

# Appendix 4.20: ICT platforms business case

Revised regulatory proposal for the ACT electricity distribution network  
2019–24

November 2018

## Business Case

# ICT Platforms

Project Name	ICT Platforms
Owner	
Planned or actual start date	Q2 FY20/21
Planned end date	Q4 FY21/22

### Synopsis

ActewAGL is proposing ICT capital investments on a number of ICT platforms:

- systems to ensure the ICT Security of the IT and OT networks
- to enhance the workforce efficiency and capabilities with its mobility infrastructure, and,
- a centralised digital content management system that will provide the capability to manage content including self service capabilities to employees, partners, and customers

## Key Parameters

Project Title:	ICT Platforms	Project No:	N/A
Category	Operational program		
Program	Corporate and ICT Program		
Capex (\$M)	\$2.81m (\$0.95m funded by Evoenergy)	Estimated Start Date	1/10/2020
Net Cost (\$M)	\$2.9m (\$1.00m funded by Evoenergy)	Estimated Finish Date	1/10/2021

## Background and Project Mandate

*Note that this business case describes the Evoenergy components of a consolidated ActewAGL initiative delivering to all entities of the Joint Venture.*

ICT Security

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

## Mobility

ActewAGL has established a mobility platform consisting broadly of infrastructure, application hosting and publishing and mobile device management components.

Continued investment is required to further develop and support effective and secure mobile computing solutions. This initiative includes a refresh of hardware required to deliver a mobility solution as it reaches end of life.

A review of this platform undertaken in 2018 has identified areas for improvement or extension:

- Expand use of existing product to include remote desktop provisioning;
- Expand mobile device management to include a test environment to address technical and usability gaps;
- Implement a consistent end-to-end look and feel to reduce complexity;
- Implement a VPN to ensure full usability of laptop and tablet devices when not connected to the network; and,
- Extend virtualisation platform to enable access from multiple channels depending on the user's role.

## Digital Content Management System

A digital content management system will support the management of digital content, including content for the web and digital devices. Standardising content management practices will allow ActewAGL to increase the relevance of content across all channels and reduce customer and employee access to outdated materials.

# Options Analysis

## Options Overview

For integrated security platform requirements, the following options were considered:

1. Do nothing  
Do nothing. Do not implement, upgrade or refresh ICT Platforms.
2. Implement ICT Platforms  
Implement ICT Security controls, refresh and upgrade mobility platform and implement a DCMS.
3. Implement ICT Security controls only  
Implement high priority ICT Security controls only. Do not implement upgrade or refresh mobility or DCMS

## Cost of the Investment

Indicative costs for the Digital Content Management System were provided through an external ICT Strategy engagement undertaken in early 2017.



Mobility costs were estimated based upon a review of ActewAGL's mobility platform completed in 2018.

Costs for additional ICT Security controls were formed internally after detailed analysis through the formation of ActewAGL's ICT Security Strategy (2018-2023).

Note that the proposed implementation schedule is subject to change based upon ongoing assessment of ICT Security threat.

ICT Expenditure Type	Total Project	Evoenergy Allocation
Capital Expenditure	\$2,810	\$952
Operating Expenditure	\$130	\$44
<b>Total</b>	<b>\$2,940</b>	<b>\$996</b>

*Note: All amounts are in \$Thousands in nominal dollars. Cost Allocated to Evoenergy in accordance with 'ActewAGL Cost Allocation Methodology'.*

## Cost Comparison

The cost comparison for these options over a ten-year period follows. The cost comparison has been undertaken over ten years to ensure that ActewAGL has taken a long-term view over all IT investments.

Evoenergy Expenditure Option	Implementation Cost	Lifecycle Cost over 10 years	Total
Do nothing	--	--	--
Implement ICT Platforms	\$996	\$963	\$1,959
Implement ICT Security Controls only	\$376	\$647	\$1,023

## Regulatory Impact

The expected capital expenditure over the next regulatory period is outlined in the below table.

ICT Expenditure	Year 1 2019/20	Year 2 2020/21	Year 3 2021/22	Year 4 2022/23	Year 5 2023/24	RCP Total
Enterprise wide	-	\$310	\$2,500	-	-	\$2,810
Allocated to Evoenergy	-	\$105	\$847	-	-	\$952

*Note: All amounts are in \$Thousands in FY 2019 real dollars. Cost Allocated to Evoenergy in accordance with 'ActewAGL Cost Allocation Methodology'.*

## Benefits

### ICT Security

The proposed ICT security investment is to ensure the safe and reliable operations to customers through maintaining the technical currency of the ICT security capability. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### Mobility

Refreshing ActewAGL's mobility infrastructure, and upgrading to access features of a contemporary mobility solution will:

- Enable continued use of mobility solutions core to current business processes
- Empower customers by delivering mobile, self-service channels,
- Provide better information to customers by integrating real time data on work order progress, assets operations activities, estimated outage duration,
- Fully mobile enabled field crews to perform end-to-end daily activities in the field (100% remotely) for both work order related and admin related tasks (e.g. timesheets).
- Mobilise dispatch and scheduling, including matching of staff skillsets and locations, to enable the optimal assignment of work activities,
- Reduced reliance on manual approvals, workflow and paper work instructions, such as, safety documentation, switching instructions, procedures and maps.

## Digital Content Management System

The benefits associated with implementing a digital content management system are:

- Increased customer satisfaction: A content management system can help ActewAGL increase relevance of content across all channels and reduce customer access to outdated materials through clearly defined asset and data management workflows;
- Safety – Contributes towards running a safer business, ensuring the consistency of safety and procedural documentation; and,
- Consistent policy and procedure knowledge across business units.

## Risk Assessment

The risk assessment for these options follows.

Risk Statement		Option 1	Option 1 Rating	Option 2	Option 2 Rating	Option 3	Option 3 Rating
Operational Risk – ICT Security Risk (Cyber Attack)	Likelihood	Likely	High	Likely	High	Likely	High
	Consequence	Major		Moderate		Moderate	
Inefficient use of mobility platform	Likelihood	Likely	Medium	Unlikely	Low	Likely	Medium
	Consequence	Minor		Minor		Minor	



## Investment Appraisal

(\$000's)	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	Total
Capital Expenditure											
ICT Platforms	-	310	2,500	-	-	-	-	-	-	-	2,810
Total Capital Expenditure	-	310	2,500	-	-	-	-	-	-	-	2,810
Evoenergy share (after CAM)	-	105	847	-	-	-	-	-	-	-	952
Operating Expenditure											
ICT Platforms	-	130	281	320	320	320	320	320	320	320	2,651
Total Operating Expenditure	-	130	281	320	320	320	320	320	320	320	2,651
Evoenergy share (after CAM)	-	44	95	108	108	108	108	108	108	108	895
Project Benefits											
ICT Platforms	-	-	-	-	-	-	-	-	-	-	-
Total Benefits	-	-	-	-	-	-	-	-	-	-	-
Evoenergy share (after CAM)	-	-	-	-	-	-	-	-	-	-	-
Depreciation	-	31	312	562	562	562	531	250	-	-	2,810
Tax	-	48	178	265	265	265	255	171	96	96	1,638
Net Cash Flows	-	(392)	(2,603)	(55)	(55)	(55)	(65)	(149)	(224)	(224)	(3,823)
PV of Net Cash Flows	-	(367)	(2,282)	(45)	(43)	(40)	(44)	(94)	(132)	(124)	(3,170)
Cumulative PV	-	(367)	(2,648)	(2,694)	(2,736)	(2,776)	(2,820)	(2,914)	(3,046)	(3,170)	-

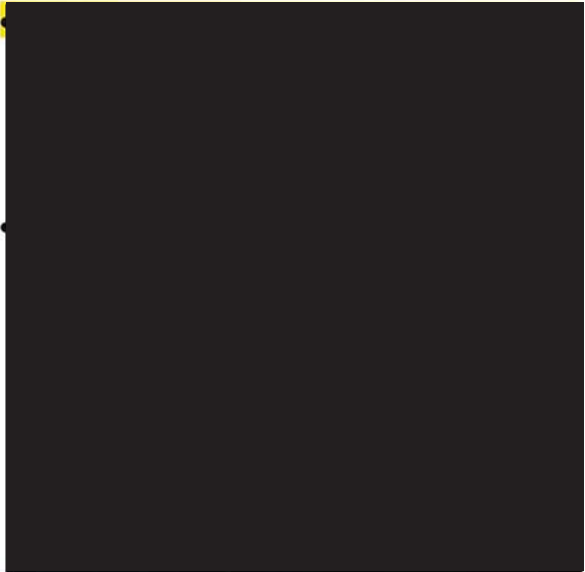


BI, Analytics and AI Platform	NPV		NPV
	(Entreprise)	(Evoenergy)	(Evoenergy)
	(3,170)	(1,032)	(1,032)
Total NPV	(3,170)	(1,032)	(1,032)

Assumptions				
Cost of Capital	6.38%			
Cost Increase	2.50%			
Asset Effective life (years)	5			
Tax Rate	30%			
Evoenergy CAM	33%			



## Justification against NER objectives and criteria

### Mapping to NER Capital Expenditure Objective(s)

Mapping to the relevant 'Capital expenditure objective(s)' (Chapter 6, National Electricity Rules) <i>The forecasted capital expenditure is considered necessary to achieve:</i>	
6.5.7(a)(1) meet or manage the expected demand for standard control services over that period;	<ul style="list-style-type: none"> <li>Accurate data and ability to access information through mobile channels will help Evoenergy meet the expected demand for standard control services.</li> </ul>
6.5.7(a)(2) comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;	<ul style="list-style-type: none"> <li>Mobile devices used in the field are required to provide support ensuring field staff have access to all OH&amp;S and safety regulations,</li> <li>The Content Management System (CMS) supports the improvement in safety and compliance as all information is maintained and accessible in one single location and through the same "look and feel",</li> </ul> 
6.5.7(a)(3) to the extent that there is no applicable regulatory obligation or requirement in relation to: (i) the quality, reliability or security of supply of standard control services; or (ii) the reliability or security of the distribution system through the supply of standard control services, to the relevant extent: (iii) maintain the quality, reliability and security of supply of standard control services; and (iv) Maintain the reliability and security of the distribution system through the supply of standard control services.	 <ul style="list-style-type: none"> <li>Implementation of digital systems will enable ActewAGL to provide better quality, secure, and reliable information to the business as well as to its customers,</li> <li></li> </ul>

6.5.7(a)(4) maintain the safety of the distribution system through the supply of standard control services	<ul style="list-style-type: none"> <li>The proposed capital expenditure seeks to maintain critical workplace technology components used in the field to access and support asset maintenance activities and processes. This ensures the continued safe operation of the distribution system and hence the risk of potential failure and/or unplanned production outages is reduced,</li> <li>The Content Management System (CMS) supports the improvement in safety and compliance as all information is maintained and accessible in one single location that is easily searchable, such as, safety documentation,</li> </ul>

### Mapping to NER Capital Expenditure Criteria

Mapping to 'Capital expenditure criteria' (Chapter 6, National Electricity Rules)

*The forecasted capital expenditure reasonably reflects each of the following:*

6.5.7(c)(1) the efficient costs of achieving the capital expenditure objectives;	<ul style="list-style-type: none"> <li>This initiative will improve more reliable network operations enabling ActewAGL to fulfil its capital expenditure more effectively. Moving to digital and mobile platforms will streamline manual functions resulting in reduced expenditure, and</li> <li>All ActewAGL ICT programs undergo a strict governance process which will consider a number of factors including options analysis, return-on-investment and consideration of capital vs. operating expenditures.</li> </ul>
6.5.7(c)(2) the costs that a prudent operator would require to achieve the capital expenditure objectives; and	<ul style="list-style-type: none"> <li>By not uplifting IT platforms supporting critical business processes, this exposes ActewAGL to unacceptable levels of risk to its business</li> </ul>

	operations, potentially resulting in the failure to meet the capital expenditure objectives 6.5.7(a)(2) and (3).
6.5.7(c)(3) a realistic expectation of the demand forecast and cost inputs required to achieve the capital expenditure objectives.	<ul style="list-style-type: none"><li>• N/A</li></ul>

## Recommendation

The recommendation is to implement the ICT platforms described in this business case.