

Investment Evaluation Summary (IES)

Project Details:

Project Name:	<i>Software and hardware support and maintenance</i>									
Project Id:	IT.SFT.04									
Thread:	Information Technology									
CAPEX / OPEX:	OPEX									
Scope Type:	C									
Service Classification:	Standard Control									
Work Category Code:	ITC									
Work Category Description:	IT & Communications									
Record Point ID:	R0000150795									
Preferred Option Description:	<i>Software and hardware support and maintenance is continued.</i>									
	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
Estimate (\$)	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M
Total (\$) 2017-2019	\$8,395,360									
Total (\$) 2017-2027	\$41,976,800									

Governance:

	IES Section 1		IES Section 2	
Business Unit Review:				
Thread Endorsed:		18/05/2015		18/05/2015
Project Approver:				

Document Details:

Version Number:	1.0
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Section 1 (Gated Investment Step 1)

1. Background

This initiative covers the software and hardware maintenance and support of software systems managed by Corporate IT at TasNetworks.

The software solutions covered by this program of work are integral to the successful operation of TasNetworks.

TasNetworks are continuously exploring ways to increase their efficiency and improve effectiveness. These efficiencies are often being achieved through the strategic implementation of software solutions to streamline / automate business processes, or even make some processes completely obsolete. As such, demand from the business for IT Application services remain consistently high and is not expected to reduce during the forthcoming regulatory period.

1.1 Investment Need

The software and hardware support and maintenance of software systems managed by Corporate IT at TasNetworks must be continued.

The IT infrastructure underpins the entire TasNetworks business. All facets of the operations would be affected if the software and hardware support and maintenance is not continued.

The following table provides some examples of the likely impacts.

Technology Group	Impact without
Business critical applications (e.g. [REDACTED])	No business critical applications. Without them, the entire 'meter' to 'cash' processes would be mortally broken.
Field Tools (e.g. [REDACTED])	Without field tools, field operatives will be reduced to using pen and paper, which would be a significant step backwards. TasNetworks will not meet market SLA's which would impact market and settlement processes.
Other business applications (e.g. [REDACTED] etc.)	There are many other applications that provide process support for TasNetworks staff that allows them to perform their particular job efficiently and effectively. Without these applications, then the effectiveness and efficiency of TasNetworks staff is significantly reduced.
General IT infrastructure maintenance agreements including: <ul style="list-style-type: none">• Server.• Storage.• Network devices.	This group represents the backbone of the TasNetworks IT infrastructure. It provides the hardware applications needed to run the business applications. Without it, the business applications could not be utilised.

Without this investment the business will be crippled.

1.2 Customer Needs or Impact

Customers will be indirect beneficiaries of this initiative. TasNetworks systems will be available, compliant, and supported. TasNetworks can therefore operate as efficiently and effectively as possible.

1.3 Regulatory Considerations

Some of these the key business critical applications such as Brave and Gentrack are core to TasNetworks meeting its obligation as being part of the regulated National Electricity Market. These products are designed within the constraints of the National Electricity Market. TasNetworks National Electricity Market obligations have therefore been mitigated by purchasing these applications. Without these applications, TasNetworks will need to review all of its regulatory obligations as being part of the National Electricity Market.

2. Project Objectives

The project objective is to ensure the continued software and hardware support and maintenance of TasNetworks IT infrastructure.

3. Strategic Alignment

3.1 Business Objectives

The following table highlights how the initiative will assist in achieving TasNetworks corporate vision.

Strategic Goal	How this initiative will address the strategic goals
"we understand our customers by making them central to all we do"	<ul style="list-style-type: none">TasNetworks business applications and IT infrastructure supports the business's ability to perform a variety of customer facing functions. Not maintaining support could lead to adverse customer impacts. This initiative aims to keep systems supported and healthy.
"we enable our people to deliver value"	<ul style="list-style-type: none">Should health of business systems decay, issues may lead to requirement for manual processes introducing inefficiency and stress.
"we care for our assets, delivering safe and reliable network services while transforming our business"	<ul style="list-style-type: none">Healthy TasNetworks business applications and IT infrastructure are essential to ensure compliance with industry standards and regulations and robust governance processes.

3.2 Business Initiative Alignment

In maintaining efficient and accurate billing this initiative supports the aims of lowest sustainable pricing.

4. Current Risk Evaluation

This chapter details the risk of 'Do Nothing'.

The TasNetworks Risk Framework details the level of risk the business finds acceptable in each category (Safety, Environment, Financial, Regulatory, Legal and Compliance, Customers, Assets, Reputation and People).

This initiative addresses Financial and People risks, of which TasNetworks has a [REDACTED].

Failure to maintain support and maintenance agreements can result in TasNetworks employees being unable to access applications ranging from business critical systems to field tools. This could have a significant impact on the business' ability to function.




4.1 Risk Matrix

TasNetworks business risks are analysed utilising the corporate risk matrix, as outlined in TasNetworks Risk Management Framework.

Relevant strategic business risk factors that apply are follows:

Risk #	Risk Category	Risk	Impact	Likelihood	Consequence	Risk Rating
IT-031	Financial	[REDACTED]	No access to business support applications which will hinder numerous business support processes.	Likely	Minor	Medium
IT-032	Financial	[REDACTED]	No access to business critical applications which will halt the 'meter to cash' process.	Likely	Major	High
IT-033	Financial	[REDACTED]	Business applications could not work without the underlying IT infrastructure.	Likely	Major	High
IT-034	Financial	[REDACTED]	Without field tools, field operatives will be reduced to using pen and paper, which would be a significant loss of efficiency resulting in slower work or increased workforce.	Likely	Major	High

Section 1 Approvals (Gated Investment Step 1)

Business Unit Review:		Date	
IT Project Initiator:		Date	18/05/2015
IT Thread Approved:		Date	18/05/2015
Manager (Network projects) or Group/Business Manager (Non-network projects):		Date	
[Send this signed and endorsed Summary to the Capital Works Program Coordinator.]			

Actions			
CWP Project Manager commenced initiation:		Assigned CW Project Manager:	
PI notified project initiation commenced:		Actioned by:	

Section 2 (Gated Investment Step 2)

5. Preferred option

The preferred option is for software and hardware support and maintenance to be continued.

There is no other viable option to consider.

5.1 Scope

The scope is simply the ongoing payment of support and maintenance agreement for the items listed in the following table.

[illegible]

5.2 Expected outcomes and benefits

The outcomes and benefits are considered from a TasNetworks' perspective and from an external stakeholder perspective, in this case the customer and retailer.

Outcomes and benefits have also been segregated into tangible (i.e. measureable) and intangible (not measureable). Tangible benefits will be used as part of the NPV calculations in chapter 6.

TasNetworks' perspective	<p>Tangible benefits</p> <p>There no tangible bottom line direct savings can be derived from the investments, but rather reduced business risk, from having functioning, supported software.</p> <p>Not having supported applications puts the business at great risk, particularly in the areas of financial services, risk services, human resources, asset management, IT infrastructure and market systems. This risk is not able to be quantified.</p> <p>Intangible benefits</p> <ul style="list-style-type: none">• The ability to deliver accurate data in a timely manner.• Increase employee confidence in market systems, leading to a reduction in stress, frustration, overtime, retention issues of employees.• Decrease the likelihood of human error.• Employees will feel more valued.• Inefficiencies would be reduced.• Reduced reliance of working outside of systems and processes• Reduces the reliance on existing trained resources who understand defects and workarounds.• Adds value to our assets by enabling reliable services.
Customer and retailers perspective	<p>From a customer perspective, the business can continue to operate as it does now.</p>

5.3 Regulatory Test

N/A

6. Options Analysis

Two options have been considered as described in the following chapter:

- Option 0 - Do Nothing.
- Option 1 - software and hardware support and maintenance to be continued.

Each option is commented with regard to the following criteria:

- Solution effectiveness. Solution effectiveness is tested against the 'Investment Need' (detailed in chapter titled 'Investment Need'). In simple terms, does the option achieve the project objectives?
- Cost.
- Business impact – the selected option will consider the level of change to TasNetworks environment (including during project implementation and post implementation).
- Business Strategic alignment – does the option fulfil the business objectives and current business initiatives (detailed in chapter titled 'Strategic Alignment').
- IT strategic alignment.
- Project complexity – solutions will not be un-necessarily complex. Complexity introduces risk through combination of resource requirements, increased change etc.
- Risk profile – solutions will be risk adverse.
- Ability to achieve compliance – solutions will be fully compliant with all regulatory requirements and applicable industry standards.
- Time – ability to implement within deadline. Solutions will be implemented within a suitable timeframe to ensure compliance (where relevant), minimise disruption to the business and reduce the likelihood of project requirements becoming dated.

6.1 Option Summary

Option 0 – Do Nothing		
Criteria	Advantages	Disadvantages
Solution effectiveness	N/A	N/A
Cost	No initial CAPEX cost to consider. However, as described under disadvantages there will be a cost!	TasNetworks will lose support. Applications may partially or fully fail requiring manual workarounds or replacement with alternate product.
Business impact		TasNetworks may need manual workarounds or replacement products for those applications that fully or partially fail.
Business strategic alignment		The business objective <i>'we understand our customers by making them central to all we</i>

		<p><i>do'</i> will not be fulfilled due to potential revenue loss and unpredictable pricing as a result of unexpected application replacement or manual workarounds.</p> <p>The business objective, <i>'enable our people to deliver value'</i> will not be fulfilled due to potential negative business impacts or applications failing.</p> <p>The business objectives, <i>'we care for our assets, delivering safe and reliable network services while transforming our business'</i> will not be fulfilled due to issues with compliancy, and risk.</p>
IT strategic alignment	N/A	N/A
Project complexity	N/A	N/A
Risk to the business		See chapter titled 'Current Risk Evaluation'
Ability to achieve compliance		TasNetworks systems would become non-compliant.
Time – ability to implement within a deadline	N/A	N/A

Option 1 – software and hardware support and maintenance will be continued.		
Criteria	Advantages	Disadvantages
Solution effectiveness	Software and hardware support and maintenance will be continued.	
Cost	The cost is known and understood.	
Business impact	This option has no impact to the business as it is business as usual.	
Business strategic alignment	It will fulfil the business objectives of <i>'we understand our customers by making them central to all we do', 'we</i>	

	<p><i>care for our assets, delivering safe and reliable network services while transforming our business</i>’ detailed in the chapter titled ‘Business Objectives’.</p> <p>It will align with the business initiatives detailed in the chapter titled ‘Business Initiative Alignment’.</p>	
IT strategic alignment	N/A	N/A
Project complexity	N/A	N/A
Risk to the business		
Ability to achieve compliance	TasNetworks applications and infrastructure have been selected because of their conformance with regulatory and industry standards.	
Time – ability to implement within a deadline	N/A	N/A

6.2 Summary of Drivers

The following table compares the options presented with regard to the criteria assessed in the previous chapter.

Criteria	Option 0	Option 1
Solution effectiveness	N/A	
Cost		
Business impacts		
Business strategic alignment		
IT strategic alignment	N/A	N/A
Project complexity	N/A	N/A
Risk profile		
Ability to achieve compliance		
Time – ability to implement within a deadline	N/A	N/A

Key			
Solution effectiveness	Addresses most requirements	Addresses some requirements	Addresses few requirements
Cost	Low	Medium	High
Business Impact	Low	Medium	High
Business strategic alignment	Good alignment	Partial alignment	Poor alignment
IT strategic alignment	Good alignment	Partial alignment	Poor alignment
Project complexity	Low	Medium	High
Risk profile	Low	Medium	High
Ability to achieve compliance	Easy	Moderate	Hard
Time - ability to implement within a deadline	Easy	Moderate	Hard

6.3 Summary of Costs



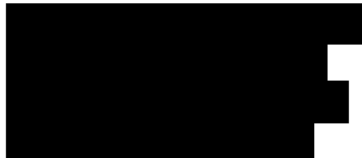

Option	Total Costs (\$)
0 – Do Nothing	No Expenditure
1 – Continue OPEX licensing, support and maintenance for all TasNetworks' software and hardware (2017-2019)	\$8,395,360

6.4 Preferred Option Cost Breakdown

	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Estimate (\$)	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M	4.2M
Total (\$) 2017-2019	\$8,395,360										
Total (\$) 2017-2027	\$41,976,800										

6.5 Summary of Risk

The preferred option addresses Safety & People and Financial risks, as analysed utilising the corporate risk matrix, as outlined in TasNetworks Risk Management Framework.

Risk Category	Risk	Impact	Mitigation	Risk Rating
Financial		No access to business support applications which will hinder numerous business support processes.	Keeping support and maintenance agreements up to date will eliminate this risk.	Low
Financial		No access to business critical applications which will halt the 'meter to cash' process.	Keeping support and maintenance agreements up to date will eliminate this risk.	Low
Financial		Business applications could not work without the underlying IT infrastructure.	Keeping support and maintenance agreements up to date will eliminate this risk.	Low
Financial		Without field tools, field operatives will be reduced to using	Keeping support and maintenance agreements up to	Low

		pen and paper, which would be a significant loss of efficiency resulting in slower work or increased workforce.	date will eliminate this risk.	
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6.6 Economic analysis

The NPV calculations below are not inclusive of the potential benefits of the preferred option as there no tangible bottom line direct savings can be derived from the investments, but rather reduced business risk.

Not having supported applications puts the business at great risk, particularly in the areas of financial services, risk services, human resources, asset management, IT infrastructure and market systems. This risk is not able to be quantified.

The NPV Calculation below is also over a ten-year timeframe.

Option No.	Option description	NPV	Reason got selection/rejection
0	Do Nothing	\$0	Risks are too great for no benefit
1	Continue Software and Hardware support and licencing (2017 – 2019)	-\$28,366,416	Greatest business benefit

6.6.1 Quantitative Risk Analysis

N/A

6.6.2 Benchmarking

N/A

6.6.3 Expert findings

N/A

6.6.4 Assumptions

The following are inclusive of project and financial assumptions.

Assumption ID	Assumption Description
ITA-121	<div style="background-color: black; height: 40px; width: 100%;"></div> <p>This risk is not able to be quantified.</p>

Section 2 Approvals (Gated Investment Step 2)

Business Unit Review:		Date	
IT Project Initiator:		Date	18/05/2015
IT Thread Approved:		Date	18/05/2015
Manager (Network projects) or Group/Business Manager (Non-network projects):		Date	
[Send this signed and endorsed Summary to the Capital Works Program Coordinator.]			

Project Initiator:		Date:	
Project Manager:		Date:	

Actions			
Submitted for CIRT review:	[Actioned by:	
CIRT outcome:			