Jemena Electricity Networks (Vic) Ltd

IT Investment Brief – End User Computing Lifecycle

Non-recurrent – Maintain Services

Jemena
bringing energy to life

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Glossary

Capex	Capital Expenditure
Current regulatory period	The period covering 1 July 2021 to 30 June 2026
ICT	Information and Communications Technology
Jemena	Refers to the parent company of Jemena Electricity Network
JEN	Jemena Electricity Network
Next regulatory period	The period covering 1 July 2026 to 30 June 2031
NPV	Net Present Value
Opex	Operating Expenditure
RYxx	Regulatory year covering the 12 months to 30 June of year 20xx for years in the Next Regulatory Period. For example, RY25 covers 1 July 2024 to 30 June 2025
Totex	Total Expenditure

End User Computing Lifecycle

Objective	This initiative aims to undertake lifecycle replacement of field mobility devices (primarily tablets with some mobile phones that are used for core business applications) and collaboration equipment (e.g. room conferencing and audio-visual equipment) that have not been replaced during the current period.		
Non-recurrent ICT sub-categorisation	☒ Maintaining existing services, functionalities, capability, and/or market benefits	☐ Complying with new/altered regulatory obligations/requirements	☐ New or expanded ICT capability, functions, and services
Background	The scope of this investment brief is the replacement of outdated, out-of-support tablets and meeting room collaboration technology that has not been replaced during the current period. **Field mobility devices** Jemena manages deployment of tablets to field staff so that they can access core applications in the field. There is a planned tablet lifecycle upgrade every 2 years however we haven't upgraded tablets since 2019 and 2020 (last regulatory period). This is because the existing models have provided longer than anticipated lifecycle as existing core business applications have remained the same during this period. We are now seeing an increased demand on the computational power required as new field operations applications are deployed e.g. Mobile Enterprise. [redacted] There has been significant performance impact on applications deployed on these devices over the last 2 years, most notably while using UpVise (work order management) and more recently ME (Mobile Enterprise). Battery life also continues to decline due to significant charge cycle count, thereby reducing time available to users in the field. This has led to productivity and reliability impacts during field operations and users are having to actively manage how many applications are open at a given time and selectively closing those not required. Furthermore, vendor support has already ceased for many tablets and for others, will cease by early 2026. Support is not extendable as it is built into the cost of the device. **Collaboration Technology** Jemena has meeting and conference rooms across a number of sites for which collaboration technology must be maintained. Collaboration technology includes audio-visual, and communications technology required to host and manage online and remote meetings; specifically, [redacted] Whilst many of the meeting and conference rooms have been updated during this current period, there are many that have not had updated technology since 2015. The reason for this is that the systems in place [redacted] were of higher specifications with dedicated video conference systems which could run stand-alone (as opposed to the standard room equipment which requires a laptop to facilitate the video conference). [redacted]		
Customer Importance	An extensive customer engagement program was implemented with JEN residential customers, small and medium businesses, large commercial and industrial customers, stakeholders, and energy experts to shape the 2026-31 Draft Plan. Key customer priorities on how we should prepare for a more sustainable energy future while meeting customer and		

	community needs today from customers includes affordability. resilience, reliability, a sustainable future, fairness and education. Other key priorities relevant to this investment, are: • **Digitisation and automation -** Customers want JEN to digitise and automate the grid to make it a smarter and more efficient network. • **Accessible communication -** Customers value efficient and accessible communication and want to easily access information on our service and the customer service team easily. More specifically, tablets enable our field crews to have real-time access to work orders and accurate and complete GIS and asset information in the field. This results in quicker time to identify assets and their details in the field. Where there is a fault, this is key to improving our time-to-restoration and in Metering/Servicing this ensures accuracy in planned works and capturing of details e.g. photos, GPS etc. in the field.
Key Considerations	**Field mobility device cost estimates** We have [redacted] to ensure we are seeking the highest return whilst not overspending on the required devices to meet the minimum requirements of our field crew for the expected life of the device. The technical team has procured and undertaken extensive performance, reliability and suitability of all devices available on the market that meet our pre-requisites (size, weight, operating system etc.). At this stage we have based our forecast estimates on these discussions however we plan to [redacted] **Collaboration Technology cost estimates** As mentioned in the Background above, the existing technology has reached the end of serviceable life, thereby impacting the ability to use the base functionality of video conferencing with current modern standards i.e. Microsoft Teams meetings. The costs have been established based on Jemena's experience of deploying modern Microsoft Teams Room systems (MTR's) across other assets and business units, noting that only JEN-related costs have been included. We continue to explore market offerings from other manufacturers to ensure the highest value, reliability, and suitability to meet our requirements. Jemena will be [redacted]
Options	JEN has considered two alternatives to deliver the capability articulated above: (1) Defer replacement until next period – not recommended (2) Replace tablets and collaboration technology - recommended **Option 1: Defer replacement until the following period** **Description** JEN would continue to use existing devices and collaboration technology and only replace these in the following regulatory period, 2032-36. **Benefits** By maintaining the current version, JEN would avoid incurring the costs and many of the risks outlined at Option 2 below.

Risks

By the end of next period, the tablets would be 7-9 years old and collaboration technology up to 12 years old. Risks experienced today as described in the 'Background' section will only be exacerbated over the next period as these devices become more and more outdated compared with current versions.

It will become more and more difficult to address performance and availability issues. Furthermore, the outdated tablets and collaboration technology will lack new features, functionalities, and/or integrations that streamline operations and enhance productivity.

As technology evolves, the outdated tablets and collaboration technology will become incompatible with newer software, data formats, or hardware platforms, limiting interoperability and hinder collaboration. More specifically:

- Tablets would no longer support required applications to support core business activities (as the applications drop support for older Android operating system updates/patches).
- Delivery time of Metering/Servicing (planned works) would increase as there would be increased trips of trucks back to depot to receive new jobs (printed material).
- Meeting Room Technology would no longer connect to videoconferencing resulting in local display of content only. This would significantly impact collaboration between JEN staff at multiple locations.

Summary

This option 1 (Do nothing) is not recommended as we do not consider it reflects good industry practice given the risks outlined above.

Option 2: Replace tablets and collaboration technology

Description

This option would replace 278 tablets in JEN in 2027 and in 2030 and update collaboration technology in meeting rooms over the next regulatory control period.

Benefits

The key benefit of this approach is that the new tablets and technology would have full vendor support and all the functionality that comes with that including security patches, bug fixes, documentation updates and corrections. More specifically, this option will:

- Maintain security of our systems which engage with customer information (names, addresses, and connection details).
- Provide longer opportunity of time-on-tools in the field without repeated visits back to the depot for updated paper-based job information, diagrams etc.
- Enable field crews to provide quicker response times to faults with real-time SCADA and GIS information available on responsive and secure devices.
- Provide a higher degree of flexibility in ways-of-working for employees to collaborate from multiple office locations and when working remotely.

Risks

The key risk associated with replacing tablets and collaboration technology with the latest version is internal staff availability to rollout the replacement however we mitigate this risk by planning ahead to ensure relevant Subject matter experts and technicians are available. Where this isn't possible, we will leverage external vendor support.

Costs

JEN's costs for this option are outlined in the table below.

	$2024	RY27	RY28	RY29	RY30	RY31
	Total Capex	[redacted]			[redacted]	[redacted]
	Non-recurrent Opex					
	Recurrent-step Opex					
	Total Opex					
	Totex	[redacted]			[redacted]	[redacted]

As noted in the table above, this option will incur non-recurrent capex costs of [redacted] over the 2026-31 period to replace tablets and collaboration technology.

These costs comprise the purchase of tablets [redacted], and the subject matter experts from within JEN and supported by vendors as required for the tablet replacements and collaboration technology upgrades.

Summary

This option is recommended as we consider it reflects good industry practice given the benefits and risks outlined above. Furthermore, it provides the lowest sustainable cost.

Options Summary

The table below summarises the quantitative and qualitative differences between the analysed options.

($2024)	Capex	Opex	Totex	NPV	Residual Risk
Option 1	Not applicable	Not applicable	Not applicable	Not applicable	Moderate
Option 2	[redacted]	[redacted]	[redacted]	Not applicable	Low

What We Are Recommending

JEN proposes to proceed with Option 2: Replace tablets and collaboration technology. JEN considers that it best reflects good industry practice and provides the lowest sustainable cost.

Dependencies on other Investment Briefs

Not applicable.

Relationship to ICT Capital Forecast

The supporting modelling for this investment brief is contained in the following model**: JEN – IT Investment Brief – End User Computing Lifecycle – Costs and Benefits Analysis Model**