

# **Data and Information Management Policy**

This policy supersedes all previous versions and is valid until further notice.

## 1 Context

LINZ has responsibility for a wide variety of land, sea, geographic and administrative information and datasets. As an information agency, good information and data management is vital to LINZ's success.

Data and information management is defined as:

The development, execution and supervision of plans, policies, programmes and practices that control, protect, deliver and enhance the value of data and information assets.<sup>1</sup>

Good data and information management supports:

- Delivery of LINZ and the Government's core business
- LINZ's contribution to enhancing New Zealand's economic, environmental and social prosperity the power of where drives New Zealand's success
- The provision of transparent access to LINZ data for our customers
- Public Sector statutory and accountability requirements
- LINZ's reputation as a credible leader in the data and information space
- LINZ staff to make evidence-based decisions at all levels of the organisation
- LINZ's ability to deliver its high-level outcomes:
  - High-value geographic and property information
  - World-class property system
  - Making best use of the Crown Estate
  - Safeguard New Zealand's interest in sensitive assets

# 2 Purpose

The purpose of this Policy is to ensure that data and information for which the LINZ Chief Executive has responsibility is managed as an asset throughout its lifecycle in accordance with legislative requirements and Cabinet directives.

LINZ's delivery of its core business relies on staff, customers and stakeholders having ready access to use and reuse reliable data and information. If these assets are not managed well, LINZ could face many

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<sup>&</sup>lt;sup>1</sup> Source = DAMA Data Management Body of Knowledge

challenges including loss of third-party revenue, increases in operating cost, increased risk due to inability to meet compliance requirements, compromised cyber security, ineffective discovery and sub-optimal business continuity. Without effective management of data and information, LINZ would be unable to effectively conduct its core business and meet its obligations to the government and New Zealanders.

This Policy defines the principles used to manage information at LINZ and describes the way we manage and govern data and information.

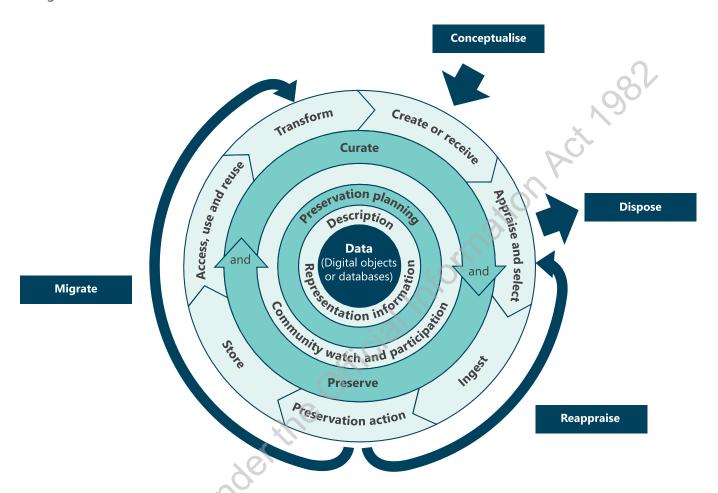


Figure 1. Information and data lifecycle

The DCC Curation Lifecycle Model<sup>2</sup> below shows the information and data lifecycle referred to throughout this Policy.

The DCC model provides a graphical, high-level overview of the stages required for successful management of information and data from initial creation or receipt through its iterative cycle. It is envisaged that LINZ users of the model will enter at any stage of the lifecycle depending on their current need. This model allows mapping of specific functions, roles, responsibilities and standards to be mapped and helps identify supporting processes.

Effective Date: 21 February 2020

Policy Owner: Chief Information Officer

<sup>&</sup>lt;sup>2</sup> Appendix 1 has the key elements of the DCC Curation Lifecycle Model. Appendix 1 defines the terms used in the lifecycle.

# Scope

This Policy applies to all the information and data that LINZ has responsibility for, regardless of the environment, location, format or source. It includes information and data that resides in cloud services whether in New Zealand or offshore. The Policy is designed to complement other data and information responsibilities covered by LINZ's specific regulatory roles.<sup>3</sup>

All LINZ managers, staff, suppliers and contractors must comply with this Policy.

# The principles

Three principles govern the management of LINZ data and information. It will be:

- 1 Well managed as an asset
- 2 Open, accessible and reusable
- Protected where necessary

# 4.1 Well managed as an asset

HION ACT 1982 LINZ will manage all the data and information for which it is responsible as an asset throughout its lifecycle by:

- collecting, creating, maintaining and disposing of data and information to:
  - support LINZ to achieve its business outcomes in a cost-effective and efficient manner
  - o minimise risk to LINZ, its customers, external stakeholders and the Crown
  - o comply with relevant legislation, including the Privacy Act 1993, NZ Bill of Rights Act 1990, Official Information Act 1982, Public Records Act 2005, Land Transfer Act 2017, Overseas Investment Act 2018, Copyright Act 1994, Contract and Commercial Law Act 2017

# 4.2 Open, accessible and reusable

LINZ will ensure that its data and information:

- is easily and widely available except where legislation or business risk specifically precludes this
  - o access may be provided directly, through shared solutions/services with other agencies, or through private sector distributors
  - o where charges are levied, pricing will comply with appropriate guidelines
- is effectively discoverable
  - by providing appropriate metadata
    - by promoting it to the wider community

<sup>&</sup>lt;sup>3</sup> The Regulators include the Surveyor General, Registrar General of Land, Commission of Crown Lands and Valuer General who have regulatory standard setting functions and specific information responsibilities defined in legislation.

- is trusted and authoritative by:
  - o developing and/or implementing standards and processes to deliver appropriate data and information quality, accuracy, relevancy, consistency, timeliness and usability
- can be effectively integrated, reused and repurposed
  - using agreed standards and frameworks
  - o by understanding how data users can and could use our data
- if high public value, is proactively released online
  - o in accordance with the Declaration on Open and Transparent Government
- is licensed for re-use
  - o under a Creative Commons Attribution New Zealand Licence wherever possible, in accordance with the NZ Government Open Access and Licensing (NZGOAL) framework, Version 2, 2014 ionAci

# 4.3 Protected where necessary

LINZ will:

- protect personal, confidential and classified information and data
  - o in line with government guidelines and legislation (e.g. the Guidelines for Protection of Official Information, Protective Security Requirements, Privacy Act 1993). This includes robust analysis and ongoing assurance of information and data security compliance of LINZ's external vendors (e.g. outsourcing partners and cloud service providers).
- release personal information in a way that complies with legislation to protect individuals' privacy (e.g. the Privacy Act 1993, the Public Records Act 2005, Land Transfer Act 2017, Domestic Violence Act 1995)
- respect the intellectual property rights of other parties
  - o in accordance with the principles established in the Copyright Act 1994, and by complying with any conditions contained in any licence for information LINZ has to use or holds on behalf of another party.

# Roles and responsibilities

# Chief Executive

## Role

The Chief Executive has overall responsibility for ensuring LINZ manages all its data and information as an asset throughout its lifecycle, in accordance with relevant legislation, standards, policies and guidelines.

# **Deputy Chief Executive**

### Role

The Deputy Chief Executive provides the overarching mandate for the development, ongoing management and dissemination of data and information sets under their group's control.

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## Responsibilities

- Accountability for identifying, prioritising and resourcing the key data and information sets
  - Ensuring LINZ maintains details of key data and information sets in a Departmental data and information asset register
- Providing assurance that decisions on data and information development, management and dissemination adhere to the principles in this Policy
- Provide the appropriate mandate, support and resources to Domain Stewards, Data Owners and Data Managers so they can effectively carry out their responsibilities.

## Domain Steward = 'Guider'

## Role

A Domain Steward works at a strategic level, takes a holistic view and operates within the context of LINZ.

They set the strategic direction for the data domain, advocate for the needs of data users at the macro level and use their influence to promote good practice through their awareness and understanding of the statutory and regulatory environment.

Typically, a Domain Steward will be at Tier 3 and receive their mandate from ELT.

## Responsibilities

Setting the strategic direction for the data domain

- Designing, setting and monitoring high-level frameworks and standards
- Engaging externally to influence and improve the quality of data and information sets strategically important to, but not held by, LINZ
- Promoting strategic investment in, and use of, the data by articulating benefits and opportunities
- Monitoring and adjusting strategy and standards
- Facilitating the appointment of the Data Owner
- Managing the following risks:
  - Change in Government policy (risk/opportunity)
  - Economic factors
  - Private sector perception of LINZ as a competitor
  - Data owner and manager roles not assigned

# Data Manager = 'Controller'

## Role

A Data Manager defines the appropriate operational data/information policies and standards and provides/secures the funding and resources for a data manager to effectively manage and deliver datasets to the users.

Typically, a Data Manager will be at Team Manager level or above and will have financial and people management delegations. The specific level depends on the size and complexity of the dataset. They receive their mandate from a Deputy Chief Executive.

## Responsibilities

- Bidding for, obtaining, assigning and overseeing required resources (including funding and people)
- Aligning to the strategies for the data domain defined by the Data Steward
- Defining the operational framework for the information/data lifecycle
- Owning data risks and setting controls

## Data Maintenance = 'Doer'

## Role

This role administers a data or information set throughout its lifecycle by implementing the operational data/information policies and standards defined by the Data Manager. While accountability for implementation rests with the Data Manager, they may delegate responsibilities to others.

## Responsibilities

Operational management of data/information through its lifecycle, following the framework defined by the Data Manager. This includes activities specified in the data and information lifecycle

## **Data users**

## Role

Data users from the user community within and external to LINZ, play a key role in ensuring that the policies, requirements, delivery mechanisms and technical architecture designs meet the needs of the user community. Without the data users there would be no need for information to be governed! Data users must understand their information needs sufficiently to assist in the data governance function and comply with the relevant data and information management use responsibilities.

## Responsibilities

- Comply with all relevant LINZ policies, standards and operational processes regarding the creation and use of LINZ data and information throughout its lifecycle
- Provide feedback on data and information requirements to Data Managers to inform the ongoing development and management of data and information sets
- Engage with Data Managers to facilitate improvements to existing data sets and the creation of new ones, through such processes as co-creation or collaboration.

# **Knowledge Management**

## Role

The Knowledge Management team, under the Manager Knowledge Leadership, plays a key role in the implementation and oversight of this Policy at LINZ.

## Responsibilities

- Providing leadership and advice on the development of standards and guidelines to support this
- Pro-actively advising LINZ data and information domain stewards, data owners and data managers to enable them to manage information and data in line with this Policy
- Monitoring implementation and uptake of this Policy and reporting back to the Chief Information Officer
- Overseeing the regular review and updating of this Policy, in conjunction with business owners and representatives from LINZ business groups

# LINZ references

The following are indicative of the range of guidelines and principles LINZ has adopted to ensure its operations are consistent with its data and information management responsibilities as defined in this Policy. Further guidelines will be created to support domain stewards, data owners and data managers in Official Information exercising their responsibilities. The latest versions of these documents can be accessed from the LINZ Intranet and LinZone document management system.

# **Guidelines and Principles**

- LINZ Data Service (LDS) Data Governance
- LinZone Principles
- Online File Sharing at LINZ
- **Landonline Terms and Conditions**
- Protecting Information at LINZ

# External references

The following external references have assisted the development of this Policy.

# Legislation

- Cadastral Survey Act 2002
- Contract and Commercial Law Act 2017
- Copyright Act 1994
- Land Transfer Act 2017
- Intelligence and Security Act (ISA) 2017
- Official Information Act 1982
- Overseas Investment Amendment Act (2018)
- Overseas Investment Act 2005
- Privacy Act 1993
- Public Records Act 2005
- Other LINZ acts see http://www.linz.govt.nz/about-linz/our-organisation/legislation-linz-administers

# Policy frameworks, strategy and guidelines

- Archives New Zealand mandatory standard
- Charging fees for public sector goods and services [Audit NZ, 2008]
- Declaration on Open and Transparent Government [2011]
- Government Enterprise Architecture for New Zealand, GEA-NZ
- Guidelines for Setting Charges in the Public Sector [Treasury, 2002]
- New Zealand Data and Information Management Principles [2011]
- NZ Government Open Access and Licensing (NZGOAL) framework, Version 2, 2015
- Protective Security Requirements

Released under the Official Information Act 1982 Gaye Seavancke

Approved 21 February 2020 as a LINZ Administrative Policy

#### **Chief Executive**

Land Information New Zealand

Effective Date: 21 February 2020 Chief Information Officer Policy Owner:

# Appendix 1 - Key elements of the DCC Curation Lifecycle model

## **Data**

Data is any information in binary digital form and is at the centre of the Curation lifecycle. This includes:

# **Digital Objects**

These can be simple digital objects (discrete digital items such as text files, image or sound files along with their related identifiers and metadata) or complex digital objects (discrete digital objects made by combining several other digital objects, such as websites).

## **Databases**

These are structured collections of records or data stored in a computer system

# Lifecycle actions

### Description and representation information

Assign administrative, descriptive, technical and preservation metadata, using appropriate standards, to ensure adequate description and control over the long-term. Collect and assign representation information required to understand and render both the digital material and the associated metadata.

## Preservation planning

Creating a Plan for preservation throughout the curation lifecycle of digital material. This would include plans for management and administration of all curation lifecycle actions.

### Community watch and participation

Maintain a watch on appropriate community activities and participate in the development of shared standards, tools and suitable software.

### Create and preserve

Be aware of and undertake management and administrative actions planned to promote curation and preservation throughout the curation lifecycle.

# Sequential actions

### Conceptualise

Conceive and plan the creation of data, including capture method and storage options.

### Create or receive

Create data including administrative, descriptive, structural and technical metadata.

### Appraise and select

Evaluate data and select for long-term curation and preservation. Adhere to documented guidance, policies or legal requirements.

### Ingest

Transfer data to an archive, repository, data centre or other custodian. Adhere to documented guidance, policies or legal requirements.

#### Preservation action

Undertake actions to ensure long-term preservation and retention of the authoritative nature of data. Preservation actions should ensure that data remains authentic, reliable and usable while maintaining its integrity. Actions include data cleaning, validation, assigning preservation metadata, assigning representation information and ensuring acceptable data structures or file formats.

### Store

Store the data in a secure manner adhering to relevant standards.

### Access, use and reuse

Ensure that data is accessible to both designated users and reusers, on a day-to-day basis. This may be in the form of publicly available published information. Robust access controls and authentication procedures may be applicable.

### Transform

Create new data from the original by either migration into a different format or by creating a subset, by selection or query, to create newly derived results.

## **Occasional actions**

### Dispose

Dispose of data and information that has not been selected for long-term curation and preservation in accordance with documented policies, guidance or legal requirements. Typically, data may be transferred to another archive, repository, data centre or other custodian. In some instances, data is destroyed. The data's nature may, for legal reasons, necessitate secure destruction.

### Reappraise

Return data which fails validation procedures for further appraisal and re-selection.

### Migrate

Migrate data to a different format. This may be done to accord with the storage environment or to ensure the data's immunity from hardware or software obsolesce.