

Technology Document ICT Program Brief Workforce Collaboration

2023-27 Transmission Revenue Reset

PUBLIC

Submitted: 29 October 2020



Table of Contents

1	Doc	ument Background	3
	1.1	Purpose of this document	3
	1.2	References	3
	1.3	Document History	3
	1.4	Approvals	3
2	Exec	cutive summary	4
	2.1	Program summary	4
3	Con	ext	7
	3.1	Background	7
	3.2	Current limitations	8
	3.3	Objective(s)	9
	3.4	Customer outcomes	9
	3.5	Business drivers	10
	3.6	Approach to developing expenditure forecast	10
4	Opti	ons	12
	4.1	Overview	12
	4.2	Option #1 Business as Usual	12
	4.3	Option #2 Knowledge Capture and Transfer (RECOMMENDED)	16
	4.4	Option #3 Intelligent Workforce Platform	22
5	Ass	essment and recommended option	27
	5.1	Assessment of the options	27
	5.2	Recommended option	29
6	Atta	chment 1 – Risk level matrix	32

1 Document Background

1.1 Purpose of this document

The purpose of this document is to outline a business case for a proposed program of work that will form part of AusNet Services' Technology TRR submission.

1.2 References

Document	Version	Author
AusNet Services FY19-FY23 Technology Plan	V1.00	AusNet Services
TRR Technology Strategy	V0.21	S Scanlon
Digital Utility Strategy	V1.3	S Scanlon

1.3 Document History

Date	Version	Comment	Person
22/10/2020	V1	Create base version	A Sharp

1.4 Approvals

Position	Date
Technology Leadership Team	

2 Executive summary

2.1 Program summary

The table below provides a summary of the program discussed in this brief. Additional information is provided following the table and throughout the brief.

Table 2-1 Summary table

Key objective(s)	To uplift enterprise capability and modernise daily operations, while ensuring business continuity and sustainable risk management for an increasingly							
of the program	complex Transmission network.							
Key benefits	 In an increasingly complex and challenging environment More efficient and effective means for communication and workforce collaboration, improving AusNet Services' staff productivity. Ability to utilise information across the workplace to improve speed, safety and accuracy of workforce decision-making and information reporting to customers. Improved access to knowledge and contextual information to better manage processes that support the successful operations of the transmission network. Ability to continue the delivery of reliable, efficient and safe power for customers. Greater capability to analyse financial information leading to more transparent and accurate planning, budgeting and forecasting. This allows AusNet Services to find increasingly cost effective ways of working. Enhanced effectiveness of core enterprise functions and in back office functions, through automation of previous manual processes, improving AusNet Service's teams' productivity. 							
	Electricity Distrik				Electricity 30%)
Cost allocation	Gas Distribution	21%						
	Recurrent							
Program type	Non-Recurrent							
	Client Devices							
Program timings								
	(\$m)	FY22	FY2322	F١	í 24	FY2524	FY26	Total
	Capex	[C-I-C]	[C-I-C]	-	-I-C]	[C-I-C]	[C-I-C]	\$4.11
Expenditure forecast	Opex (incl. step change)	[C-I-C]	[C-I-C]		-I-C]	[C-I-C]	[C-I-C]	\$1.91
lorecast	Electricity Transmission cost	[<mark>C-I-C</mark>]	[<mark>C-I-C]</mark>	[C·	<mark>-I-C</mark>]	[<mark>C-I-C]</mark>	[<mark>C-I-C]</mark>	\$6.02
Total program [C-I-C] [C-I-C] cost				<mark>-I-C]</mark>	[C-I-C]	[C-I-C]	\$17.69	
Estimated life of system	The estimated life of the solutions deployed on-premise is 5 years with a refresh. Those solutions that are deployed as subscription services would be contracted for the term of the period.							

Customer Engagement	This program has been proposed as part of AusNet Services Electricity Distribution Price Reset (EDPR) submission and this brief pertains to the TRR allocation of these costs. As part of the EDPR process, we have held deep dive workshops with stakeholders including the Customer Panel, on ICT. In that engagement we described the importance and need for ICT expenditure to meet our customers' evolving needs and to support compliance with regulatory and legal obligations. Material associated with all our deep dives is available on AusNet Services' website.
	A key theme of our engagement with the Customer Forum was the need for us to provide clarity on what we were proposing and what the expected customer benefits were. This information has been also presented to the Customer Advisory Panel (CAP) We acknowledge the feedback received from both sessions and have taken it into consideration when proposing the most appropriate option for this business case.

Industry wide change, rapid technology advancements and ever-changing workforce dynamics are transforming the way utilities engage with their workforces.

As advanced technologies become commonplace, there is increasing demand from employees for devices and applications that enable flexible working arrangements, making tasks both safer, easier and more efficient for teams. A connected workforce able to communicate with remote teams, and partners has many benefits, including improved safety and efficiency of operations and overarching management, regardless of the physical location of teams. Embedding collaboration tools into the way work is accomplished facilitates the sharing of ideas and knowledge, creating a seamless delivery of services to our customers.

As employees develop within organisations, they acquire knowledge which is specialised to the company's operations, structure and culture. The unique insights that are gathered by individuals in roles such as Access Coordinators or System Planners make training difficult for new employees to replicate as the workforce ages, changes or move roles. While new technologies enable learning conversations, equally as important is cultivating a culture that captures ongoing knowledge and incentivises collaborative behaviour. This ability to capture and utilise information and learnings efficiently across the workplace improves the speed and accuracy of tasks and decision-making, allowing quicker response to both customer and business needs.

Corporate functions play an integral role furthering the accuracy of decision making from a financial perspective. Simplification of finance processes through automation of repetitive transactional tasks will enable more time for employees to support the business more effectively, by identifying opportunities for positive change and providing critical information and analysis to make strategic decisions. The ability to perform advanced analytics on consolidated financial information will allow teams to deliver more value in creating transparency and improved accuracy of planning, budgeting and forecasting.

In this current regulatory period (FY2018-FY2022), AusNet Services has had an increased focus toward strategic initiatives to ensure our evolving workforce is equipped with modern tools to work efficiently into the future and deliver affordable services to customers.

While progress has been made from a communications perspective (through implementation of Skype, SharePoint and upgraded intranet), the use of these technologies as a central source of knowledge is not embedded into daily routine, limiting ability to build on existing enterprise content. Similarly, manual processes are limiting the ability to distribute timely information, and input into planning and management.

Acknowledging these limitations, investments proposed in this program of work for the upcoming period (FY2023- FY2027) include enhanced solutions such as:

- Technology to establish productive and effective means for communication and workforce collaboration
- Improvements in capability to continuously capture and transfer knowledge amongst employees
- Improvements in analytics capabilities, including transparency and accuracy of portfolio and enterprise wide planning, budgeting, forecasting and reporting
- Leveraging automation and cognitive tools to optimise previously manual processes in back office functions.

Connectivity of employees, as well as an improved learning capability and seamless flow of information will ensure employees can more efficiently **deliver the basics** for customers, as well as ensuring the network is **always safe**. The improvements in operational efficiency will also result in lower bills for customers **affordable for me** as the cost to serve decreases. The initiative will prepare AusNet Services to be **ready for the future** by creating platform for employees to utilise learnings and knowledge rapidly, increasingly important as technology change occurs at a rapid pace. Furthermore, AusNet Services will be able to provide staff with improved information about safe work practices, ensuring that the services provided by AusNet Services are **always safe**.

This program of work will deliver significant benefits to employees in 'driving efficiency and effectiveness across the portfolio' over the long term, as information is more readily accessible regardless of workforce location or business area. It also aligns to 'Lead energy transformation, embracing change' enabling AusNet Services to embrace changes in the workforce and technology.

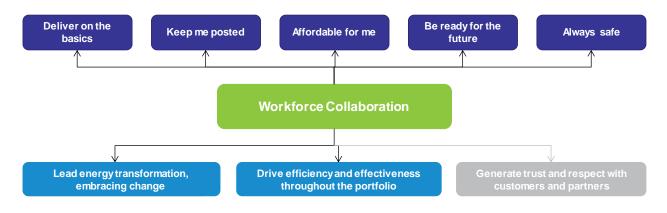


Figure 2-1 Summary of customer and business drivers of this program

Alignment with AER ICT expenditure assessment framework

In accordance with the framework outlined in the AER – Guidance Note – Non-network ICT capex assessment approach for electricity distributors (28 November 2019), we have categorised the recommended program (option 2) as 25% recurrent expenditure on the basis that a portion relates to ongoing refresh of AusNet Services' core business systems, a cost that must be incurred periodically. We have also categorised this program as 75% non-recurrent, on the basis that the recommended program (option 2) involves new additional investment.

We have also undertaken NPV analysis in support of the project, along with a detailed business case.

3 Context

New technologies to drive collaboration will enable AusNet Services to evolve in line with its changing market and workforce. It includes initiatives that address limitations in AusNet Services' ability to collaborate and share knowledge, and increased capacity to manage performance and productivity of projects and business / operating units. It provides use cases to input into other business investments in information management.

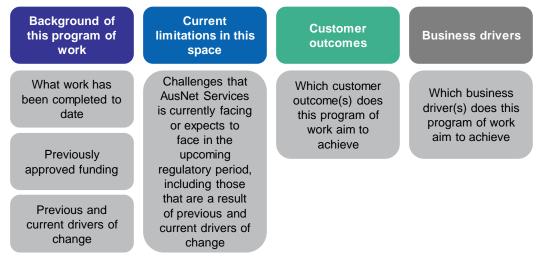


Figure 3-1 Key areas of the context to be discussed

3.1 Background

Over the past decade, our energy consumers, regulators and industry peers have raised their expectations of utilities to match the customer centric, digital capabilities of other services providers such as banks and telecommunications services. Feedback from our customers highlights their growing expectations –particularly around reliability of supply and increased communication regarding network performance, all underpinned by an assumption that our costs will remain low.

AusNet Services operates via a partner model, with a large portion of operations completed by vendors and contractors. In some divisions, we rely on a high percentage of external labour, which is expected to remain into the future. While enhancing the flexibility of our workforce, this approach to outsourcing core work creates challenges in ensuring information is easily accessible. It can also limit the way knowledge about our business is captured and transferred among employees.

Changing workforce demographics mean AusNet Services is also faced with the burden of finding skilled staff to replace experienced operators as they retire. Having an enterprise knowledge management solution, which is consistently updated to include relevant materials in terms of both training and developments as well as standard procedure documentation, will allow new staff to be upskilled quickly, and leverage the insights and experience of previous employees.

Digital workforce collaboration will reduce the impact of these challenges by improving efficiency of management and provision of information to all teams. In the current period, collaboration tools have been made more widely available to increasing workforce connectivity. There was also investment to significantly uplift the presence of physical digital devices. Work toward a truly connected enterprise will continue into the next regulatory period.

Corporate functions play an integral role furthering the accuracy of decision making from a financial perspective. Simplification of finance through automation of repetitive transactional tasks will alleviate time to support the business by identifying opportunities and providing critical information and analysis to make strategic decisions. The ability to perform advanced analytics on consolidated financial information, will allow finance to deliver more value in creating transparency and improved accuracy of planning budgeting and forecasting.

Strategic initiatives included in the current regulatory period that are related to the proposed program of work for FY2023-FY2027 include:

- Integrated Digital Engagement Intranet upgrade to improve information access and collaboration between internal and external stakeholders. This included developing an inhouse information system to collect and leverage employee, customer and other stakeholder insights for the purpose of improving service delivery. This overarching strategy will continue into the FY2023-FY2027 period, with the intention to fully utilise existing digital assets before addressing gaps with new solutions.
- **Unified communications** Communications features that enable mobility and collaboration (multi-party, multi-media, multi-location information sharing) capabilities for users. Moving forward, communications will extend to optimise 130 sites and enable flexible work arrangements.
- Modernise and simplify the overall technology landscape AusNet Services has
 previously identified the need for a single solution for asset and workforce management (SAP
 ERP & EAM) and has continued to consolidate data and standardise processes over several
 regulatory periods. This work will continue in the forecast period.

These overarching programs and the focus on three key areas will continue into the FY2023-FY2027 regulatory period:

- 1. Leveraging employee insights and knowledge to enable efficient capture and transfer of knowledge.
- 2. Connectivity of employees, to allow flexible work arrangements and increase collaboration.
- 3. Improved efficiency and analytics capabilities for corporate functions.

Business continuity and risk mitigation will become increasingly dependent on how new technologies can be utilised by corporate functions to deliver greater value to customer and the business.

This program brief proposes three different options and recommends the option which best addresses these challenges given the associated costs, benefits, risks, and impacts on customer outcomes and business drivers. This analysis is discussed in sections 4 and 0.

3.2 Current limitations

Despite improvements over the previous and current regulatory periods, the current asset maintenance process has the following limitations:

• [C-I-C]

• [C-I-C]

• [C-I-C]

3.3 Objective(s)

The overarching objective of this program of work is to uplift enterprise capability, modernise day-today operations to ensure business continuity and sustainable risk management and deliver cost reductions for customers.

This will be completed through:

- Technology solution to establish efficient and effective means for communication and workforce collaboration, to enable workforce working for employees and partner teams
- Improvements in capability to continuously capture and transfer knowledge amongst employees.
- Improvements in analytics capabilities, including transparency and accuracy of portfolio and enterprise wide planning, budgeting, forecasting and reporting.
- Leveraging automation and cognitive tools to optimise previously manual processes in back office functions.

3.4 Customer outcomes

Through customer research carried out by AusNet Services, a succinct list of key customer values and priorities were identified. These customer outcomes are:

- delivering basic services "deliver on the basics"
- keeping customers informed "keep me posted"
- affordable services "affordable for me"
- adaptability "be ready for the future"
- safety "always safe".

Additional information on each of these customer outcomes is provided in the overarching Technology TRR submission FY2023-2027.

All expenditure programs identified and proposed by AusNet Services will have regard to the customer outcomes and can be directly linked to at least one of these five outcomes.

We consider that this program of work will be most relevant to '**affordable for me**' as cost savings made from more efficient process can be passed on to customers over the long-term. In this initiative, improvements to knowledge management will enable the transitioning and dynamic workforce retain operational insights that can reduce time and costs. All corporate functions serve the purpose of '**delivering the basics'**, specifically increased communication between employees ensuring smooth operations and collaboration, creating greater opportunity for efficiency. With these efficiencies, it means that customers will have a smoother customer experience related to reduction in overlap of service providers, faster response times, and more efficient issue resolutions. Customers will also experience an uplift in service standards, as effective knowledge management would strengthen service standardisation. Equally as important is '**always safe**,' as improved access to safe work practices and risk mitigation procedures will ensure safety of employees and the community, this will be explored further in the discussions on each of the options.

3.5 Business drivers

In the face of significant industry disruption resulting in a period of substantial uncertainty and increasing complexity across the industry, AusNet Services has selected four key business drivers which set the direction for the business.

These business drivers are:

- Maintaining current service performance in a disrupted environment where risks are changing due to the increasingly complex nature of the grid.
- Updating and implementing new technologies to enable AusNet Services to respond to changes within the growing renewable generation market;
- Complying with new obligations; and
- Delivering improvements requested by our customers regarding sustainability and cost.

All expenditure programs identified and proposed by AusNet Services will have regard to the business drivers and can be directly linked to at least one of these initiatives.

We consider that this program of work will be most relevant to 'Updating and implementing new technologies to enable AusNet Services to respond to changes within the growing renewable generation market', as increased productivity will result from having information more readily available for employees and improved visibility across workforce and program/ portfolio management will aid effective decision-making. We will further explore this in the discussions of each of the options.

3.6 Approach to developing expenditure forecast

For each program brief, a consistent approach is used to develop programs of work and the associated expenditure forecast for the regulatory period FY2023-2027.

A full overview of the approach can be found in section 3.2 of the "AusNet Services – Transmission Revenue Review – Technology Strategy Document".

To develop each program of work and associated expenditure, the following steps were taken:

- Needs analysis to identify areas of the network and business processes that require investment over the upcoming regulatory period,
- Bottom up discussion with business and technology architects and delivery leads to develop options to address the investment need, including scope, key objectives, and drivers influencing the requirement for the programs,
- Consideration of different options to achieve the objectives of the program and analysis of their relative costs, benefits and risks, and
- Top down view to ensure that the Technology Strategy investment portfolio represents prudent and efficient expenditure for the upcoming period, relative to AusNet Services' previous expenditure and also benchmarked against other comparable Transmission businesses.

4 **Options**

4.1 Overview

This section provides an overview of a select number of options that may feasibly alleviate the current limitations. Each option represents a combination of initiatives fit within the program of work.

Brief overview of each of the options						
Option 1	Business as usual (no new applications or systems, only refreshing current applications)					
Option 2	Knowledge capture and transfer:					
(Recommended)	 Establishing an integrated platform allowing for knowledge capture and transfer 					
	 Improvements to enable collaboration and ensure productivity of teams regardless of location 					
	 Improvements in automation and analytics capability across enterprise content management back office functions, specifically improving the accuracy of planning, budgeting and forecasting. 					
Option 3	[C-I-C]					

Table 4-1 Brief overview of the options

4.2 Option #1 Business as Usual

This option involves continuing AusNet Services' current tactical roadmap, which includes maintaining current systems and applications that are used to manage enterprise content, connect employees and manage both the workforce and program/ portfolio planning.

At a minimum, a series of refreshes will be required for existing applications. This option does not look to expand any of the existing capabilities identified above; it is the base level of investment to maintain current business as usual outcomes.

Knowledge Management

Complete the necessary refreshes to allow continued content management via SharePoint (Microsoft Cloud and On Premise).

Workforce Mobility and Collaboration

Refreshes to Windows workstation, Citrix platform and maintenance of the enterprise application store for both IT and OT employee devices will be required during the period.

Corporate functions

The current SaaS Solution for planning, budgeting and forecasting will require refreshed modules or implementation of additional modules required by the current vendor within the FY2023-FY2027 regulatory period. The solutions will also have a lifecycle refreshes during the period (SAP MRS and SAP BPC) these costs are included in the Technology Asset management (TAM) Application brief.

As described in the context and drivers' sections above, limitations in knowledge capture and transfer as well as visibility and accountability over the workforce are already having an impact on AusNet Services' ability to efficiently deliver reliable, safe power for customers.

As such, continuing AusNet Services' current capabilities in workforce management and communication is not an acceptable option over the next regulatory period.

Alignment to objectives

We do not consider that this option achieves any of the intended objectives of this program of work, as shown in Table 4-2 below.

Objective		Comments
An enhanced solution to facilitate the distribution of information efficiently across the workplace to improve speed and accuracy of workforce decision- making	×	No further benefits or strategic objectives will be achieved by refreshing existing systems and applications.
Improvements in analytics capabilities, including transparency and accuracy of portfolio and enterprise wide planning, budgeting, forecasting and reporting	×	No further benefits or strategic objectives will be achieved by refreshing existing systems and applications.
Utilising automation to improve efficiency of manual corporate functions.	×	No implementation of automated processes.

Table 4-2 Objectives analysis of option 1

Costs

Table 4-3 Costs of option 1

(\$m)	FY23	FY24	FY25	FY26	FY27	Total
Сарех	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$0.97
Opex	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$0.40
Electricity Transmission cost	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$1.37
Total program cost	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$4.60

Benefits

This option involves maintain the current systems and operations, without any uplift of capability to address the need and limitations described above. As such there are no specific benefits identified, aside from those associated with maintaining status quo systems.

Risks

There are a number of risks associated with the implementation of this particular option, as highlighted in the table below. Based on the consequence and likelihood of each risk, we have rated each of the individual risks blue, green, yellow, orange and red (order of severity). See Attachment 1 – Risk level matrix for additional information on this rating system.

	Risks	Consequence	Likelihood	Risk rating
R1.1	Knowledge loss due to staff turnover			С
R1.2	Lost productivity due to time spent locating information	Level 1: Compromised ability to efficiently utilise existing knowledge across the organisation creating inconsistencies in information management and decision- making.	Almost Certain	С
R1.3	Impacted health and safety of field crews if correct information is not readily available	Level 2: Health and safety risk where correct procedures are not carried out, particularly in the field	Likely	С
R1.4	Limited ability to attract and retain talent	Level 1: As work force ages, there is the risk of finding long term replacements for critical operational roles	Almost Certain	С
R1.5	Inefficiencies (e.g. workarounds), manual errors and poor data integrity associated with management, planning budget and forecasting and reporting processes	Level 1: Poor data integrity and manual processes increase the time to perform management and reporting. A lack of visibility to across all business units affects ability to manage employees and ensure targets are met.	Almost Certain	С

Table 4-4 Risks of option 1

As we have identified many medium risks, we consider that overall, this option is rated medium risk.

Alignment to customer related drivers of expenditure

As discussed in Section 3.4, five key customer outcomes have been identified through discussions with customers. The table below highlights the how this option will achieve these outcomes. Where we consider that a customer outcome is not directly achievable by the option or irrelevant, 'N/A' is applied.

Customer outcome	How this program achieves this
Deliver on the basics	At a minimum, a series of refreshes will be required for existing applications to maintain business as usual for operations and field employees. This will not deliver any services with better capability or efficiency than what exists today.
Keep me posted	N/A
Affordable for me	N/A
Be ready for the future	N/A
Always safe	N/A

Table 4-5 Customer related drivers of option 1

Alignment to business related drivers of expenditure

As discussed in Section 3.5, there are four Transmission business drivers that AusNet Services has identified and is focussing on over the next regulatory period. The table below highlights how this option will input into the initiatives where relevant. Where we consider that a business driver is not directly relevant to the option, 'N/A' is applied.

Table 4-6 Business	related of	drivers o	of option 1
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Business drivers	How this program achieves this
Maintaining current service performance in a disrupted environment where risks are changing due to the increasingly complex nature of the grid;	Business as usual (no new applications or systems, only refreshing current applications)
Updating and implementing new technologies to enable AusNet Services to respond to changes within the growing renewable generation market;	N/A - No uplift from existing capabilities
Complying with new obligations	N/A - No uplift from existing capabilities
Delivering improvements requested by our customers regarding sustainability and cost.	N/A - No uplift from existing capabilities

4.3 Option #2 Knowledge Capture and Transfer (RECOMMENDED)

In today's workplace, there is rapid proliferation of applications, with collaboration platforms like chat, email, calendars, meeting notes, project plans, and risk/issue tracking programs. With the increased use of these platforms comes exponential increases in data in many forms and file types across many messages and documents. As an employee, it becomes harder to search, find and utilise this information within an organisation, whether it originates in an email a document or a team member. Legacy share folders and intranets like SharePoint where teams manually upload documentation quickly, lose relevance, because the maintenance of these pages takes time and requires clear ownership and accountability. Therefore, once the immediate need for the uploaded documents is passed, relevance of these pages decreases dramatically.

While AusNet Services has commenced initiatives in this space in the current regulatory period, in this option investment will be required to ensure larger volumes of data and content are easily accessible and intuitive for employees to locate information quickly.

To ensure a prudent approach to investment during the regulatory period, for each opportunity for capability improvement, several options will be assessed including new products, additional functionality to existing tools or a customised solution built in house. There will be a mix of software and hardware required to uplift capability across the IT and OT workforces.

Included in this initiative is an investment in change management which will be critical to ensuring the culture of collaboration is established in line with the new solutions.

Digital solutions will be considered in the following areas.

Knowledge Management and Collaboration

Currently, while Microsoft SharePoint exists enterprise wide, it is not fully utilised as an enterprise content management solution. It contains mainly static word documents and presentation packs used across the business. In the FY2023-FY2027 regulatory period, knowledge management must grow from storage of documents to both capture and transfer of current and past employee insights.

The solution proposed will seek to:

- Create an intelligent user interface which can personalised by function and business role.
- Improve search-ability through consistent tagging of files and organisation of existing content into relevant folders for appropriate teams to access.
- Allow multimedia artefacts to be uploaded including videos etc. that could be utilised for training purposes or as quick reference guides for common problems both back office and field workers.
- Ensure all procedural information can be located in a digital form for easy access by all employees to aid situational awareness on all devices (e.g. field crews accessing short video demonstrations on mobile devices).
- Create a dynamic list of expertise across the business, in the absence of information there is the capability to locate and 'Dial the Expert'.
- Embed a metric into wider KPI framework which incentivises individuals to upload work to the shared environment.

Corporate Functions

AusNet Services completes continuous improvement initiatives as they arise within our corporate functions. Many finance processes have already been outsourced, however, moving forward the intention is to utilise automation and an established robotics platform to create further operational efficiency in manual rule based tasks. Initial analysis will be conducted to determine the most cost effective form of automation (robotics, automated products and systems/ cognitive).

Assuming the robotics platform is established and ready to accept use cases, the solution proposed will progress AusNet Services' automation capabilities by:

- Conducting initial analysis into relevant processes to undergo robotic process automation
- Prioritising workflows
- Conducting proof of concepts to identify high value, low complexity processes
- Building and rolling out automations to relevant back office functions (including HR and legal).

In addition to automation, a more transparent and accurate financial analysis solution will utilise real time data and advanced analytics. This tool will enable:

- Utilisation of advanced analytics to incorporate real time data into financial planning budgeting and forecasting
- Provision of end to end visibility of all projects within the enterprise portfolio
- Integration with Finance solutions (SAP Financial or similar)
- Consolidation of an overarching view of spend (budget v. actuals), with the ability to visualise by business unit, project, location, employee type etc.
- Tracing accountability and progress of project in close to real time
- Integration with existing systems to aid other financial calculations implementing additional modules if required.

Described in the context and drivers' sections above, limitations in knowledge capture and transfer, mobility and efficiency of corporate functions affect AusNet Services' ability to deliver reliable, safe power for customers. Option 2 is designed to address a significant number of the capability gaps.

Alignment to objectives

We consider that this option achieves all of the intended objectives of this program of work, as shown in the table below.

Objective		Comments
An enhanced solution to facilitate the distribution of information efficiently across the workplace to, improve speed and accuracy of workforce decision-making	•	This option will improve search functionality to locate relevant data for modelling and planning, as well as trouble shooting, learning and resourcing.
Improvements in analytics capabilities, including transparency and accuracy of portfolio and enterprise wide planning, budgeting, forecasting and reporting	~	This option will significantly increase the analytics capability of corporate functions, specifically enhancing accuracy and transparency of planning budgeting and forecasting by utilising real time data.
Utilising automation to improve efficiency of manual corporate functions.	~	Under this option, AusNet Services will commence automation on highest priority functional processes based on the highest impact for lowest cost.

Table 4-7 Objectives analysis of option 2

Costs

(\$m)	FY23	FY24	FY25	FY26	FY27	Total
Сарех	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$4.11
Opex (incl. step change)	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$1.91
Electricity Transmission cost	[<mark>C-I-C]</mark>	[<mark>C-I-C]</mark>	[C-I-C]	[C-I-C]	[<mark>C-I-C]</mark>	\$6.02
Total program cost	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$17.69*

Table 4-8 Costs of option 2

Both the Knowledge Management and Portfolio Management tools that form part of this option are likely to be deployed as subscription services we would expect this to result in a permanent increase in opex of approximately \$135.000 per annum.

Note, the total program cost of the Workforce Collaboration has been modified since the program was originally proposed in the EDPR submission. The change is due to the removal of the Mobility initiative in alignment with revised business objectives for Transmission. This has reduced the request of the component for Transmission which has in turn reduced the cost of the total program.

Benefits

Knowledge Management and Collaboration:

- Increased enterprise wide operational effectiveness through timely access to the correct information and up to date versions of documents, and a reduction in lost or misplaced information.
- A centralised and integrated repository of information reducing rework / duplication of work, information inconsistencies and operational effectiveness (e.g., time spent searching for documentation would be reduced).
- Improved and more collaborative culture, supporting teamwork and information/knowledge sharing.
- Timely access to safety material, policies, procedures etc.
- Reduced time to train and on board new employees.
- Capture specialised role information to avoid knowledge loss due to staff turnover.

Corporate Functions:

- Reduction in manual process due to automation of transactional tasks.
- Reduced time to complete financial modelling and analysis due to enhanced decision-making through more readily accessible quality information.
- More accurate and detailed financial modelling and analysis due to inclusion of real time data.

Risks

There are risks associated with the implementation of this particular option, as highlighted in the table below. Based on the consequence and likelihood of each risk, we have rated each of the individual risks blue, green, yellow, orange and red (order of severity). See Attachment 1 – Risk level matrix for additional information on this rating system.

	Risks	Consequence	Likelihood	Risk rating
R2.1	Knowledge loss due to staff turnover	Level 1: Limited ability to capture knowledge from Subject matter experts and establish knowledge sharing across the organisation. Extending time to train new staff and may create a skill gap in the organisation	Likely	D
R2.2	Lost productivity due to time spent locating information	Level 1: Compromised ability to efficiently utilise existing knowledge across the organisation creating inconsistencies in information management and decision- making.	Unlikely	E
R2.3	Impacted health and safety of field crews if correct information is not readily available	Level 2: Health and safety risk where correct procedures are not carried out, particularly in the field	Possible	D
R2.4	Limited ability to attract and retaining talent	Level 1: As work force ages, there is the risk of finding long term replacements for critical operational roles	Possible	E
R2.5	Inefficiencies (e.g. workarounds), manual errors and poor data integrity associated with management, planning budget and forecasting and reporting processes	Level 1: Poor data integrity and manual processes increase the time to perform management and reporting. A lack of visibility to across all business units affects ability to manage employees and ensure targets are met.	Possible	E

Table 4-9 Risks of option 2

We consider that overall this option is rated low risk.

Alignment to customer related drivers of expenditure

As discussed in Section 3.4, five key customer outcomes have been identified through discussions with customers. The table below highlights the how this option will achieve these outcomes. Where we consider that a customer outcome is not directly achievable by the option or irrelevant, 'N/A' is applied.

Customer outcome	How this program achieves this
Deliver on the basics	This option allows AusNet Services to carry out network operations more efficiently and ensure reliable supply to our customers. Customers will experience increase in service standards, reduced response times, and an overall more satisfied customer experience with reduced duplication of communication efforts.
Keep me posted	This option allows for increased reporting and proactive information management that will help support more transparent and efficient management of network performance and any required communications
Affordable for me	By improving on knowledge management, retention of knowledge and efficient ways of working, this will improve AusNet Services' ability to work more cost effectively. These efficiencies will reduce business costs and therefore costs to customers.
Be ready for the future	This option will prepare AusNet Services for the future by creating platform for employees to utilise learnings and knowledge rapidly, which is increasingly important as technology change occurs at a rapid pace as does change in customer needs.
Always safe	This option allows AusNet Services to complete operations more safely by providing all staff with quick and digestible information on best / safe work practice, and access to SMEs able to assist with enquiries as they arise.

Table 4-10 Customer related drivers of option 2

Alignment to business related drivers of expenditure

As discussed in Section 3.5, there are four Transmission business drivers that AusNet Services has identified and is focussing on over the next regulatory period. The table below highlights how this option will input into the initiatives where relevant. Where we consider that a business driver is not directly relevant to the option, 'N/A' is applied.

Business drivers	How this program achieves this
Maintaining current service performance in a disrupted environment where risks are changing due to the increasingly complex nature of the grid;	Lifecycle and refresh current applications
Updating and implementing new technologies to enable AusNet Services to respond to changes within the growing renewable generation market;	This option will advance AusNet Services in embracing the changing workforce and advancements in technology.
Complying with new obligations	N/A
Delivering improvements requested by our customers regarding sustainability and cost.	This option will lead to productivity gains from efficient information management and utilisation of existing employee insight and experience. Enhanced management tools with a greater level of visibility over financials and performance will also lead to more informed decision-making and operational efficiency.

Table 4-11 Business related drivers of option 2

4.4 Option #3 Intelligent Workforce Platform

Option 3 involves investments in cutting edge technologies to greatly enhance workforce tools, data collection and analysis.

[C-I-C]

Alignment to objectives

We consider that this option achieves all of the intended objectives of this program of work, as shown in the table below.

Table 4-12 Objectives	analysis of option 3
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Objective		Comments
[C-I-C]	>	[C-I-C]
[C-I-C]	~	[C-I-C]
[C-I-C]	✓	[C-I-C]

Costs

Table 4-13 Costs of option 3

(\$m)	FY23	FY24	FY25	FY26	FY27	Total
Capex	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$5.99
Opex (inc Step Change)	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$3.28
Electricity Transmission cost	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[<mark>C-I-C</mark>]	\$9.27
Total program cost	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	[C-I-C]	\$28.54*

[C-I-C]

Benefits

[C-I-C]

Risks

There are a number of risks associated with the implementation of this particular option, as highlighted in the table below. Based on the consequence and likelihood of each risk, we have rated each of the individual risks blue, green, yellow, orange and red (order of severity). See Attachment 1 – Risk level matrix for additional information on this rating system.

	Risks	Consequence	Likelihood	Risk rating
R3.1	[C-I-C]	[C-I-C]	Unlikely	E
R3.2	[C-I-C]	[C-I-C]	Unlikely	Ε

Table 4-14 Risks of option 3

	Risks	Consequence	Likelihood	Risk rating
R3.3	[C-I-C]	[C-I-C]	Unlikely	E
R3.4	[C-I-C]	[C-I-C]	Unlikely	E
R3.5	[C-I-C]	[C-I-C]	Unlikely	E

We consider that overall, this option is rated low risk.

Alignment to customer related drivers of expenditure

As discussed in Section 3.4, five key customer outcomes have been identified through discussions with customers. The table below highlights the how this option will achieve these outcomes. Where we consider that a customer outcome is not directly achievable by the option or irrelevant, 'N/A' is applied.

Customer outcome	How this program achieves this
Deliver on the basics	[C-I-C]
Keep me posted	[C-I-C]
Affordable for me	[C-I-C]

Table 4-15 Customer related drivers of option 3

Customer outcome	How this program achieves this
Be ready for the future	[C-I-C]
Always safe	[C-I-C]

Alignment to business related drivers of expenditure

As discussed in Section 3.5, there are four Transmission business drivers that AusNet Services has identified and is focussing on over the next regulatory period. The table below highlights how this option will input into the initiatives where relevant. Where we consider that a business driver is not directly relevant to the option, 'N/A' is applied.

Table 4-16 Business related drivers of option 3

Business drivers	How this program achieves this
Maintaining current service performance in a disrupted environment where risks are changing due to the increasingly complex nature of the grid;	[C-I-C]
Updating and implementing new technologies to enable AusNet Services to respond to changes within the growing renewable generation market;	[C-I-C]
Complying with new obligations	[C-I-C]
Delivering improvements requested by our customers regarding sustainability and cost.	[C-I-C]

5 Assessment and recommended option

5.1 Assessment of the options

To identify a recommended option for this program of work, we have selected a number of criteria to assess each of the options. We consider that these criteria represent a comprehensive view of each option, in achieving AusNet Services' business and customer objectives as well as requirements of the AER in ensuring that any expenditure is both prudent and efficient.

The table below summarises our assessment of each of the options against the criteria.

	Option 1	Option 2	Option 3
Alignment to objective	Not aligned to any program objectives	Aligned to all program objectives	Aligned to all program objectives
Costs (\$m)	\$1.38	\$5.34	\$8.56
Overall risk rating	Medium	Low	Very low
Alignment to customer related drivers of expenditure	Low alignment (1/5)	High alignment (5/5)	High alignment (5/5)
Alignment to business related drivers of expenditure	No alignment (1/4)	Medium alignment (3/4)	Medium alignment (3/4)

 Table 5-1 Summary table of the assessment of the options

As discussed above, the recommended option for Workforce collaboration over the FY2023-FY2027 period creates opportunities for AusNet Services to capture and transfer knowledge, promote and execute on workforce collaborate and operate their corporate functions more effectively, reducing manual effort.

This is because:

- Option 1 provides no uplift in capability, only required refreshes of existing systems to ensure they stay in support
- Option 2 (recommended) is able to meet capability requirements with realistic degree of implementation and lower delivery risk
- Option 3 achieves the same option of option 2 but at much higher cost. The fact that it creates options for future automation (and efficiency savings) is balanced against the higher level of delivery risk due to a large degree of integration and change management in terms of establishing a collaborative culture to realise benefits.

5.1.1 NPV analysis

As this program includes 75% non-recurrent expenditure, we have undertaken NPV analysis demonstrating the cost effectiveness of Option 2, the recommended option, as shown in **Table 5-2**, below.

Table 5-2 NPV analysis (\$FY21m)

	Costs (NPV)	Benefit (NPV)	Net benefit (NPV)
Option 1	\$1.19	\$0	-\$1.19
Option 2	\$3.45	\$7.38	\$3.92
Option 3	\$5.93	\$7.88	\$1.95

We have captured two primary benefits for this program:

- Improved employee productivity (recognising that we are operating in an increasingly complex environment with increasing requirements)
- Reduction in major outages and the impact on the Market

We have only captured 30% of the benefits for each of the options, as only 30% of the costs of the program are allocated to this TRR submission.

We consider that only Options 2 and 3 will improve employee productivity. Option 1 involves continuing business as usual. Option 2 will improve employee productivity and flexible work arrangements, as well as improvements in automation and analytics capability. The annual productivity savings would be circa \$0.88m, whereas Option 3 will improve employee productivity through improving the integration between systems. We have therefore estimate that the annual benefit for Option 3 will be \$2.55m across the 2023-27 period.

We have also measured the savings of costs incurred through market impact due to better information exchange and decision making and quantified the reduction based on the implementation of the proposed options. Better use of information would aid key processes such as planned outages, maintenance planning and network control. The net outcome of improvements in these areas will be less congestion of the transmission network resulting in less market impact to customers, which will be realised in lower customer prices.

As Option 1 involves business as usual, we do not expect there to be any additional benefits associated with reduced outages, however, we have estimated both Option 2 and Option 3 will result in a "Market Impact" avoidance of \$4.43M per annum.

Based on our NPV analysis, Option 2 has a favourable NPV with a lower capital expenditure than Option 3 and is therefore our recommended option.

5.2 Recommended option

Option 2 is the recommended option for AusNet Services for the Workplace collaboration program of work. Table confirms what is in scope and out of scope for this program of work, as well as the other programs of work on which the successful delivery of this program is dependent on.

In scope	Out of scope	Dependencies
[C-I-C]	[C-I-C]	[C-I-C]

Table 5-3 Confirmation of scope of recommended option

Below in Table , we have identified techniques or actions to mitigate the risks identified for this option.

Table 5-4 Option 2 risks and mitigation actions

	Risk	Consequence	Likelihood	Rating	Mitigation
R2.1	[C-I-C]	[C-I-C]	Likely	D	This risk will be alleviated by implementation of option 2 however should be tracked going forward.
R2.2	[C-I-C]	[C-I-C]	Unlikely	E	This risk will be alleviated by implementation of option 2 however should be tracked going forward.
R2.3	[C-I-C]	[C-I-C]	Possible	D	This risk will be alleviated by implementation of option 2 however should be tracked going forward.

	Risk	Consequence	Likelihood	Rating	Mitigation
R2.4	[C-I-C]	[C-I-C]	Possible	E	This risk will be alleviated by implementation of option 2 however should be tracked going forward.
R2.5	[C-I-C]	[C-I-C]	Possible	E	This risk will be alleviated by implementation of option 2 however should be tracked going forward.

6 Attachment 1 – Risk level matrix

The figure below shows the risk level matrix to which we have assessed each of risks within the options. Risks of highest concern are rated red, whereas those of lowest concern are rated blue.

		Consequence				
		1	2	3	4	5
L	Almost Certain	С	С	В	А	A
k e	Likely	D	С	В	В	А
l i h o	Possible	E	D	С	В	А
o d	Unlikely	E	D	D	С	В
	Rare	E	E	D	С	С

Fia	ure	6-1
IIY	uic	U - I

Consequence Rating	
5	Catastrophic
4	Major
3	Moderate
2	Minor
1	Insignificant

Over	Overall Risk Rating	
А	Extreme	
В	High	
С	Medium	
D	Low	
Е	Very Low	