Initial briefing for the .nz Policy Advisory Panel (Part One)

Purpose

This paper is Part One of the initial briefing for the .nz Policy Advisory Panel. It provides an introduction to the domain name system, information on InternetNZ’s strategic vision for the Internet and suggested lens to see the .nz policy review through.

The purpose of this paper is to spark dialogue among the Panel and to help inform its work on the Issues Paper. The issues identified are not a complete list. We anticipate more issues will be identified by the Panel as the review progresses.

This paper canvasses the broader context in which .nz operates, such as Internet openness, human rights, privacy and the Treaty of Waitangi. The second part (Part Two) of the initial briefing will discuss issues with the .nz policies (form, process and content) in more detail, and potential gaps identified. We will provide a taster of the Part Two report for the second meeting. The full Part Two report will be delivered ahead of meeting three.

This paper, Part One, is drafted at an introductory level to cater for the range of members of the Panel and their varying knowledge of the domain name system. More detailed information (technical or other) can be provided when needed.
Background

InternetNZ’s vision
InternetNZ is a non-profit member organisation. It is the home and guardian of .nz – providing the infrastructure, security and support to keep it humming. It is overseen by a Council of elected representatives.

InternetNZ’s overarching vision is an Internet that is open, secure and accessible to all New Zealanders. Our .nz policies need to reflect our vision.

The purpose of .nz policy review
InternetNZ would like to ensure its .nz policies are modern, robust, harmonised and world class in line with other well-regarded domain name spaces around the world.

The .nz policy framework currently comprises five policy documents. These policies were originally drafted in 2002 and have been revised from time to time (see Terms of Reference for documents we’re seeking you to review, as below):

- .nz TLD principles
- .nz Framework policy
- Policy development process
- Principles and responsibilities
- Operations and Procedures
- Dispute resolution service.

Today’s world is complex with many competing interests; quite different to what it was in 2002. Trade-offs may need to be made to ensure an open Internet is maintained while mitigating security threats, allowing for future developments.

---

1 .nz Advisory Panel Terms of Reference, [https://internetnz.nz/sites/default/files/DotNZ%20review%20panel%20ToR.pdf](https://internetnz.nz/sites/default/files/DotNZ%20review%20panel%20ToR.pdf)
2 InternetNZ, [https://internetnz.nz/tld-principles](https://internetnz.nz/tld-principles)
5 InternetNZ, [https://internetnz.nz/nz-principles-and-responsibilities](https://internetnz.nz/nz-principles-and-responsibilities)
6 InternetNZ, [https://internetnz.nz/nz-operations-and-procedures](https://internetnz.nz/nz-operations-and-procedures)
7 InternetNZ, [https://internetnz.nz/dispute-resolution-service-policy](https://internetnz.nz/dispute-resolution-service-policy)
technical requirements and commercial objectives, and robust compliance practices.
The review has inter-dependencies with other InternetNZ work, such as:
- defining “openness”
- the security and threat work under way with registrars
- implementation of findings from David Pickens’ independent review of the Domain Name Commission Limited (DNCL)
- the implementation of DNCL’s compliance program from the Deloitte Compliance strategy
- consideration of the findings from the dispute resolution service review
- marketing efforts to promote .nz through our channel of registrars
- our contribution to the Christchurch call.

The review is in two phases
The review is in two phases.

- **Phase One:** over a 12 month period, the .nz Advisory Panel will undertake a review of the .nz policies and provide advice to InternetNZ from July 2019 to July 2020 through two reports (“Issues” report and “Recommendations” report).
- **Phase Two:** InternetNZ will consider the recommendations of the Panel and make decisions about the re-development of the .nz policies from August 2020, adopting recommendations from the .nz Panel where appropriate and making changes to the .nz policies.

Within Phase One, there may be aspects or provisions of the .nz policies that need to be addressed earlier, such as the interim emergency / exceptional circumstances provision that expires in October 2019.

The role of the .nz Advisory Panel
We ask the .nz Advisory Panel to provide independent advice on what issues exist with the .nz policies and recommend changes to modernise them, ensure the policies are fit-for-purpose and align with our vision.

We seek two outputs:
1. an issues report by January 2020
2. a recommendations report by June/July 2020.
We would like the Panel to analyse the current policies, think about the broader context in which .nz operates and our strategic pillars, and engage with a wide range of stakeholders (including registrants and potential users of the system), to see what they think.

InternetNZ considers a multi-stakeholder process\(^8\) to be a critical part of the process to review the .nz policies. We have had early feedback from the Panel on how it would like to approach engagement. We will prepare a briefing on engagement for discussion at the second meeting in August.

**The role of InternetNZ**

InternetNZ’s secretariat will support the work undertaken by the .nz Advisory Panel. We can:

- help with desktop research and analysis
- liaise with internal data and technical staff for useful information to help the Panel deliver on its outputs
- assist with the engagement process
- help the Panel collate the contributions of its members, and draft its reports.

Ultimately, Panel members will lead this work and provide robust and timely advice on issues and solutions in the .nz policies. To help inform this work, Panel members are required to analyse the .nz policies, identify the issues, and draft the Issues report and Recommendations report after engaging broadly with stakeholders.

**The domain name system: an introduction**

**What is a domain name?**

A domain name is an identification string that defines a realm of administrative autonomy, authority or control within the Internet.\(^9\)

---

\(^8\) The foundation principle of multistakeholderism is that when all stakeholders in a problem are involved in a solution, the consensus outcome will carry more legitimacy, and reflect all perspectives.

Most people spend very little time thinking about it when they go online and connect with sites and information so quickly and easily. A computer or smartphone can locate requested information using an address, called an IP address - a series of digits and sometimes letters, separated by a decimal point or colon.

When the Internet is connecting to a specific website, it is using an IP address to locate the server where that website is hosted. The computer works behind the scenes to take the domain name typed in, blends in some additional data, and finds the IP address that steers your computer to the server where that domain is hosted.

Domain names are formed by the rules and procedures of the Domain Name System (DNS). This, in turn, is governed by a set of domain name policies, the principles that determine how we run the DNS. The most effective way of governing the DNS is through management of the way people can register domain names.

Domain names are organised in subordinate levels of the DNS root domain:

- **top-level domains** (TLDs): the first level of domain names
  - **generic top level domain names** (gTLDs): a category of top-level domains, including prominent domains such as “.com”, “.info”, “.net”, “.edu”, “.org”
  - **country code top level domain names** (ccTLDs): a two-letter Internet top-level domain designated for a particular country, sovereign state or independent territory for use to service their community. It is a signature for a country’s part of the Internet
- **second level domain names** (2LDs): at the second level, names include “.co.nz”, “.govt.nz” and “.māori.nz”.

---

12 Ibid.
14 “Domain Name for Dummies”, page 9.
Countries, sovereign states, and independent territories around the globe have been assigned their own ccTLDs. For instance, Australia is “.au”, the United Arab Emirates has been assigned “.ae”; and the Netherlands has been assigned “.nl”. These ccTLDs are managed by or on behalf of that country.\textsuperscript{17}

This .nz policy review focuses on New Zealand’s ccTLD, .\textsuperscript{nz}.

In 2017, 330.6 million domain names were registered globally.\textsuperscript{18} Our .nz Quarterly report found 710,982 registered .nz domain names.\textsuperscript{19} As at 13 August 2019, there are 711,894 .nz domain names.

Who are the key actors in the domain name system?

A number of parties are involved in registering a domain name. Below, we set out the key actors, and the current terminology, in the .nz domain name space:

- \textbf{Internet Corporation for Assigned Names and Numbers (ICANN):} a privately operated, not-for-profit corporation established in the 1990s

\begin{flushright}
\textsuperscript{17} ICANNWiki, “Country code top-level domain”, \url{https://icannwiki.org/Country_code_top-level_domain}
\textsuperscript{19} InternetNZ, ‘.nz Quarterly report’, April - June 2019.
\end{flushright}
that co-ordinates the Domain Name System (DNS) at the global level.\textsuperscript{20} It is commonly referred to as “ICANN”

- **The NZ government**: no one person or body actually owns .nz. However, InternetNZ is the designated manager - and, in that role, it operates .nz in the public interest on behalf of the local internet community. The government has a Memorandum of Understanding (MOU) with InternetNZ to run the domain name system signed in May 2016 and updated in June 2018 to reflect the group's revised structure\textsuperscript{21}

- **The .nz registry**: the technical operator and manager of the .nz domain name space.\textsuperscript{22} InternetNZ is the .nz registry. The registry does not sell domain names directly to the public but through authorised registrars who buy domain names from the registry on behalf of their customers. The registry maintains the authoritative DNS infrastructure for .nz and second-level domains (2LDs) under .nz, such as .co.nz, .org.nz

- **Name holder / registrant**: the person or organisation who purchases and registers the domain name.\textsuperscript{23} The registrant registers their .nz domain name through the .nz registrar or .nz reseller, and manages their domain name and settings through that registrar, or the “reseller” (see below)

- **Domain Name Commission Limited (DNCL)**: the self regulatory authority for the .nz domain name space. A wholly owned InternetNZ subsidiary, DNCL’s role is to develop and monitor a competitive registrar market and create a fair environment for the registration and management of .nz domain names. It makes decisions on enforcement, disputes and compliance independently. It is led by a Commissioner and governed by a Board of Directors. For more information, see: [https://www.dnc.org.nz/the-commission](https://www.dnc.org.nz/the-commission)

- **Domain name sellers**: there are two types of organisations who sell .nz domain names:
  - **.nz Registrars**: registrars hold a contract with DNCL to distribute domain names.\textsuperscript{24} A registrar has its own set of terms and conditions in a contract that a registrant will sign, and the details of those terms and conditions may be part of a registrant’s

\textsuperscript{20} InternetNZ, “ICANN and the Domain Name System”, [https://internetnz.nz/icann-and-domain-name-system](https://internetnz.nz/icann-and-domain-name-system); ICANN brings together people and organisations interested in the DNS to make global policies that have an impact on the generic Top Level Domains (.com). These policies may have future impact on how we operate .nz for New Zealand.


\textsuperscript{24} “Domain Name for Dummies”, page 21.
decision-making criteria when choosing a registrar.25 The .nz registrars vary in size - some are niche and others are large and commercial. A few types of registrars could be said to exist in today’s market: “open”, “closed”, “wholesale provider” and “moderated” (please see appendix for more information).

- **Resellers**: businesses or organisations who buy .nz domain names from .nz authorised registrars and provide domain name registration services, including managing domain name records, through the registrar. They hold the relationship with the registrar. Resellers do not have direct access to the .nz registry.

- **Moderators of second level domain names (see ‘second level domains’)**: Moderators of moderated second level domain names approve registrations and ensure registrations comply with the policy for the moderated domain space.

See diagram below that sets out the domain name institutions and key actors involved in .nz.

---

25 Ibid.
Most ccTLDs registry operators manage or administer a country specific top level domain. Most are not-for-profit: they are foundations, co-operatives, universities, research institutes or part of their government. They are funded

---

26 CENTR, “What is a ccTLD registry and what does it do?”,
through the proceeds from registrations, which are re-invested into maintaining their functioning, educational campaigns, research, etc.\textsuperscript{27}

The ccTLDs set their own terms and conditions specifying the duration of the registration period, prices, terms of use, prohibited names, etc. They operate in national legal frameworks and policy contexts.\textsuperscript{28}

\textbf{What are the key stages in the domain name lifecycle?}

The key stages in the life cycle of a .nz domain name are as follows:\textsuperscript{29}

1. The registrant selects an available domain name
2. The registrant chooses a registrar and “registers” a domain name
3. The domain name is “active”
4. The domain name can be “transferred”
5. The domain name is “suspended” or “cancelled”
6. The domain name is “pending release”
7. The domain name is “released” and made available to be registered on a first come, first served basis.

\textsuperscript{27} Ibid.
\textsuperscript{29} See “Domain Name for Dummies".
Understanding the .nz domain space: introduction to issues

The .nz policy review provides an opportunity to consider whether the policies reflect today's world and what is considered important by New Zealanders.

We suggest consideration of the three pillars of InternetNZ’s strategic vision when reflecting upon the issues:

- an open Internet
- a secure Internet
- an Internet that is accessible for all New Zealanders.

The three pillars of InternetNZ’s strategic vision

An open Internet and .nz policies

The first pillar of InternetNZ’s strategic vision is an open Internet. The domain name system is part of the Internet's core infrastructure, and has a vital role in supporting Internet openness.

Internet openness is the Internet's capability to connect people around the world as equal participants who can develop new uses of the core technologies and innovate without permission.

Openness is supported when Internet technologies, architecture, and governance operate to enable people to participate and contribute on the Internet as equals. An Internet that fully enables people to participate may require responses to spam, malware, and other unwanted behaviours.

Internet openness is threatened when market structures, government actions, or business decisions limit the ways people can use and contribute to the Internet. A contravention of Internet openness would be, for example, if a mobile Internet provider blocked a legitimate chat app or a competitor’s video service for users of its network.

.nz policy can support the benefits of Internet openness by enabling good faith participation in the .nz space, including innovation by participants. Other
policy concerns require limits on who can participate in the .nz space, and how. It may be useful to consider how those limits align with a concern for Internet openness.

InternetNZ is currently developing a working definition of “Internet openness” to use in policy decision-making for the next decade. We will share our discussion paper with you in the next month or two when published.

**A secure Internet and the .nz policies**

The second pillar of InternetNZ’s strategic vision is for a secure Internet.

Domain names play a central role in how New Zealanders use the Internet. An important part of keeping New Zealand’s Internet secure, and trusted is ensuring .nz domains are secure and safe.

Security is a priority at InternetNZ. This year, we have been working to understand the security situation of our .nz registrar customers and how to raise the bar across the sector, and on the role we play in security more broadly, to build security and trust in the system.

Registrants, registrars and resellers, as well as the .nz registry and the DNCL, have key roles to play in domain security:

- the .nz registry is vital national infrastructure and needs to have very high overall cybersecurity to mitigate its vulnerability to outside threats and risks
- for registrants, domain names are an important asset. The security of their domain name protects their website and emails, and how well their site functions, including the levels of traffic encryption
- registrars provide services to registrants telling other people on the Internet where to find their website, so implementing the appropriate security protocols to protect the system and registrants is important
- the self-regulator (DNCL) provides oversight, monitoring and accountability mechanisms to give everyone confidence in the domain name system.

.nz policies can play a vital role in setting minimum standards for security or incentivising good security.

While .nz policy has a role to play in setting expectations on the parties involved, it can also create permissions for the .nz registry or DNCL or the
Domain Name Commissioner to take action against domains threatening the security of other domains or other parts of New Zealand’s Internet.

**Internet for all New Zealanders**

The third pillar of InternetNZ’s strategic vision is that the Internet is for all New Zealanders.

We believe registering a domain name and accessing the benefits of having a .nz domain name should be something all New Zealanders are able to do. It should not matter where they live (e.g. rural or urban) or their economic status (e.g. rich or poor). The age limit for registering a .nz domain is currently set at 18 years old - this could be considered by the Panel (see below for a more detailed discussion under “registrants”).

Levers in the .nz domain space, like pricing, or data validation, could create barriers to entry and limit some people's ability to register and access the .nz domain space.

**Broader consideration for the .nz policies**

As well as our strategic goals above, we also ask the Panel to consider this work through other lenses important to New Zealanders: human rights, privacy and Te Tiriti o Waitangi, and economic / commercial growth balanced with wellbeing.

**Human rights and freedoms and the .nz policies**

Human rights recognise the inherent value of each person, regardless of background, where we live, what we look like, what we think or what we believe.  

The Universal Declaration of Human Rights, adopted by the United Nations in 1948, sets out the basic rights and freedoms that apply to all people. The New Zealand Government has agreed to uphold and respect many human rights treaties, including the International Covenants on Civil and Political Rights, and Economic, Social and Cultural Rights.

---

31 Ibid.
32 United Nations, ‘International Covenant on Civil and Political Rights’ 1966, [https://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx](https://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx)
The United Nations has published guiding principles on business and human rights. The guidance states that the role of governments is to respect, protect and fulfil human rights, and the role of businesses is to respect human rights in their operations.\(^{34}\)

The Human Rights Act 1993 protects people in New Zealand from unlawful discrimination.\(^{35}\) Prohibited grounds of discrimination include sex, age, marital status, religious belief, colour, race, disability, and sexual orientation.\(^{36}\)

One basic right is a person's right to freely express themselves under New Zealand's Bill of Rights 1990.\(^{37}\) Have we sufficiently included (explicitly, or implicitly) this right in the .nz policies? Other rights and freedoms may be relevant to the .nz domain space, including the right to justice, liberty of the person, freedom of association and the freedom of movement.\(^{38}\)

A separate potential issue is the exercise of a right or freedom may conflict or compete with other important areas, such as an open Internet. We would like to explore the relationship between the .nz policies and human rights, and whether any changes need to be made to the policies.

We ask you to explore the following questions about human rights:

- to what extent are human rights relevant in today’s context to the .nz policies?
- to what extent do human rights compete with other important concepts, such as an open Internet, and how should they be prioritised or regulated for?
- should we consider a broader set of human rights and freedoms as part of the .nz review? If so, how could the .nz policies be refreshed to accommodate for a broader consideration of rights and freedoms?


Te Tiriti o Waitangi / Treaty of Waitangi and the .nz policies

Currently, the .nz policies do not contain explicit provisions directly linked to Te Tiriti o Waitangi (Te Tiriti) or tikanga values.

We consider policies for .nz need to consider the distinct interests and identity of New Zealand and its people, and the ways users and others may wish those interests to be realised in the .nz policies.

Official sources recognise the New Zealand constitution increasingly reflects the fact that Te Tiriti is regarded as a founding document of government in New Zealand.\(^{39}\)

In 2011, the Waitangi Tribunal released its report into WAI 262: Ko Aotearoa Tēnei (‘This is Aotearoa’): A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity.\(^{40}\) The report recommended wide-ranging reforms to laws and policies affecting Māori culture and identity, including better protection against the culturally offensive use of Māori text and imagery.\(^{41}\)

We believe that considering Māori interests under Te Tiriti is part of good policy practice in New Zealand. We encourage engagement of stakeholders, including individuals, iwi, hapū, and other groups reflecting Māori interests, as well as government and the broader public, to consider Māori interests under Te Tiriti and the .nz policies.

The ability to register Māori macrons in names is one step that has already been taken in the .nz domain name space. Additionally, domain names exist with iwi.nz (moderated) and .māori.nz (unmoderated but regulated as it is a .nz domain name). Anyone can purchase a licence for a second level domain .maori.nz.

We ask you to consider:

---

\(^{39}\) Department of Prime Minister and Cabinet, *Cabinet manual 2017*, <dpmc.govt.nz>, p 1.


\(^{41}\) The Tribunal found, ‘New Zealand sits poised at a crossroads both in race relations and on our long quest for a mature sense of national identity’.
how the .nz policies could reflect or incorporate the principles and spirit of Te Tiriti?

whether a dispute process should be developed to address concerns about the registration of domain names that incorporate Matauranga Māori?

what can we learn from the report of the Waitangi Tribunal, Ko Aotearoa Tēnei (WAI 262)?

Privacy rights and the .nz policies

New Zealanders are growing more aware of privacy as an important interest in the digital era. The risk of personal information being shared, used or disseminated inappropriately can result in harm to people, and deter participation in online services.

We ask the Panel to consider privacy matters when reviewing issues. A balance may need to be struck. For instance, the open publication of registrant’s details for accountability but, at the same time, personal information (e.g. addresses) may need to be kept private for the security or safety of that person.

Privacy is recognised in international and domestic law:

- as a right under the Universal Declaration of Human Rights
- under New Zealand’s Privacy Act 1993. The Act is to promote and protect individual privacy, and establish principles on collection, use and disclosure of information relating to individuals and access by individuals to information held about them
- the European Union’s General Data Protection Regulation (GDPR) came into effect in May 2018 and applies new data protection standards to

---

%40bloc%40bpri%40bmem%40rpub%40rimp_ac%40anif%40anif%40bcur%40rinf%40rinf_a_aw_se&p=1; the current Privacy Bill (2018) will replace the current Act, but maintains the same overall framework and key definitions, http://www.legislation.govt.nz/bill/government/2018/0034/latest/LMS23223.html
the personal information of people in the European Union⁴⁴ - the GDPR could be applied to processing of data outside the EU⁴⁵

- individual privacy rights were recently consulted on by DNCL, when it had the responsibility for developing the .nz policy framework.⁴⁶ As a result, from 2017, registrars must provide individual registrants of .nz domain names not in significant trade with the option to allow greater protection of certain private information (address and phone contact details withheld and not displayed).⁴⁷

Currently, the .nz policies contain provisions that may impact upon the privacy rights set out under international or domestic law. For example, the operation of the .nz registry requires the collection and processing of personal information to register a domain name. It could be risky if, for instance, too much personal information is published on the Internet.

In practice, DNCL could provide registrants’ data to government agencies if requested by an authorised notifier (e.g. CertNZ), in line with agreements and the Information Privacy Principles under the Privacy Act.⁴⁸

We ask the Panel to consider:

- if individual privacy rights need to receive greater protection under the .nz policies?
- if any particular privacy issues exist for registrants now, and in future, not provided for under the current .nz policies?
- are there additional requirements we need to consider based on changes to domestic and international law (e.g. the GDPR)?

**E-commerce and economic growth and the .nz policies**

---

⁴⁵ European Union, ‘Data Protection Rules’,
General Data Protection Regulation, Article 3; https://www.icann.org/dataprotectionprivacy
⁴⁷ Ibid.
⁴⁸ DNCL, ‘Memorandums of Understanding’, https://dnc.org.nz/irpo/mou; Privacy Act, see Principle 11,
We consider economic growth is an important broader consideration for the .nz policies. Domain names and websites are a way for New Zealand individuals and businesses to grow their own and others’ economic opportunities. We wish to not impose unnecessary barriers that will inhibit New Zealand enterprises to grow and prosper.

InternetNZ research reveals important, related points about business and the .nz domain name space that may give you context on the relationship between them:49

- businesses have more positive perceptions of the value of social media to their business than consumers, suggesting a disconnect between the perception of value and the actual value to their business. Websites continue to be more favourably perceived than social media for most aspects of consumers purchase decisions
- .nz continues to be the most trusted website. Businesses choose a .nz domain name to reflect they are a NZ business and their pride in being a NZ business
- awareness about how to purchase a domain name and set up a website is low among businesses who say they are likely to buy one. It needs to be as quick and easy as possible for these businesses to access information about how to set up a domain name.

The research also found:

- small businesses, in retail trade and manufacturing, who are based in the North Island outside of Wellington, are most likely to buy a domain name in the next 12 months
- even businesses without an Internet presence recognise the benefits of a website, and those who are likely to buy a domain name say they would do it for the website address
- key barriers among those likely to purchase are that they have not got around to it yet, however, their lack of knowledge about how to do it is also a factor
- 71% of businesses without a domain name who are likely to buy one are focused on growth within New Zealand
  - 12% of businesses without a domain name are extremely, very or quite likely to buy one in the next 12 months (3% are extremely or 49 InternetNZ, “Public Opinion Research 2018: a research report from Colmar Brunton”, https://internetnz.nz/sites/default/files/InternetNZ_public_opinion_research_results.pdf
very likely). Of these, the majority (86%) would likely purchase a .nz domain name over any other.

We ask the Panel to consider:

- if the current .nz policies unnecessarily limit growth opportunities for New Zealand businesses, by making it harder than it needs to be to get online with .nz? Conversely, could a change in the policies encourage more New Zealand businesses to have a domain name and web presence and engage in e-commerce?
- the broader contribution that .nz makes to the commercial opportunities of New Zealand and the wellbeing of our people, and the economic development potential for .nz? One example of wellbeing that we are thinking of is the role of .nz in the digital inclusion of New Zealanders (see also the above section on an Internet for all New Zealanders)?