TasNetworks Technology Strategy

Executive Summary

Authorisations

Action	Name and title	Date
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Responsibilities

This document is the responsibility of the Information Technology Team, Tasmanian Networks Pty Ltd, ABN 24 167 357 299 (hereafter referred to as "TasNetworks").

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Technology Strategy

1.   Introduction

The TasNetworks Technology Strategy was established in 2016 in order to set sound TECHNOLOGY direction and clear governance principles. The Strategy seeks to support and enable TasNetworks' strategic business pillars – Our Customers, Our People, Our Stakeholders, One Business - leverage economies of scope and scale, lower our cost and risk profiles, provide higher returns to our shareholders, and increase customer satisfaction through lower market pricing and innovative services and solutions.

The Technology Strategy recognises the current and ongoing convergence of technologies represented across Information Technology (IT), Operational Technology (OT) and Telecommunications. At TasNetworks, Technology currently operates within a federated model, whereby in addition to the Corporate IT department, Technology-related activities also exist separately within business units.

2.   Background

At the time of the 2014 merger and integration of the Aurora Energy distribution and Transend assets, it was accepted that multiple groups performing similar functions could likely exist within the newly formed business. Also at the start-up of TasNetworks, Corporate IT services contained a mix of both internal and outsourced resources supporting the Corporate IT business systems. Following the merger the TasNetworks IT Governance Framework was established, which outlines key principles based on IT governance standard ISO/IEC 38500 to ensure:

- IT responsibilities are clearly established;
- Alignment of Corporate and Technology Strategy;
- IT acquisitions and investments are made properly and in an informed manner based on the enterprise requirements;
- IT delivers required performance;
- IT conforms to all compliance requirements; and
- IT policies and practices take human behaviour into account.

The TasNetworks Technology Strategy establishes an agreed strategy for all Technology at TasNetworks, recognising:

1. The approved IT Governance Framework (August 2014);
2. The implementation of the Ajilis (ERP) Program; and
3. The diverse ownership and accountability for Technology at TasNetworks.

3.   Desired future state

For Technology to deliver sustainable value it must support and enable TasNetworks to achieve its strategic business goals. One of these key strategic business goals and the stated way we work at TasNetworks is to remove duplication. It is the aspirational goal that we only have one of everything. Consistent feedback within TasNetworks has been that Technology needs improvement in order to deliver modern technology solutions and services, at acceptable risk and cost. Additionally, TasNetworks Technology has been heavily weighted to internally-focused infrastructure investment with limited attention on external customer-centric opportunities. The future success of TasNetworks

will be supported with Technology-enabling business solutions that both improve the customer experience of current offerings as well as future offerings.

Technology is a key enabler for TasNetworks' business and its people. There is strong TasNetworks Leadership Team (TLT) consensus that the TasNetworks Technology Strategy must be consistent with business strategy and deliver the following objectives within the IT Governance Framework:

- Clear Technology principles and accountabilities;
- A Technology function that continues to improve efficiency and effectiveness;
- A Technology service and solutions that are agile, flexible and responsive to business needs;
- Technology services and solutions that support and enable new business opportunities as they emerge;
- A clear Enterprise Architecture that aligns with TasNetworks' future direction;
- A Technology risk profile that protects our assets, the privacy of our customers, and ensures continuity of our essential services consistent with our Risk Appetite;
- Common and compatible Technology Infrastructure
- Transparency and clarity of Technology operating costs;
- A "one stop shop" support model so that all Technology issues can be responded to quickly;
- A successfully implemented Ajilis (SAP ERP) program that is delivering benefits through business process standardisation and integration; and
- Deliver sustainable cost savings.

4.   Impacts of current state

Inherent to the newly merged TasNetworks entity has been the existence of disparate TasNetworks Technology environments, which has presented the opportunity to streamline operations and improve outcomes for our customers, costs, and risk profile.

The TasNetworks Technology Strategy recognises that the opportunities for further synergies in the merged entity must be assessed in order to enable delivery of the business strategy. Opportunities to continuously improve the current Technology environment may be summarised as follows:

- We can deliver better value to our customers because we have:
    - o Lower operating overheads;
    - o Investment geared more to value-add customer services and solutions rather than maintaining the status quo; and
    - o Increased speed to market (business agility and flexibility) by simplifying our complex and disparate Technology environment. This will become an increasing need as structural market changes and disruptive technologies accelerate.
- Our investment in Technology will deliver greater value to our customers and shareholders due to:
    - o Removing duplication of resourcing (e.g. service delivery; application support; infrastructure, network and security; data and development; project management);
    - o Removing duplication of systems (e.g. service delivery call logging tools; buildings management);
    - o Providing a consistent approach to, and transparency of, Technology vendor management and procurement;

- o Replacing manual analogue workflows with integrated digital solutions that improve workforce productivity, efficiency, collaboration and decision-making; and
- o Selecting when appropriate "off the shelf" solutions rather than highly customised and/or in-house bespoke development.
- Risks inherent in the current model will be reduced as a result of:
  - o Fully implementing an enterprise Technology Governance framework;
  - o Standardising our approach to Technology security;
  - o Setting common and consistent Technology standards (e.g. project management, development principles, change and release management, data centre management);
  - o Continuing to simplify the current Technology environment (i.e. easier and more cost-effective to maintain and support); and
  - o Replacing ageing and non-mainstream platforms that are reliant on the knowledge residing with a few individuals or marginal vendors.

5. TasNetworks' Technology Strategy

Our Technology Strategy is to simplify the Technology environment through the consolidation and integration of applications, infrastructure and vendors to enable the lowest cost to operationally manage and support Technology and deliver corporate and customer expectations.

Core to the TasNetworks Technology Strategy is Ajilis, which will become the central enterprise platform. All business systems and workflows will either adopt, or integrate with, the Ajilis solution. Any exception to this principle will be approved by the TLT.

TasNetworks recognises that technology domains of Information Technology, Operational Technology and Telecommunications Technology will converge in the short to medium term and are a key element to delivering the Technology stream of TasNetworks Transformation Roadmap 2025.

We will achieve this by:

- Operating within the Board approved TasNetworks IT Governance Framework;
- Building the roadmap for the future TasNetworks Technology Enterprise Architecture, inclusive of investment, prioritisation and phasing;
- Delivering solutions based on re-use before buy; buy before build; build as last resort reflecting the lowest Total Cost of Ownership (TCO) option;
- Actively pursuing strategic outsourcing opportunities by seeking partners, cloud and external agencies to deliver our low value commodity services;
- Protecting TasNetworks' Technology assets with a risk-based security model; and
- Positioning TasNetworks Technology as an enabler of future business agility and increased customer value by transforming the way we operate.

We will apply this strategy for all Technology at TasNetworks which must be in alignment with the business strategy and the Ajilis program.

6.   TasNetworks Transformation Roadmap

In parallel with the Technology Strategy the TasNetworks Transformation Roadmap 2025 for TasNetworks has been developed, which has set an aspirational level of network operations maturity for TasNetworks to achieve in line with customer and stakeholder expectations. Fundamental and essential to all pillars of the TasNetworks Transformation Roadmap 2025 is achieving significant technology uplift to enable and support this future state. The Technology Strategy must therefore align with and support the TasNetworks Transformation Roadmap 2025.

7.   Technology convergence

Fundamental to the TasNetworks Transformation Roadmap 2025 is the essential uplift of technology capability and the convergence of technology domains of IT, Operational Technology (OT) and Telecommunications. This view is further supported by international IT research and advisory company Gartner, which states: "Organisations that succeed in the coming years will combine traditional IT, the IoT (Internet of Things) and OT (including telecommunications) systems and skills. Those that hold on to a rigid separation will fall behind."

The need is to establish the fundamental building blocks of technology over the next three years to 2020 in preparation for the future state that the TasNetworks Corporate Strategy and TasNetworks Transformation Roadmap 2025 articulate. We will first simplify, integrate and align Technology operations as appropriate, then transform technology services. Implicit is the need to address duplication and simplification opportunities as well as immediate actions to uplift service levels, reduce costs, reduce risk and gear activity to the current TasNetworks Corporate Strategy – in all areas of Technology.

The Technology Strategy does not attempt to resolve all current demarcations but instead focuses on the initiatives and activities that must be completed in the next three years that will prepare TasNetworks to meet its objectives in the TasNetworks Transformation Roadmap 2025 and eventually achieve technology convergence. These initiatives and activities will in the first instance support the completion of Ajilis, and align with the next revenue reset. The approach also acknowledges that improvement in how technology is delivered across TasNetworks is needed irrespective of TasNetworks Transformation Roadmap 2025. This approach is also cognisant of potential changes to regulation, in particular the "ring fencing" of unregulated business activities.

Appendix 1 – Draft Horizon Chart
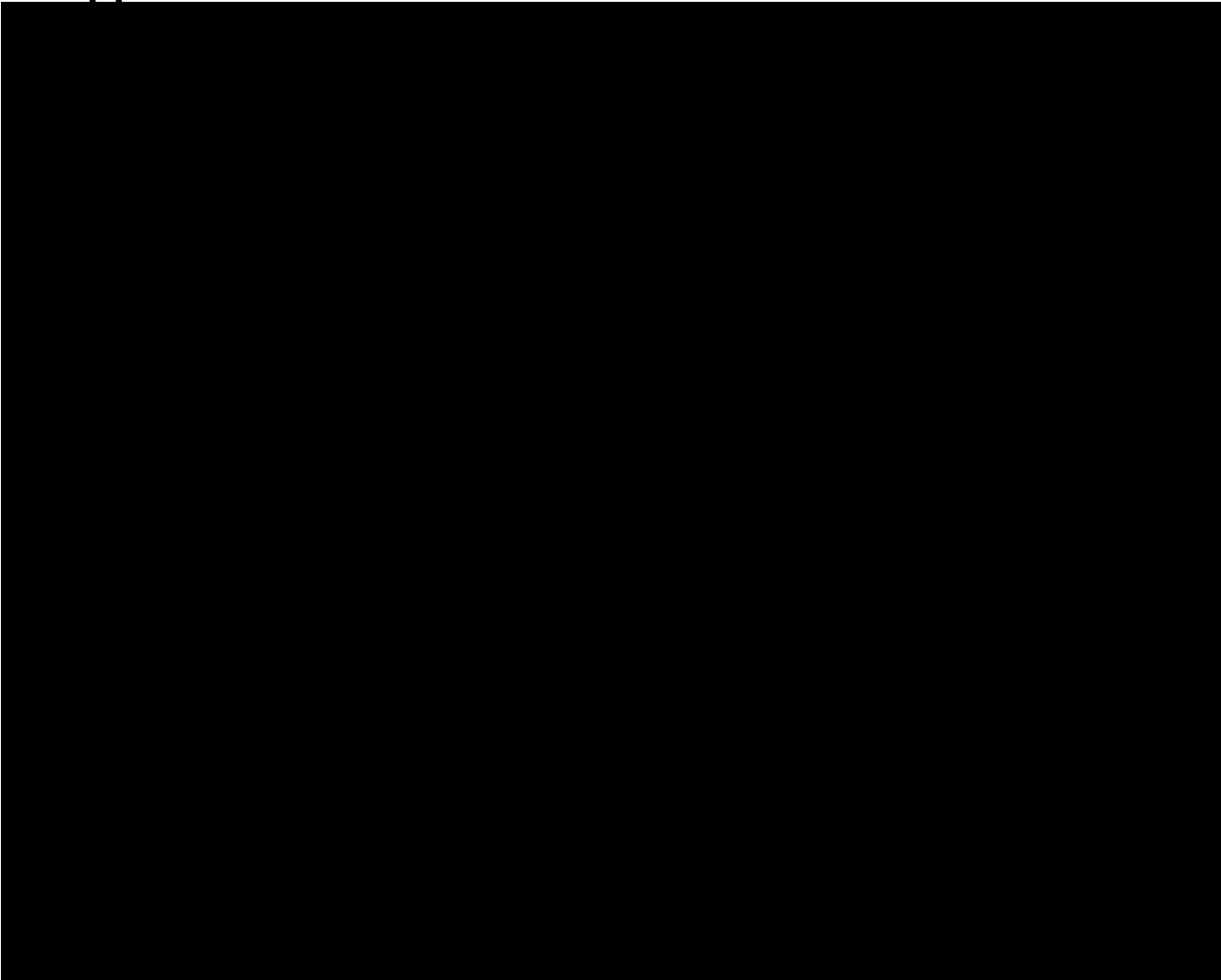
Appendix 2 – Enterprise Architecture

Enterprise architecture (**EA**) is the definition and representation of a high-level view of an enterprise's business processes and IT systems, their interrelationships, and the extent to which these processes and systems are shared by different parts of the enterprise. The primary goal of EA is to define the desirable future state of the organisation's business processes and IT systems (often referred to as the "to-be" or target architecture) and to provide a roadmap for achieving this target from the current state ("as-is"‖or baseline architecture). Two key components of EA are the planning process ("definition"), and the direct and tangible outputs of that planning process ("representation"), i.e., EA documentation (e.g., architecture diagrams, roadmaps, and other artefacts). (Tamm et al; 2011, CAIS)

Key to the development of the EA Strategy for TasNetworks will be to determine the breadth of scope, governance, investment roadmap and business benefits relevant to this enterprise and in with and support of the TasNetworks Transformation Roadmap 2025 and the Ajilis program. These will be considered in the development of the EA Strategy.

The Open Group Architecture Framework (TOGAF) further details elements comprising an EA. TOGAF is an open (free) internationally accepted framework inclusive of a detailed method and set of supporting tools for developing an enterprise architecture.

According to the TOGAF business executive's guide to IT Enterprise Architecture:

"An effective enterprise architecture is critical to business survival and success and is the indispensable means to achieving competitive advantage through IT."

What are the benefits of an enterprise architecture?

The purpose of EA is to optimise across the enterprise the often fragmented legacy of processes (both manual and automated) into an integrated environment that is responsive to change and supportive of the delivery of the business strategy.

EA provides strategic context for the evolution of the technology landscape in response to the constantly changing needs of the business environment, including the TasNetworks Transformation Roadmap 2025 and Ajilis.

A good EA will enable us to achieve the right balance between IT efficiency and business innovation. It allows the business to innovate safely in their pursuit of customer and stakeholder outcomes. At the same time, it ensures the needs of the organisation for an integrated Technology Strategy are met, permitting the closest possible synergy across the extended enterprise.

The advantages that result from a good EA bring important business benefits.

Strategic context for TasNetworks:

- Alignment with TasNetworks' strategic direction
- Accurate view of the current technology landscape
- Agreed understanding of the future operating platform
- Provides the basis for prioritising initiatives, improving decision-making, and the development of an achievable and efficient program of work

More efficient Technology operations:

- Lower software development, support, and maintenance costs
- Increased portability of applications
- Improved interoperability and easier system and network management
- Improved ability to address critical enterprise-wide issues like security
- Easier upgrade and exchange of system components

Better return on existing investment, reduced risk for future investment:

- Reduced complexity in Infrastructure
- Maximum return on investment in existing Infrastructure
- The flexibility to make, buy, or out-source Technology solutions
- Reduced risk overall in new investment, and the costs of Technology ownership

Faster, simpler, and cheaper procurement:

- Buying decisions are simpler, because the information governing procurement is readily available in a coherent plan
- The procurement process is faster — maximizing procurement speed and flexibility without sacrificing architectural coherence
- The ability to procure heterogeneous, multi-vendor open systems.

The TasNetworks Enterprise Architecture Strategy

In order to progress the Technology Strategy, TasNetworks has developed an EA Strategy and framework, which will be delivered with oversight from the Technology Governance Group. This ongoing process will be inclusive of relevant business stakeholders and take into account the TasNetworks Transformation Roadmap 2025, Ajilis and regulatory requirements as and when they emerge.

Appendix 3

Information Technology (IT) means the provision of hardware, software, services, and supporting infrastructure to manage and deliver information using voice, data, and video.

Included in Information Technology are:

- All computers with a human interface
- All computer peripherals which will not operate unless connected to a computer or network
- All voice, video and data networks and the equipment and services necessary to operate them
- All IT services provided by vendors or contractors
- Operating costs associated with providing information technology
- All costs associated with developing, purchasing, licensing or maintaining software

Examples of Information Technology are:

- Computer applications that include data storage and programs to input, process, and output the data
- Software and support for office automation systems such as word processing and spreadsheets
- Users' PCs, laptops, tablets, smartphones and software
- Server hardware and software used to support applications such as electronic mail, file and print services, database, application/web servers, storage systems, and other hosting services
- Data, voice, and video networks and all associated communications equipment and software
- Peripherals directly connected to computer information systems used to collect or transmit audio, video or graphic information, such as scanners and digitisers
- Voice response systems that interact with a computer database or application
- All operating costs, equipment and services associated with supporting the technology infrastructure.

Excluded from Information Technology are:

- "Closed/stand-alone" computer systems that monitor or automate equipment-based mechanical processes, such as fire alarm systems;
- Technology users who are not directly involved in developing, implementing or supporting technology. For example, people who digitise drawings, people who do desktop publishing, and "power users" who use advanced application features (e.g. spreadsheets or word processing); and
- Information data entry services.

Appendix 4

8. IT Governance Framework

8.1 Board Oversight of IT

The Board should monitor the use of IT and the performance of management using similar means to those that apply to other aspects of the organisation - through regular, well designed reporting, direct questioning and a system of review or audit.

8.1.1 Board Responsibilities

The Board's roles and responsibilities include:

- Approve an IT governance system, including IT governance principles;
- Approve an IT Strategy developed from the broader corporate strategy and aligned to the approved IT Governance Framework;
- Monitor and review performance against the approved strategic objectives; and
- Where required under delegations, approve proposals and business cases.

8.2 TasNetworks Leadership Team Responsibilities

The TLT receives its authority to manage and implement the framework from the TasNetworks Board. The TLT's primary purpose is to implement and manage the IT Governance Framework.

8.2.1 Terms of Reference

The TLT's roles and responsibilities include:

8.2.1.1   Governance and Planning

- Implement an IT governance system, including a decision-making hierarchy;
- Develop IT Governance related policies and procedures as required;
- Provide a corporate view of IT and Identify business opportunities that support organisation-wide goals and promote collaboration;
- Ensure a consistent approach is taken in the supply and support of IT systems within the organisation;
- Encourage innovation in the application of IT across TasNetworks;
- The establishment of organisation-wide strategic directions for IT;
- Evaluate and advise the Board on the IT strategy;
- Evaluate and approve IT risk management criteria; and
- Evaluate and advise the Board on information compliance and security criteria.

8.2.1.2   Decision Making

- Ensure major initiatives are aligned with TasNetworks' strategies;
- Evaluate the risk of major IT projects and decide when projects should proceed, be reviewed or be discontinued;
- Determine and recommend to the Board major IT project funding requirements; and
- Educating and informing all directors so they are able to understand IT and make decisions if required.

8.2.1.3   Measure and Monitor

- Establish processes to review, evaluate, approve, prioritise and monitor IT initiatives and proposals across TasNetworks;
- Establish processes to monitor and measure the progress of major IT projects; and
- Develop performance measures and benchmarks to ensure that promised benefits are realised.