

E2E - Stage 2 options analysis (project initiation)

## Investment Evaluation Summary (IES)

❖ For work being proposed for inclusion into the capital works program.

Project name:	IT Infrastructure – Core Services
Department:	IT Infrastructure
Investment Type:	Non-Network
Investment Category:	Non-Network - Information Technology
Functional Area(s):	ITSSC ITSSO
Project ZoNe location:	<a href="http://projectzone.tnad.tasnetworks.com.au/it-program/B000224">http://projectzone.tnad.tasnetworks.com.au/it-program/B000224</a>
Document Number:	R0001993192
Needs Item Reference:	R0002037375
Regulatory Investment Test Required?	No
Version Number:	1
Date:	1 <sup>st</sup> July, 2024

❖

Preferred Option:	Option 2 – Maintain and extend Core Services infrastructure				
Level 1 Estimate +/- 30 per cent (preferred option – base dollars):	Capex: \$14,424,861 Opex: \$5,008,031 Total: \$19,432,892				
Expenditure profile	FY25	FY26	FY27	FY28	FY29
Capex	\$1,715,328	\$5,600,448	\$1,663,989	\$2,798,712	\$2,646,384
Opex	\$428,832	\$1,400,112	\$554,663	\$1,199,448	\$1,424,976

❖

Sign-offs (in support of the recommended option)			
Works Initiator:		Date	16/01/2023
Leader: (Endorsement)		Date	16/01/2023
Leader or General manager noting delegation levels. (Approval) <sup>1</sup>		Date	Click here and type the date.

<sup>1</sup> Approval based on delegation level.

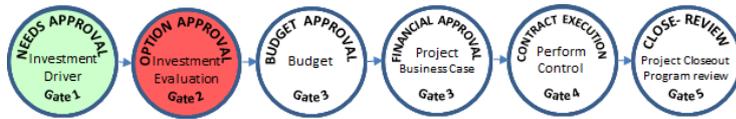
❖ denotes mandatory field

## 1. RELATED DOCUMENTS

Description	URL
Needs Form	<a href="http://relink/R0002047378#R24_NEE_S_IT_ITSSC_ITInfrastructureCoreServices.docx">http://relink/R0002047378#R24_NEE_S_IT_ITSSC_ITInfrastructureCoreServices.docx</a>
Estimate	
NPV	<a href="http://relink/R0002047363#R24_NPV_S_IT_ITSSC_ITInfrastructureCoreServices.xlsx">http://relink/R0002047363#R24_NPV_S_IT_ITSSC_ITInfrastructureCoreServices.xlsx</a>
Asset Management Plan	<a href="http://relink/R0002047370#R24_SUP_S_IT_ITSSC_ITInfrastructureAssetManagementPlan.docx">http://relink/R0002047370#R24_SUP_S_IT_ITSSC_ITInfrastructureAssetManagementPlan.docx</a>
Risk Profile – Option 0	<a href="http://relink/R0002047402#R24_SUP_S_IT_ITSSC_ITInfrastructureCoreServices.xlsx">http://relink/R0002047402#R24_SUP_S_IT_ITSSC_ITInfrastructureCoreServices.xlsx</a>
<a href="#">TasNetworks Towards 2030</a>	
<a href="#">TasNetworks Digital Technology Strategy</a>	
<a href="#">IT Infrastructure Roadmap (DRAFT)</a>	
<a href="#">Future Distribution System Vision</a>	
<a href="#">TasNetworks Corporate Plan</a>	
<a href="#">TasNetworks Business Plan</a>	
<a href="#">TasNetworks Risk Management Framework</a>	
<a href="#">National Electricity Rules (NER)</a>	

## 2. OVERVIEW

### 2.1 APPROVAL GATE STATUS



Approval Gate	Approver Title	Approver Name	Date
Gate 1 – Needs	IT Leader	Nigel Bailey	25/02/2022
Gate 2 – Option	This project seeks <b>OPTIONS APPROVAL</b> to proceed		

In line with the Gated Investment Framework this Project seeks Gate 2 Option approval to proceed to budget and financial approvals. This IES presents economic and risk assessments for each option considered, together with recommendation of a preferred option to address the business need.

### 2.2 BACKGROUND

The IT Infrastructure – Core Services program is responsible for the provision and maintenance of the underlying hardware and software components required to host and delivery business application and data services. The platforms and technologies within the scope of this program include:

- Server hardware hosted in TasNetworks datacentre locations.
- Network hardware and software, including:
  - Datacentre core network platforms.
  - Wide Area Network (WAN) hardware and software.
  - Campus and remote site Local Area Network (LAN) hardware and software.
  - Wireless network platforms.
- Data storage and backup platforms hosted in TasNetworks datacentres.
- Supporting equipment enabling the operation of the above items.

This Investment Evaluation Summary (IES) documents planned expenditures for the IT Infrastructure – Core Services program for the determination period. The scope of this IES includes:

1. Planning activities necessary to scope and schedule implementation, maintenance and upgrade of in-scope platforms.
2. Managing the full life cycle of platforms from design to decommissioning according to asset management plans.
3. Actions to ensure that core platforms remain fit for purpose and compliant with TasNetworks fiduciary, regulatory, market and legislative responsibilities.

Given the length of time of the determination period and the rapid rate of change in the IT industry, accurate cost forecasting is problematic. In addition, some proposed alternatives are sufficiently disruptive that careful analysis and testing should precede any implementation decision. For these reasons cost estimates for these options contain a considerable degree of uncertainty.

Furthermore, it must be noted that the IT sector as a whole is undergoing a seismic shift in the methods by which business application services are delivered to customers. This shift is characterised by increased use of cloud service providers for infrastructure, execution platform and application services and an increasing use of subscription models for both service delivery and pricing. As a result, R24 costs in this program will *increasingly shift from CAPEX to OPEX*. This shift is largely unavoidable without massive changes to TasNetworks' approach to application delivery and an increase in business risk (or a change to the accounting standards, which do not currently the capitalisation of subscription

services). This change would also run counter to the activities of almost all other private and government entities, both within the Utilities sector and in general.

*Therefore, while these alternatives are presented in this document at a high level, further investigation will be required during subsequent initiative phases to accurately determine costs. This investigation will be performed in accordance with the TasNetworks Project Management Methodology and Enterprise Architecture Framework.*

## 2.3 PROBLEM DEFINITION

IT Infrastructure provides the systems underpinning delivery of business systems and knowledge to the business in a timely manner. Core services hardware and software provides underlying platforms that enable hosting of business data and execution of business applications.

Without reliable, effective and flexible core infrastructure platforms:

- IT cannot continue to deliver the application services and data that the business needs to operate.
- TasNetworks cannot support flexible and remote working capability to support the business during lockdowns.
- IT cannot deliver new business application services to support business transformation and process digitisation.

## 3. CUSTOMER NEEDS AND IMPACT

TasNetworks' customers expect continued safe and reliable delivery of power under all circumstances. This delivery is supported by business application services that are hosted on and delivered using the Core Services infrastructure described in this document. This infrastructure must meet TasNetworks requirements for reliability and performance while also minimising the ongoing cost of operating and maintaining the infrastructure,

Additionally, as consumers of the services that IT Infrastructure provides, TasNetworks requires:

1. Timely and effective access to data and applications.
2. Swift resolution of issues and outages impacting this access.
3. IT support for delivery of new or replacement application services through implementation of new or upgraded core infrastructure platforms.

Core infrastructure must be configured and operated in a manner that allows TasNetworks to meet current and anticipated future regulatory and legislative requirements, both specifically directed at the energy sector and in general as a critical infrastructure provider.

Finally, TasNetworks expects IT Infrastructure to support business transformation efforts in pursuit of goals outlined in the Towards 2030 and Digital Technology Strategy documents.

The recommended program option meets both internal and external customer needs through prudent and targeted expenditure on core IT infrastructure through the reset period. Activities and requirements driving the requirement for expenditure in this IES are documented in the IT Infrastructure Asset Management Plans. To summarise, Core Services activities in the R24 period will consist of:

- Maintenance and periodical upgrade or replacement of the core services platforms documented in the IT Infrastructure Asset Management Plan.
- Review of core services platforms, architecture and vendors to ensure continued fitness for purpose and value.

- Development and deployment of emerging technologies for use in conjunction with or to replace existing core services platforms.

As noted above, TasNetworks budget planning for delivery of the program will reflect the industry trend towards operationalisation of expenditures that have traditionally been capitalised. While specific vendor and product changes in this area cannot be quantified with precision this far out from the reset period, the following budget impacts can be safely assumed:

1. Software (and to a lesser extent hardware) purchases will increasingly be subscription-based, with no usage rights at the end of the subscription.
2. Software that traditionally was available to install on-premises will move to cloud platforms, either entirely or as the focus of continued vendor development.

Installation and configuration of both subscription and cloud products cannot be capitalised under existing accounting standards, further shifting expenditure from CAPEX to OPEX.

## 4. CORPORATE ALIGNMENT ❖

### 4.1 BUSINESS PERFORMANCE OBJECTIVES

This project will help achieve the customer and business performance objectives in TasNetworks' Corporate Plan, and as shown in Table 2.

**Table 1** Performance objectives relevant to this project.

Performance category	Performance measure	Investment impact on performance
Safety and wellbeing	Significant incidents	<ul style="list-style-type: none"> <li>• Core Services supports delivery of remote and flexible work options reduce the need to travel.</li> </ul>
Safety and wellbeing	Reportable incidents	<ul style="list-style-type: none"> <li>• Core Services supports delivery of remote and flexible work options reduce the need to travel.</li> </ul>
Our customers	Customer net promoter score	<ul style="list-style-type: none"> <li>• Supports delivery of new application services to customers.</li> <li>• Supports AI, big data and analytics services delivered to improve supply reliability, regulatory compliance and control costs.</li> </ul>
Our people	Employee engagement	<ul style="list-style-type: none"> <li>• Underpins delivery of application and data services required by TasNetworks employees to execute their job functions.</li> <li>• Enables remote and flexible work options.</li> </ul>
Our business - Sustained cost management	Capital expenditure	<ul style="list-style-type: none"> <li>• Continued prudent management of IT Core Services platforms enables control of IT CAPEX associated with equipment upgrade and replacement.</li> </ul>
Our business - Sustained cost management	Operating expenditure	<ul style="list-style-type: none"> <li>• OPEX reductions anticipated through increasing automation of</li> </ul>

Performance category	Performance measure	Investment impact on performance
		Core Services platform operations and management. <ul style="list-style-type: none"> <li>• Supports business OPEX reduction through support for new application services aimed to improve workforce efficiency.</li> </ul>
Our business - Network service	Service incentive bonuses earned - transmission and distribution	<ul style="list-style-type: none"> <li>• Supports delivery of new and enhanced application services supporting transmission and distribution performance improvement.</li> </ul>

## 4.2 RISK OBJECTIVES

This project will assist in mitigating key business risks identified in TasNetworks' Corporate Plan. Table 3 presents all business risks, identifying those that would be positively impacted by the proposed project.

A detailed assessment of the risks mitigated by the project is presented in Section 5.3.

**Table 2 Business risks mitigated by this project**

Key Business Risks	Describe the specific risk(s) to which the business is currently exposed, for mitigation through the proposed project, and how it aligns with the Key Business Risk(s)
Death or Injury (Employee)	<ul style="list-style-type: none"> <li>• Risk of death or injury during travel:               <ul style="list-style-type: none"> <li>○ To and from work; and</li> <li>○ For work purposes</li> </ul> </li> <li>• Network platforms support remote working, reducing travel time and associated risks.</li> </ul>
Customer Focus	<ul style="list-style-type: none"> <li>• Core Services platform support development and delivery of business application services aimed at servicing the customer.</li> <li>• Remote and mobile work enabled and supported by Core Services infrastructure allows continued focus on customer regardless of workforce location.</li> </ul>
Business Continuity Management	<ul style="list-style-type: none"> <li>• Supports continued operations during disasters through remote work.</li> </ul>
Cyber Security	<ul style="list-style-type: none"> <li>• Reduce risk of intrusion or compromise through appropriate configuration, management, maintenance and update of core services platforms.</li> </ul>

## 4.3 STRATEGIC OBJECTIVES

IT Infrastructure provides the hardware and software platforms that not only underpin existing operations but are essential to support implementation of TasNetworks strategic objectives.

The Core Services program directly or indirectly supports implementation of these objectives as outlined in the table below by providing the ability to host and access TasNetworks data and applications.

Table 4 summarises strategic objectives that will be addressed by this project.

- Table 3 Strategic objectives relevant to this project

- Strategic Document	- Strategic Objective	- How the proposed investment will address the strategic goal
Digital Technology Strategy	People and Culture	Enable continued reliable and secure access to TasNetworks application and data services.
	Data	Ensure data can be delivered to applications and end users.
	Information Technology	Enable new technologies and simplify the technical environment.
	Customer	Support customer digital experiences through provision of hosting and access infrastructure.
	Security	Maintain and enhance the security of core infrastructure platforms.
	Innovation	Pursue automated infrastructure provisioning and management.
Towards 2030	Sustainable Prices	Control OPEX required to support increasing complexity through automation and autonomous systems.
	AI Grid	Provide platforms for hosting of applications and data to support AI-driven operations.
	Digital Network Operations	Provide platforms for hosting of and access to applications and data to support digital network operations and integration with other TN application services.

## PROJECT OBJECTIVES ❖

The program objectives can be summarised as:

1. Avoiding Business Risk: through maintaining TasNetworks' ability to both host and access data and applications.
2. Avoiding Cyber Risk: by ensuring that core infrastructure platforms are configured securely and updated in response to discovered vulnerabilities and released security patches.
3. Regulatory and Legislative Compliance: through prudent operation of core infrastructure platforms.
4. Drive Productivity Improvements: by supporting new business processes and applications, optimising the performance of supporting core infrastructure platforms and reducing the resources required to operate and maintain an increasingly complex and interconnected IT environment.
5. Support Strategic Goals: by providing the base infrastructure to host and provide access to new applications and application development/deployment models.

These objectives will be achieved through execution of planning, implementation, migration and maintenance activities as documented below:

- Continued operation of core infrastructure assets in TasNetworks datacentres, offices and remote sites.
- Maintenance, upgrade and replacement of core infrastructure assets according to the IT Infrastructure Asset Management Plan.
- Continued patching and configuration of platforms to reduce cyber security risk.

- Adoption of new architectures and methodologies to automate core infrastructure operations, including:
  - Adoption of optimised practices such as DevOps and DevSecOps, with security incorporated into every stage of infrastructure lifecycle.
  - Build and extend telemetry and analytics support to improve the efficiency of core infrastructure operations.
  - Support delivery of new and/or improved technology service delivery by other IT Infrastructure programs.

## 5. OPTIONS ANALYSIS

### 5.1 OPTIONS CONSIDERED AND ECONOMIC ANALYSIS

Table 4 lists the options considered, the outcome of the economic analysis for each option, and the option being proposed for endorsement in this Investment Evaluation Summary. Details of the NPV analysis are included in Appendix A1.

Table 4 Options considered

Option No.	Option summary	Direct cost (\$m)	NPV (\$m)	Preferred option (yes/no)	Reason for selection/rejection
0	Do nothing (as described above). Let existing maintenance expire, no capacity upgrades or asset replacement.	Nil*	-5.844	no	Associated risks are outside of TasNetworks' risk appetite, and would inevitably result in compromise or removal of ability to deliver services.
1	Maintain existing core infrastructure capability only.	16.194	-15.549	no	Limited capacity to enhance and extend core infrastructure platforms in support of TasNetworks strategic objectives.  Steadily increasing OPEX requirement to support increasing number and complexity of platforms.
2	Maintain and extend existing core infrastructure capabilities based on in-house delivery of infrastructure services.	19.432	0.067	yes	Continues to provide core infrastructure underpinning application and data services delivered to internal and external customers.  Allows evolution of technology architectures, platforms and processes to control OPEX costs.

\* Additional OPEX costs associated with this option are reflected in general operations and support costs.

## E2E - Stage 2 options analysis (project initiation)

### 5.1.1 OPTION 0: DO NOTHING

OPTION	DESCRIPTION	ASSOCIATED RISKS
Do nothing	<ul style="list-style-type: none"> <li>Allow existing maintenance agreements to expire without renewal.</li> <li>Do not upgrade or replace platforms.</li> <li>Platforms maintained reactively through break-fix actions only.</li> </ul>	<ul style="list-style-type: none"> <li>Localised short term failure to deliver business applications and data leading to loss of some business functions and associated OPEX.</li> <li>Widespread short term failure to deliver business applications and data leading to loss of most or all business functions and associated OPEX.</li> <li>Total failure to deliver business applications and data for an extended period.</li> <li>Sustained widespread failure to deliver business applications and data requiring additional expenditure to remediate in addition to costs associated with business function loss.</li> <li>Sustained and increasing cyber security risk as unpatched platforms are increasingly vulnerable to compromise.</li> <li>Increased OPEX required due to rising costs of platform operation and remediation.</li> </ul>

### 5.1.2 OPTION 1: TECHNICAL DESCRIPTION

OPTION	DESCRIPTION	ASSOCIATED RISKS
Maintain core infrastructure platforms	<ul style="list-style-type: none"> <li>Maintain core infrastructure platforms in their current state to the level required to support delivery of business applications and data as they exist at present.</li> <li>Support natural growth in data and usage of existing business systems.</li> <li>No allowance made for new business systems and associated IT platforms and architectures.</li> </ul>	<ul style="list-style-type: none"> <li>Inability to meet evolving business requirements as the Digital Strategy is implemented.</li> <li>Outsourcing of some IT functions required to support strategy implementation without corresponding reduction in the IT 'footprint'.</li> <li>Increased OPEX required to support proliferation of business services without optimisation of architecture and/or process automation.</li> <li>Degradation of IT Infrastructure's ability to provide timely and effective support for core infrastructure platforms.</li> <li>Limited ability to drive productivity and efficiency improvements on existing architectures.</li> </ul>

### 5.1.3 OPTION 2: TECHNICAL DESCRIPTION

OPTION	DESCRIPTION	ASSOCIATED RISKS
Maintain and extend core infrastructure platforms	<ul style="list-style-type: none"> <li>Provide core infrastructure platforms required to implement business projects and initiatives.</li> <li>Enhance the automation capabilities of platforms to control OPEX costs.</li> <li>Introduce new platforms and architectures to streamline operation of platforms and reduce associated OPEX.</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of new platform capabilities and architectures may impede delivery of new applications as skills are developed.</li> <li>Net OPEX cost reductions may not be realised as workload increasingly moved to subscription charging models.</li> </ul>

### 5.1.4 SENSITIVITY ANALYSIS

Not applicable.

## 5.2 OPTION EXPENDITURE PROFILES

The following tables show the expenditure profile for each investment option.

Option 0 – Do nothing Estimate (in nominal dollars) \$					
Option 0 expenditure profile	FY25	FY26	FY27	FY28	FY29
Capex					
Opex					

Option 1 – Estimate (in nominal dollars) \$					
Option 1 expenditure profile	FY25	FY26	FY27	FY28	FY29
Capex	\$1,429,440	\$4,667,040	\$1,386,658	\$2,332,260	\$2,205,320
Opex	\$357,360	\$1,166,760	\$462,219	\$999,540	\$1,187,480

Option 2 – Estimate (in nominal dollars) \$					
Option 2 expenditure profile	FY25	FY26	FY27	FY28	FY29
Capex	\$1,715,328	\$5,600,448	\$1,663,989	\$2,798,712	\$2,646,384
Opex	\$428,832	\$1,400,112	\$554,663	\$1,199,448	\$1,424,976

## 5.3 RISK MITIGATION

The matrix presented in Table 6 compares the options, showing how each assists TasNetworks in mitigating its key business risks (previously identified in section 4.3 “Risk objectives”).

Appendix B provides supporting details of the risk assessment outcomes presented in Table 6.

**Table 6 Risk matrix summary**

Risk Drivers	Current risk (Corporate Plan)	Option 0 – Do nothing Unmitigated risk	Option 1 - Net risk	Option 2 - Net risk
Death or Injury (Employee)	High	High	High	High
Customer Focus	Medium	High	Medium	Medium
Business Continuity Management	Medium	High	Medium	Medium
Cyber Security	High	Very High	High	Medium

#### 5.4 QUANTITATIVE RISK ANALYSIS

Costs associated with risk realisation have been modelled in NPV and risk calculations. Detailed information is available on request.

#### 5.5 BENCHMARKING

Not applicable.

#### 5.6 EXPERT FINDINGS

Not applicable.

#### 5.7 PREFERRED OPTION

The preferred option supports TasNetworks operational and strategic needs through the continued delivery and operation of core infrastructure platforms underpinning data access and business service delivery to TasNetworks employees, contractors and customers.

Furthermore, this option supports TasNetworks ongoing efforts to mitigate business and cyber risk as well as ensuring continued compliance with regulatory and legislative responsibilities, both existing and anticipated through:

- Reduction in travel and associated risks through maintenance of core infrastructure platforms supporting remote and mobile work.
- Reduction of cyber risks through platform maintenance, patching and other risk mitigation activities.
- Maintain and improve the ability to support the TasNetworks workforce in disaster periods (e.g. lockdown/pandemic).

Finally, the preferred option enables targeted and prudent spending to improve core infrastructure function, operation and maintenance through the configuration and update of platforms to reduce operational overheads associated with growing number and complexity of core infrastructure.

Activities described above aim to achieve and maintain the target state for core services, whereby core infrastructure is:

- Fit for purpose, both now and in support of TasNetworks' strategic objectives.
- Securely and efficiently provisioned, operated and maintained.
- Supports improvement of processes associated with core infrastructure to support increased operational efficiency.
- Support implementation of the IT Infrastructure technology roadmap.
- Support implementation of the TasNetworks Digital Strategy.

### 6. INVESTMENT TIMING ❖

CAPEX and OPEX funding will be sought through the reset period according to the expenditure profiles documented above.

## 7. EXPECTED OUTCOMES AND BENEFITS

The benefits to TasNetworks from implementation of the preferred option will be:

1. Continued ability to host and enable access to TasNetworks data and applications (as measured by IT application services availability metrics).
2. Continued and improved support for home, remote and mobile workforce requirements.
3. Reduced labour requirements to operate and maintained core infrastructure through optimisation of infrastructure and adoption of automation tools and processes (as measured by the ratio of IT Infrastructure staff to core infrastructure platforms).
4. Increased employee satisfaction through reliable and effective delivery of core infrastructure underpinning flexible working arrangements (as measured through employee satisfaction metrics).
5. Increased employee productivity through reliable and effective delivery of new application services to office and field staff (indirectly measured through office and field productivity metrics).

## 8. ASSUMPTIONS ❖

The following assumptions were made during the creation of this document:

1. Execution of the R19 Core Services program.
2. Continued adoption and refinement of the recommendations documented in the Towards 2030 and Digital Technology Strategy documents.
3. Continued applicability of TasNetworks IT architectural principles through the reset period.
4. Australian Energy Sector cyber security requirements currently under discussion are enacted into law prior to the commencement of the reset period.
5. The Federal Critical Infrastructure Bill currently under development is enacted into law prior to the commencement of the reset period.

## 9. REGULATORY INVESTMENT TEST

Not applicable.

## 10. RECOMMENDATION ❖

It is recommended that the preferred option is approved and progressed as it best satisfies the customer and business needs.

## APPENDIX A – ECONOMIC ANALYSIS

The assumptions used in the economic analysis are as follows:

- Service improvements in Option 2 result in an average 2.25% productivity gain across the business (50 minutes/week):
  - Labour burden cost \$70/hr
  - Labour force based on current FTE numbers
  - 230 working days/yr
- Service improvements in Option 2 result in an average 7.5% productivity gain across the IT Infrastructure team:
  - Labour burden cost \$100/hr
  - Labour force of 24
  - 230 working days/yr
- NPV analysis is carried out for a 5 year period (2024-29).

The results of the Economic Analysis are provided below:

<b>ANALYSIS OF OPTIONS</b>		<b>Option 0</b>	<b>Option 1</b>	<b>Option 2</b>
		<b>Status Quo - Do Nothing</b>	<b>Maintain capability</b>	<b>Support TN strategic objectives</b>
<b>CASHFLOW</b>				
	<i>flow</i>			
<b>Capital Expenditure</b>	Cash outflow	-	(12,020,718)	(14,424,861)
<b>Operational Expenditure</b>	Cash outflow	-	(4,426,059)	(5,311,271)
<b>Operational Cost savings</b>	Cash Inflow	-	-	-
<b>Total Expenditure</b>	Cash outflow	-	(16,446,777)	(19,736,132)
<b>Revenue</b>	Cash Inflow	-	-	-
<b>Net Cashflow</b>	Net cash	-	(16,446,777)	(19,736,132)
<b>CASHFLOW NPV</b>		-	(15,549,420)	(18,659,304)
<b>PLUS NON CASH</b>				
<b>Non Cash Benefits</b>	Non cash in	-	-	19,826,874
<b>Non Cash Costs</b>	Non cash out	(6,395,721)	-	-
<b>Net Value</b>	Net Value	(6,395,721)	(16,446,777)	90,742
<b>COST BENEFIT NPV</b>		(5,844,030)	(15,549,420)	67,435
	<b>RANKING</b>	<b>2</b>	<b>3</b>	<b>1</b>

		<b>Capex Cash</b>	<b>Opex Cash</b>	<b>Net Cash</b>	<b>Cash NPV</b>	<b>Cost Benefit NPV</b>	<b>RANKING</b>
Status Quo - Do Nothing	Option 0	-	-	-	-	(5,844,030)	2
Maintain capability	Option 1	(12,020,718)	(4,426,059)	(16,446,777)	(15,549,420)	(15,549,420)	3
Support TN strategic objectives	Option 2	(14,424,861)	(5,311,271)	(19,736,132)	(18,659,304)	67,435	1

**APPENDIX B – KEY BUSINESS RISK COMPARISON**

The project options each have a different impact on key business risks. The table below provides a qualitative summary of the impacts of each option on key business risks, with consideration for the risk approach and risk management process outlined in TasNetworks’ Risk Management Framework.

Key business risks	Current risk as per Corporate Plan			Option 0 (Description of the ‘Do nothing’ scenario)				Option 1 (Description)				Option 2 (Description)			
	Likelihood	Consequence	Risk	Likelihood	Consequence	Risk	How does this option mitigate current situation risk?	Likelihood	Consequence	Risk	How does this option mitigate current situation risk?	Likelihood	Consequence	Risk	How does this option mitigate current situation risk?
Death or Injury (Employee)	Possible	Major	High	Possible	Major	High		Possible	Major	Medium	Reduction in travel through support for remote work.	Possible	Major	High	Reduction in travel through support for remote work.
Customer Focus	Unlikely	Moderate	Medium	Possible	Moderate	High		Unlikely	Moderate	Medium	Maintain system availability and performance.	Unlikely	Moderate	Medium	Improve system availability and performance.
Business Continuity Management	Possible	Moderate	Medium	Likely	Moderate	High		Possible	Moderate	Medium	Maintain system availability and performance.	Click here to select the Likelihood rating	Click here to select the Consequence rating	Click here to select the Risk rating	Improve system availability and performance.
Cyber Security	Likely	Major	High	Almost certain	Major	Very High		Likely	Major	High	Continued availability of platform support and security updates.	Possible	Moderate	Medium	Improved cyber security through implementation of secure platform architectures.