy visualisation and updates. These addresses fragmented storage across (C-I-C), improving safety and planning for field operators.
- **3D Network, LIDAR and Topographic Visualisation:** Integrating and analysing 3D network models and LIDAR data into systems to enable accurate visualisation of low-voltage and high-voltage assets. This addresses the lack of 3D operational views and potential outdated LIDAR data, improving fault location and outage response.
- **Geospatial data improvements:** Updating geospatial data standards, in alignment to GDA 2020 to integrate property boundaries and accurate trench details into GIS and ADMS, plus updating as per other data anomalies identified through with inconsistencies with drawings. This addresses inconsistencies and oversimplification in current geospatial representations, enabling precise planning and fault management.
- **Consolidate Geospatial Capability:** Unifying disparate geospatial systems (C-I-C) into a single viewing platform using (C-I-C). This addresses reliability and safety risks caused by inconsistent network information across multiple sources.
- **Network Model (HV/LV):** Integrating HV and LV network models from (C-I-C) into ADMS to provide geospatial visualisation in the control room, improving situational awareness and enabling efficient management of planned and unplanned outages.
- **Multi-view demand forecasting:** Implementing advanced forecasting tools like (C-I-C) for bottom-up demand modelling and scenario analysis. This address reliance on spreadsheets and lack of detailed forecasting

capability, enabling better planning for EV uptake (e.g. load of transformers/conductor sizes) and regulatory submissions.

The quantified benefits of these initiatives included faster and more efficient responses to outages, leading to reduced emergency operating costs. Additionally, the program was forecast to improve employee productivity, enhance compliance, and improve safety outcomes by strengthening protocols for low voltage operations.

Based on assessment of alternate architectural implementation options, recommended expenditure was \$39.0m capex and \$1.8m opex for incremental ongoing licences and support, as shown in **Table 4** below (\$real 2024 and representing distribution network allocated costs).

**Table 4 - Initial Submission Forecast Expenditure (\$'million, real FY2024)**

Cost item	FY2027	FY2028	FY2029	FY2030	FY2031	Total
Capex	\$ 14.6m	\$ 6.8m	\$10.8m	\$2.6m	\$3.8m	<b>\$38.6m</b>
Opex	-	\$0.2m	\$0.2m	\$0.7m	\$0.7m	<b>\$1.8m</b>
Total	<b>\$14.6m</b>	<b>\$7.0m</b>	<b>\$11.1m</b>	<b>\$3.3m</b>	<b>\$4.6m</b>	<b>\$40.4m</b>

## 1.2. AER draft decision feedback

The AER's Draft Decision did not accept AusNet's Network Model Management program. The AER's alternate forecast reduced program capex by \$10.6m (\$real 2026) and removed the proposed opex step change, as shown in **Table 5**.

**Table 5 - AER Alternative Forecast Expenditure (\$m, real FY2026)**

Cost item	Initial Proposal	AER Alternative	Adjustment
Capex	\$42.7m	\$32.1m	-25%
Opex	\$1.4m	\$0.0m	-100%

The AER and EMCa provided reasons for the Draft Decision Adjustments:

- The identified need and risk analysis has overrated the overall risk. EMCa provided feedback specifically regarding Risks R1.1 to R1.3, and that there is little quantitative evidence to support AusNet's risk assessments.
- The direct capex improvement is overestimated and when corrected, the project NPV becomes negative. EMCa acknowledges that AusNet's benefit sources are reasonably identified, however highlights concerns regarding the assumptions underpinning these benefits and especially the marginal benefit-to-cost ratio.
- An alternative option to defer some of the work to the next period and focus on the highest value-adding components needs to be considered.

Additionally, the AER provided feedback on the overall ICT program, which is relevant to the Network Model Management program:

- Business cases provide only brief descriptions and do not include robust evidence to justify the need for each initiative within the proposed scope.
- Limited clarity regarding functional requirements, available technologies, and alignment with business needs, suggesting low project maturity.
- The approach to cost estimation do not appear to be based on bottom-up cost calculations and are not informed by market-tested sources such as vendor quotations or benchmarked industry pricing.

## 2. AusNet's Revised Proposal

In the 10 months since the initial EDPR submission, and to address the AER's Draft Decision feedback, AusNet's has further matured the required scope, business benefits and cost estimates for Network Model Management program initiatives. This section details these revised proposal changes which specifically address the Draft Decision feedback.

### 2.1. Updated Program Scope

AusNet has acknowledged the AER Draft Decision and EMCa feedback and revised our Network Model Management proposal to target the highest value initiatives and scope. As a result, we have reduced the scope of our geospatial systems consolidation, data and capability improvement initiatives. We have also descoped the Multiview Demand Forecasting initiative, deferring it to the following regulatory cycle.

Since the initial EDPR submission, we have commenced detailed design work for the Network Model (HV/LV) project. This design work has further informed the project cost estimate and quantified benefits, and has also identified a benefit-justified need to include LV Management as an additional scope item.

Details of the scope for each of the revised initiatives are detailed in **Table 6** below. The revised program sees delivery of the most critical and highest value capabilities, while reducing scope and deferring initiatives where appropriate.

**Table 6 – Revised Scope**

Initiative	Scope
Geospatial data improvements <i>Reduced Scope</i>	This updated initiative halved the scope to only focus solely on implementing GDA 2020 updates, with geospatial improvements limited to this standard. Assessing drawing inconsistencies in geospatial systems have been deferred to the next period.
Consolidate Geospatial Capability <i>Reduced Scope</i>	This initiative focuses on integrating highly-critical systems only i.e. (C-I-C), rather than implementing the full suite of geospatial capabilities. This targeted approach reduces required investment while retaining flexibility for future integration enhancements.
Preparedness (bushfire risk) <i>Reduced Scope</i>	This initiative focuses only on leveraging existing platforms to capture and store critical bushfire risk data, prioritising high-value use cases for deployment. Analytics and workforce integration capabilities have been deferred to the next period, enabling faster delivery while maintaining flexibility for future enhancements.
Network Model (HV/LV) <i>Refined Scope</i>	<p>This initiative will integrate the high-voltage (HV) and low-voltage (LV) network models from GIS into ADMS, ensuring a single source of truth and eliminating manual maintenance. It includes extending the LV electrical model down to the customer connection point and enabling geospatial and schematic views of both HV and LV networks within ADMS.</p> <p>These enhancements will significantly improve situational awareness in the control room, supporting efficient management of planned and unplanned outages and driving operational reliability.</p> <p>Note that detailed design work for this project, including LV Management, has commenced and remains ongoing.</p>
LV Management <i>Extended Scope</i>	<p>This initiative will introduce advanced LV management capabilities within ADMS by enabling the creation of switching instructions using actual asset data, applying safety logic for LV operations, and streamlining approval processes for planned LV work.</p> <p>As part of our detailed design process and extensive scope/benefit review, we have expanded the scope to integrate LV management with the Network Model (HV and LV) to ensure a holistic and future-ready approach. This bundled strategy accelerates benefit value realisation, provides deeper operational insights, enhances risk management, and introduces complementary capabilities that maximise overall benefits.</p> <p>Importantly, this initiative - originally scheduled for post-FY2031 - has been brought forward to deliver benefits sooner, improving customer outcomes and optimising delivery efficiency.</p>
Hazard, Environment, Access, Easements Overlays <i>Reduced Scope</i>	This initiative focuses only on publicly available data sources and readily available AusNet information, reducing overall data complexity. This approach will prioritise high-value datasets over detailed integrations. For example, easement integration with Vic Land datasets has been removed due to setup and ownership complexities.
3D network, LiDAR, and Topographic visualisation	This initiative focuses only on capturing 3D network, LIDAR & topographic data with limited visualisation enhancements. Analytics and advanced insights have been



Reduced Scope	deferred to the next period, our solution will aim to display and contextualise the data rather than interpret asset types or provide analytical outputs.
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2.2. Program Delivery and Dependencies

The Network Model Management program represents two domains of capability enhancements, with interdependencies between initiatives as depicted in **Figure 1** below. A number of the projects builds upon each other; e.g. data enables better decision making for planned and unplanned outage, which ultimately improves network visibility, operational efficiency and data accuracy.

Integrated network operations enhancement (Network Model and LV Management)

These initiatives deliver advanced operational capabilities that improve safety, reliability, and efficiency. By integrating high-voltage (HV) and low-voltage (LV) network models into ADMS, we establish a single source of truth for network connectivity. Extending the LV model to the customer connection point and enabling schematic and geospatial views significantly enhances situational awareness in the control room. Complementing this, the introduction of LV management capabilities provides real-time visibility of the LV network, applies safety logic for switching instructions, and streamlines approval processes for planned LV work.

These enhancements rely on accurate geospatial data to ensure seamless integration and dependable operational insights. Together, they support faster outage restoration, improved employee productivity, and reduced emergency operational expenditure, while mitigating safety risks and strengthening

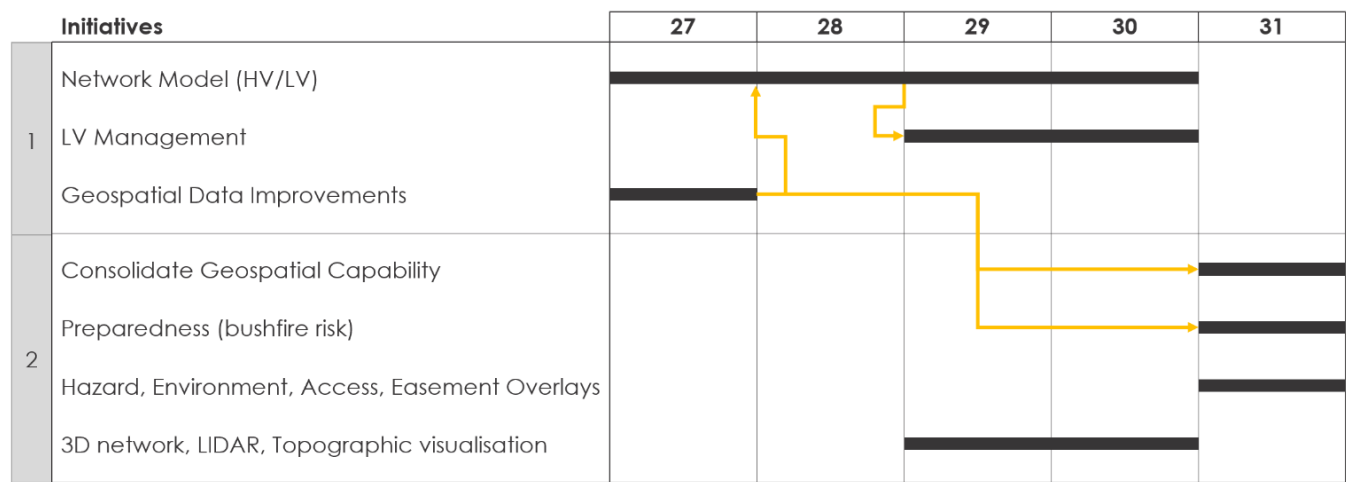
Enhancing geospatial data and systems capabilities

This group of initiatives focuses on enhancing geospatial accuracy and bushfire risk preparedness to support safe and compliant network operations. By implementing GDA2020 updates and consolidating critical geospatial systems, such as (C-I-C), we establish a reliable spatial framework that enables future capability development. In parallel, leveraging existing platforms to capture and store high-value bushfire risk data ensures timely and accurate information for operational decision-making.

Alongside these efforts, our approach to geospatial (2D & 3D) data visualisation is centred on enhancing effectiveness and value by integrating basic hazard overlays and 3D network visualisation into operational systems. By capturing LiDAR and topographic data and incorporating publicly available hazard and environmental datasets, we equip operators and engineers with a richer spatial context, ultimately enabling more informed decision-making.

As detailed in Section 2.1, advanced analytics and workforce integration have been deferred to accelerate delivery and reduce complexity, while maintaining flexibility for future enhancements. This approach provides essential spatial accuracy and risk context for downstream initiatives, supporting improved network planning, operational safety, and regulatory compliance.

Figure 1 – Network Model Management & Geospatial capabilities Initiatives Dependency Mapping



2.3. Revised Program Costs

In response to the AER’s feedback regarding referenceable cost estimates, AusNet has revalidated cost estimates for our programs. This revalidation has incorporated updated solution design for the network model (HV/LV) initiative, which is currently undergoing detailed design. For geospatial-specific initiatives, AusNet has engaged its delivery

partner (IBM) to provide revised cost assessments, reflecting updated requirements and matured scope. Given IBM has detailed knowledge of AusNet's geospatial initiatives, systems architecture, integrations, dependencies, and operational constraints, gained over the years. This expertise positions IBM to provide accurate and reliable project cost estimates for AusNet.

Costs estimates for AusNet's proposed Network Model Management program have been revised in our resubmission to reflect the scope maturity and newly identified needs.

- Geospatial data and systems foundations – reduced from (C-I-C) (*geospatial data improvements; consolidate geospatial capability; preparedness bushfire risk*)
- Geospatial (2D & 3D) data visualisation – reduced from (C-I-C) (*3D network, LiDAR, and Topographic visualisation; Hazard, Environment, Access, Easements Overlays*)
- Network Model (HV/LV) - increased from (C-I-C). Revised estimate represents outcomes from current detailed design phases, which has provided greater definition of required delivery costs
- LV Management - new scope to (C-I-C). Identified as through network model detailed design as justified scope acceleration from FY2032-36 period, providing incremental benefits and delivery synergies

Initiative cost estimates are shown in **Table 7** below. IBM cost estimates have been deflated to \$real 2024 basis and AusNet internal Program Management and Architecture assigned. Implementation opex for configuration of SaaS-based systems has been assessed as 20% of total project cost, based on historical like-project benchmarks. All program costs are fully allocated to AusNet's distribution network.

**Table 7 – Revalidated Program Cost Estimates (\$real 2024)**

Initiative	Capex	Opex - Implementation	Opex - Licensing	Basis notes
Preparedness (bushfire risk)	(C-I-C)			IBM cost estimate
3D network, LiDAR, and Topographic visualisation	(C-I-C)	(C-I-C)	(C-I-C)	IBM cost estimate
Geospatial data improvements	(C-I-C)			IBM cost estimate
Consolidate Geospatial Capability	(C-I-C)	(C-I-C)		IBM cost estimate
Hazard, Environment, Access, Easements Overlays	(C-I-C)			IBM cost estimate
Network Model (HV/LV)	(C-I-C)		(C-I-C)	Detailed design estimate, incorporating (C-I-C)
LV Management	(C-I-C)			Detailed design estimate, incorporating (C-I-C)
<b>Total</b>	<b>\$40.7m</b>	<b>\$0.2m</b>	<b>\$0.6m</b>	

## 2.4. Updated Program Benefits

The detailed design work for the Network Model (HV/LV) project has revalidated and expanded the expected benefits. Identified incremental benefits include improved LV switching instructions, greater control room efficiency, and enhanced compliance.

In line with the reduced geospatial capability scope, we have conservatively reduced benefit estimates for initiatives including preparedness, 3D network, LIDAR topographic visualisation, geospatial improvements, and overlays. This reduction in benefits appropriately reflects the revised program focus on highest-priority areas.

As a result of this revalidation, quantified benefits for the Network Model Management program include:

- **Improved Operational Efficiency:** Reduced site visits, time for writing and executing LV switching, and overtime for coordinators. Enhanced approval processes for planned LV instructions.
- **Situational Awareness:** Real-time visibility of the as-operated LV network for network controllers, improving fault identification and restoration times.
- **Data Integration and Network Planning:** Better data integration and network planning by aligning HV and LV network model data between (C-I-C) and ADMS, providing tools to identify and resolve network data

discrepancies, creating opportunities for improved LV network planning, and delivering benefits to multiple teams using (C-I-C).

- **Customer Outcomes:** Faster restoration times, improved accuracy of outage notifications, and reduced penalties for notification breaches.
- **Safety:** Reduced human error incidents by leveraging enhanced safety logic for LV switching instructions.
- **Reliability:** Faster fault restoration using integrated system data, better visualisation of outages, and accurate fault location identification.
- **Compliance and Guaranteed Service Levels:** Reduced penalty costs for notification breaches, enhanced visualization of outages and more accurate fault locations resulting in improved restoration times and therefore fewer Guaranteed Service Level payments and meeting reliability targets.

## 2.5. Updated Risk Assessment

Acknowledging the AER Draft Decision and EMCa feedback, AusNet has reassessed our current network model and geospatial-related risks using our Enterprise Risk Management Framework (risks of highest concern are rated red and those of lowest concern are rated blue). Our risk assessment has considered the cumulative impact of gaps identified in Section 2.1 on our ability to provide safe and reliable electricity services to our customers.

**Figure 2 – Risk assessment of current state**

		Consequence				
		1	2	3	4	5
Likelihood	Almost certain			Material Risk threshold		
	Likely			R1.1-1.2 R1.4		
	Possible			R1.3		
	Unlikely					
	Rare					

Legend
A
B
C
D
E

RISK	CONSEQUENCE	LIKELIHOOD	RISK RATING
<b>R1.1</b> <b>Limited LV Model &amp; Geospatial Visibility:</b> Missing LV Model and missing geospatial views within ADMS constrain efficient network operations for planned and unplanned outage – especially during major events – resulting in customer outage impacts due to limited visibility and poor coordination with field crews.	<b>Level 3:</b> Medium impact to customer service levels with regulatory implications	Likely	<b>B</b>
<b>R1.2</b> <b>Sub-optimal network planning</b> making due to modelling limitations, leading to higher costs and deteriorating performance as network complexity increases.	<b>Level 3:</b> Financial impact of sub-optimal decision making, with increased expenditure > \$2m	Likely	<b>B</b>
<b>R1.3</b> <b>Risk of non-compliance</b> due to inconsistencies or inaccuracies in geospatial data, leading to incorrect decision making relative to environmental or hazard locations	<b>Level 3.</b> Regulatory compliance impact, with resulting fines and additional audit and reporting requirements imposed	Possible	<b>C</b>
<b>R1.4</b> <b>Incomplete LV connectivity model and details:</b> Gaps in LV connectivity data increase the risk of non-compliance with planned customer notification requirements and exacerbated by increasing network complexity.	<b>Level 3:</b> Inefficient network operations and regulatory compliance impact, with resulting fines and additional audit and reporting requirements imposed	Likely	<b>B</b>

### 3. Evaluation of Options

Consistent with the AER's "Non-network ICT capex assessment approach" of November 2019, for AusNet's revised proposal we have evaluated credible options for the Network Model Management program. Recognising the AER's Draft Decision feedback, we have focused options analysis on alternate degrees of scope within the program.

We have identified two credible Network Model Management scope options, as detailed in **Table 8** below:

**Table 8 – Options summary**

OPTION	SUMMARY
<b>Option 1: Implement only data foundations and network operational capabilities only</b>	<p>Option 1 represents a partial execution of the proposed Network Model Management program, focusing on delivering network operation capabilities. Initiatives included are:</p> <ul style="list-style-type: none"> <li>Geospatial data improvements (<i>partial</i>)</li> <li>Network Model (HV/LV)</li> <li>LV Management</li> </ul>
<b>Option 2: Implement all data foundations, network operation and geospatial capability enhancements</b>	<p>Option 2 proposes to fully implement digital solution for network model enhancements, as identified in AusNet's revised proposal. In addition to the initiative listed in Option 1 above, additional programs of work include:</p> <ul style="list-style-type: none"> <li>Geospatial data improvements (<i>full</i>)</li> <li>Hazard, Environment, Access, Easements Overlays</li> <li>3D network, LiDAR, and Topographic visualisation</li> <li>Consolidate Geospatial Capability</li> <li>Preparedness (bushfire risk)</li> </ul> <p>This is our recommended option as it addresses our capability gaps by implementing the network operational improvements outlined in Option 1, along with additional initiatives that enhance geospatial data information, strengthen network planning and improve major event management.</p>

#### 3.1. Option 1 – Implement network operational capabilities only

This option represents a reduced scope, prioritising advancement of network operational capabilities through the HV/LV network model and LV management, and enabled by necessary geospatial data improvements.

As shown in **Figure 3** below, this option reduces the identified risks below AusNet's material risk threshold. The planned degree of functionality and integration of these systems reduces both the consequence and likelihood of network operational impacts.

**Figure 3 – Risk assessment – Option 1**

		Consequence				
		1	2	3	4	5
Likelihood	Almost certain			Material Risk threshold		
	Likely					
	Possible			R1.1 – R1.4		
	Unlikely					
	Rare					

Legend
A
B
C
D
E

	RISK	CONSEQUENCE	LIKELIHOOD	RISK RATING
R1.1	<b>Limited LV Model &amp; Geospatial Visibility:</b> Missing LV Model and missing geospatial views within ADMS constrain efficient network operations for planned and unplanned outage – especially during major events – resulting in customer outage impacts due to limited visibility and poor coordination with field crews.	<b>Level 3:</b> Medium impact to customer service levels with regulatory implications	Possible	<b>C</b>
R1.2	<b>Sub-optimal network planning</b> making due to modelling limitations, leading to higher costs and deteriorating performance as network complexity increases.	<b>Level 3:</b> Financial impact of sub-optimal decision making, with increased expenditure > \$2m	Possible	<b>C</b>
R1.3	<b>Risk of non-compliance</b> due to inconsistencies or inaccuracies in geospatial data, leading to incorrect decision making relative to environmental or hazard locations	<b>Level 3.</b> Regulatory compliance impact, with resulting fines and additional audit and reporting requirements imposed	Possible	<b>C</b>
R1.4	<b>Incomplete LV connectivity model and details:</b> Gaps in LV connectivity data increase the risk of non-compliance with planned customer notification requirements and exacerbated by increasing network complexity.	<b>Level 3:</b> Inefficient network operations and regulatory compliance impact, with resulting fines and additional audit and reporting requirements imposed	Possible	<b>C</b>

Forecast expenditure for this option is \$35.9m capex and \$0.5m recurrent opex for incremental licenses and support, as shown in in Table 9 below. This option delivers NPV of \$4.8m. While this reduced scope option delivers positive NPV, it is not preferred as it does not address the identified geospatial capability gaps nor deliver associated benefits.

**Table 9 – Forecast Expenditure for Option 1 (\$'million, real FY24)**

Cost item	FY27	FY28	FY29	FY30	FY31	Total
<b>Capex</b>	\$3.2m	\$10.4m	\$13.6m	\$8.6m	-	<b>\$35.9m</b>
<b>Opex (Implementation)</b>	-	-	-	-	-	-
<b>Opex (Licencing and Support)</b>	-	-	-	\$0.25m	\$0.25m	<b>\$0.5m</b>
<b>Total expenditure</b>	<b>\$3.9</b>	<b>\$10.4</b>	<b>\$13.6</b>	<b>\$8.9m</b>	<b>\$0.3m</b>	<b>\$36.4m</b>
<b>Net Present Value</b>						<b>\$4.8m</b>

## 3.2. Option 2: Implement network operational and enhanced geospatial capabilities

This option includes implementation of both network operations enhancements (via HV/LV Network Model and LV Management), and also enhancements and consolidations of AusNet's broader geospatial capabilities. This scope fully addresses the identified needs to realise improvements in our network operations, planning and management capabilities.

Delivering these initiatives together maximises operational efficiency, supports structured and informed decision-making, and delivers a cohesive solution that underpins safe and reliable network operations. Targeted enhancements are underpinned by accurate geospatial data, to enable improved geospatial capabilities such as bushfire risk preparedness, and advanced and consolidated data visualisation.

Our risk assessment, as depicted in **Figure 4** below, demonstrates that this Option reduces the likelihood of key risks to AusNet. The planned level of functionality and system integration reduces identified risks compared to Option 1.

Figure 4 – Risk assessment – Option 2

		Consequence				
		1	2	3	4	5
Likelihood	Almost certain			Material Risk threshold		
	Likely					
	Possible			R1.1-1.2 R1.4		
	Unlikely			R1.3		
	Rare					

Legend
A
B
C
D
E

RISK	CONSEQUENCE	LIKELIHOOD	RISK RATING
<b>R1.1</b> <b>Limited LV Model &amp; Geospatial Visibility:</b> Missing LV Model and missing geospatial views within ADMS constrain efficient network operations for planned and unplanned outage – especially during major events – resulting in customer outage impacts due to limited visibility and poor coordination with field crews.	<b>Level 3:</b> Medium impact to customer service levels with regulatory implications	Possible	<b>C</b>
<b>R1.2</b> <b>Sub-optimal network planning</b> making due to modelling limitations, leading to higher costs and deteriorating performance as network complexity increases.	<b>Level 3:</b> Financial impact of sub-optimal decision making, with increased expenditure > \$2m	Possible	<b>C</b>
<b>R1.3</b> <b>Risk of non-compliance</b> due to inconsistencies or inaccuracies in geospatial data, leading to incorrect decision making relative to environmental or hazard locations	<b>Level 3.</b> Regulatory compliance impact, with resulting fines and additional audit and reporting requirements imposed	Unlikely	<b>D</b>
<b>R1.4</b> <b>Incomplete LV connectivity model and details:</b> Gaps in LV connectivity data increase the risk of non-compliance with planned customer notification requirements and exacerbated by increasing network complexity.	<b>Level 3:</b> Inefficient network operations and regulatory compliance impact, with resulting fines and additional audit and reporting requirements imposed	Possible	<b>C</b>

Forecast expenditure for this option is \$40.7m capex, \$0.2m non-recurrent opex for SaaS implementation, and \$0.6m recurrent opex for incremental licenses and support, as shown in **Table 10**. This option delivers NPV of \$12.0m. This option is recommended as it provides higher NPV than Option 1 and addresses all geospatial capability needs.

Table 10 – Forecast Expenditure for Option 2 (\$'million, real FY24)

Cost item	FY2027	FY2028	FY2029	FY2030	FY2031	Total
<b>Capex</b>	\$3.9m	\$10.4m	\$13.9m	\$8.9m	\$3.6m	<b>\$40.7m</b>
<b>Opex (Implementation)</b>	-	-	\$0.1m	\$0.1m	\$0.1m	<b>\$0.2m</b>
<b>Opex (Licencing and Support)</b>	-	-	-	\$0.25m	\$0.25m	<b>\$0.5m</b>
<b>Total expenditure</b>	<b>\$3.9m</b>	<b>\$10.4m</b>	<b>\$14.0m</b>	<b>\$9.3m</b>	<b>\$4.0m</b>	<b>\$41.6m</b>
<b>Net Present Value</b>						<b>\$12.0m</b>

### 3.3. Preferred Option

Of two options assessed, our analysis has found that Option 2 provides the highest NPV. This option delivers the most benefit to customers and exposes AusNet to the least operational risk. This option best supports AusNet's commitment to enhancing resilience and service outcomes for our customers and is aligned to the overall technology strategy for the Distribution line-of-business.

Noting the AER's Draft Decision feedback regarding business opex benefits of this program offsetting the incremental digital licences and support costs, AusNet is not requesting a step change for the \$0.6m recurrent opex. AusNet's proposed step change does include \$0.3m for non-recurrent implementation costs for SaaS-related products.

**Table 11 – Option analysis summary (\$'000s, real FY24)**

Criteria	Option 1	Option 2	Initial Proposal
<b>NPV (\$'000, real FY24)</b>	<b>\$4,817</b>	<b>\$11,981</b>	\$2,339
<b>Capex (\$'000, real FY24)</b>	<b>\$35,855</b>	<b>\$40,748</b>	\$38,588
<b>Opex (\$'000, real FY24)</b>	<b>\$500</b>	<b>\$869</b>	\$1,836
<b>Technically feasible</b>	✓	✓	
<b>Addresses identified need</b>	✗	✓	
<b>Deliverable within timeframe</b>	✓	✓	
<b>Delivery risk</b>	Low	Low	
<b>Preferred option</b>	✗	✓	

# 4. Appendix

## 4.1. Cost Estimate – Network Model (HV/LV) & LV Management

Based on current status of detailed design, commenced in the second half of 2025, AusNet's ADMS Network Model (HV/LV) and LV Management project cost is based on bottom-up cost estimates developed in conjunction with (C-I-C) SMEs. This cost estimate is reflective of detailed design scope, resource breakdown and implementation requirements.

Implementation Scope Component	Capex ('000, \$real 2024)	Cost Basis
ADMS Network Model (HV & LV)	(C-I-C)	(C-I-C)
ADMS LV Management	(C-I-C)	(C-I-C)
Infrastructure	(C-I-C)	(C-I-C)
AusNet Internal Program Management and Architecture	(C-I-C)	(C-I-C)
Total	35,180	



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