



Jemena Electricity Networks (Vic) Ltd

Technology Plan

IT Investment Brief - Mobility step change

Recurrent - Step Change



Glossary

AER	Australian Energy Regulator
Current regulatory period	The period covering 1 Jan 2016 to 31 Dec 2020
CYxx	The calendar year which covers the 12 months to 31 December of year 20xx. For the current regulatory period, this is equivalent to RYxx.
ICT	Information and Communications Technology
Intervening period	The period covering 1 Jan 2021 to 30 Jun 2021 covers the time between the current regulatory period and the next regulatory period. The Intervening period arises with the move from a calendar year regulatory year to financial.
Jemena	Refers to the parent company of Jemena Electricity Networks (Vic) Ltd.
JEN	Jemena Electricity Networks (Vic) Ltd.
Next regulatory period	The period covering 1 Jul 2021 to 30 Jun 2026
RYxx	Regulatory year covering the 12 months to 30 June of year 20xx for years in the Next Regulatory Period and the 12 months to 31 December of year 20xx for years in the Current Regulatory Period. For example, RY20 covers 1 January 2019 to 31 December 2020 and RY22 covers 1 July 2021 to 30 June 2022.

Mobility Recurrent Step Change

Objective	To ensure that Jemena Electricity Networks (Vic) Ltd. (JEN) maintains the IT systems for its mobility solutions that communicate data between corporate IT systems and field workforce personnel.
Background	<p>During the current regulatory period, JEN implemented systems, communications mechanisms and deployed mobile devices to allow field crews to access JEN's core application systems when on-site and to both view and update information live. This was forecast and allowed for during the previous regulatory determination and is included as a <i>non-recurrent – new capability</i> project during the current regulatory period. No recurrent projects were included in the current period for lifecycle replacement of these systems.</p> <p>JEN's 'base' recurrent expenditure (used to forecast recurrent expenditure required during the next regulatory period) is calculated from the actual recurrent expenditure during the current regulatory period. As this does not include any recurrent expenditure for mobility-related IT systems, a step change is required to account for the additional recurrent expenditure that will be required during the next regulatory period for these systems.</p> <p>We have therefore included this step change to reflect the necessary ongoing lifecycle maintenance activities associated with this system which are not captured in JEN's 'base' recurrent expenditure for the current regulatory period.</p>
Customer Importance	<p>Mobility solutions deliver the following benefits:</p> <ul style="list-style-type: none"> • Safety to both staff and customers: direct access to data such as asset location and current status and condition makes working on assets inherently safer. • Data quality: mobile solutions push the verification of data input into the field where work on the assets is being conducted instead of relying on paperwork to be returned to the office and manually re-entering. High-quality data leads to improvements in performing work, reducing rework and eliminates potential hazards.
Strategic Approach	<p>Jemena has invested during the current period to establish a foundational IT platform for mobility. It gives staff and contractors access to live data, allows the capture of system changes live and facilitates efficient communication between staff, contractors and JEN's core systems. This improves the quality of the work done to the network reducing rework, faster delivery of customer-initiated works and improved targeting of asset maintenance and replacement to produce better safety outcomes.</p> <p>The mobility system is a long-term, strategic investment. JEN intends to maintain the current level of mobility capabilities and to do this, must replace and update the platforms and systems within the mobility IT environment to keep them current and ensure the continued delivery of the benefits of the system to customers.</p>
Options	<p>JEN has considered only one option - maintaining the mobility IT environment as replacing the system comes at a high-cost, or unwinding the system would require a reversion to manual processes, which come at a higher cost. There are no reasonable alternative options that will securely maintain current mobility capabilities during the next regulatory period and beyond.</p> <p>Jemena has a strong track record of maintaining its platforms and applications efficiently and prudently as evidenced by the work performed as <i>Recurrent – base expenditure</i> over the current and previous regulatory periods.</p>

Option 1: Maintain mobility solutions**Description**

JEN will update the mobility IT environment through lifecycle upgrades following similar procedures as are undertaken for corporate applications.

Costs

Mobility lifecycle projects and annual costs are outlined in the table below. The mobility solution is customised to suit the requirements of the electricity distribution network, and as a result, these costs are specific to JEN's operations.

Table 1: Option 1 Costs – Direct Escalated (mid-year 2021)

\$2021	Project ID	RY22	RY23	RY24	RY25	RY26
Mobility Lifecycle - Workforce Management (WOM, MRS)	ITEE51	428,382	429,912	431,518	433,141	434,777
Mobility Lifecycle - Employee Mobility (Fiori Applications)	ITEE55	162,266	162,846	0	164,069	164,688
Total		590,647	592,758	431,518	597,210	599,466

This option will require \$2.8m of recurrent capital expenditure for the maintenance of the solutions over the next regulatory period.

These costs were estimated using JEN's standardised estimator tool for IT projects as described in the Technology Plan under the section on Forecasting Method. Mobility platforms and, in particular, the end-user apps, have more frequent updates than for more conventional client-server applications and their rollout involves site visits and training for staff who often do not have the same level of computer skills as their office-based counterparts.

The basis for the estimates aligns with similar (but categorised as non-recurrent due to being part of an initial rollout) tasks and projects that JEN undertook while rolling out the mobility solutions in the current regulatory period.

Risks

The risks of these projects are managed within Jemena's governance and project management framework; the risks—typically deployment, technological and change management—are not considered material for these projects.

Benefits

There are no specific incremental benefits associated with this option. All forecast expenditure is for maintaining existing functionality through regular updates and replacement to remain current and supported.

Summary

This option will replace the existing systems at an efficient cost. However, it will materially impact on the operations of the entire distribution network if the projects are not undertaken.

Options Summary	<p>The table below summarises the quantitative and qualitative benefits.</p> <p style="text-align: center;">Table 2: Options Summary</p> <table border="1" data-bbox="359 344 1173 450"> <thead> <tr> <th data-bbox="359 344 494 398"></th> <th data-bbox="494 344 719 398">Capex \$2021</th> <th data-bbox="719 344 944 398">Qualitative Risks</th> <th data-bbox="944 344 1173 398">Qualitative Benefits</th> </tr> </thead> <tbody> <tr> <td data-bbox="359 398 494 450">Option 1</td> <td data-bbox="494 398 719 450">-2,811,599</td> <td data-bbox="719 398 944 450">Low</td> <td data-bbox="944 398 1173 450">Low</td> </tr> </tbody> </table>		Capex \$2021	Qualitative Risks	Qualitative Benefits	Option 1	-2,811,599	Low	Low
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Option 1	-2,811,599	Low	Low						
What We Are Recommending	<p>Jemena proposes to proceed with maintaining the mobility systems into the future as recurrent expenditure similar to the other major corporate ICT systems that Jemena manages.</p> <p>As no recurrent replacement expenditure was incurred during the current regulatory period for mobility IT systems, a step change of \$2,811,599 (\$2021, direct, escalated) should be applied to the <i>recurrent – base</i> forecast for the next regulatory period. This will ensure that the allowance for recurrent expenditure during the next regulatory period is sufficient to cover mobility IT lifecycle projects that were not required during the current regulatory period due to significant non-recurrent projects applied to these applications.</p>								
Relationship to ICT Capital Forecast	<p>The proposed option for this business case is contained in the ICT investment plan as <i>Recurrent – step</i> Project IDs: ITEE51 & ITEE55.</p>								