How New Zealand's data and information principles work together

This draft guide provides a high-level comparison of the data and information principles in the NZ government context, including their scope, and applies a value lens to the principles. The target audience for this guide is NZ government agencies.

Acknowledgement

We would like to express our gratitude to Pam Madgwick of InfoRethink for creating this guide for the Open Data Programme. Pam has not only conducted research but contributed her knowledge and experience to provide valuable insights into the government data and information context.

Have your say

This is a draft guide intended to generate discussion on the guide's content and to stimulate the creation of a new and better guide. We need your feedback and suggestions to improve the guidance we publish. Are there other principles and frameworks that should be included? Do you have any questions you would like answered in the guide? Join the discussion on Loomio or email opendata@stats.govt.nz

A high-level comparison of the principles and frameworks

In August 2016 the Open Data Programme published a comparison of the International Open Data Charter (ODC) and the NZ Data and Information Management Principles (NZDIMP), with the ODC principles as a starting point. The comparison identified alignment and gaps with the NZDIMP.

Table 1 provides a high-level view of the alignment and intersection of the principles using NZDIMP as a starting point. This illustrates how a NZDIMP principle may be covered by one or more principles in the other statements.

The principles and frameworks listed in table 1 are:

NZDIMP & the Declaration	NZ Data and Information Management Principles https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-data-and-information-management-principles/
	Declaration on Open and Transparent Government https://www.ict.govt.nz/guidance-and-resources/open-government/declaration-open-and-transparent-government/
ODC	International Open Data Charter https://opendatacharter.net/principles/
NZGOAL	NZ Government Open Access and Licensing Framework https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-and-licensing-nzgoal-framework/nzgoal2/

SEUDA Principles for the safe and effective use of data and analytics
Principles-for-the-safe-and-effective-use-of-data-and-analytics-guidance.pdf

NZ ICT Strategy NZ Government ICT Strategy
https://www.ict.govt.nz/strategy-and-action-plan/strategy/

Table 1: High-level comparison of the principles and frameworks

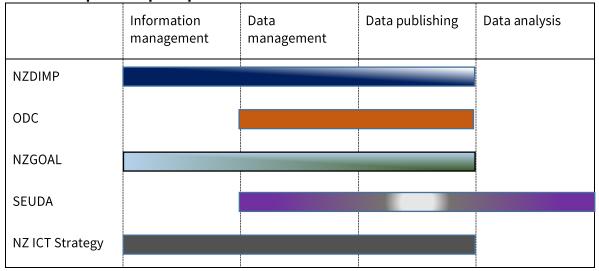| NZDIMP & the Declaration	ODC	NZGOAL	SEUDA	NZ ICT Strategy
Open	Open by default	Open access to copyright works with Creative Commons Attribution (BY) licence as default Open access to non-copyright material	[Implied only - Not specifically mentioned]	Open data and sharing by default
Protected	Open by default	NZGOAL does not apply to information or works containing personal information [Restrictions to the Open Access Principle apply in certain circumstances] Anonymisation Principle	Focus on people Maintain transparency Retain human oversight	…supported by privacy & security settings
Readily available	Timely and comprehensive Accessible and usable	…agencies should make their copyright works [and non-copyright material] which are or may be of interest to people available for re-use on the most open of licensing terms…To the greatest extent practicable, such works should be made available online.		Open data and sharing by default supported by privacy and security settings
Trusted and authoritative	Timely and comprehensive Accessible and usable	Attribution requirements …agencies should not impose digital rights management technologies	Ensure data is fit for purpose Understand the limitations Retain human oversight	Public trust and confidence permits sharing and re-use of information

NZDIMP & the Declaration	ODC	NZGOAL	SEUDA	NZ ICT Strategy
Well managed	Timely and comprehensive Accessible and usable Comparable and interoperable	…Agencies should consider the formats in which they [material for reuse] ought to be released taking into account …the wishes of those who will or are likely to re-use the works or material…etc Open Format Principle	Ensure data is fit for purpose	Frameworks and infrastructure facilitate flows of information and reuse
Reasonably Priced	Accessible and usable	The Charging Principle generally discourages charging by State Services agencies for re-use of copyright works and non-copyright material, unless statutory, policy or commercial imperatives require it.	Not covered.	Not covered.
Reusable	Timely and Comprehensive Accessible and usable Comparable and interoperable For improved governance and citizen engagement For inclusive development and innovation	NZ GOAL seeks to foster a culture of sharing of government material for reuse by others.	Ensure data is fit for purpose Focus on people Maintain transparency Understand the limitations Retain human oversight	Frameworks and infrastructure facilitate flows of information and reuse Public trust and confidence permits sharing and re-use of information
NZ Declaration on Open and Transparent Government	For improved governance & citizen engagement	Foster greater transparency of government agencies' performance through encouraging the release of (and feedback on) performance data	Deliver clear public benefit	Customers experience seamless, integrated and trusted public services

NZDIMP & the Declaration	ODC	NZGOAL	SEUDA	NZ ICT Strategy
	For inclusive development and innovation	…to generate creative, cultural and economic opportunities for New Zealanders and both non-profit and commercial organisations	Deliver clear public benefit	Information skills drive new insights and better decisions

Scope of data and information principles

In broad terms the scope of these principle statements extends through information management, data management, data publishing, and data analysis. Each statement focuses on these with differing strength – as shown in table 2.

Table 2: Scope of the principle statements

	Information management	Data management	Data publishing	Data analysis
NZDIMP				
ODC				
NZGOAL				
SEUDA				
NZ ICT Strategy				

Principles align in content and intent

While the scope (ie the focus on information management, data management, data publishing, or data analysis) of each set of principles varies, they are somewhat aligned in content and intent. That is, whether primarily addressing data, information, or both, the emphasis is on accessibility and availability, and on privacy and confidentiality where that matters.

If you are seeking to implement aligned principles across your agency, you will want to consider where the management intersects are, and where the differences will need to be. At a high level, you would expect to make decisions about whether your high value information and data is open or protected. This process will be the same for both data and information, and you would apply the same criteria. However, the skills needed to manage information and manage data for them to be accessible (internally and externally) will be different. And then, the skills need to analyse data and analyse information will have differences but will also converge.

Whether you are releasing data or information for re-use the same principles can apply. The expectation is that what is released is trusted and authoritative; comprehensive and timely etc., irrespective of form. Information and data are released for the same purpose – re-use to gain value.

Differences in level of detail

The level of detail provided for interpreting and applying the principle statements varies considerably. For example, the intent is spelled out in much greater detail in the ODC and NZGOAL than in the NZDIMP. However, NZDIMP is applied in conjunction with the Declaration on Open and Transparent Government, which adds greater insight into the intent of the principles.

The explanatory information which forms part of the ODC provides considerable context for implementing the Charter, and the information included provides deeper insight and guidance for interpreting and implementing the principles.

Defining 'government' data in the context of the ODC

As we explore the detail of the explanatory information it is worth noting that the ODC defines 'government data' more broadly than we generally do in a New Zealand context. ODC states (underlining ours, not ODC):

> "We recognize that the term 'government data' includes, but is not limited to, data held by national, regional, local, and city governments, international governmental bodies, and other types of institutions in the wider public sector. The term government data could also apply to data <u>created for governments by external organizations, and data of significant benefit to the public that is held by external organizations</u> and related to government programs and services (eg data on extractives entities, data on transportation infrastructure, etc.)".
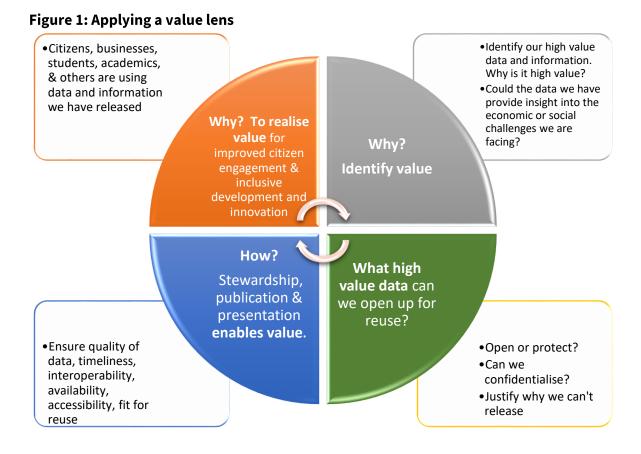
Applying a value lens

Ultimately, we have and apply data and information principles to realise value. It is clear this is an iterative process as we identify and make available more data and information, people re-use the data and information, and we again collect, make available and re-use derived, new, or related data and information. The more data and information we make available the greater the transparency into government decision-making and the greater the opportunity for others to use the data and information in innovative ways to find new solutions to problems.

Our first steps, including identifying our high-value data and information, analysing the data and information to ascertain if any must be withheld, justifying any decisions not to publish, and listing data through data.govt.nz leads to a core value in that stakeholders and the public will now know that this data is being collected. Engagement and feedback may help us prioritise which datasets and information will be of greatest interest externally and this will inform prioritisation for preparing datasets and information for publication.

Ideally, we will have set up our data management systems so that the data is in a format, and of sufficient quality to be shared right from the start. In reality, much of our data (including high

value data) may be stored so that it can't be easily shared. It may have known inaccuracies and may not be as comprehensive as we would like, so we may need a programme of work to enable value through stewardship, publication and presentation.

Publication so that data and information can be easily re-used will then enable access by others to use as is, to manipulate and combine with other data, and to realise the value beyond what we do as a government agency. Figure 1 below illustrates this process. Each quadrant focuses on value creation.

Figure 1: Applying a value lens

Relating the value lens to the principles

Table 3 shows how the value lens approach aligns to the various principle statements, using NZDIMP and the ODC Principles as examples. There is considerable overlap between and within the detail of the different sets of principles. Thinking about the primary decisions that need to be made, these fit into the categories of:

- Identifying and knowing what data and information we have, its potential value and current state. Deciding what can be released and what should not be released (without confidentialisation).
- Readying current data and information to be published; establishing policies and practices which enable future data releases to be carried out easily and efficiently. We know from the start that the data is authoritative, can be trusted, and is in an interoperable format, etc.
- Releasing the data and information that our stakeholders and others tell us is of value to them.

Table 3: Value proposition

Value proposition	Declaration on Open and Transparent Government and the NZDIMP	ODC Principles	Implementation Strategy
Identify high value, core data and information	Open	Open by default	**What** can be released and **what cannot** be released and **Why**
	Protected	Open by default	
Enable value through stewardship, publication and presentation	Readily available	Timely and comprehensive Accessible and usable	**How** to prepare for release, and the expectations on quality of release
	Trusted and Authoritative	Timely and comprehensive Accessible and usable	
	Well Managed	Timely and comprehensive Accessible and usable Comparable and interoperable	
	Reasonably Priced	Accessible and usable	
	Reusable	Accessible and usable	
Realising value	[Statement] Declaration on Open and Transparent Government	For improved governance and citizen engagement	**Why** do this?
		For inclusive development and innovation	