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

Digital Post-Implementation Reviews

Top 10 Project Summary

Document number:

Date : January 2025



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Document history

DATE	VERSION	COMMENT
30/09/2024	V1.0	Draft PIRs prepared and issued for review
11/10/2024	V2.0	Updated to incorporate review feedback
18/10/2024	V3.0	Final document for submission

Related documents

DOCUMENT	VERSION	AUTHOR
Technology Strategy and Investment Plan	V3.0	AusNet Services

Approvals

POSITION	DATE
Digital & Technology – Strategy, Regulatory and Partner Management	October 2024
Digital & Technology – Program Management	October 2024
Distribution – Strategy and Regulation	October 2024

Background

The Post Implementation Reports (PIRs) presented in this document represent AusNet Services' completed Distribution related Digital Programs of work or Projects in the period 2020 – 2024 and have been selected on the basis of being the largest in terms of size of their Distribution allocation of capital investment. Consistent with the AER's ICT expenditure assessment guideline, Programs and Projects in flight and yet to be completed in this same period are therefore not included, with a number of those in-flight Programs and Projects relating to EDPR submissions for the same period.

The following table lists the Projects for which PIR's have been provided in this document and provides a scorecard of delivery performance against original Business Case data.

No.	Project Name	Delivery Performance		
		ToTex* Variance \$	Schedule variance mths	Realised Benefit
1	SDME Major Upgrade	\$4.24M (+96%)	11 (+52%)	<ul style="list-style-type: none"> Risk & Safety - realised Organisational Efficiencies - realised
2	Customer Initiated New Load Connections	\$1.41M (+24%)	2 (+17%)	<ul style="list-style-type: none"> Customer Outcomes - realised Regulatory Compliance - realised Organisational Efficiencies - realised
3	RES Delivery Model Mobilisation ICT	-\$0.38M (-8%)	17 (+189%)	<ul style="list-style-type: none"> Organisational Efficiencies - realised
4	Automation of network access	\$1.03M (+15%)	4 (+33%)	<ul style="list-style-type: none"> Customer Outcomes - realised Organisational Efficiencies - realised Risk & Safety - realised
5	Project Nebula Cloud Migration	\$1.92M (+12%)	8 (+31%)	<ul style="list-style-type: none"> Risk & Safety - realised Organisational efficiencies - realised
6	AOD to AHI Consolidation	\$0.22M (+4%)	1 (+7%)	<ul style="list-style-type: none"> Risk & Safety - realised Organisational Efficiencies - realised
7	ADMS Implementation – Phase 1	\$0.61M (+14%)	0** (0%)	<ul style="list-style-type: none"> Customer outcomes - realised
8	Cyber Security Program	-\$5.84M (-25%)	-10 (-29%)	<ul style="list-style-type: none"> Risk & Safety - realised Regulatory Compliance - realised
9	Market Compliance Program	\$0.34M (+5%)	3 (+35%)	<ul style="list-style-type: none"> Regulatory Compliance - realised
10	Metering Compliance Program	-\$15.50M (-18%)	3 (+12%)	<ul style="list-style-type: none"> Regulatory Compliance - realised Customer Outcomes - realised
Total		-\$11.94M		

*TotEx reflects the total CapEx and Project OpEx costs for the Project or Program, i.e. it is not solely the Distribution element of the TotEx.

**Note: Phase completion date has been referenced as it was a Design phase only, and therefore had no applicable go-live date.

Project PIRs

1. SDMe Major Upgrade

Project details

<p>Project description</p>	<p>Spatial Data Management for Electricity (SDMe) is the “network information backbone” for the electrical distribution and transmission networks. It is used to manage and interrogate electrical distribution and transmission network asset information: where the assets are, and how they are connected to form the electricity grid. For context, SDMe information and capabilities underpin all network-related operations, including outage management, works planning/scheduling, asset lifecycle management, customer supply management, designing for an optimised network, and for developing insights.</p> <p>AusNet Services' version of the SDMe application was out of vendor support and no longer able to adapt and respond to AusNet Services' requirements. The SDMe Project was initiated to upgrade SDMe to a fully supported version, and improve associated workflows, tools, interfaces and overall supportability of the application.</p> <p>Following assessment of alternative options, the SDMe upgrade was identified as the least cost option, and a key enabler for broader business and technology initiatives, including:</p> <ul style="list-style-type: none"> • reducing corporate risk by implementing data management tools and supported platforms to support data integrity • improving granularity, design and correctness of the network model and its accessibility for all network operations and analytics, as required for future dynamic grid initiatives which will yield community benefits, and • enabling AusNet Services to respond to market and customer needs associated with the future dynamic grid.
<p>Project delivery commentary</p>	<p>Additional budget and extended delivery timelines were required due to the material impact of COVID-19 on off-shore testing service availability and unanticipated complexity in developing the platform to meet AusNet Services' circuit modelling, spatial data and data maintenance requirements. This was predominately due to unexpected customisation requirements specific to bespoke needs of AusNet Services that could not be supported by standard functionality, and broader business changes which drove scope additions throughout the life of the project (e.g. definition of Enterprise Spatial Strategy).</p> <p>In acknowledgement of the scale of changes and complexity, AusNet Services re-assessed the merits of the business case, including project costs, feasible benefits and value of proceeding with project delivery at several points throughout the project, with each re-assessment validating AusNet Services continuing with implementation of the SDMe program.</p>

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$4.03M	\$0.38M	\$4.41M
Project budget (final actuals)	\$8.21M	\$0.44M	\$8.65M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	81%	81%	81%
Distribution budget	\$3.27M	\$0.31M	\$3.59M
Distribution actuals (final actuals)	\$6.68M	\$0.35M	\$7.04M

Project schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion*
24/11/2017	23/08/2019	27/09/2019	31/07/2020	11/09/2020

* Actual project completion date reflects the date all post go live administrative activities have been completed, including for example final invoice payment and Purchase Order closure, and therefore may be a significant period post Actual go-live date.

Project Benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Maintain existing services, functionalities and capabilities through upgrade to a supported version of the core application (i.e reducing the risk of failure).	Yes	Risk & safety	31/07/2020 Supported technology deployed.
Improve quality of operational information produced and maintained within SDMe being relied upon to support planning, development and decisions in relation to safely operating and conducting work on the network.	Yes	Risk & safety	31/01/2021 Deployment of a standardised data model and data quality management toolset.
Enable AusNet Services to progress its Future Network Role and Integration of Distributed Energy Resources through a modern, more capable and adaptable SDMe capability.	Yes	Organisational efficiencies	31/07/2020 Introduction of a new SDMe capability providing increased ability to support a future dynamic grid.

2. Customer Initiated New Load Connections

Project details

<p>Project description</p>	<p>AusNet Services recognises that customers today require a consistent end-to-end experience across the business, improved connection times, better value for connection costs, greater choice in design and construction service providers, greater visibility of the status of their projects, and greater support of online financial transactions.</p> <p>Existing AusNet Services systems provided inadequate visibility of connection timelines and alerting, with greater quality of information flows and improved processes required to support a consistent customer experience and faster connection times.</p> <p>In response to these challenges and customer needs, AusNet Services initiated a project to deliver an enhanced customer experience through the implementation of an intuitive web-based portal and revised operating model for 'Customer Initiated Load Connections'.</p> <p>The project provided:</p> <ul style="list-style-type: none"> • Improved customer experience with self-serve functionality, streamlined processes, and greater visibility of the options for contestability of design and construction works using accredited service providers • Operational efficiencies through streamlined operational processes and back-end system automation, where possible • A revised Supply Policy to simplify design effort and provide an associated pricing model supported by online payments.
<p>Project delivery commentary</p>	<p>Additional budget required and planned go-live movement due to the need to bring in additional resources (both technical and project management) in response to build complexity and to drive additional testing given unanticipated defects found in testing. Given the direct customer impact of any defects in the deployed solution, these additional resources were required to provide quality assurance of the outcome.</p>

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$5.51M	\$0.41M	\$5.92M
Project budget (final actuals)	\$6.96M	\$0.37M	\$7.33M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	82%	49%	80%
Distribution budget	\$4.51M	\$0.20M	\$4.74M
Distribution actuals (final actuals)	\$5.70M	\$0.18M	\$5.88M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
05/03/2019	16/03/2020	31/05/2020	25/05/2020	30/07/2020

Project benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Enhanced customer experience through improved and streamlined processes for new connections, including self-serve functionality.	Yes	Customer outcomes	25/05/2020 Self service capability delivered.
Satisfying AusNet Services' Essential Services Commission commitments, achieved through continual improvements associated with the Distribution Business Service commitments for timely electricity connections.	Yes	Regulatory Compliance	25/05/2020 Maintain compliance.
Internal efficiencies by enabling technology capability for customers to self-serve for new load connections.	Yes	Organisational efficiencies	30/07/2020 \$2.9m Opex savings p.a.

3. RES Delivery Model Mobilisation ICT

Project details

<p>Project description</p>	<p>Technology advancements and the conclusion of works associated with the Victorian Bushfire Royal Commission significantly reduced the volume of Electricity Distribution works. As a result, AusNet Services commenced a review of its Electricity Distribution Field Services model in mid-2018 to consider alternative delivery models in pursuit of greater efficiency and sustainable delivery of AusNet Services' future works programs.</p> <p>Four key objectives underpinned the selection of a suitable delivery model, being;</p> <ul style="list-style-type: none"> • A focus on customer • Low cost and efficient operations • Safe, timely and high-quality delivery • Flexible and adaptive to the current and future needs. <p>The review determined that an outsourced model would best meet future requirements, and following a competitive market assessment, Downer was selected to provide these services.</p> <p>At the time, Downer provided electricity field services under the Electricity Services Contract (ESC) for the Central region, with approximately 60,000 field activities performed by ~175 field agents per year. This Project delivered the systems capability and interconnectivity for maintenance works required to enable the expansion of this service with Downer to include the East and North Regions, covering an additional 60,000 anticipated field activities performed by ~180 field agents.</p>
<p>Project delivery commentary</p>	<p>Significantly deferred go-live date due to extended planning needs identified after the appointment of Downer, and the transition to a phased deployment approach (being between September 2021 and July 2022), by depot, versus an originally assumed "big bang". This revised approach mitigated service risk.</p> <p>Note: The below budget and schedule details relate to the technology component only of the project, which included:</p> <ul style="list-style-type: none"> • Establishing a secure gateway to share works management data • Replacement of AusNet Services' works management solutions and support hardware with Downer Field Service Management Systems and mobility platform for the management, planning, dispatch and execution of field activities.

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$4.35M	\$0.15M	\$4.50M
Project budget (final actuals)	\$4.12M	\$0M	\$4.12M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	100%	100%	100%
Distribution budget	\$4.35M	\$0.15M	\$4.50M
Distribution actuals (final actuals)	\$4.12M	\$0M	\$4.12M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
28/06/2019	31/03/2020	30/04/2020	26/09/2021 (First Depot) 31/07/2022 (Final Depot)	25/08/2022

Project benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Technology enablement of the broader Program to outsource field services for North and East regions with Downer, with realisation being technology in place to support first depot deployment.	Yes	Organisational efficiencies	26/09/2021 Enabling technology deployed.

4. Automation of Network Access

Project details

<p>Project description</p>	<p>AusNet Services was unable to process network access requests within responsive timeframes due to manually intensive processes and increasing volumes of requests driven by network changes e.g. the introduction of Rapid Earth Fault Current Limiter (REFCL) devices.</p> <p>This Project was initiated to streamline the management of planned outages for Electricity Distribution using automation and machine cognitive intelligence from the point of an Applicant creating an outage application through to the approved switching schedules being made available to the Field Crews.</p> <p>Delivery of this project included the development and implementation of an on-premise solution to:</p> <ul style="list-style-type: none"> • Address the operational risk of legacy out-of-support systems associated with our network access process to enable work on AusNet Services electrical network (NEMS and TOAD) by replacing them with a modern web-based Network Access Planning Dashboard • Support the need for a flexible response to demand (peaks & troughs) by automating manual processes using automation and cognitive machine learning technologies • Improve the customer experience in relation to planned outage notifications • Assist with reducing the risk of non-compliance for communication of planned outages to life support and sensitive customers through more timely access to information.
<p>Project delivery commentary</p>	<p>Additional budget and extended delivery timelines were required due to the complexity associated with understanding and effectively deploying these new and emerging automation and machine learning technologies.</p>

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$6.48M	\$0.20M	\$6.68M
Project actuals (final actuals)	\$7.44M	\$0.27M	\$7.71M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	100%	100%	100%
Distribution budget	\$6.48M	\$0.2M	\$6.68M
Distribution actuals (final actuals)	\$7.44M	\$0.27M	\$7.71M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
1/05/2019	1/05/2020	1/08/2020	31/08/2020	12/03/2021

Project Benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Improved lead times and accuracy of notifications to customers regarding outages.	Yes	Customer outcomes	31/08/2020 Increased automation of processes and communications to customers.
Reduced operating costs and improved efficiencies in the planning of network costs.	Yes	Organisational efficiencies	12/03/2021 Increased automation of schedules and reduced manual activities.
Improved safety for both Life Support and Sensitive customers, and reduced risk of authority non-compliance.	Yes	Risk & Safety	31/08/2020 Automated authority validation implemented.

5. Project Nebula Cloud Migration

Project details

Project description	<p>In August 2020, Project Nebula was established to support the migration of key applications and platforms to the Cloud, transitioning away from on-premise infrastructure, where appropriate and justified.</p> <p>This project enabled mitigation of critical infrastructure platform end-of-life (EOL) risks, reduced investment in 5-yearly hardware refresh cycles, and supported modernisation of AusNet Services technology platforms.</p>
Project delivery commentary	<p>Additional budget required due to scope changes identified at the completion of Detailed Design confirming applications for migration to the cloud and supporting vendor cost quotes. New scope items not originally planned in the Business Case required additional timeframes to deliver. Primary scope changes included the removal of the AOD migration (subject to new Business Case), and addition of Information Management data platform to aid reduce legacy costs with a net positive outcome. These revisions to scope were made once detailed design and analysis were completed.</p>

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$14.69M	\$1.44M	\$16.13M
Project budget (final actuals)	\$16.75M	\$1.30M	\$18.05M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	49%	49%	49%
Distribution budget	\$7.19M	\$0.71M	\$7.9M
Distribution actuals (final actuals)	\$8.21M	\$0.64M	\$8.85M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
02/09/2019	15/10/2021	12/11/2021	06/06/2022	23/08/2022

Project benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Mitigate cyber and associated maintenance risks of on-premise infrastructure.	Yes	Risk & Safety	06/06/2022 On premise infrastructure estate reduced.
Future CapEx avoidance for hosted infrastructure and associated support costs (OpEx).	Yes	Organisational efficiencies	30/11/2022 Hosted infrastructure CapEx needs reduced.
Increased automation and accelerated infrastructure provisioning.	Yes	Organisational efficiencies	06/06/2022 Cloud provider solutions and Service Level Agreements in place.

6. AOD to AHI Consolidation

Project details

Project description	<p>The 'AusNet On Demand' (AOD) to Application Hosting Initiative (AHI) Consolidation project complemented Project Nebula in delivering against AusNet Services cloud migration strategy and was established to:</p> <ul style="list-style-type: none"> • address the immediate risk of end of life for the AOD hardware platform, which runs business-critical applications • consolidate AusNet Services on-premise hardware footprint onto a single virtualised hardware platform (AHI).
Project delivery commentary	<p>Minor budget and schedule variances incurred due to additional resource needs, unexpected technical complexity, and the need to defer migration at a time of inclement weather (in order to mitigate risk associated with the introduction of technical change during an inclement weather period).</p>

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$6.18M	\$0.14M	\$6.32M
Project budget (final actuals)	\$6.54M	\$0M	\$6.54M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	49%	49%	49%
Distribution budget	\$3.03M	\$0.07M	\$3.10M
Distribution actuals (final actuals)	\$3.2M	\$0M	\$3.2M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
1/07/2021	30/09/2022	31/10/2022	06/11/2022	03/03/2023

Project benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Mitigate cyber and associated maintenance risks of on-premise infrastructure.	Yes	Risk & Safety	06/11/2022 On premise infrastructure estate reduced.
Avoid legacy infrastructure costs.	Yes	Organisational efficiencies	06/11/2022 Reduction in legacy support costs and CapEx needs.

7. ADMS Implementation – Phase 1

Project details

<p>Project description</p>	<p>The Advanced Distribution Management System (ADMS) Program was initiated in 2020 as the current Distribution Management System platform was unable to meet both the future state needs of AusNet Services and increasing network complexity.</p> <p>As a large and complex program, AusNet Services' ADMS implementation program was planned for delivery over 4 Phases, to be executed over an extended duration (~5-7 years). Implementation of the Advanced Distribution Management System (ADMS) will enable AusNet Services to optimise operational management of its electricity distribution network and outage related customer interactions by bringing more information into a single platform for situational awareness and greater control of the Distribution network.</p> <p>Phase 1 of the Program focused on design of the future landscape of AusNet Services' ADMS capability, selection of a product vendor, and definition of implementation activities required in future phases to replace or fundamentally uplift the existing ADMS solution.</p> <p>This PIR applies to Phase 1 of the ADMS Program.</p>
<p>Project delivery commentary</p>	<p>Additional program budget required to increase certainty of scope and costs associated with future phases, onboarding additional program, business and technical resources to front end design work during this phase of the program.</p>

Project budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$4.3M	\$0.15M	\$4.45M
Project budget (final actuals)	\$4.91M	\$0.15M	\$5.06M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	100%	100%	100%
Distribution budget	\$4.3M	\$0.15M	\$4.45M
Distribution actuals (final actuals)	\$4.91M	\$0.15M	\$5.06M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
5/03/2021	N/A for Phase 1*	11/04/2022	N/A for Phase 1*	11/04/2022

* Note: Go-live dates have been referenced as not applicable given Phase 1 was focused on design only.

Project benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Enable design of the future state operations for Network Operations and Management, and drive efficient use of funds through market scans and analysis of technologies to support.	Yes	Customer outcomes	11/04/2022 Future phase designs complete.

8. Cyber Security Program

Program details

<p>Program description</p>	<p>The Cyber Security Program aimed to increase the protection of AusNet Services' critical assets, data and staff, and was designed in three annual tranches of initiatives running from 2021 through to 2024.</p> <p>The Program's three-year initiatives were selected and prioritised to assist in achieving Maturity Level 3 (MIL-3) of the Australian Energy Sector Cyber Security Framework (AESCSF), which was expected at that time to be mandated for achievement by energy operators by 2024.</p> <p>This PIR relates to the first and second annual tranches for the period May 2021 to the period April 2023. This is due to a revised business case being approved for the period 2023-2026 to reprioritise the initiatives of the program to address the evolving organisation, technology, and threat landscape at that time, and the cybersecurity requirements of the Security Of Critical Infrastructure (SOCl) Act, the Privacy Act and AESCSF SP2 in March 2024.</p> <p>The following improvements were delivered via the first and second tranche:</p> <ul style="list-style-type: none"> • the way identities of staff, devices, customers and partners are managed • remediation of vulnerabilities across the systems • real-time visibility of threats and vulnerabilities informed by threat intelligence • the speed at which actions could be taken based on quality threat intelligence • standards-based, structured and measurable environment • compliance to regulatory obligations.
<p>Program delivery commentary</p>	<p>Given the evolution of a new 2023-2026 Business Case (refer above commentary) incorporating the original tranche 3 scope, expenditure and budget not incurred in the program was re-forecast as part of the subsequent 2023-2026 Business Case.</p>

Program budget

Budget dimension	CapEx	Program OpEx (PropEx)	Total Cost (TotEx)
Program budget (original approved)	\$19M	\$4.43M	\$23.43M
Program budget (final actuals)	\$13.16M	\$4.43M	\$17.59M

Program Budget - Distribution Allocation

Distribution budget dimension	CapEx	Program OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	47%	49%	47%
Distribution budget	\$8.93M	\$2.17M	\$11.1M
Distribution actuals (final actuals)	\$6.17M	\$2.17M	\$8.34M

Program schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live*	Actual project completion*
01/04/2021	28/02/2024	31/03/2024	30/04/2023	28/08/2023

*Actual dates provided are for tranches 1 and 2 of the original business case only.

Program Benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Compliance to AESCSF SP1 requirements.	Yes	Risk & Safety, Regulatory Compliance	30/04/2023 Compliance to AESCSF SP1 met.
Critical assets cyber security risk reduction.	Yes	Risk & Safety	30/04/2023 Compliance to AESCSF SP1 met.

9. Market Compliance Program

Program details

<p>Program description</p>	<p>The Market Compliance program was established to ensure compliance with specific rule changes, AEMO procedures, and regulatory obligations that impacted AusNet Services' market facing and customer interaction services during the FY2019 period. The program included 8 prioritised initiatives. Examples include:</p> <ul style="list-style-type: none"> • Establishment of a DER Register aligned with obligations under the National Electricity Rules (NER) • Review of National Meter Identifier (NMI) standing data to support mandated changes to standing data that addressed deficiencies and supported future industry changes. <p>Complementing these compliance initiatives, several core technology changes were also delivered to reduce the time and cost to deliver anticipated future compliance changes and enable AusNet Services to respond to a more customer centric market. The two primary initiatives delivered were:</p> <ul style="list-style-type: none"> • Introduction of core components of a Customer Interaction Management platform • Upgrades to the existing SAP Customer Information System (CIS) Solution enabling rapid integration with other applications.
<p>Program delivery commentary</p>	<p>Additional budget (associated with resource extensions) and extended delivery timelines were required primarily due to the extension of the DER Register deployment, in line with revised regulatory timelines. A small portion of budget variance was due to inaccurately forecast development effort in technologies required to support non-DER initiatives.</p> <p>Note: Due to the nature of this program, individual go-live dates were defined for each regulatory and compliance initiative. The dates provided in the tables below reflect the overall program schedule and budget.</p>

Program budget

Budget dimension	CapEx	Program OpEx (PropEx)	Total Cost (TotEx)
Program budget (original approved)	\$6.81M	\$0.08M	\$6.88M
Program budget (final actuals)	\$7.0M	\$0.22M	\$7.22M

Program Budget - Distribution Allocation

Distribution budget dimension	CapEx	Program OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	100%	100%	100%
Distribution budget	\$6.81M	\$0.08M	\$6.88M
Distribution actuals (final actuals)	\$7.0M	\$0.22M	\$7.22M

Program schedule

Original approved			Actual achieved	
Program start	Go-live	Program completion	Actual go-live	Actual program completion
12/03/2019	01/12/2019	17/02/2020	27/02/2020	30/03/2020

Program Benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
<p>Compliant with regulatory obligations associated with 2019 customer/market changes including:</p> <ul style="list-style-type: none"> • DER rule change: Register established and operational • AEMO CATS and standing data changes • Improvements in functionality for the maintenance of registrations for life support customers. 	Yes	Regulatory compliance	27/02/2020 Met compliance.
<p>Establishment of enhanced toolset (Customer Interaction Management) for providing additional customer data capability.</p>	Yes	Customer outcomes	27/02/2020 CIM toolset deployed.

10. Metering Compliance Program

Project details

<p>Project Description</p>	<p>In 2019 AusNet Services initiated the Metering Compliance Program to ensure AusNet systems and processes met the minimum compliance requirements associated with the AEMC's 5 Minute Settlement and Global Settlement rule changes:</p> <ul style="list-style-type: none"> • 5 Minute Settlement: The rule change altered the settlement period for the wholesale electricity spot market from 30 minutes to 5 minutes, to align with the dispatch period • Global Settlement: the existing settlement-by-difference methodology which is used in the NEM was replaced with a global settlement methodology. <p>To enable implementation of these compliance changes, AusNet Services was required to deliver significant metering life-cycle activities including updates to the Meter Data Management system and replacement of end-of-life infrastructure and environments. The Metering life-cycle updates provided foundational capability to enable delivery of the 5 Minute Settlement and Global Settlement changes.</p> <p>Delivery of the Metering Compliance program and associated metering life-cycle activities supported the following outcomes:</p> <ul style="list-style-type: none"> • Provision of a better price signal for investment in fast response technologies, such as batteries, new gas peaking generation, and demand response • More efficient bidding, operational decisions, and investment through the alignment of the operational dispatch and financial settlement periods • An aligned approach, where possible, with Retailers and other Victorian Distributors.
<p>Project delivery commentary</p>	<p>Extended delivery timelines of 3 months were approved by the AEMC for 5 Minute Settlement compliance in response to the impacts of Covid-19 and the need for a further round of consultation.</p> <p>Cost savings were made in actuals (vs Budget) due to renegotiations with vendors during Covid-19 given broad market slow down of work and the availability of more competitive rates.</p>

Project Budget

Budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Project budget (original approved)	\$85.58M	\$2.08M	\$87.86M
Project actuals (final actuals)	\$71.47M	\$0.89M	\$72.36M

Project Budget - Distribution Allocation

Distribution budget dimension	CapEx	Project OpEx (PropEx)	Total Cost (TotEx)
Percentage allocation to Distribution Business	100%	100%	100%
Distribution budget	\$85.58M	\$2.08M	\$87.86M
Distribution actuals (final actuals)	\$71.47M	\$0.89M	\$72.36M

Project Schedule

Original approved			Actual achieved	
Project start	Go-live	Project completion	Actual go-live	Actual project completion
1/04/2019	30/06/2021	31/10/2021	30/09/2021	31/07/2022




Project Benefits

Summary of key benefits	Benefit Achieved	Benefit type	Realisation
Compliance with National Electricity Amendment (Five minute settlement) Rule 2017 No. 15 and National Electricity Amendment (Global settlement and market reconciliation) Rule 2018 No. 14.	Yes	Regulatory compliance	30/09/2021 Met compliance.

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