31 January 2023

Attachment 5.9.d: Customer Information Systems program

Ausgrid's 2024-29 Regulatory Proposal

Empowering communities for a resilient, affordable and net-zero future.

Ausgrid

Table of Contents

1. Document governance

1.1. Purpose of this document

The purpose of this document is to outline the program brief for the proposed Customer Information Services program of work that will form part of our 2024-29 regulatory proposal.

Related documents

Document	Version	Author
2022-35 Corporate Strategy	V1.0	Head of Strategy
2022-29 Technology Strategy	V1.0	CIO
2022-25 Customer Strategy	V1.0	Customer Manager
Attachment 5.9 - Technology Plan	V2.1	ICT Manager
Attachment 5.9.j - Customer Information Systems - CBA model	V1.0	ICT Manager
Consolidated Cost Model	V18	ICT Manager

Document history

Date	Version	Comment	Person
18/03/2022	V0.1	Early visibility draft	ICT Manager
10/05/2022	V0.2	ICT and Business feedback	ICT Manager
18/05/2022	V1.0	CIO Review	ICT Manager
26/05/2022	V1.0 -.9	Independent Review	ICT Manager
31/10/2022	V2.0	CIO Review	CIO

Approval(s)

Name	Position	Date
CIO	Chief Information Officer	31/10/2022
CFO	Chief Financial Officer	30/11/2022

2. Executive summary

The table below provides a summary of the Customer Information Systems program detailed in this program brief. It shows that the program of work, if approved, would enable better outcomes for our customers, partners and communities. The program would require an investment of up to $21.0 million and will deliver net present value (**NPV**) of $91.8 million, based on our NPV modelling.

Executive summary	
Key Objectives(s) of the program	The purpose of the Customer Information Systems program is to continue the momentum created through our Customer Transformation focus in the current 2019-24 regulatory control period. This will enable us to deliver the products and services our customers and partners need and value to support their evolving relationship with energy. It also enables Ausgrid to support the evolving requirements of the market in achieving a Net Zero shared future.
Customer benefits	Improved outcomes will be enabled through: • Ensuring our service interactions are simple and easy to engage in; • Enabling omnichannel communications and self-serve options that are more accessible and intuitive for people from diverse backgrounds and capabilities; • Delivering services in a way that is empathetic to individual needs, especially during outages and emergency response; • Efficiently managing customer requests and enquiries and delivering more consistent experiences; • Helping large energy customers and partners to more efficiently and reliably support the community via automated interactions and provision of key operational data; • Time savings benefits by providing more real-time visibility thereby reducing the amount of time customers and partners need to spend interacting with us; • A better experience for our staff by removing manual effort on routine tasks enabling employee time to be directed to higher value interactions with our customers; and • Improving the efficiency of complex connections.
Compliance requirements	• Electricity Supply (General) Regulation 2001 is one source of our distribution service standards in which we need to report any network failures for small customers. Our customer information systems are foundational in providing the data and analytics for supporting this reporting; • Privacy Act 1988, Information Privacy Act 2014 - Having up-to-date and supported customers information systems is a key enabler to appropriately securing and storing customer information and reducing the risk of a data breach; • Electricity Supply Act 1995 (**NSW**) - Ensuring our customer information systems are highly available and secure enables our critical business services to meet obligations in this Act; and

Executive summary							
	• National Electricity Law (**NEL**) and National Electricity Rules (**NER**) - Ensuring our customer information systems are highly available and secure is an enabler for our critical customer facing services to meet these Rules. • Australian Energy Market Operator (**AEMO**) has flagged the implementation of the Commonwealth Consumer Data Rights reforms in the energy market, to ensure availability, choice and right of access to data. Ongoing development of our information systems will be key to meeting these obligations. • Independent Pricing and Regulatory Tribunal (**IPART**) Guaranteed Service Level (**GSL**) - thresholds and calculations will be changing to a cumulative scheme into the next regulatory period, which will require changes to customer online compensation requests, review and reporting processes and systems • Australian Energy Regulator (**AER**) Export Tariff Guidelines – Introduces time flexible and two-way tariff constructs that will require more data exchange with new and existing partners, more transparent customer experience to manage and support changes and greater visibility of Consumer Energy Resources (**CER**) at point of connection.					
NPV calculations	**Customer:** $91.0 million		**Shareholder:** $0.8 million		**Total:** $91.8 million		
Program timings	**Program duration**		**5 years**				
	Program start year		2025	Q1 ☒	Q2 ☐	Q3 ☐	Q4 ☐
Expenditure forecast	**$ million**	**FY25**	**FY26**	**FY27**	**FY28**	**FY29**	**Total[1]**
	CAPEX	(2.7)	(2.7)	(2.0)	(1.6)	(1.5)	**(10.5)**
	OPEX	(2.7)	(2.7)	(2.0)	(1.6)	(1.5)	**(10.5)**
	SCS[2]	(5.5)	(5.3)	(4.0)	(3.1)	(3.0)	**(21.0)**
Program type	**ICT investment**		☒ Yes			☐ No	
	Recurrent ICT		☐ Yes			☒ No or n/a	
	Non-recurrent ICT		☒ Yes			☐ No or n/a	
	One-off SaaS opex		☒ Yes			☐ No or n/a	

Table 1 Executive summary

[1] Due to rounding, some totals may not correspond with the sum of the separate figures.
[2] Cost Allocation Method (CAM) allocated standard control services component. Indirects are excluded.

3. CONTEXT

3.1. Background

This document outlines the case for investment in our Customer Information Systems. These are the systems that we use to interact with our customers and partners (Retailers, Councils and Accredited Service Providers (**ASPs**)) on a daily basis. These systems directly impact the quality of experiences these members of our community have when dealing with us and are integral to our ability to deliver services efficiently while meeting evolving community expectations.

3.1.1. Strategic approach

Ausgrid's business strategy articulates a clear vision for communities to have the power in a resilient, affordable, net zero future with a targeted emphasis on four strategic objectives:

- Thriving communities: Listen and understand to exceed customer expectations;
- Valued people: Put our people at the heart to make Ausgrid a great place to work;
- Optimised assets and operations: Excel at operations to deliver safe and affordable services; and
- Delivering net zero: Innovate and grow our business to support a net zero future.

3.1.2. Our customer strategy

We recognise that customers are at the heart of our business and our strategy is informed by and aims to deliver on their needs. An overview of our *Customer Strategy* appears below.

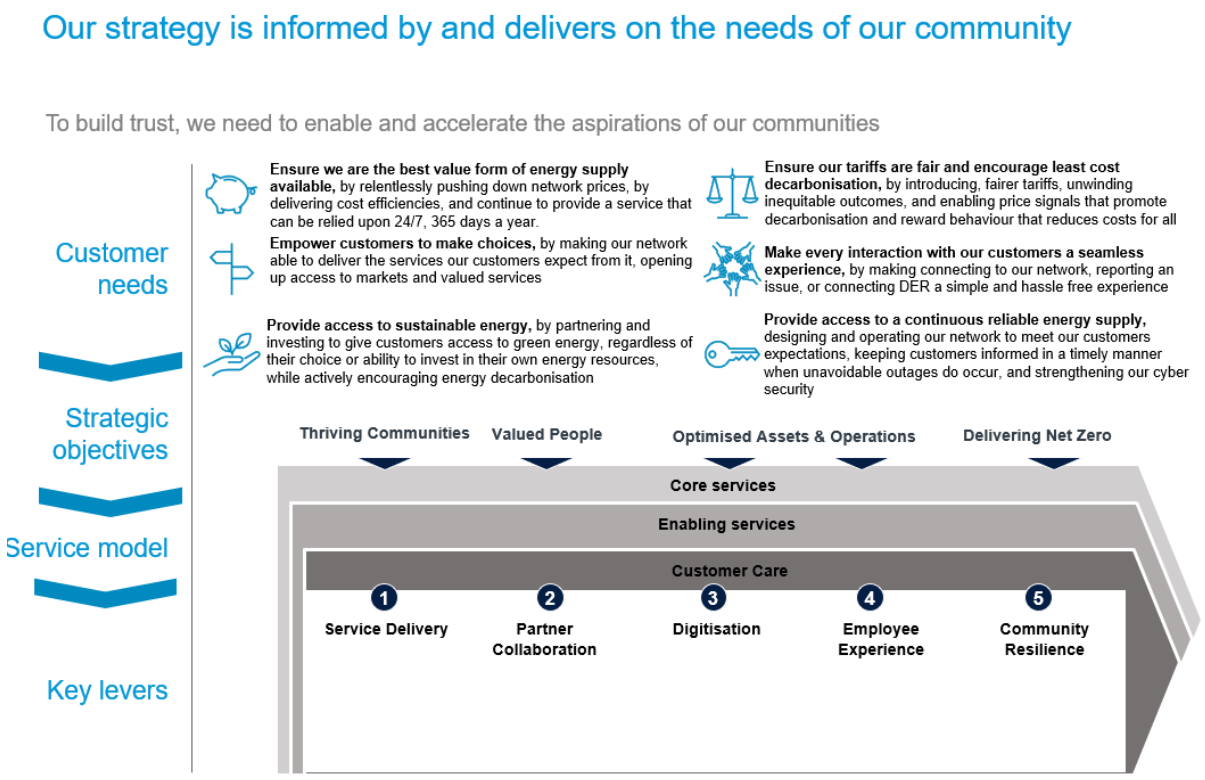

Figure 1 Overview of our customer strategy

Our customer strategy supports the execution of Ausgrid's corporate strategy by responding to customer, community and stakeholder expectations.

To do this, we have identified 5 key levers to help us achieve Ausgrid's strategic objectives:

1. **Service Delivery:** Listen to our customers and learn how to exceed their expectations in the delivery of services
2. **Partner Collaboration:** Continue to build trust and share information with our energy delivery partners to deliver better outcomes for our shared customers
3. **Digitisation**: Lift our capabilities with a data-led approach to digitising business operations and customer interactions to get things done quickly and easily
4. **Employee Experience:** Make work easier for our employees by providing the right tools and access to information to enable a people-driven focus on service excellence
5. **Community resilience:** Establish clear mechanisms to support our community's resilience (customer protections, financial support, enhance accessibility).

If approved, this brief will be an important enabler for the execution of our strategy, allowing us to leverage each of these levers to drive operational efficiency, improve service effectiveness and to win the confidence of our communities so we can support community enablement during the energy market transition.

3.2. Problem / opportunity

We commenced our Customer Transformation journey in the current 2019-24 regulatory control period to evolve from being an asset centric business to a customer centric one that delivers what customers need in a way they value. The first stage of this evolution in the current regulatory period has seen the progressive redesigning of services to become more efficient, effective and enable valued outcomes. The second stage, building on the current momentum, is planned in the 2024-29 regulatory period.

The program was initiated because our customer, partner and employee experiences were often poor due to cumbersome legacy systems and the inability to view all customer details quickly and accurately in a single system or view. This impeded our ability to gauge customers' and partners' needs and service experience in real time, whilst also causing substantial non-value-adding manual work by Ausgrid staff, customers and service partners during interactions.

The framework created to deliver the Customer Transformation seeks to enable our long-term corporate strategy:

- Objective 1 - Thriving communities: Listen and understand to exceed customer expectations;
- Objective 2 - Valued people: Put our people at the heart to make Ausgrid a great place to work;
- Objective 3 - Optimised assets and operations: Excel at operations to deliver safe and affordable services; and
- Objective 4 - Delivering net zero: Innovate and grow our business to support a net zero future.

Progress to date

We commenced our Customer Transformation journey in the current 2019-24 regulatory control period to evolve from an asset centric organisation to having a customer and community focus. The first stage of this evolution in the current regulatory period has seen the progressive redesigning of services to become more efficient, effective and enable valued

outcomes. The second stage, building on the current momentum, is planned in the 2024-29 regulatory period.

Our Customer Transformation program was initiated because our customer, partner and employee experiences were often poor due to cumbersome legacy systems and the inability to view all customer details quickly and accurately in a single system or view. This impeded our ability to gauge customers' and partners' needs and service experience in real time, whilst also causing substantial non-value-adding manual work by Ausgrid staff, customers and service partners during interactions.

The program focused on delivering key foundational building blocks and a scaffold on which to build future services along with the migration of some important services to a single platform. To date we have:

1. Evaluated options for and implemented a new fit for purpose Customer Relationship Management (**CRM**) System, built around a single customer-centric view of our customers, partners and their representatives. In time, this system will bring together all customer interactions to represent a view of each customer's experience with Ausgrid that is current, comprehensive, and secure.
2. Integrated some of our key systems and core customer request processes to our CRM to provide us with the ability to better inform each customer and partner interaction with relevant status and service history details. This has enabled planned and unplanned outages, complaints, claims, tiger tails, and safety and bushfire defects to be simpler, more timely and accurate.
3. Introduced new capabilities to communicate more effectively with customers on the moments that matter most to them via the channel they are most interested in using. Our new short message service (**SMS**) notifications for planned and unplanned outages have been particularly welcomed by customers.
4. Delivered a series of enhancements to our website with a focus on outage pages including performance improvements to increase the user capacity of the outage map, a better experience for mobile users and features to enable better tracking of outages including suburb search functions. In addition to uplifting design, content and useability, we have also provided dedicated tailored web pages for Life Support, Retailers, Councils and our Customer Assistance package
5. Improved customer and staff experience by replacing our aged contact centre system with a modern omnichannel cloud based solution for voice, email and social interactions with automated contact recognition and integration updates into the CRM.
6. Used customer insights gathered from our Voice of Community Program, to inform business decisions which improved our service efficiency and effectiveness.

Some of the customer benefits this work has delivered include:

- Time to resolve complaints reduced from 33 days to 8 days;
- Time to resolve claims reduced from 46 days to 30 days;
- Design checking time for connection applications halved from 10 to 5 days;
- Increased self service capability for our website users;
- Customer time to navigate contact centre IVR reduced from 183 seconds to 85 seconds; and
- Early notification of outages via text message.

We have been measuring the impact of these improvements via our Customer and Partner Confidence Scores questionnaire data expressed as a percentage of respondents providing a score of 7 out of 10 or above. This approach is aligned with Energy Consumers Australia's (**ECA**) approach to measuring consumer sentiment and allows us to benchmark against others in the industry.

Acknowledgment of our transformation by customers and partners is evident in the Confidence scores graphed below with the impact of service improvements particularly evident despite a period of many challenges.

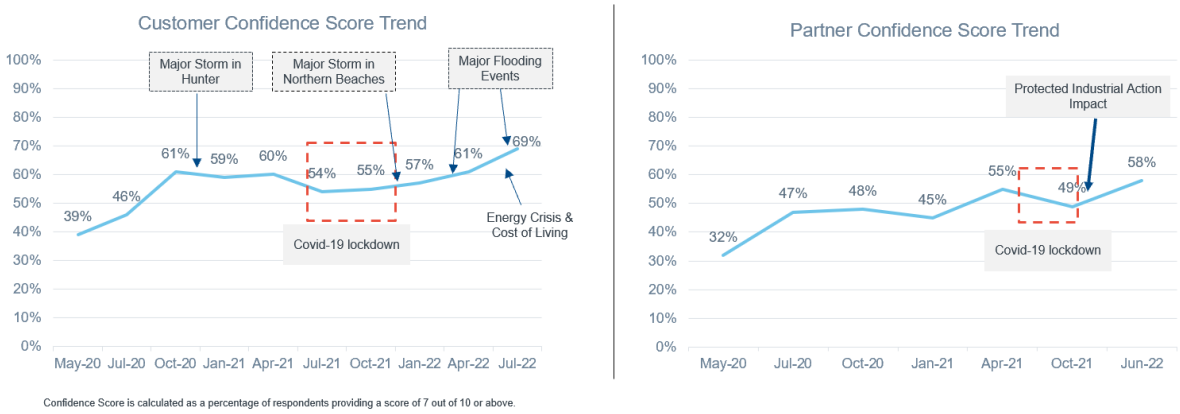

Figure 2 Customer Confidence Score Trend

The investment to further improve our Customer Information Systems in 2024-29 are targeting further improvements in these metrics which already indicate that customers are realising benefits from our investments.

Next Steps

Continuing to invest in the second phase of this transformation is important to continue the momentum and keep up with electricity market changes. Simply sustaining the Customer Transformation work we have completed to date will not meet the evolving expectations of our customers and partners.

The initiatives proposed to be delivered over the 2024-29 regulatory control period, which are the subject of this Customer Information System Program Brief will:

1. Complete the planned uplift of self-service capabilities, contact centre operations and l customer interactions via multiple channels to improve and streamline customers' overall experience, including applying the updates required to meet regulatory obligations.
2. Continue to enrich each of our communication channels to be more accessible and relatable across an increasingly diverse community.
3. Further consolidate, automate and digitise direct and related customer data into our Customer Relationship Management platform to enable improved customer and partner relationships, interactions, insights and requests.
4. Improve the end-to-end connections process to deliver seamless communication and more streamlined processes.
5. Enable us to formulate products and services that our residential and business customers and partners value, based on a holistic, single view of customer and leverage the new capabilities and insights only made possible through the evolution of our field service, network and asset management systems and processes being introduced in multiple tranches from 2023.

3.3. Investment objectives

Under this proposed program of work, we are aiming to meet evolving customer and partner expectations. Specifically, the objectives sought to be achieved by this program are:

- Simplified customer interactions and omnichannel communications to make them more accessible and intuitive, including seamless opportunities to self-serve;
- Improved speed and transparency of connections while reducing community disruption from development and maintenance works; and
- Through targeted digitisation of high volume and low value adding activities, enable staff time to be directed to higher value and more empathetic interactions with our customers.

3.4. Customer Benefits

The investment focus areas have been prioritised to meet the evolving needs of our community and the key benefits sought to be achieved by this program are;

- Improved customer and partner experience by:
  - Delivering services in a way that is empathetic to individual and diverse needs, especially during outages and emergency response;
  - Ensuring our services are simple and easy to engage with; and
  - Efficiently managing customer requests and enquiries and delivering more consistent experiences
- Time savings benefits by providing more real time responses to queries and service requests, reducing the amount of time customers and partners need to spend interacting with us; and
- A better experience for our staff by removing manual effort on routine tasks that will enable employee time to be directed to higher value interactions with our customers.

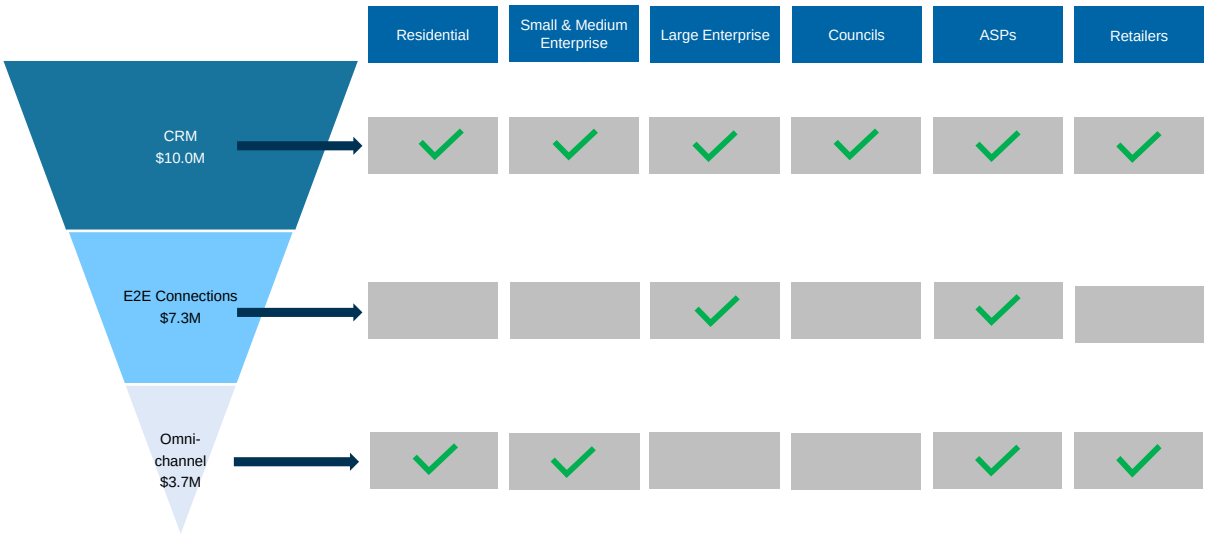

Figure 3 Overview of FY25-29 expenditure categories for Customer Information Services

1. Customer Digitisation and Automation

Creating automated workflows will help us to service customer requests with greater speed and accuracy and keep customers better informed.

- Simplified and streamlined processes for Retailers, ASPs and Councils when engaging with Ausgrid to fulfil service and partnership requests.

- Large customers can better manage impacts on business operations with immediate data provision using outage application programming interfaces (**API**).
- Real time Voice of Community will ensure customer feedback is distributed to the relevant departments quickly and enable faster closed loop response.
- Faster communication and flow of information prior to, during and after outages between outage responders, Councils and Ausgrid.

2. End-to-end connections processes

- A more seamless experience for connecting customers when communicating with Ausgrid from initial enquiry through to successful energisation.
- Improved project planning for large customers with better visibility of construction milestones and reduced delays and associated costs for end customers.
- Stronger ASP relationships with Ausgrid through streamlined processes, reduction in manual effort and increased efficiency.

3. Contact Centre and Omnichannel responsiveness

- Multiple language choices on our website and service and outage communications to help culturally and linguistically diverse customers stay informed.
- Inclusive online experience that supports screen readers for the vision impaired.
- Improved experience consistency regardless of chosen channel and customer segment.
- Improvements to overall outage communication across channels, including via social media, website and SMS notifications.

3.5. What we have heard from our Customers

We continuously engage with our customers and partners to ensure we remain responsive to their evolving expectations. Key themes from stakeholder consultation include:

- A strong desire from large business customers for an improved connections experiences for customer funded contestable projects;
- Customers have differing needs and want services that are fair and accessible for all of types of customers who engage with us; and
- Timely, accurate outage information is critical for all customer types.

As a result, the proposed investment in our Customer Information System capability is driven by the need for us to continue to be able to:

1. Respond to evolving customer expectations for digitisation of services and real time responses to enquiries;
2. Deliver services consistently to customers; and
3. Adapt to deliver on growing customer expectations.

3.6. Compliance requirements

The proposed program of work is required to meet compliance and regulatory obligations. The obligations, along with a brief description of the requirement, relating to the obligation are set out below.

Obligation	Description of Requirement
Electricity Supply (General) Regulation 2001	We must meet several distribution service standards for small customers. We must report on any failures to meet these standards and may be liable for penalties for any such failures. The Electricity Supply (General) Regulation is one source of our distribution service standards. Our customer information systems are foundational in providing the data and analytics for supporting this reporting.
DNSP License Conditions **NSW Independent Pricing and Regulatory Tribunal**	License conditions[3] are imposed under the *Electricity Supply Act 1995 (NSW)*. License conditions include customer service standards associated with interruption frequency and interruption duration. We must pay claims for compensation if it exceeds certain standards in relation to the length of time that it interrupts a customer's supply of electricity and the frequency of such interruptions. Our customer information systems are required for monitoring and measuring our performance against these standards. IPART has announced that the GSL thresholds and calculations will be changing to a cumulative scheme in the

[3] Licence conditions for Ausgrid are available from IPART's website: https://www.ipart.nsw.gov.au/Home/Industries/Energy/Energy-Networks-Safety-Reliability-and-Compliance/Electricity-networks/Licence-conditions-and-regulatory-instruments#:~:text=Operating%20licences%20apply%20to%20Ausgrid%2C%20Endeavour%20Energy%2C%20Essential,to%20be%20read%20in%20conjunction%20with%20...%20

Obligation	Description of Requirement
	2024-29 regulatory period. This will require changes to customer online compensation requests, review and reporting processes and systems including CRM.
National Electricity Law **National Electricity Rules**	NEL[4] requires us to promote efficient investment in, and efficient operation and use of electricity services for the long-term interests of consumers of electricity with respect to price, quality, safety, reliability, and security of supply of electricity as per the National Electricity Objective. The operating and capital expenditure objectives[5] set out in the NER require us to maintain both the quality, reliability, and security of supply of standard control services and the reliability and security of the distribution network. We are also required to comply with the reporting requirements under the National Energy Customer Framework (**NECF**) under the National Electricity Retail Rules (**NERR**). Our customer information systems provide data for monitoring our compliance with these rules
National Market Procedures **Australian Energy Regulator (AER)**	We are subject to a range of obligations under National Market Procedures such as Market Settlement and Transfer Solutions (**MSATS**) and Business-to-business (**B2B**) procedures which govern certain market interaction such as service order requests and updates to customer information. The AER has released new Export Tariff Guidelines which will introduce time flexible and two-way tariff constructs that will require more data exchange with new and existing partners, more transparent customer experience to manage and support changes and greater visibility of CER at point of connection.
Privacy Act 1988 & Information Privacy Act 2014	As specified in the Privacy Act 1988, we are required to take reasonable steps to protect personal information held by us, including customer data held in our Customer Information Systems, and to issue notifications of certain data breaches. Civil penalties may apply where we do not comply with Privacy Act 1988. Having up-to-date and supported customers information systems is a key enabler to appropriately securing and storing customer information and reducing the risk of a data breach;

[4] The NEL is set out in a schedule to the *National Electricity (South Australia) Act 1996*.

[5] See clauses 6.5.6(a) and 6.5.7(a) of the NER.

Obligation	Description of Requirement
Commonwealth Consumer Data Rights Act 2019 (CDR)	AEMO has flagged the implementation of the 2019 Commonwealth Consumer Data Rights reforms in the energy market, which are to ensure availability and choice in the right to access customer data. They have also highlighted that as part of this implementation, we will need to provide customers with greater insights on installed CER capacity and be able to target CER and residential solar and battery owners with specific communications. Continual development of our CRM will be key to meeting these obligations.

Table 2 Summary of compliance requirements

4. OPTIONS

This section provides an overview of the options to address the investment need. The NPV associated with each option is also noted.

4.1. OVERVIEW OF OPTIONS

Two options have been considered, which are listed in the table below. The recommended option for the 2024-29 regulatory control period is **Option 2: Enhance or optimise,** based on quantitative analysis demonstrating that it will unlock the most net economic benefits compared to Option 1 which has a significantly lower NPV.

Option	Description	NPV
Option 1: Base Case: (Sustain Existing Capabilities)	Make no further updates to existing Customer Information Systems to expand functionality, except for minimum compliance-based changes.	**($10.8) million**
Option 2: Optimise Existing and Make Targeted Enhancements (optimise and enhance)	Leveraging existing Customer Information systems, introduce new capability and communication channels to improve the customer, partner and employee experience. Key initiatives include: • Further digitisation and automation of services; • End to end connections enhancement; • Evolve SMS notifications for additional services; • Integration of our key customer database with external sources; and • Establish modern accessible, integrated and preference based omni-channel communications capability across post, contact centre, website, social media, email, and SMS messaging.	**$91.8 million**

Table 3 Summary of options

The principal difference between the two options are:

- Option 1 maintains current functionality only and does not seek to enhance customer or employee experience. Only compliance-based changes would be made to Customer Information Systems, and these would be done on an as-needed basis;

- Option 2 introduces additional functionality and digital capabilities targeting higher priority and/or higher impact customer interactions and using existing technology.

4.1.1. Approach to costing

We have used revealed costs, market testing and peer review to ensure that costs for each option are efficient.

A bottom-up methodology was used to estimate the costs for each option and considered typical delivery team resource requirements, delivery partner costs and license/subscription fees. Previous actual costs from similar projects within the Customer Information Systems area were also used to estimate costs, which we have tested against industry peers directly, liaison with software vendors and through consultants' independent cost benchmarks.

Consultants and peers within Ausgrid have reviewed project labour estimates.

As outlined in section 4.2 of the Technology Strategy, a final business case development process will be used to refine scope, costs and impacts for the proposed investment. A competitive procurement activity will also be undertaken to inform costs and solution options and ensure activities undertaken represent value of money.

4.2. OPTION 1: BASE CASE (Maintain base functionality/requirements)

4.2.1. Description

This option involves making customer information available through existing systems, with no investment in new functionality, and undertaking compliance-based changes only as needed.

4.2.2. Option 1 costs

For this option the estimated capital expenditure is $11.9 million and the market NPV of ($10.8) million. There is no incremental change to operating expenditure over the 2024-29 regulatory control period.

Option 1: Capital Expenditure Cost and Scope Assumptions

$ million	FY25	FY26	FY27	FY28	FY29	Total (FY25-29)
Direct labour	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	**(3.0)**
Materials	-	-	-	-	-	**-**
Contractor services	(1.9)	(1.8)	(1.8)	(1.7)	(1.7)	**(8.9)**
Indirect cost	-	-	-	-	-	**-**
Contingency	-	-	-	-	-	**-**
TOTAL CAPEX	**(2.5)**	**(2.4)**	**(2.4)**	**(2.3)**	**(2.3)**	**(11.9)**
Non-recurrent	-	-	-	-	-	**-**
Recurrent	**(2.5)**	**(2.4)**	**(2.4)**	**(2.3)**	**(2.3)**	**(11.9)**

Table 4 Option 1 – Capital expenditure cost and scope assumptions

4.2.3. NPV analysis

The NPV of Option 1 is driven primarily by the costs incurred. As this option only maintains existing capability, and invests in minor compliance-driven, it will only maintain value already being realised from the existing systems. Therefore, no incremental financial benefits are realised by this option.

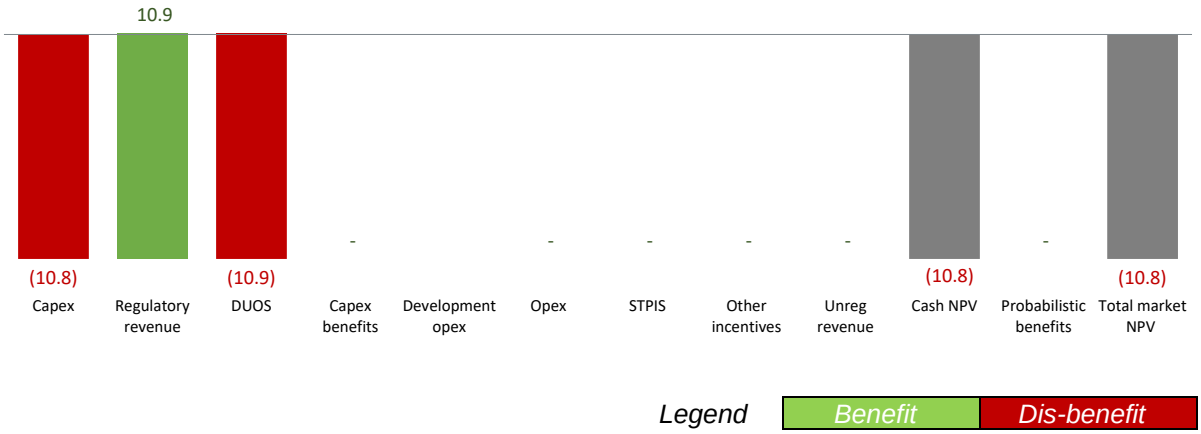

Figure 4 4 Option 1 - Market NPV ($' millions, real FY24)

The NPV of Option 1 is ($10.8) million. The key benefits of Option 1 are that we maintain current client service capability and continue to meet our compliance obligations. As there are no changes in the risk profile under Option 1, there are no quantified benefits.

4.3. OPTION 2: Enhanced Customer Information Systems capability (Preferred)

4.3.1. Description

Under this option, we will undertake a targeted set of initiatives that build on existing customer information systems, introduce new capability and communication channels to improve the customer and employee experience.

4.3.2. Option 2 assumptions

Under Option 2, we would invest in the following projects during the 2024-29 regulatory control period:

- **Further digitisation and automation of services**: This initiative will further enhance the existing CRM and integrated Customer Information Systems, building off the work that has commenced in this regulatory period. It will significantly enhance employee and customer experience by reducing the amount of time our employees spend processing customer data, and reducing the time that customers interact with us across phone calls, emails, and other interactions. This will include the following initiatives:
  - **Migration of residual non-Single View of Customer processes to CRM:** This will involve progressively shifting services to CRM on a prioritised basis;
  - **Self Service Portals**: This provides an integrated customer experience for customers and partners, enabling them to undertake service requests; and
  - **Integration:** Enabling two-way integration with external platforms such as Councils' WebGIS platform, State Emergency Services (**SES**) during unplanned outages.
- **Improve end-to-end connections management:** This will include streamlining processes for connection projects to enable better communication with applicants and

customers, automation of processes and improved workflows to streamline the set up and management of assets, remove bottlenecks, increase digitisation and reduce complexity.

- **Evolve SMS notifications for additional services:** This will expand the range of outage notifications to include proactive updates on revised estimated restoration times. This will also include progress updates to customers on service requests from our enabling services category;
- **Integration of our Key Customer Database with external data sources:** This will provide the capability to receive feeds from multiple data sources and integrate these with our customer's systems to enable delivery of bespoke services;
- **Continue modernising Omnichannel Communications:** This will allow Ausgrid to establish and maintain modern accessible, integrated and preference based omnichannel communications capability across post, contact centre, website, social media, email, and SMS messaging to adapt to new services and evolving customer expectations.

4.3.3. Option 2 costs

For this option the estimated uplift in operating expenditure is $10.5 million. Capital expenditure is estimated at $10.5 million for a total of $21.0 million and all costs are non-recurrent. This option has a market NPV of $91.8 million.

Option 2: Capital Expenditure Cost and Scope Assumptions

$ million	FY25	FY26	FY27	FY28	FY29	Total (FY25-29)
Direct labour	(0.7)	(0.7)	(0.5)	(0.4)	(0.4)	**(2.7)**
Materials	-	-	-	-	-	**-**
Contractor services	(2.0)	(2.0)	(1.5)	(1.2)	(1.1)	**(7.8)**
Indirect cost	-	-	-	-	-	**-**
Contingency	-	-	-	-	-	**-**
TOTAL CAPEX	**(2.7)**	**(2.7)**	**(2.0)**	**(1.6)**	**(1.5)**	**(10.5)**
Non-recurrent	(2.7)	(2.7)	(2.0)	(1.6)	(1.5)	**(10.5)**
Recurrent	**-**	**-**	**-**	**-**	**-**	**-**

Table 5 Option 2 – Capital expenditure cost

Option 2: Operating Cost Assumptions

$ million	FY25	FY26	FY27	FY28	FY29	Total (FY25-29)
Direct labour	(0.7)	(0.7)	(0.5)	(0.4)	(0.4)	**(2.7)**
Materials	-	-	-	-	-	**-**
Contractor services	(2.0)	(2.0)	(1.5)	(1.2)	(1.1)	**(7.8)**
Indirect cost	-	-	-	-	-	**-**
Contingency	-	-	-	-	-	**-**
TOTAL OPEX	**(2.7)**	**(2.7)**	**(2.0)**	**(1.6)**	**(1.5)**	**(10.5)**
Non-recurrent	(2.7)	(2.7)	(2.0)	(1.6)	(1.5)	(10.5)
Recurrent	**-**	**-**	**-**	**-**	**-**	**-**

Table 6 Option 2 – Operating cost

4.3.4. NPV analysis

This NPV analysis is primarily driven by productivity benefits, specifically in reduced effort required by both customers, partners and our staff in responding to, processing and resolving customer enquiries and service requests. The NPV of Option 2 is $91.8 million.

Figure 55 Option 2 - Market NPV ($' millions, real FY24)

The customer benefits are based on expected reduction in the average time spent by customers and our staff to resolve or complete interactions. This includes reduced time spent on calls, avoided calls (shift to online portals) and reduced time browsing / searching in our website looking for information.

The benefits calculations only include those CRM interactions relating to standard control services, including planned and unplanned network outages, hazards remediation, pole inspections, vegetation management and graffiti removal. We have assumed a reduction in average time spent on these interactions of 5% for customers and 1% for our staff, which is considered a conservative assumption. The assumed reduction in effort is 9% for the

Omnichannel, including SMS, notifications upgrade, based on our estimate of the number of calls that will be shifted to a digital platform.

Additional benefits that have not been quantified include improvement in customer satisfaction, as measured by metrics such as Confidence Scores for employees and customers, Service Ease percentage and Service Resolution percentage.

4.4. Alternative Options

We are mindful of the AER's Guidelines on ICT expenditure assessment in particular the development of detailed options analysis of all credible options including options of various scopes and timings and identification and quantification of all relevant benefits and residual risks for each option[6].

Section 4.2 of our Technology Plan sets out how Ausgrid uses its Architectural Principles to drive customer benefits in our use of and expenditure on technology and how this is enforced through formal Governance processes

In the context of this regulatory proposal, the strategies, core vendor solutions and architectural frameworks for our Customer Information System proposals reflect the results of detailed options evaluation carried out as part of this governance process in 2017.

This initiative was part of our regulatory proposal for the period 2014-19 and the results of a detailed investigation into technical options presented to the Enterprise Architecture Reference Board (the peak architecture governance forum at the time and predecessor of Ausgrid's current Investment Governance Committee)[7].

This analysis considered business needs, architectural requirements and a detailed product assessment of Customer & Stakeholder Relationship Management tools, shortlisting four solutions.

Evaluating these four solutions against risk, cost, benefit, performance and user experience using our architectural principles, the Enterprise Architecture Board endorsed Microsoft Dynamics CRM as the Customer Platform of choice for Ausgrid based on a comparative assessment of the four solutions against market research, functional capability and technical capability of the technology, and a comparison of their like-for-like costs[8].

Business case 20 – (Digital Transformation) of our ICT Regulatory Proposal for the period 2019-24 covered Digital Transformation Technology to support productivity, improved customer engagement and lower the cost to serve[9].

Customer Centricity was one of the four workstreams outlined in the business case:

Ausgrid has commenced a project to implement a tool for improved customer management with basic core functionality.

This new solution will use an "as a service" model of pay by consumption that allows Ausgrid to quickly respond on demand to fluctuations in usage and maintain support for the platform seamlessly without impacting quality, reliability and security.

This solution will be maintained and enhanced to provide:

a system that facilitates and automates (where appropriate) two-way communication with our customers and partners; and a preference centre that enables customers to register with Ausgrid to receive alerts (through their preferred method of real time communication) on information relevant to them.

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[6] Italics quoted from *Assessing the prudency and efficiency of the project* in *Consultation paper - ICT Expenditure Assessment*, AER, May 2019 p.20

[7] *Customer & Stakeholder Relationship Management (CSRM) Tool*, Ausgrid, March 2017

[8] *Customer Management Platform*, Ausgrid, December 2017

[9] Technology Plan Business Case - *Digital Transformation - Document No. D17/628184*, Ausgrid, April 2018

The consolidated solution provide the ability to track and record customer interactions, enable personalised self service capabilities for customers, and provide the capability to automate functions which are currently completed manually.

The seamless end to end connection capability built on digital, paperless processes enables live updates and quick case resolution/escalation through automated workflows. This significantly increases customer satisfaction levels, and worker productivity.[10]

During this regulatory period (2019-24), Ausgrid has subsequently and independently selected Microsoft's Azure cloud solutions as a target state platform for data & analytics and infrastructure-as-a-service by applying the same assessment against risk, cost, benefit, performance and user experience using our architectural principles. This is the same Microsoft solution framework that that supports Dynamics CRM.

During the current regulatory period we have successfully commissioned three customer relationship management projects in Microsoft Dynamics CRM. It is a contemporary solution and fit for purpose in Ausgrid's context. Migrating to an alternative solution would incur costs of data migration, integration to the rest of Ausgrid's information systems and organisational change management to train users in the new solution.

Alternative customer relationship management solutions in the market would not meet customers' needs any better than Microsoft Dynamics CRM but the cost of implementing them as replacements would be between 50 and 100% more than our proposed "Option 2" given the additional data, integration and change costs of moving to an alternative solution.

The detailed analysis supporting our Investment Governance Committee's selection of Microsoft remains current. Given that alternative customer management options would all be more expensive than Microsoft's with no additional customer benefit, we have rejected all alternative options as part of this Program Brief.

[10] Technology Plan Business Case - *Digital Transformation - Document No. D17/628184*, Ausgrid, April 2018

5. RECOMMENDATION

5.1 Recommended solution

The preferred option for the 2024-29 regulatory control period is **Option 2** - **Enhanced Customer Information Systems capability**. Option 2 is the preferred option as it:

- Has the strongest NPV of the two options at $91.8 million;
- Is consistent with our objective of being a customer-centric organisation;
- It best meets the expectations of our customers, partners and stakeholders;
- Is consistent with the National Electricity Objective (**NEO**); and
- Enables us to maintain compliance with our relevant compliance obligations such as protecting customer data in alignment with the Privacy Act 1988.

The basis of this recommendations is that the proposed investments under Option 2 best align to our current Customer Strategy and will:

- Deliver the time-saving benefits outlined above;
- Improve the experience our customers and partners have when interacting with us; and
- Enable our employees to focus their efforts on higher value activities rather than routine, transactional interactions.

5.1.1. Our Customer Risk Appetite

The following table details how the preferred option aligns to our Risk Appetite Statement as it relates to Customer.

Appetite Statement	Outcomes and how this investment aligns
Improving customer satisfaction and relevant customer advocate support is critical to our success and the organisation aims to improve our reputation with customers by: a) reducing planned and unplanned customer interruptions for all customers and avoiding, where possible, (consistent with our license) sustained outages to Sydney CBD, critical infrastructure, or other sensitive customers, so far as is reasonably practicable (**SFAIRP**); b) engaging more effectively with customers in resolving disputes and improving speed and ease of approvals for our major customers and partners; and c) communicating more effectively, especially in response to major events.	Initiatives in Option 2 are aligned with improving customer and partner satisfaction and our reputation with them.
• The organisation is risk averse in the way it commits to meeting our NECF obligations and SFAIRP, invests such that supply interruptions to critical customers,	Ensuring ongoing accessibility, supportability, and security of customer information systems. The initiatives have been developed in full understanding of our NECF obligations.

Appetite Statement	Outcomes and how this investment aligns
including life support customers are minimised and where planned, occur only after appropriate notification.	
The organisation is risk sensitive in the way it: • Commits to meeting the expectations of all our customers to reduce the current level of complaints by resolving all received complaints in a timely, courteous, and respectful manner. • Uses technology to better support customers. • Implements strategies to reduce the possibility and impact of events that are likely to result in sustained significant, widespread customer impacts. • Maintains business resilience and crisis management plans to ensure that unplanned interruptions are responded to safely, as quickly as possible.	Option 2 initiatives are aligned with our risk sensitivity around our customer interactions, particularly initiatives such as pre-emptively providing storm warnings to our customers.
However, the organisation is risk neutral in the way it implements transformational change with a focus on maintaining and developing our customer focus and embracing innovation and change that could improve affordability and/or customer satisfaction.	Option 2 is aligned with this risk appetite statement. The initiatives embrace innovation by implementing automation and new interfaces that will deliver benefits to our customers, partners, and employees.

Table 7 Summary of customer risk appetite

5.1.2. Program delivery risks

Risk #	Risk Category	Description	Inherent Risk Level	Mitigation Plan	Residual Risk level
01	Key Resources	Availability of suitable skilled resources within the local market to deliver the program of work.	Medium	Define resource requirements early and leverage existing relationships with strategic partners.	Low
02	New Technology Support Skills	If new technology is being introduced as part of this program, there may be insufficient skills to support the new technology after the program of work has been completed.	Medium	Plan and ensure that the required skillset is developed to ensure that technology can be supported in the future.	Low
03	Scope Expansion	Requests for additional features or capabilities not captured in the originally scope, may extend the timeline of the project.	Medium	Set scope expectations early on and define boundaries.	Low
04	Costs	Project Costs are estimated based upon market knowledge in FY22, and costs could increase as the project is executed in 2024-29 regulatory control period.	Medium	Develop a Gate 3 Business Case prior to executing the program and revise costs accordingly.	Low

Table 8 Summary of program delivery risks

5.1.3. Program assumptions

#	Type	Description
01	Resourcing	Specialist resources will be available as required during each stage of the project and for ongoing operations.
02	Prioritisation	Given the nature of the risks and the potential consequences of failures or disruptions to business operations, this program will be prioritised accordingly (see Appendix 1 and 2 – Risk Assessments).
03	Scope	As per description of initiatives in this brief.

Table 9 Summary of program assumptions

5.1.4. Program dependencies

#	Program Name	Description
01	Data to Intelligence	The Customer Information Systems program will utilise data and analytics, and integration capabilities such as APIs established by the Data and Analytics program.

Table 10 Summary of program dependencies

5.1.5. Business area impacts

#	Impacted Group	Description
01	All Ausgrid	Where possible the program initiatives will be managed with go-lives that minimise the amount of (or any) disruption to business operations due to technology transition downtimes (e.g., planned out of hours etc.)
02	Customer Group	Subject matter resources will be required in support of the requirements gathering and relevant user acceptance testing (**UAT**).
03	Network Operations	Subject matter resources will be required in support of the requirements gathering and relevant UAT.

Table 11 Summary of program dependencies

6. GLOSSARY

Shortened Form	Extended Form
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
API	Application Programming Interface
ASP	Accredited Service Provider
B2B	Business to Business
Capex	Capital Expenditure
CDR	Consumer Data Rights
CER	Consumer Energy Resources
CRM	Customer Relationship Management
DNSP	Distribution Network Service Provider
ECA	Energy Consumers Australia
FY20-24	Financial Year 2020 to Financial Year 2024
FY25-29	Financial Year 2025 to Financial Year 2029
GSL	Guaranteed Service Level
ICT	Information, Communications and Technology
IPART	Independent Pricing and Regulatory Tribunal
MSATS	Market Settlement and Transfer Solutions
NECF	National Energy Customer Framework
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
NERR	National Electricity Retail Rules
NPV	Net Present Value
Opex	Operating Expenditure

Shortened Form	Extended Form
OT	Operational Technology
SCS	Standard Control Services
SES	State Emergency Services
SFAIRP	So Far As Is Reasonably Practicable
SMS	Short Message Service
UAT	User Acceptance Testing
VCR	Value of Customer Reliability

7. APPENDICES

Appendix 1 Risk assessment – Option 1

Table 12 - Option 1 - Key risks and residual risk position by 2029 summaries the inherent risks which could be experienced by the end of the coming regulatory control period of (2029) if the base case (counterfactual) option is selected.

Option 1 does not reduce the likelihood or impact of risk R1 from materialising. By 2029, it is **Likely** both risks will materialise causing **Major** impact to the organisation.

The equivalent risk analysis provided with the recommended option (Option 2) has been conducted with respect to effectiveness of mitigating the below base case risks.

Risk Description	Inherent Risk 2029	Nature of Mitigation	Residual Risk 2029
R1 – Business Operational Impact Negative impact to customer satisfaction or sentiment due to non- customer focused projects not meeting evolving customer needs.	High	Continue to sustain existing capabilities inclusive of compliance-based changes.	High

Table 12 Option 1 - Key risks and residual risk position by 2029

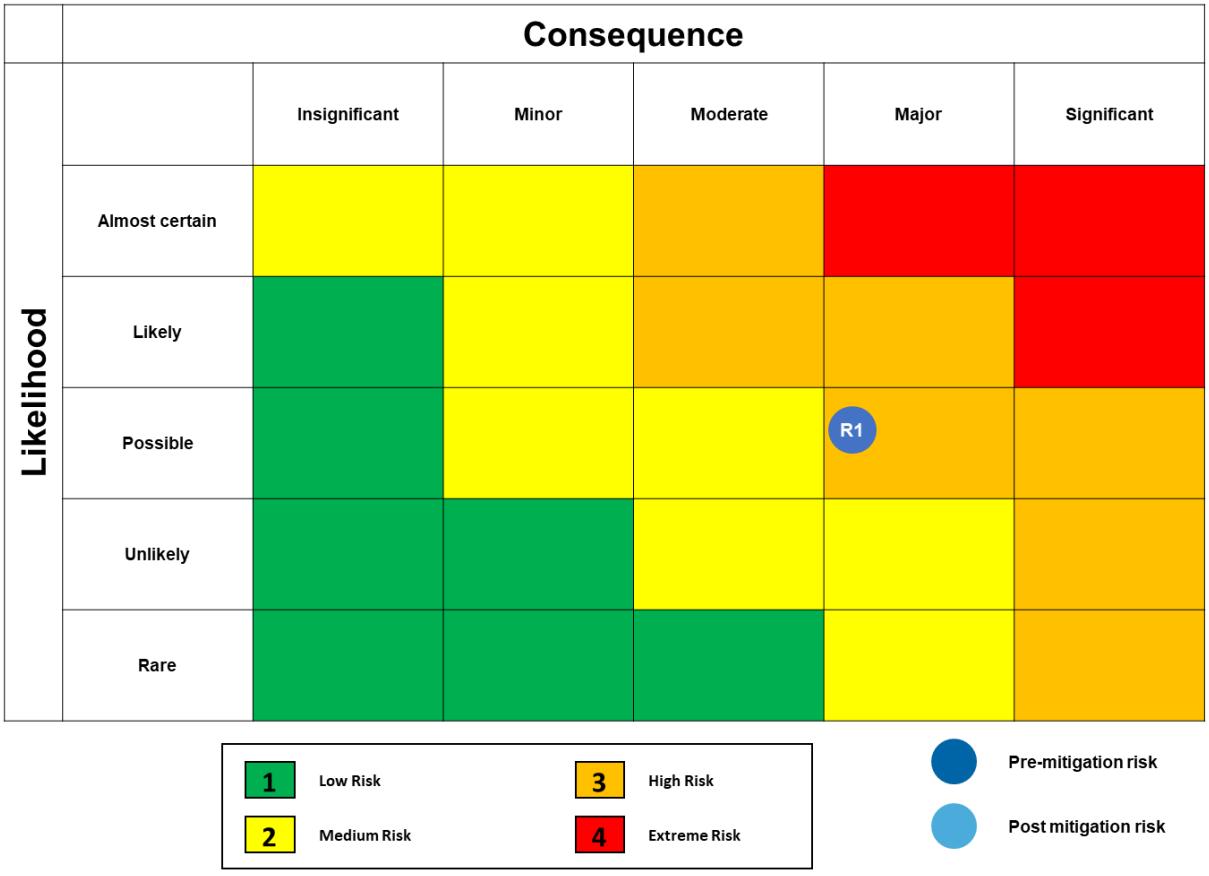

Figure 6 Change in risk position with Option 1 by 2029

Appendix 2 Risk assessment – Option 2

Table 13 - Option 2 - Key risks and residual risk position by 2029 summaries the inherent risks which could be experienced by the end of the coming regulatory control period of (2029) if the base case (counterfactual) option is selected.

The equivalent risk analyses provided with the recommended option (Option 2) have been conducted with respect to effectiveness of mitigating the below base case risks.

Risk Description	Inherent Risk 2029	Nature of Mitigation	Residual Risk 2029
R1 – Business Operational Impact Negative impact to customer satisfaction or sentiment due to non- customer focused projects not meeting evolving customer needs.	High	Continue to implement customer first centered solutions where prudent and efficient	Low

Table 123 Option 1 - Key risks and residual risk position by 2029

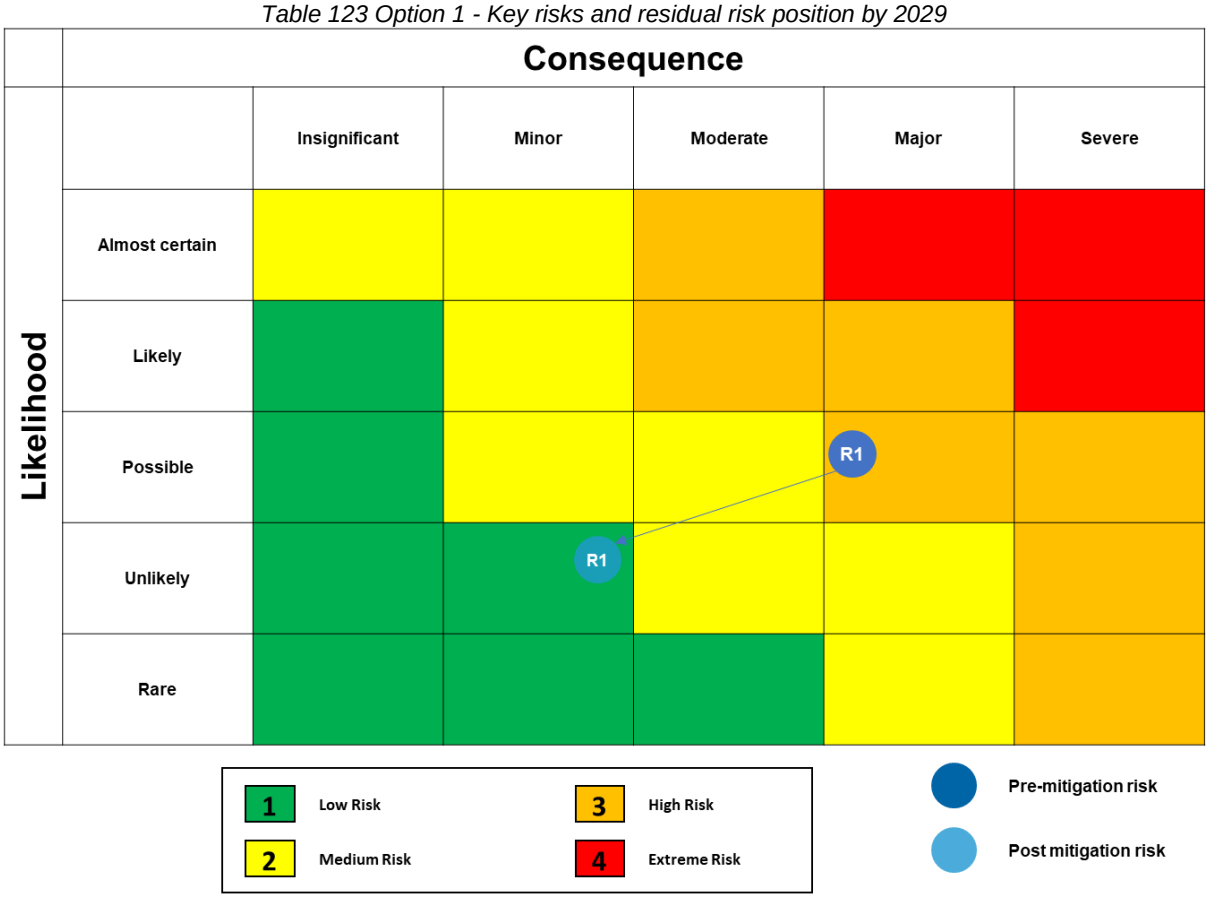

Figure 7 Change in risk position with Option 2 by 2029

Appendix 3 Benefits categories

We have identified four potential categories of benefits and have quantified these benefits wherever feasible and practicable.

The following table details the benefits categories and our approach to quantifying the value of each type of benefit. (Benefits that cannot be readily quantified are described qualitatively.)

Benefit category	Description	Quantification approaches
Operational benefits to us and / or customers	Direct improvements in the operations and / or services supplied by us because of an investment. These benefits are typically reflected in reduced costs (efficiencies), such as direct cost savings for us in delivering Standard Control Services (**SCS**) or time savings for customers.	• Benefits are quantified through: – Estimating the reduction in time for customers/partners associated with migrating the resolution of customer/partner enquiries or service requests to more digitised self-service channels and providing information on a more real-time basis; – Estimating the reduction in time for our employees because of these same changes; – Multiplying that estimated time saving for customers/partners by the value of their time, which is based on the [average weekly earnings]; and – Multiplying that estimated time saving for our employees by the average hourly wages applicable to those resources.
IT risk benefits	Changes in risks relating to IT systems and functionality because of an investment. For example, a reduction in the risk that an IT system will fail.	• Risk based benefits are quantified by estimating the change in the expected cost of the risk, where the expected cost of the risk is estimated as the likelihood of the risk (%) times the consequence of the risk ($) • For some risk-based benefits (for example safety) we will use a risk monetisation framework which allocates a monetary cost to the associated risk level. • For example, assume a risk has a consequence of $10 million and 10% chance (i.e., likelihood) of occurring without the project. With the project, the consequence does not change but the likelihood falls to 8%. – The quantified risk benefit is then the change in likelihood *times* consequence, which is (10% - 8%) x $10m = $200,000
Enterprise risk benefits	Changes in risks relating to our ability to perform tasks required by regulation or contract because of an investment.	
Community risk benefits	Changes in risks to the community at large because of an investment. For example, a reduction in safety risks for the general public.	

		• The consequence costs may comprise different elements, such as: – Loss of supply, which is measured using an estimate of the unserved energy and the value of customer reliability (**VCR**) for our distribution area – Rectification costs, which are measured using an estimate of the resource effort required (e.g., hours times $/hour for ICT resources).