

# Asset Management Policy

# Management System Document



# **Asset Management Policy**

#### **Summary:**

To define the key asset management principles and requirements which TransGrid will apply to its network assets to achieve its business objectives and Corporate Plan.

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When referring to TransGrid's policies, frameworks, procedures or work instructions, please use the latest version published on the intranet.



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#### 1. Purpose

This document forms the Asset Management Policy for TransGrid. It is intended to define the key principles and requirements which TransGrid will apply to its network assets to achieve its business objectives and Corporate Plan.

## 2. Scope

#### 2.1. Good Practice Alignment

This document has been developed based on good practice guidance from internationally recognised sources, including the Global Forum on Maintenance and Asset Management (GFMAM) and the Institute of Asset Management (IAM). It has been specifically developed to comply with the relevant clauses of BSI PAS 55:2008 (specifically clause 4.2) and ISO 55001.

#### 2.2. Corporate Alignment

This document and the principles captured within it are derived from and consistent with the TransGrid Corporate Plan. It is a live document which forms the framework for the implementation of asset management within TransGrid and the associated activities and decisions. It is intended to define the approach to asset management taken by TransGrid.

#### 2.3. Asset Management System Alignment

This Asset Management Policy forms a key role within the asset management system ensuring a clear 'line-of-sight' between the day to day maintenance and construction activities, including asset interventions and the Corporate Plan. Specifically, it provides a key assurance that TransGrid is disseminating its Corporate Plan into an effective asset management plan, and provides the start of the 'line of sight' from the Corporate Plan to the activities on the ground – a key element of good practice asset management.

This document's role within TransGrid's asset management system is shown in Diagram 1.

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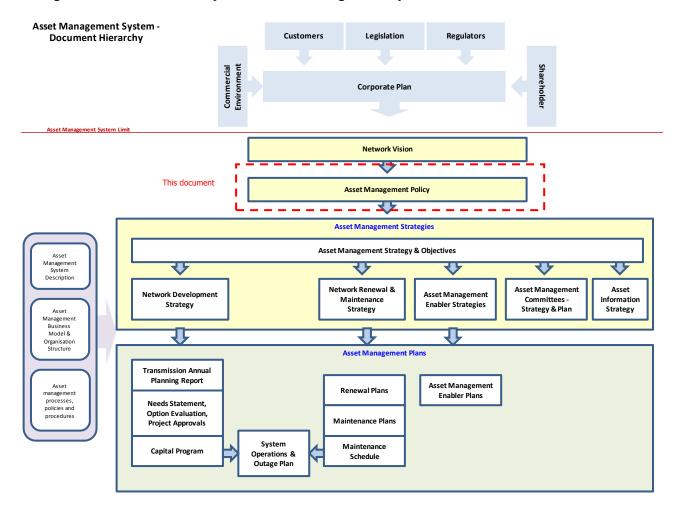


Diagram 1: Role of this Policy in the Asset Management System

These core asset management system documents provide the asset management direction for the optimal combination of lifecycle activities to be applied across TransGrid's portfolio of network assets and asset systems in accordance with their criticality to the network, condition and performance. This top-down connective thread to the Corporate Plan via these documents is a key feature of the asset management system – i.e. the clear "line of sight" from organisation direction and goals down to individual day-to-day activities.

#### 2.4. Asset Management System Activities

In accordance with the guidance of the GFMAM and the IAM, the range of asset management system activities included within the scope of this document is as shown in Diagram 2.

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Legislation Regulators Customers **Asset Management System** Non-network Assets Corporate Plan Asset Manager's requirements, Audit & Management Review Network Vision Contingency & Emergency Plans Asset Management Policy Performance monitoring & analysis Outage management & analysis Asset Management Strategy & Objectives Build / Acquire / Commission Operate Network Development Strategy Maintenance Strategy Incident & Fault investigation & analysis Network Assets Asset Management Decision Analysis & Optimisation of Investment and Lifecycle Costs Maintain Design management & analysis Renew/ Condition Replace / Reuse/ monitoring & assessments Renewal Plans, Project Documents & Maintenance Plans & Dispose Program of Work Maintenance Schedule Work Performed Asset data, asset knowledge & systems

Diagram 2: Scope of Asset Management System Activities

# 2.5. Asset Management System Definitions

**Table 1: Definitions** 

Item	Definition
Asset Management	Systematic and co-ordinated activities through which TransGrid effectively manages its assets and their associated performance, risks and expenditures over their lifecycle for the purpose of achieving its Corporate Plan
Asset Management System	TransGrid's asset management policy, asset management strategy, asset management objectives, asset management plans and the activities, processes and organisational structures necessary for their development, implementation and continual improvement
Asset Manager	Network Planning and Performance business unit is responsible for strategic asset management in TransGrid
Asset Management Policy	Principles and mandated requirements derived from and consistent with TransGrid's Corporate Plan, providing a framework for the development and implementation of the asset management strategy and the setting

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Item	Definition
	of the asset management objectives
Asset Management Strategy	Long term optimised approach to management of the network assets derived from and consistent with TransGrid's Corporate Plan and the Asset Management Policy
Asset Management Objectives	<ul> <li>The asset management objectives are:</li> <li>specific and measurable outcomes or achievement required of the asset systems in order to implement the asset management policy and the asset management strategy; and/or</li> <li>a detailed and measurable level of performance or condition required of the network assets; and/or</li> <li>specific and measurable outcomes or achievement required of the asset management system</li> </ul>
Asset Management Plans	Documents specifying activities, resources, responsibilities and timescales for implementing the asset management strategy and delivering the asset management objectives

# 2.6. Physical Assets

The assets that are included in the scope of the asset management system are those physical network assets comprising or relating to the provision of electricity transmission network services. The classes of assets that are included in the asset management system are described in Table 2.

**Table 2: Physical Network Assets** 

Physical Network Asset	Description
Substations	Power and auxiliary transformers, circuit breakers, disconnectors, instrument transformers, ancillary plant, reactive plant, infrastructure and buildings, roads, drainage, fences, oil containment systems and buffer zones.
Transmission Lines	Steel tower, steel pole, wood pole and concrete pole lines, together with their associated easements and access tracks.
Underground Cables	High voltage and pilot cables.
Protection	Protection schemes, fault and disturbance recorders; PRIM.
Metering	Revenue, check and statistical metering installations; quality of supply monitors; PRIM.
Communications	Optical fibre network, Microwave and VHF radio systems, repeater sites, PLC systems, operational telephone network, communication towers, network management system, STRIDE, and buildings, roads, drainage, fences, oil containment systems and buffer zones.
Control Systems	Substation control systems, SCADA, PRIM, source content, SAS online configuration tools and associated substation computer systems
Substation Security Assets	Security fencing, access systems, movement-activated lighting, monitoring and surveillance systems.
Asset information and	This covers the asset and system information required to be



Physical Network Asset	Description
related data	captured, recorded and maintained for the electricity transmission network, such as asset and equipment registers, condition data, protection databases, EDMS, outage and fault data, metering data, maintenance standard tasks, work schedules and resource plans
Graphical Information	TAMIS, asset information, easement information, environment
System	information, property owner information

The asset management system is focussed primarily on the management of the physical network assets as listed above. Other asset types (e.g. financial assets, information assets, human assets) are only considered in so far as they affect the optimal management of the physical network assets.

Those financial assets, information assets, and human assets that are of interest to the Asset Manager are those where there is a significant interdependency to the optimal management of the physical network assets. The Asset Manager has a vital interest in ensuring that these assets are appropriately managed to deliver information and services to meet the needs of the Asset Manager. Accordingly, the Asset Manager has established appropriate mechanisms to ensure the effective management and delivery of these financial assets, information assets, and human assets services across the interfaces to the physical network assets.

Further details of the relevant TransGrid network asset base within scope of the asset management system, including the interface to the financial assets, information assets, and human assets, can be found in the Asset Management System Description document.

## 2.7. Management of Assets outside of the Asset Management System

Whilst this policy focuses on physical network assets, the Asset Management Principles and Policy in this document are considered good practise for all TransGrid non-network assets outside the defined Asset Management System. The Asset Management Policy will inform the approach to the development of relevant strategies and plans for these assets.

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## 3. Asset Management Principles

The key asset management principles to be applied to enable the creation and implementation of the asset management strategy, objectives, and plans are:

- Assuring alignment with the Corporate Plan;
- Considering all stages in the asset lifecycle (ie planning, design, construction, operation, maintenance, renewal and disposal);
- Optimising the performance, cost and risks of the network assets;
- Focused on service outcomes as seen by customers of the network;
- Maintaining compliance with relevant regulatory requirements (eg National Electricty Rules, safety obligations, environmental obligations); and
- Providing a framework for the continual improvement of the asset management system.

## 4. Policy

TransGrid's asset management policy is to ensure that its electricity transmission network assets are effectively managed across the complete asset lifecycle in a safe, efficient, co-ordinated, and environmentally sensitive way that sustainably serves the needs of its stakeholders, customers and electricity end-use consumers, and optimises the long-term return on investment for its shareholder. In doing this TransGrid will comply with all legal, regulatory, safety and environmental requirements placed upon it and will not compromise the safety of its employees, its customers or the public.

To achieve the asset management policy TransGrid will:

- Plan, design, and build its network assets to meet TransGrid's and direct customers' and end-use consumers' requirements in a manner that:
  - Complies with Regulatory requirements (e.g. National Electricity Rules; legislative, safety and environmental obligations);
  - Achieves the best balance between upfront costs, performance and ongoing costs of maintaining and operating the assets;
  - Enables the network assets to be disposed of in a safe, reliable and cost effective manner;
     and
  - Considers both network and non-network solutions.
- Operate, maintain, renew and dispose of the network assets in a manner that:
  - o Promotes safe, reliable, sustainable and cost effective work practices;
  - Optimises the performance, cost and risks of the assets over the long-term;
  - Effects timely corrective actions based on regular monitoring and analysis of the condition and performance of the assets; and



- o Ensures asset management decisions are based on good quality and timely asset data.
- Develop and maintain a co-ordinated and end-to-end asset management system that:
  - Applies a lifecycle approach to asset management;
  - Establishes the asset management strategies, objectives and plans:
    - to support the achievement of the Corporate Plan; and
    - that are sustainable, efficient and based on an optimised consideration of economic, technical, risk and performance aspects of our assets;
  - Uses the risk management system to systematically identify hazards and to assess and control the risks associated with these hazards;
  - Integrates with TransGrid's environment, work place safety and quality management systems;
  - o Is continuously improved;
  - Ensures that employees have the appropriate asset management competencies;
  - Facilitates regular audit and management reviews of the asset management system; and
  - Regularly reviews and benchmarks the economic and technical performance of the network assets, service providers and contractors.

## 5. Approval

This document has been approved by the Managing Director.

#### 6. Communication

The signed Asset Management Policy is retained in TRIM and a copy is available on The Wire. Communication to relevant internal and external stakeholders, service providers and other relevant parties who require knowledge of the Asset Management Policy is via the following mechanisms:

- The Wire.
- A summary of this Asset Management Policy will be available throughout TransGrid's offices.
- A summary of this Asset Management Policy will be available on TransGrid's external website.

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# 7. Implementation

Accountability for the implementation of this Asset Management Policy sits with the EGM/Network Planning and Performance. The mechanisms, processes, accountabilities and responsibilities and high level timescales for its implementation are documented in the Asset Management Strategy and Objectives document

TransGrid will ensure that all service providers, contractors and suppliers will apply similarly high standards to the management of TransGrid's network assets.

## 8. Monitoring and review

Accountability for the continuous review and improvement of this Asset Management Policy sits with the EGM/Network Planning and Performance. The EGM/ Network Planning and Performance shall be accountable for arranging its review with the Managing Director at least once every five-years.

Each review shall include due consideration:

- That the document remains relevant, suitable, appropriate and consistent with the Corporate Plan;
- Of opportunities for continual improvement in terms of asset management activities; and
- Of opportunities for improvements in the format, communication and implementation of the Asset Management Policy itself.

# 9. Change history

Revision no:	Approved by	Amendment
6	Peter McIntyre	This version supersedes version 5 of the Asset Management Policy dated 17 <sup>th</sup> February 2011. It has been extensively revised to align with PAS 55 / ISO 55001.

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