



NON-NETWORK DEVELOPMENT, MAINTENANCE & RENEWAL

SECTION 6



S6



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6. NON-NETWORK DEVELOPMENT, MAINTENANCE AND RENEWAL

6.1 Introduction to Section

Section 6: Non-Network Development, Maintenance and Renewal provides an overview of Unison’s approach to the lifecycle management of its non-network assets, including policies covering the development, maintenance, and renewal of these assets. A summary of planned material, capital, and maintenance expenditure in respect of these assets is also provided.

At Unison there are three main categories of non-network assets:

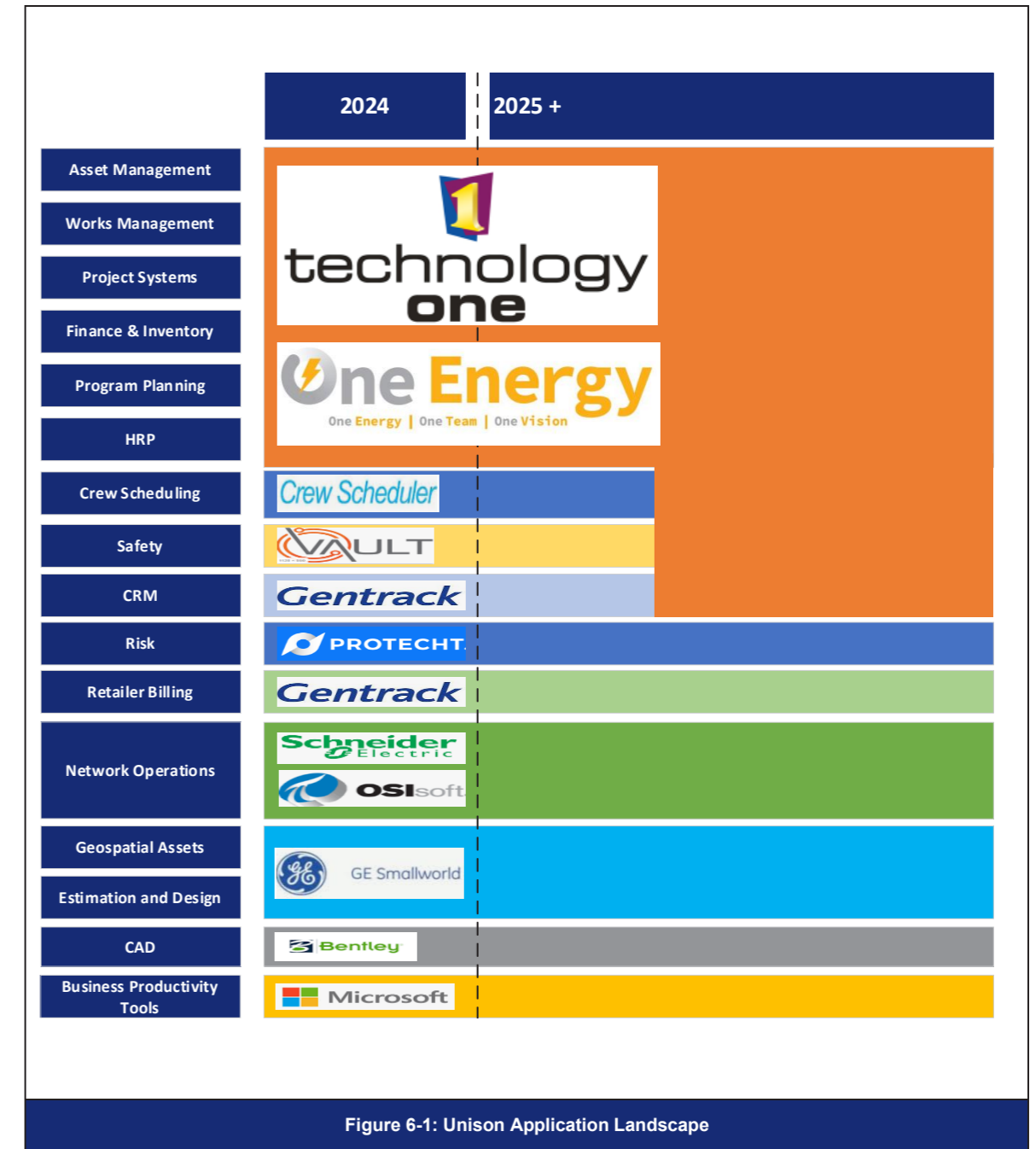
1. Information Technology (IT) Assets
2. Property, and
3. Vehicles.

Each category is detailed separately below.

6.2 Information Technology Assets

For the purposes of the Regulatory Asset Management Plan (this document), material IT assets are the communication infrastructure and information systems which directly contribute to the delivery of asset management outcomes.

Figure 6-1 outlines the IT application landscape and shows the major business functions supported by the material applications in use at Unison, and how this is planned to change over time.



6.2.1 Description of Assets

6.2.1.1 Business Applications

Unison utilises a number of systems to store information and data relevant to asset management. A description of these key applications is provided in Section 2.11.4 and replicated in Table 6-1 below.

Name of System	Description
OneEnergy ERP & EAMS	<p>OneEnergy is Unison’s Enterprise Resource Planning (ERP) system incorporating an Enterprise Asset Management System (EAMS). OneEnergy houses the asset register which is the master repository for asset data and stores both current attributes as well as historical information. The asset data that OneEnergy masters is available for viewing within the GIS.</p> <p>OneEnergy also provides works management functionality. This integrates with the asset register module of OneEnergy allowing the recording of asset management interventions against asset records.</p> <p>Additionally, an integrated suite of modules provides finance, payroll, and materials management (inventory and purchasing). OneEnergy masters the location of network assets prior to installation and utilisation.</p>
GE Smallworld GIS	The Geographic Information System (GIS) stores records of Unison’s network assets according to their location and electrical connectivity. This includes the electrical connectivity within substations and Unison’s fibre infrastructure.
Schneider ADMS	<p>The Advanced Distribution Management System (ADMS) integrates SCADA with a suite of advanced distribution management and grid optimisation applications.</p> <p>The control and operation of the network includes managing and communicating with assets in the field along with tools to enable operators to make informed decisions based on the current network status.</p> <p>Network optimisation and analysis provides Unison with the ability to optimise the state of the network. It identifies the optimal configuration to reduce electrical losses and maximise asset utilisation.</p>
Bentley and Meridian Drawing Management	The Meridian drawing management system integrates with the Bentley Microstation Computer-Aided Design (CAD) tool to manage the versioning and renditions of CAD drawings. It gives CAD technicians the functionality to work on projects and then publish finished drawings. The drawings are discoverable to the business via the Meridian web client.
Master Data Services	Microsoft Master Data Services (MDS) is a system for storing relatively static but important information used by key downstream systems and processes. At Unison, it is primarily used for storing manufacturers’ specifications of electrical and physical characteristics of equipment models.
Microsoft 0365	Microsoft 0365 is the system used to track, manage, and store documents while keeping a record of the various versions created and modified by different users. SharePoint 2016 houses all of Unison’s controlled documents including standards, which will be progressively moved to 0365 during 25/26.
OSISoft PI Historian	PI is Unison’s primary tool for the storage and analysis of time series data generated by telemetered network devices. Each data point for each piece of equipment is assigned a unique reference tag against which data is recorded and can be accessed. Interfaces are developed between PI and other applications in use in the business. Examples of data recorded in PI include switching events, transformer oil temperature, and current and voltage values at measuring points.

Name of System	Description
Gentrack	Gentrack provides a platform for consumption and ICP based network billing. Gentrack also manages the new connections and decommissioning process, network tariffs and registry updates.

Table 6-1: Key Business Applications

These systems provide essential data for risk assessments, investment decision-making and performance monitoring functions within the Asset Management System (AMS). Unison provides a comprehensive business intelligence toolset to both report from these data sources and to extract data for further analysis.

6.2.1.2 Corporate Data Network

The Unison corporate network is based on the hierarchical inter-networking model. The redundant core / distribution layer ensures that the network provides the uptime demands that services such as ADMS require, while allowing the network to be used for other business critical services.

Unison utilises a multi-vendor approach to network hardware. The core / distribution network is connected to over 40 remote sites, including zone substations (using the network communication and SCADA infrastructure), branch offices, and other companies. The primary or backbone medium for this is a carrier grade fibre optic cable network, owned and maintained by a third-party provider.

6.2.1.3 Cloud

Unison is currently operating within the hybrid cloud realm, utilising public cloud services where it is both possible and beneficial for Unison, without the introduction of undue risk to the organisation. The Unison private cloud is in geographically separated, containerised data centres, within the Hawke’s Bay region.

Critical control systems are provided by the Unison private cloud which is provided on virtualised hardware utilising technology primarily supplied by Hewlett Packard Enterprise (HPE).

6.2.2 Development, Maintenance and Renewal Policies

The Unison Information Management Group (IMG) provides a centralised service platform to manage and coordinate IT related requests. These service requests include change requests and incidents.

Unison purchases vendor-supplied maintenance and support services for all material IT assets. Hardware and networking equipment are procured with a warranty package that covers replacement, and where offered, onsite support for any defective equipment. These packages allow Unison to provide technical support, fix defects in the base product and implement enhancements that the vendor may make available as part of the product roadmap, e.g., version upgrades to vendor software or firmware.

Unison has a policy to:

- remain on supported versions of software and hardware, and
- replace hardware at the end of the vendor-provided warranty period.

Optional upgrades within supported versions of software are carried out when functionality justifies the upgrade effort.

6.2.3 Material IT Software Capital Expenditure Projects Planned for the Next Five-Years

Upgrades, replacements, or new technology implementations are determined by either technical drivers or strategic or business initiatives and are reviewed annually. Table 6-2 details current proposed IT capital projects.

Project	Description	Cost
Customer Digital Solutions	Unison recognises the need to digitise and optimise customer engagement channels. Over the coming five-year period, significant investment is expected to be made to enhance and extend Unison's customer engagement model. This will extend to include a mobile application suite and customer portal.	\$1.5M
Gentrack Billing System	The Gentrack billing system is currently running on a propriety, on premise version of Gentrack. During the next five years this is expected to be reviewed and upgraded	\$750k
GIS Spatial	The spatial geographic system is currently running on a propriety, on premise version of GE GIS Spatial software. During the next five years this is expected to be reviewed and upgraded.	\$1.5M
Network Planning Application	This project will enhance Unison's network planning toolset and build further capability to support the uncertainty associated with technology uptake driven by de-carbonisation and changes in demand in the medium to long term.	\$750k
DAIM	Data and information management is fundamental to support decision making. Unison's customers' needs are changing and with decarbonisation driving electrification and DER, the importance of data and information management is becoming more critical for safe and reliable operation of the distribution systems. Unison is investing to extend its data and information technology platform to support these drivers.	\$2M

Table 6-2: Material IT Software Capital Expenditure Projects Planned for the Next Five-Years

6.2.4 Material IT Hardware Capital Expenditure Planned for the Next Five Years

Unison replaces infrastructure assets on various life expectancies which are asset specific. Asset life is determined to ensure that the equipment provided is able to:

- support current operating system and firmware versions
- provide sufficient performance to support the business requirements
- protect Unison's environment by being able to apply the latest security protections, and
- maintain a reasonable number of hardware configurations.

Unison IT infrastructure assets are separated into the categories outlined in Table 6-3, and are typically replaced at the end of the useful life.

Category	Description	Useful Life (Years)
Network – Access Switching	Access and Distribution Switches	5
Network – Core Switching	Core Network and Data Centre Switches	7
Network – Router	Network Routing Equipment	5
Network – Security	Security Appliances – Firewalls, IDP, etc.	5
Network – Wireless	Wireless Network Infrastructure – WiFi	3
Network – OT Linking	Wireless Linking – Operational Technology	10
Network – OT Router	MPLS Routers – Operational Technology	7
Network – OT Switches	Layer 2 Switch – Operational Technology	7
Server	Physical Server infrastructure	5
Storage	Storage Area Network	5
Telephony – Fixed	PBX and Landline Deployments	5
Telephony – Mobile	Smart Phone Hardware	3
Workstation	Desktop and Laptop PCs	4

Table 6-3: Hardware Descriptions and Useful Life's

Table 6-4 outlines by asset class, the forecasted expenditure by year.

Category	2024/25 (\$k)	2025/26 (\$k)	2026/27 (\$k)	2027/28 (\$k)	2028/29 (\$k)	Total (\$k)
Network Access Switching			217			217
Network Core Switching	150			100		250
Network Router					16	16
Network Security		250			250	500
Network Wireless			250			250
Network OT Linking	50			100		150
Network OT Router		80	80			160
Network OT Switching		150				150
Servers	120	120	120	20	120	500
Storage		900				900
Telephony – Fixed			80			80
Telephony – Mobile	180	180	180	180	180	900
Telephony – Tablets						0
Workstations	210	210	210	210	210	1,050
Compute and Storage	360	250	630	2,550	850	4,640
End User Equipment	315	444	747	493	551	2,550
Network Switching and Wireless	0	735	49	30	88	902
Power Management	3	88	158	198	155	602
Router and Firewall	307	14	843	44	11	1,219
Transport Network	390	0	0	0	0	390
Voice Communication	360	437	325	175	245	1,542
Total	2,445	3,858	3,889	4,100	2,676	16,968

Table 6-4: Material IT Hardware Capital Expenditure Planned for the Next Five-Years

6.3 Property

For the purposes of this section, property assets exclude substations and land used for operational purposes, as these are classified and managed as part of Unison's network asset portfolio.

6.3.1 Description of Assets

The Unison Group's head office is in Omaha Road Hastings and additionally Unison owns contracting depots in Hastings and Taupo and a storage yard at Fernhill, Hastings. The Hastings depot is on seven different titles as various packages of land have been acquired over the years to accommodate growth. Unison's remaining depot at Rotorua is leased, although there is a small number of Unison owned assets attached to it, such as security cameras.

6.3.2 Development, Maintenance and Renewal Policies

The development, renewal and maintenance of property assets is on an 'as required' basis. The organisation's property requirements are reviewed frequently at both a strategic and tactical level. The review identifies any changes which may be necessary to ensure the continued efficient operation of the business.

To ensure Unison remains compliant with building warrant of fitness requirements, maintenance contracts are in place with third parties. These contracts cover scheduled and reactive maintenance activities on both grounds and buildings, including air-conditioning units, fire alarms and security systems.

6.3.3 Material Capital Expenditure Projects Planned for the Next Five Years

Renewal activities are determined by the Strategic Property Review that is conducted on a three-yearly basis. Table 6-5 details current proposed capital projects.

Project	Description	Cost
Hawke's Bay Yard Improvements	The material storage area in the yard is to be concreted and drainage added.	\$800k
Material Storage	Install extra storage racking at all depots.	\$160k
Taupo Yard	Redesign yard layout and renovate office.	\$750k
Security	Install new security system across all depots.	\$200k
Main Office Roof	Replace leaking office roof.	\$1M

Project	Description	Cost
Aircon Replacement	Replace aging aircon units.	\$200k
EV Chargers	Install EV chargers.	\$100k
Changing Rooms	Renovate and enlarge changing rooms at Hastings offices to accommodate increased staff numbers.	\$200k

Table 6-5: Material Capital Expenditure Projects Planned for the Next Five Years

6.3.4 Material Maintenance Activities Planned for the Next Five Years

Routine property maintenance is planned and budgeted for annually. The approximate annual cost of building and property maintenance is \$180k.

In addition to this, a provisional sum of \$100k has been allocated for the painting of buildings over the next five-year period, the majority of which is assigned to the Hastings premises. No other significant maintenance activities are currently planned.

6.4 Vehicles

6.4.1 Description and Quantity of Vehicle Assets

For the purposes of the Asset Management Plan (AMP), vehicle assets are divided into three classes. Table 6-6 details the number of vehicles in each class owned by the Unison Group.

Category	Description	Number of Vehicles
Heavy	All vehicles over 3.5 tonne excluding excavators, trailers, and generators.	105
Light	All vehicles under 3.5 tonne excluding excavators, trailers, and generators.	184
Other	Excavators, trailers, and generators, etc.	128

Table 6-6: Description and Quantity of Vehicles

6.4.2 Renewal Policy

Unison's FC0018 Motor Vehicle Policy sets out the Company's renewal criteria. The criteria are summarised in the Table 6-7.

Vehicle Type	Replacement Criteria
Heavy	15 years and / or 300,000km
Light Commercial (Utes and Vans)	5 years and / or 150,000km
Light	3 years and / or 80,000km
Other	Specific to equipment type

Table 6-7: Vehicle Type and Replacement Criteria

6.4.3 Material Capital Expenditure Projects Planned for the Next Five Years

Unison has an annual vehicle replacement plan based on its Motor Vehicle Policy. However, the Group Procurement and Logistics Manager has discretion to go outside this policy if there are commercial benefits to Unison.

The proposed five-year vehicle replacement plan is set out in Table 6-8. This plan is reviewed and updated annually based on the distance specific vehicles have travelled. Note that this does not allow for any new vehicles purchased due to business growth.

Year	Number of Vehicle Replacements	Cost (\$000)
2024/25	24	2,190
2025/26	46	3,730
2026/27	35	2,960
2027/28	24	2,480
2028/29	33	2,165

Table 6-8: Vehicle Replacements

6.4.4 Material Maintenance Activities Planned for the Next Five Years

Maintenance plans for all vehicles are as per the manufacturers' recommendations. There are currently four contracted maintenance providers across Unison's three regions.

6.5 Determination Reference Mapping Table

Section 6 References	Determination Reference
6.1 Introduction to Section	13
6.2 Information Technology Assets	13 including 13.1-13.4
6.3 Property	13 including 13.1-13.4
6.4 Vehicles	13 including 13.1-13.4

Table 6-9: Determination Reference Mapping Table