

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

Resubmission Addendum: ADMS

Date: 1 December 2025



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Document history

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03/11/2025	V1.0	Initial draft business case for review
27/11/2025	V2.0	Updated for final review
01/12/2025	V3.0	Final business case document

Related documents

DOCUMENT	VERSION	AUTHOR
Wipro - Cost Estimation Report	V1.0	Wipro
Revised Proposal Digital Program NPV Model	V2.0	AusNet Services

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Executive Summary

During our last Electricity Distribution Price Review (EDPR), we identified the need to implement an Advanced Distribution Management System (ADMS) platform to provide AusNet with the necessary capabilities for managing our distribution network in a rapidly evolving energy landscape. For the FY2027-31 period, AusNet's initial proposal included non-recurrent expenditure for continuation of our ADMS implementation program by delivering enhanced network operations and grid optimisation capabilities through the delivery capabilities in Phases 3 and 4 in our ADMS roadmap. Continuing to enhance AusNet's ADMS capability is necessary to address current limitations and issues identified with the current systems that have impacted service level outcomes and customer experience, as evidenced by the major February 2024 storms event.

AusNet's initial proposal included \$66.3m capex and \$13.7m opex (\$real 2026) for the ADMS program, encompassing both IT (ICT capex) and OT (network capex) expenditure. The AER's Draft Decision did not accept this proposal, and proposed an alternative displayed in **Table 1** below.

Table 1 AusNet Initial Proposal and AER Alternative Forecast (\$m, real FY2026)

Cost item	AusNet Initial Proposal	AER Alternative	Adjustment
Capex	\$66.3m	\$48.2m	-27%
Opex	\$13.7m	\$10.0m	-27%

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

AER Draft Decision Feedback	How this has been addressed in AusNet's Revised Proposal
AusNet should consider the 2 years lag the ADMS program is experiencing and the flow on effects to project timelines in the FY2027-31 EDPR period	<ul style="list-style-type: none"> AusNet has acknowledged the AER's feedback and revalidated our ADMS roadmap schedule. The revised proposal program incorporates re-baselined delivery schedule, including deferral of initiatives out of the FY2027-31 period, and focus on the delivery of highest value and maturity initiatives in the FY2027-31
Phase 3 of the ADMS programs should be rescoped, focusing on the highest value of initiatives (noting interdependencies)	<ul style="list-style-type: none"> AusNet has refined and matured the scope of each initiative to clearly demonstrate the need for investment. Initiatives that were classified as low maturity or lower value have been deferred and will be revisited in the next EDPR period
AusNet benefits appear to be overstated, and do not clearly link to Phase 3 and Phase 4 initiatives. Interdependency of benefits with the Field Enablement and Network Model programs Management is unclear.	<ul style="list-style-type: none"> AusNet has updated the benefit modelling for its ADMS program, discretely linking each quantified benefit with its corresponding initiative Benefits between across Field Enablement, Network Model Management and ADMS business cases have been revised to clearly delineate the differences between benefits forecast.
Cost estimates not based on referenceable bottom-up assessments, with potential for over-estimation bias.	<ul style="list-style-type: none"> AusNet has completed revalidation of our ADMS program cost estimates. Additionally, we engaged Wipro (C-I-C) to complete bottom-up cost estimates, leveraging their knowledge of AusNet's technology landscape and industry expertise.

In addressing the AER's Draft Decision feedback, AusNet evaluated two options for the Revised Proposal program. These options assessed the relative cost and benefits from two alternative extents of scope. The results of this assessment are details in **Table 2**, with the preferred Option 2 providing highest NPV and addressing identified capability gaps.

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

#	OPTION NAME	COST (TOTEX \$M)	NPV (\$M)	PREFERRED
1	Implement only core functionality improvements	\$46.4m	\$2.9m	No
2	Implement core functionality and strategic improvements	\$59.4m	\$5.2m	Yes

Based on this assessment, AusNet's ADMS revised proposal represents \$52.1m capex, and \$7.3m opex. All costs represent distribution network allocation. Expenditure profile through the FY2027-31 regulatory period is detailed in **Table 3** below.

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

Cost item	FY27	FY28	FY29	FY30	FY31	Total
Capex (Implementation)	\$8.3m	\$10.1m	\$8.2m	\$12.8m	\$12.8m	\$52.1m
Opex (Licencing and Support)	-	\$1.0m	\$1.5m	\$1.5m	\$3.2m	\$7.3m
Total expenditure	\$8.3m	\$11.1m	\$9.7m	\$14.3m	\$16.0m	\$59.4m

1. AusNet's proposal and AER draft decision

In 2020 AusNet embarked on a multi-year and multi-phase program to implement an Advanced Distribution Management System (ADMS). The ADMS provides a modern, integrated, digital platform to enable AusNet to meet the challenges of operating and managing a dynamic and complex grid, characterised by the increased uptake of renewables and increased frequency and severity of extreme events from climate change.

This section summarises AusNet's initial FY2027-31 regulatory period proposal for ADMS, to deliver enhanced network operations and grid optimisation capabilities through the delivery of Phase 3 and 4 of our ADMS roadmap. 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 identified new ADMS capabilities and system functionality that are required to enable us to effectively manage key network operations issues and energy transition challenges facing our network. These include:

- Increasing penetration of renewables on a grid originally designed and built for large scale one-way power flows is creating challenges in keeping energy supply and demand in balance and ensuring frequency and voltage levels remain within operating limits.
- Increased frequency of extreme weather events, reduced base load generation, rapid technological change, evolving market players, and changing customer/regulator expectations are increasing the complexity in how we must operate and manage our network.
- The lack of integration between our ADMS and SCADA systems is becoming a more challenging issue as the complexity of the network increases, which over time decreases the responsiveness of our control room and can lead to more Human Error Incidents (HEIs).
- Greater workload and therefore stress on our controllers may hinder employee performance and retention, and therefore put the continuity of our capabilities and effective operation of the network at risk.
- The need to improve outage management and communication capabilities as identified from recent external and internal reviews including the Victorian Government's Network Resilience Review¹, the Victorian Government's Network Outage Report² and our internal Post Incident Report following the February 2024 storms that was conducted by Nous.

To address these identified needs, AusNet's initial ADMS submission proposed the following initiatives, split into two phases, to address the capability gaps identified. These initiatives are detailed in **Table 4** below.

Table 4 – Initial proposal ADMS program of work

	Initiative	Description & core capabilities
Phase 3	Dx SCADA and eFEPs	Migration of (C-I-C) and implementation of new eFEPs
	ADMS (OT) digital Improvements	Remediate existing OT performance issues across ADMS, SCADA, ICCP and associated infrastructure and ensures the OT environment can support the Phase 3 scope.
	Improved monitoring of the SCADA	Uplift of current systems to better monitor the SCADA system through (C-I-C)
	Custom SCADA scripts migration	Migrate ~160 custom scripts to ADMS core product (reduces operational risk, and removes technical debt)
	Storm readiness (C-I-C) / Major event management	Provide outage volume predictions by area based on historical outages and weather data. Visualisation of weather combined with outage predictions overlaid onto the network diagram.
	Advanced weather forecasting (storms, solar, demand)	Implementation of a solution to predict network demand and weather forecasting to support the effective management of CERs
	HV DER management	Enables dynamic constraint management for HV generator connections e.g. solar farms, wind farms, and batteries.

	Network simulator	Enables network events to be simulated to support controller training and system testing of advanced modules, e.g. DPF, Fault Location Isolation and Service Restoration and PORT.
	Enhance workforce management (Field crews/resource mgmt.)	Enablement of a consolidated view of projects, resources and rostering to enhance workforce management efficiency
Phase 4	AMI/LV Analytics / ADMS enhanced integration	Integration of the LV network and AMI (Smart Meters) into the ADMS to provide greater visibility and control of the network
	DERMS / ADMS integration	Integration of AusNet's DERMS and ADMS to enable better management and monitoring of DER/CER
	Historical network viewer	Implementing a (C-I-C) solution to enable better post-event analysis and decision making to improve network reliability
	Distribution wallboard	Implementation of an operations wallboard for distribution
	Network access, authorisation and switching	Replace current version of (C-I-C) (custom built network access management system) with a (C-I-C) solution
	Field resource authorities' management	Enables verification of field staff's skills and licenses to ensure they are assigned work within the limits of their qualifications
	Wide area restoration (WAR)	Enables automated Wide Area Restoration for zone substation faults and decommissioning of the custom Distribution Feeder Automation (DFA) product including DFA Zone Sub black.

Based on our assessment of alternate program implementation options, proposed expenditure was \$60.4m capex and \$15.9m of opex, as shown in **Table 5** below (\$real 2024). The program benefit modelling focused on the quantification of control room productivity, rapid detection and remediation of issues on our network leading to shorter outage times for customers, and safety incident avoidance.

Table 5 - Initial Submission Forecast Expenditure for ADMS Program (\$'million, real FY2024)

Cost item	FY2027	FY2028	FY2029	FY2030	FY2031	Total
Capex	\$14.3m	\$15.5	\$14.5m	\$8.5m	\$7.7m	\$60.4m
Opex	\$1.0m	\$3.4m	\$3.8m	\$3.8m	\$3.8m	\$15.9m
Total	\$15.3m	\$18.9m	\$18.3m	\$12.3m	\$11.4m	\$76.3m

1.2. AER Draft Decision Feedback

The AER's Draft Decision did not accept AusNet's ADMS program. The AER's alternate forecast reduced program capex across IT (ICT capex) and OT (network capex) by \$18.1m (\$real 2026) and proposed opex step change by \$3.7m, per **Table 6** below.

Table 6 AusNet Initial Proposal and AER Alternative Forecast (\$m, real FY2026)

Cost item	AusNet Initial Proposal	AER Alternative	Adjustment
Capex	\$66.3m	\$48.2m	-27%
Opex	\$13.7m	\$10.0m	-27%

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

- AusNet should consider the 2 years lag the ADMS program is currently experiencing and the flow on effects to project timelines in the FY27-31 EDPR period
- AusNet should review costs and benefits to ensure they are robust and only have costs with a higher level of maturity. Phase 3 of the ADMS programs should be rescoped, focusing on the highest value of initiatives (noting interdependencies)

- AusNet benefits also appear to be overstated, and do not clearly link to Phase 3 and Phase 4 initiatives. Interdependency of benefits with the Field Enablement and Network Management Model programs is unclear.

Additionally, the AER provided feedback on AusNet's overall ICT program, which is relevant to the ADMS 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 did 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 response to the AER's Draft Decision feedback, and incorporating the continued progression of AusNet's ADMS program through 2025, AusNet has undertaken a comprehensive review of the ADMS program, including its scope, delivery schedule, cost estimation basis, and benefit quantification for the proposed FY2027-31 regulatory period. This section details these revised proposal changes, along with specifically addressing the AER's Draft Decision feedback.

2.1. Updated Program Scope

Through 2025, AusNet has re-baselined our roadmap and progressed design for the next phases of ADMS capability implementation. This revalidation has focused on the delivery of highest value initiatives and has refined project delivery timelines to support optimal sequencing. These changes have delivered a stronger focus on key capabilities with mature scopes of work, along with de-scoping, deferral and consolidation of initiatives, and updated benefit modelling.

Revalidation has resulted in 6 initial proposal initiatives being deferred out of the FY2027-31 period or consolidated into other programs for cost efficiency, as detailed below:

- DERMS/ADMS integration – Phase 4 initiative deferred out of FY2027-31 period
- AMI/LV analytics/ADMS enhanced integration – Phase 4 initiative deferred out of the FY2027-31 period
- Distribution wall board – Phase 4 initiative deferred out of the FY2027-31 period (opportunity to progress earlier if control room relocation proceeds)
- Improved SCADA monitoring – Requirement re-evaluated and initiative deferred out of the FY2027-31 period to prioritise highest value scope
- Field Resources Authorities Management and Enhanced Workforce Management – Consolidated into Field Enablement non-energy field mobility project

Incorporating these deferrals and consolidations, the revised scope for the ADMS program initiatives, including where the scope of initial proposal initiatives have been adjusted, is detailed in **Table 7** below.

Table 7 – Revised AMDS Program Scope

Initiative	Scope
ADMS (OT) digital improvements <i>Reduced scope</i>	Remediate OT performance issues across ADMS, SCADA, ICCP, and associated infrastructure. Key areas identified include: <ul style="list-style-type: none"> • Provide ADMS Lite backup for business continuity if primary and secondary data centers fail • Automate testing and upgrade processes to support ongoing resilience and evergreen operations • (C-I-C) database fine-tuning • Setting up planner workstations
Customer SCADA scripts migration <i>Scope unchanged</i>	AusNet currently operates with c.160rev custom scripts in the SCADA, whose functionality is now available via the out-of-the-box solution from (C-I-C). The scope of this program is to migrate existing custom scripts into (C-I-C) core ADMS product and standardise the ADMS environment by leveraging out-of-the-box (OOTB) functionality. This approach will reduce reliance on bespoke scripting to ultimately improve system maintenance, stability and upgradability.
Dx SCADA and eFEPs <i>Scope unchanged</i>	AusNet's ADMS (C-I-C) and SCADA (C-I-C) are currently linked via an inter-control centre communications protocol (ICCP). This link is currently causing operational challenges, such as latency of up to 10-15mins limiting real-time SCADA visibility and functionality constraints, creating scalability and reliability concerns. The scope of this initiative is to align with (C-I-C) recommended architecture, replacing the current (C-I-C) SCADA and eFEPs (front-end processor to the SCADA) with a (C-I-C) solution. By doing so the ICCP link can be removed, due to both solutions being native products, reducing potential points of failure, eliminating latency delays and frequency of SCADA outages.
Wide Area Restoration (WAR) <i>Scope extended</i>	AusNet currently in the process of replacing our custom Distribution Feeder Automation (DFA) system with (C-I-C) FLISR (fault location, isolation and service restoration) tool to enable automated fault detection, section isolation and power

	<p>restoration. DFA requires manual intervention for restoration decisions, which can delay outage recovery.</p> <p>Scope of this covers the implementation of Primary Outage Restoration Tool (PORT) to compliment the FLISR solution, enabling the coordination and automation outage restoration decisions across the network. PORT adds intelligence and decision-making capability beyond basic fault isolation, reducing reliance on manual controller actions.</p> <p>Extended scope of this program includes the decommission of our DFA system and additional integration requirements to enable PORT to interface with FLISR.</p>
HV DER management <i>Scope unchanged</i>	<p>Enable direct control of high voltage distributed energy resources (HV DER) connected to the distribution network by integrating AusNet's SCADA system with DER SCADA platforms.</p> <p>Active control is needed to enable coordinated management of energy exports and improve network stability, as the high levels of energy exports from these generators (e.g. small-scale solar farms and wind farms) can create grid instability, making it difficult manage loads and keep the network stable.</p>
Advanced Dynamic Voltage Management <i>Scope unchanged</i>	<p>AusNet is trialling Dynamic Voltage Management (DVM) across five substations to address voltage fluctuations driven by increasing Distributed Energy Resources (DERs) and Consumer Energy Resources (CERs). Voltage rise in low-voltage networks can exceed regulatory limits, leading to equipment damage, safety concerns, and compliance risks.</p> <p>Scope of this initiative covers the expansion of ADMS and (C-I-C) to monitor voltage in real time, ensuring the maximum number of customers remain within acceptable limits while supporting a more resilient, DER-ready network.</p>
Alarms management <i>New scop, originally planned for delivery in current regulatory period)</i>	<p>Rationalise alarms processes and philosophy to improve distribution network monitoring, reduce control room turnover, efficiency and training times. The current set-up is resulting in high alarm volumes, causing delayed fault response and operational inefficiencies.</p> <p>Scope includes enhancements to the alarm dashboard, implementation of alarm shelving functionality, and upgrades such as LV Supply Fail Alarm improvements.</p>
Network access, authorisation and switching <i>Scope unchanged</i>	<p>This initiative proposes replacing the existing (C-I-C) with a (C-I-C) solution. (C-I-C) is both complexed and expensive to run. Transition to a (C-I-C) product will simplify end-to-end workflow process for the distribution network into a consolidated solution.</p> <p>This system facilitates access to the network, providing pre-approvals, approvals and final authorisation to conduct switching.</p>
Historical network viewer <i>Scope unchanged</i>	<p>Implementation of (C-I-C)'s historical network viewer module. This module enables AusNet to view and utilise historic ADMS data to support post-event analysis and decision making, improving network reliability and optimise future responses.</p>
Network simulator <i>Scope unchanged</i>	<p>Implementation of (C-I-C) web application (C-I-C) - use to train Distribution controllers using historic situations and 'what if' scenarios to enhance decision-making and preparedness.</p> <p>This application will enable controllers to train in a simulated environment, replicating real network faults, device failures, etc, along with trialling new configurations and network modules.</p>
Advanced weather forecasting (storms, solar, demand) <i>Scope unchanged</i>	<p>Implement an off-the-shelf advanced weather forecasting system for improved visibility of network demand / supply and enabling better grid management.</p> <p>Currently, AusNet leverages a rudimentary forecasting solution leveraging WeatherZone and BOM (Bureau of Meteorology) data to predict network demand. With the introduction of more CER (customer energy resources), the network is becoming increasingly complex. As such, there is a need for a solution that provides a broader and more detailed view of weather forecasting to accommodate the demands of these resources.</p>
Storm readiness (C-I-C) / Major event management <i>Scope unchanged</i>	<p>Implement a system to proactively predict network outages by leveraging live weather data and historical outage patterns to overlay onto the network diagram. This capability will enable appropriate readiness planning and real-time decision making, especially during severe weather events, to drive greater network resilience.</p>

2.2. Updated Program Delivery and Dependencies

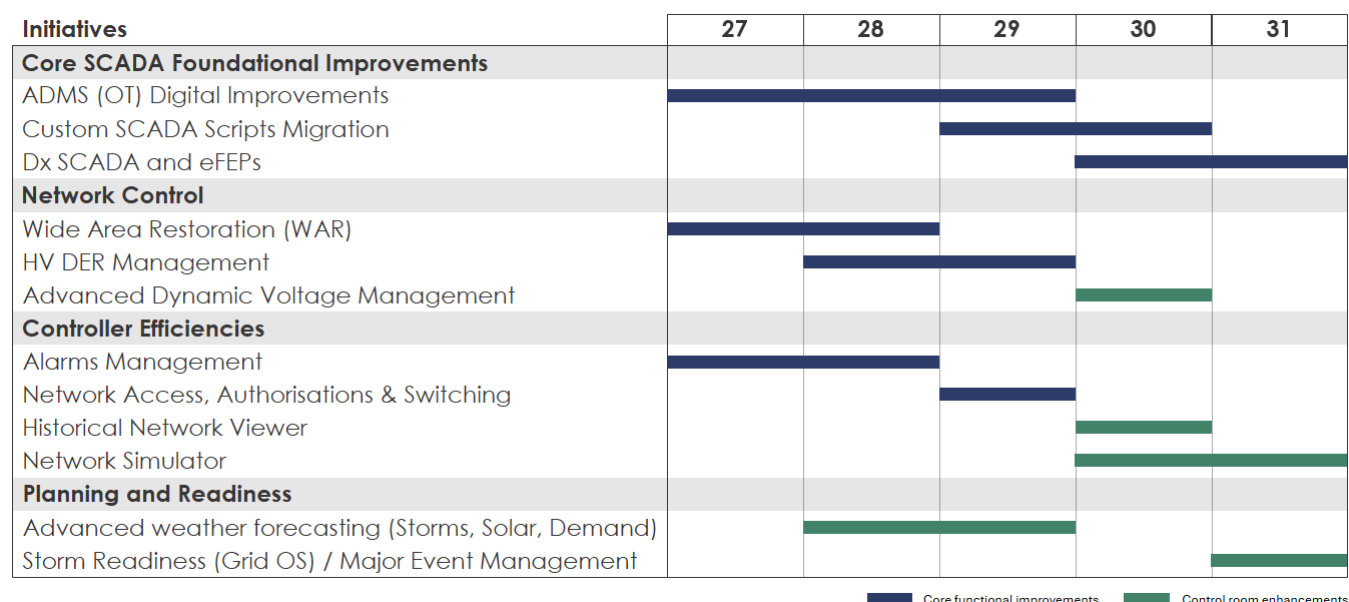
AusNet's proposed ADMS initiatives are structured two capability workstreams:

- **Core functional improvements:** Essential initiatives that maintain the baseline levels of system integrity, reliability or functionality of AusNet's network operations. These programs represent the minimum level of investment required to keep the network stable and secure.
- **Control room capability enhancements:** Initiatives provide additional control room functionality to improve efficiency and management of our network operations. As network management becomes increasingly complex due to more frequent extreme weather events and the growing integration of consumer and distributed energy resources, these capabilities will enable us to manage and prepare for these challenges more effectively.

Within these workstreams, initiatives have been classified into the following domains to support prioritisation and sequencing, with respect to functionality, dependencies and associated benefits. This is detailed below and depicted in **Figure 1**.

- **Core SCADA Foundational Improvements:** To ensure that the reliability, stability and performance of the core ADMS system can support efficient network operations. The proposed initiatives will focus on remediating system performance issues to enhance core platform stability.
- **Network Control:** Provides advanced grid management capabilities to maintain system stability, while enabling accelerated restoration and a coordinated response to outages. The proposed Wide Area Restoration (WAR) initiative remains a business priority and will be implemented first due to its significant benefits in improving resilience and reducing outage impacts for customers.
- **Controller Efficiencies:** AusNet's controllers perform a critical and demanding role in maintaining network reliability and responding to operational events, as such, improving their efficiency and reducing cognitive load is essential to the business. Initiatives will focus on improving operational workflow, before training and simulation tools.
- **Planning and Readiness:** Enables disaster preparedness and predictive capabilities to ensure AusNet is prepared to respond to effects of major events. AusNet plans to implement Advanced Weather Forecasting as an initial step, while awaiting (C-I-C) maturity before event management.

Figure 1 – Revised Proposal ADMS Program Roadmap



2.3. Revised Program Cost Estimates

In response to the AER's feedback regarding referenceable cost estimates, AusNet has engaged our delivery partner Wipro, in consult with (C-I-C), to provide revalidation of cost assessments for each initiative. These bottom-up estimates reflect the updated program requirements, schedule and matured scope. Wipro has detailed knowledge of AusNet's

ADMS systems implementation to-date, including architecture, integrations, dependencies, and operational constraints. This expertise positions Wipro to provide accurate and reliable project cost estimates for AusNet.

Initiative cost estimates for revised ADMS program have are shown in **Table 8** below (\$real 2024). Wipro cost estimates have been deflated to \$real 2024 basis and AusNet internal Program Management and Architecture assigned. All program costs are fully allocated to AusNet's distribution network.

Key cost estimate changes include:

- Descoping of Improvement monitoring of the SCADA, AMI/LV analytics / ADMS enhanced integration, DERMS/ADMS integration and Distribution wallboard initiatives – reduction of (C-I-C)
- Reduced scope for ADMS (OT) digital improvements – reduced from (C-I-C)
- Incorporation of workforce management related capabilities into Field Enablement program scope – reallocation of (C-I-C)
- Additional initiative added to uplift existing alarms management capability – addition of (C-I-C)
- Expansion of WAR scope to include additional functionality and replacement requirements – increase from (C-I-C)

Table 8 – Revised Program Costs

Initiative	Capex	Opex - Implementation	Opex - Licensing	Basis Notes
ADMS (OT) Digital Improvements	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Custom SCADA Scripts Migration	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Dx SCADA and eFEPs	(C-I-C)	(C-I-C)	(C-I-C)	AusNet adjustment to Wipro cost estimate, resulting in (C-I-C) reduction. AusNet's initial EDPR proposal estimate assessed as more accurate based on input from internal AusNet SCADA support team.
Wide Area Restoration (WAR)	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
HV DER Management	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Advanced Dynamic Voltage Management	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Alarms Management	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Network Access, Authorisations & Switching	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Historical Network Viewer	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate – Opex includes licensing for Network Simulator
Network Simulator	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Advanced weather forecasting (Storms, Solar, Demand)	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
Storm Readiness (Grid OS) / Major Event Management	(C-I-C)	(C-I-C)	(C-I-C)	Wipro cost estimate
ADMS incremental support team	(C-I-C)	(C-I-C)	(C-I-C)	As per AusNet workshop with (C-I-C)
ADMS license and support contract	(C-I-C)	(C-I-C)	(C-I-C)	As per contracts with (C-I-C)
Total	\$52.1m	-	\$7.3m	

2.4. Quantification of Benefits

AusNet has revised the benefit model for the ADMS program to align with our updated proposal. For new and expanded scope initiatives, we have quantified the additional benefits that the revised scope will deliver (e.g. alarms management). Modelling has also removed benefits associated with initiatives that have been de-scoped. Furthermore, each defined benefit has been mapped to its corresponding initiative, providing clear visibility of value drivers across the program.

AusNet's approach to quantifying ADMS program benefits is as follows, and developed through workshops with Distribution Network Operations and review of operational performance data:

- The benefits to customers and AusNet of the proposed investments were calculated based on review of prior outage event performance, the systems and process for each of the key task types involved, and an estimation of potential improvements.
- Analysis of historical data related to outages and safety incidents has been undertaken to assess improvements in reliability and network safety.
- The economic value of the reduction in outages experienced by customers was calculated based on the average value of customer reliability (VCR) for the AusNet distribution network, and from workshops with operational teams to assess potential outage time reductions if new systems and/or functionalities are implemented.
- Employee efficiency benefits represent a reduction in FTE growth and not reduction in current headcount. Benefits quantified are focused on employee efficiencies realised in control room activities such as the reduced training time, cognitive load complexity of workflows for controllers and associated staff.

Refer the revised proposal NPV model for the quantification of ADMS program benefits.

3. Evaluation of Options

This section provides an overview of options identified that feasibly enable AusNet to address the limitations with our existing systems. Recognising the AER's Draft Decision feedback and "Non-network ICT capex assessment approach" of November 2019, we have focused options analysis on alternate degrees of scope within the program.

We have evaluated two alternate scope options for the ADMS program, as detailed in **Table 9** below:

Table 9 – Options summary

OPTION	SUMMARY
Option 1: Implement only core functionality improvements	<p>AusNet has revised our initial proposal ADMS program and prioritised the initiatives that deliver remediation of the key limitations currently identified within our ADMS landscape. These limitations include the stability of the SCADA system and need for improved outage restoration and alarms management capabilities.</p> <p>Option 1 represents a partial execution of the proposed ADMS program, focusing on delivering core functionalities to address these key limitations. Initiatives include are:</p> <ul style="list-style-type: none"> • ADMS (OT) digital improvements • Customer SCADA Scripts migration • Dx SCADA and eFEPs • Wide area restoration (WAR) • HV DER management • Alarms management • Network access, authorisations and switching
Option 2: Implement core functionality improvements and control room enhancements	<p>Option 2 proposes to fully implement proposed ADMS enhancements identified in AusNet's revised proposal. In addition to the initiatives listed in Option 1 above, additional programs of work include:</p> <ul style="list-style-type: none"> • Advanced dynamic voltage management • Historical network viewer • Network simulator • Advanced weather forecasting (storms, solar, demand) • Storm readiness (GridOS) / Major event management <p>This is our recommended option as it addresses all identified capability gaps by implementing the core foundational improvements outlined in Option 1, along with additional initiatives that enhance controller efficiency, strengthen training and planning processes, and improve major event management.</p>

3.1. Option 1 – Implement only core functionality improvements

This option represents a reduced scope approach, only implementing core functionality improvements as detailed in Section 2.2. This option does not provide targeted control room operations enhancements.

The cost of this option is \$40.5m capex and \$5.8m ongoing opex (\$real 2024) for licencing and support, and it delivers NPV of \$2.9m, as shown in **Table 10** below.

Table 10 – Forecast Expenditure for Option 1 (\$'million, real FY2024)

Cost item	FY27	FY28	FY29	FY30	FY31	Total
Capex (Implementation)	\$8.3m	\$8.5m	\$6.6m	\$8.2m	\$9.0	\$40.5m
Opex (Licencing and Support)	-	\$1.0m	\$1.5m	\$1.5m	\$1.8m	\$5.8m
Total expenditure	\$8.3m	\$9.5m	\$8.1m	\$9.7m	\$10.7m	\$46.4m
Net Present Value						\$2.9m

This option is not recommended as it does not fully address the capability gaps that were identified in AusNet's ADMS systems and does not deliver the quantified employee productivity benefits achieved through efficient controller workflows and reduced controller training time. Additionally, this option does not include scope to implement

capabilities that we believe will be critical to manage emerging operational complexities, such as DER integration and the increasing frequency of adverse weather events.

3.2. Option 2 – Implement core functionality improvements and control room capability enhancements

Option 2 represents the implementation of all initiatives included in AusNet's proposed ADMS resubmission. The proposed roadmap will focus on the implementation of foundational improvements across the EDPR period, before introducing additional capabilities to address evolving business and operations requirements

The cost of this option is \$52.1m capex and \$7.3m ongoing opex (\$real 2024) for licencing and support as shown in **Table 11** below. This option is recommended as it delivers NPV of \$5.2m, higher than Option 1, through capture of all the quantified benefits from both the customer outage time reduction and controller productivity benefits identified in the revised proposal assessment.

Table 11 – Forecast Expenditure for Option 2 (\$'million, real FY24)

Cost item	FY27	FY28	FY29	FY30	FY31	Total
Capex (Implementation)	\$8.3m	\$10.1m	\$8.2m	\$12.8m	\$12.8m	\$52.1m
Opex (Licencing and Support)	-	\$1.0m	\$1.5m	\$1.5m	\$3.2m	\$7.3m
Total expenditure	\$8.3m	\$11.1m	\$9.7m	\$14.3m	\$16.0m	\$59.4m
Net Present Value						\$5.2m

3.3. Preferred Option

Our analysis has found that Option 2 best supports the needs of AusNet's Distribution business and delivers the highest NPV. The ADMS initiatives proposed will enable AusNet to fully address the gaps in our network operations capabilities, with low deliverability risk, to achieve our customer commitments of improving resilience and customer service outcomes.

Table 12 – Option analysis summary (\$'000s, real FY24)

Criteria	Option 1	Option 2	Initial Proposal
NPV (\$'000, real FY24)	\$2,932	\$5,197	\$3,687
Capex (\$'000, real FY24)	\$40,544	\$52,117	\$60,394
Opex (\$'000, real FY24)	\$5,847	\$7,305	\$15,857
Technically feasible	✓	✓	
Addresses identified need	✗	✓	
Deliverable within timeframe	✓	✓	
Delivery risk	Low	Low	

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