

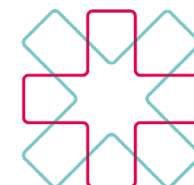


Digital trade review

Final Report

31 July 2023

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Preface

This report has been prepared for Manatū Aorere / Ministry of Foreign Affairs and Trade (the Ministry) by Daniel Wright, Susan Burns, Edwina Merito, and Paul Giles from MartinJenkins (Martin, Jenkins & Associates Ltd).

For 30 years MartinJenkins has been a trusted adviser to clients in the government, private, and non-profit sectors in Aotearoa New Zealand and internationally. Our services include organisational performance, employment relations, financial and economic analysis, economic development, research and evaluation, data analytics, engagement, and public policy and regulatory systems.

We are recognised as experts in the business of government. We have worked for a wide range of public-sector organisations from both central and local government, and we also advise business and non-profit clients on engaging with government.

Kei te āwhina mātau ki te whakapai ake i a Aotearoa. We are a values-based organisation, driven by a clear purpose of helping make Aotearoa New Zealand a better place. Our firm is made up of people who are highly motivated to serve the New Zealand public, and to work on projects that make a difference.

Established in 1993, we are a privately owned New Zealand limited liability company, with offices in Wellington and Auckland. Our firm is governed by a Board made up of partners Kevin Jenkins, Michael Mills, Nick Davis, Allana Coulon, Richard Tait, Nick Carlaw, and Sarah Baddeley, as well as independent director Sophia Gunn and chair David Prentice.



Executive Summary

Digital trade is evolving rapidly in the international arena. Governments across the world are grappling with how they should approach this changing landscape. Manatū Aorere / The Ministry of Foreign Affairs and Trade asked us to review New Zealand's policy settings affecting digital trade. As part of the review, we heard a range of views from stakeholders, including observations that the digital world is seeing an increase in restrictive regulation. We also heard concerns that digital trade chapters and ambitions are being defined by those with a vested economic interest in digital trade, like big technology firms.

The report breaks down digital trade to six chapters:

1. There are clear opportunities to use **digital tools to facilitate the movement of physical goods across borders**. Many trade processes remain paper-based, adding administrative and compliance costs for exporters and importers. However, making compliance documents available online, including their submission, is only one step along an extended journey. Building systems that further reduce or streamline human interactions by enabling datasets to

inform trade compliance information represents an attractive future of trade administration.

2. New Zealand's traditional trade barriers, such as our isolation and a small economic market, are broken down with increased opportunities in **weightless trading – goods and services delivered electronically**. However, each sector in this space is facing bespoke sets of challenges to grow their industry, from recruitment and retention of talent to access to grants. Large platforms dominate many of the industries and come with an assortment of opportunities and challenges for the New Zealand Government.
3. Digital trade is an interconnected part of economic wellbeing for **Māori**. We observed that there is a lot more work to do in identifying what mātauranga Māori means in the context of digital trade, so it can be protected and supported. This review is just one part of an ongoing discussion with Māori on digital trade and other trade matters.

4. To fully harness the opportunities that digital trade offers, we need to ensure that people and businesses feel safe while participating in the modern digital world. **Trust in the digital world** is therefore a crucial component of digital trade. It includes things such as cyber security and privacy, through to challenges arising with regulating products run on software, like cars.
5. Like digital trade, the technology landscape is rapidly evolving and with-it social attitudes and challenges. We need to **prepare for new technology** while acknowledging that the technological landscape is moving faster than governments can keep up with. While this presents challenges, it also provides an opportunity to work together to solve cross-border issues.
6. Underpinning digital trade is the movement of **data**. Digital trade has a role to play in developing standards, promoting cooperation, and encouraging interoperability across borders. We must also ensure that governments protect the right to regulate for legitimate policy objectives.



Increasing connectivity and improving technology comes with a range of opportunities for New Zealanders to buy and sell across the world. It is important that we take every opportunity to make sure that the benefits of digital trade are shared with everyone in society. Similarly, the technological landscape, social attitudes, and associated challenges and opportunities are rapidly evolving. This review is part of a long, ongoing dialogue between the Ministry, other government departments, Māori, and other stakeholders.



Introduction

Ngā mihi nui ki a koutou

We want to extend a heart-felt thanks to all those who generously shared their time with us during this review, some of them several times. This report relies heavily on your contributions and insights.

Defining "digital trade"

There is no agreed definition of "digital trade".

Digital trade is evolving in the international arena, and each new provision included in a digital trade, or e-commerce chapter of a trade treaty, can change the apparent scope of the concept a little further. Given that broad and evolving scope, there is no commonly agreed definition of digital trade.

However, some definitions have been presented. For this review, we have been guided by the OECD's definition, which notes a growing consensus that digital trade:

"encompasses digitally-enabled transactions of trade in goods and services that can either be digitally or physically delivered, and that involve consumers, firms, and governments".¹

Goals and considerations that help us understand digital trade and its scope.

Early in our engagement, we noticed that the OECD definition was particularly broad, which made it difficult for stakeholders to engage with. To help with understanding digital trade and the scope of the concept, we developed the following non-exhaustive list of key goals and considerations for government and its negotiators to consider in relation to digital trade.

We intended this list to also help stakeholders identify their own interests as we engaged with them in this review.

- Enabling smoother trade of physical goods across borders through paperless trading

- Setting and aligning standards on flows and management of data across borders
- Ensuring privacy and consumer rights are upheld among our trading partners
- Keeping people and businesses safe online while participating in the global marketplace
- Considering our unique context, and ensuring there's space for the New Zealand government to regulate where it is warranted
- Sharing the opportunities that digital trade offers with everyone in society, and
- Future-proofing our settings to ensure the responsible development and regulation of emerging technologies like Artificial Intelligence (AI) and blockchain, while getting ourselves ready to harness those opportunities.

We should note that the definition itself was, at times, a point of discussion during our engagement, which we discuss further in later sections.

¹ OECD. "The impact of digitalisation on trade", <https://www.oecd.org/trade/topics/digital-trade/>, retrieved 20 June 2023



The importance of digital trade

Many organisations have attempted to quantify the value of digital trade, as well as the size of the digital economy in Aotearoa New Zealand and overseas. Estimations are difficult, given the breadth of digital trade as outlined in the definition above, and there is an active international discussion about how to measure the value of the digital economy.^{2,3}

Some estimates suggest that the technology sector represents New Zealand's second-largest export earner, behind dairy. The top 200 technology exporters' overseas sales grew more than 14% between 2020 and 2021.⁴ Though, we note that digital trade reaches well beyond the technology sector, including into digitised movements of physical goods.

Many industries in the digital economy come with high-paying careers and do not suffer from New Zealand's traditional trade limitations of a small isolated market.

Parts of digital trade come with a potentially attractive environmental proposition, where very little carbon is emitted for digitally delivered goods. Furthermore, New Zealand's high

renewable electricity profile presents an opportunity for low carbon data processing centres, which require a significant and stable supply of energy.

A review of New Zealand's digital trade settings

The Trade for All Advisory Board recommended a review of digital trade.

In 2018, the Trade for All Advisory Board (the Advisory Board) was appointed to provide the government with an independent report with recommendations on New Zealand's trade policy.

The Advisory Board's final report noted that digital technology offers many opportunities to New Zealand through:

- helping overcome the disadvantages of distance from markets
- helping businesses increase their productivity
- providing enjoyment to New Zealanders, and

- allowing New Zealand to leverage its high levels of education.⁵

In the context of addressing public confidence and trust, and modernising trade policy, the Advisory Board recommended that:

"a thorough review of New Zealand's interest in the digital trade negotiations should be carried out..."

On 23 March 2020, Cabinet agreed in principle to that review while noting the Minister's advice that it is not in New Zealand's interest to pause all negotiations on digital trade issues, but that positions taken in ongoing negotiations would be informed by the review.

The Ministry has asked us to review digital trade.

The Ministry has commissioned MartinJenkins to "review Aotearoa New Zealand's policy settings affecting digital trade and supporting the digital economy, as well as interests in digital trade."

² UNCTAD, "Measuring the value of E-commerce" https://unctad.org/system/files/official-document/dtlecde2023d3_en.pdf, retrieved 28 July 2023

³ OECD, "Measuring the Digital Economy : A New Perspective" [https://read.oecd-ilibrary.org/science-and-](https://read.oecd-ilibrary.org/science-and-technology/measuring-the-digital-economy_9789264221796-en)

[technology/measuring-the-digital-economy_9789264221796-en](https://read.oecd-ilibrary.org/science-and-technology/measuring-the-digital-economy_9789264221796-en), retrieved 28 July 2023

⁴ NZTech, Overview of the New Zealand technology sector, <https://nztech.org.nz/info-hub/about-the-sector/>, retrieved 20 June 2023.

⁵ Trade For All Advisory Board, "Report of the Trade For All Advisory Board", 2019.



We have included policy principles throughout the report.

As part of this review, the Ministry asked us to prepare policy principles to guide future digital trade policy and associated negotiations in the international sphere. These policy principles give a high-level indication of New Zealand's position on various matters affecting digital trade and indicate outcomes that it should seek to achieve in digital trade, including in the negotiation of related provisions.

This report also includes a small number of areas that we have identified for further consideration, subject to competing priorities and resourcing. These considerations do not relate to trade negotiations or wider digital trade policy but fit into our suite of findings on digital trade more broadly.



Digital trade in context

The breadth of digital trade is enormous

There are disparate views about how to define digital trade, what we should be committing to in trade treaties, and the extent to which we should be pushing a position globally. Our engagement made clear that "digital trade" means different things to different people.

At one end, we heard views that trade treaties should be limited to only include rules around the movement of physical goods, so digital trade should only consider factors like moving trade compliance processes online. Specifically, some stakeholders did not agree that we should make international commitments that limit our right to regulate on matters like data.

We also heard views that the digital world had, until recently, benefited from limited regulation and restriction across the world. Some participants observed a marked increase in regulation that they considered were trade restrictive and not necessarily in pursuit of legitimate policy objectives. Those participants welcomed New Zealand and its trading partners agreeing and aligning with global norms and standards.

For some Māori participants, we heard concerns that digital trade had been overtly defined and classified by "big tech". Māori participants took a broader interpretation, connected to a Māori world view, including making the connection to place, values, and relationships between indigenous peoples.

It blurs the physical and digital world

We found some of the complexity of defining digital trade is in the blurring and overlapping of the digital and physical worlds.

The concept of "trade" has evolved with the emergence of technology. Many routine activities in modern living, from scrolling social media to simply owning an email account, have interactions with modern digital trade rules, like privacy protection or rules around where data is stored.

This blurring of lines, or merging of worlds, makes it increasingly difficult, if not functionally impossible, to opt-out of the rules that digital trade establishes. For that reason, we stress the need for a cautious and considered approach to agreeing digital trade rules in treaties and err

towards an adaptive approach, including flexibility and cooperation where there may be uncertainty on the impact of commitments.

This is especially so in the case of current and future effects of treaties on Te Tiriti o Waitangi/Treaty of Waitangi.

Digital trade is commanding international action

There has been a proliferation of digital trade chapters and bespoke digital trade treaties, like the DEPA (Digital Economy Partnership Agreement) and the Singapore-Australia Digital Economy Agreement.

But digital interventions and regulations are also increasing across the world. The OECD Digital Services Trade Restrictiveness Index measures domestic regulation in digital trade policy. Recent Index measures suggest that those



domestic regulations across the world have become increasingly restrictive.^{6,7}

The government needs to respond differently

Many of the issues discussed in this report touch on overlapping and sometimes unclear mandates between the Ministry and other government departments with domestic policy functions. Those other departments are engaged in international representation, advocacy, and negotiations in international forums on digital trade matters.

Given the rapidly evolving landscape that digital trade seeks to oversee, it is imperative that these challenging topics are managed in a flexible and coordinated way. For example, in the uncertain world of managing the opportunities and risks from emerging technology, it is important that trade policy commitments do not unduly limit the government's right to regulate for legitimate policy objectives, while recognising the potential interaction with opportunities for exports.

⁶ López González, J., S. Sorescu and P. Kaynak. "Of bytes and trade: Quantifying the impact of digitalisation on trade", *OECD Trade Policy Papers*, No. 273, 2023, <https://doi.org/10.1787/11889f2a-en>, retrieved 20 Jun 2023

⁷ OECD Going Digital Toolkit, "OECD Digital Services Trade Restrictiveness Index", <https://goingdigital.oecd.org/en/indicator/73>, retrieved 20 Jun 2023



Physical goods



This section covers those elements of digital trade that facilitate the movement of physical goods across borders. It covers topics such as paperless trading and electronic invoicing.

This section does not deal in detail with topics such as digital identities and trust frameworks, as these are discussed later in this report. However, we acknowledge that those areas interact with the elements of digital trade discussed in this section.

Our engagement on this topic was mainly with businesses that trade physical goods overseas, representative bodies, digital trade experts, and businesses that support international trade transactions. The engagement focused on the barriers and areas of friction in the trade of physical goods overseas and on how we can work to alleviate or manage them.

Our reliance on physical exports

Physical goods make up 70% of New Zealand's exports,⁸ with agricultural products featuring heavily among our most-traded goods. This is particularly relevant for iwi/hapū and Māori businesses, who have significant assets in the primary sector and are increasingly participating in export markets.⁹

According to a recent press release from the Minister of Trade and Export Growth, 73.5% of New Zealand's export goods are now covered by a Free Trade Agreement.¹⁰ The US is also our largest remaining market without an FTA, at 11% of our exports.¹¹

There are opportunities for New Zealand to expand its offering to the world and some of those are discussed later in this report. However, New Zealand will probably continue to have an export profile weighted to physical goods for some time.

Trade efficiencies

We heard from trading businesses that they perceive that the government's efforts in lowering tariffs is largely complete, with agreements in place and preferential access into most of our major export markets. They argue the focus should shift to non-tariff barriers, particularly the administrative burden for traders.

Trading businesses are frustrated by the outdated, prescriptive, and often manual processes used in trading goods internationally. They told us that trade administration and compliance is heavily paper-based, which brings greater risks of delays at port and of human error, and adds to the time cost of trading. All those problems add to the cost of selling goods internationally.

The potential benefits of digitising trade processes for New Zealand exports have been estimated at between \$9 billion and \$18 billion if rolled out across the APEC region, when all those countries join a digital trade environment.¹²

⁸ New Zealand Foreign Affairs and Trade, "NZ trade policy", <https://www.mfat.govt.nz/en/trade/nz-trade-policy/>, retrieved 20 Jun 2023.

⁹ Chapman Tripp, "Te Ao Māori Trends and insights Pipiri 2017", [te-ao-maori-2017-english.pdf \(chapmantripp.com\)](https://www.chapmantripp.com/te-ao-maori-2017-english.pdf), retrieved 20 Jun 2023

¹⁰ Beehive, "UK FTA delivers benefits from today", <https://www.beehive.govt.nz/release/uk-fta-delivers-benefits-today>, retrieved 20 Jun 2023

¹¹ New Zealand Foreign Affairs and Trade, "An overview of New Zealand's trade in 2021", <https://www.mfat.govt.nz/en/trade/mfat-market-reports/an-overview-of-new-zealands-trade-in-2021/>, retrieved 20 June 2023

¹² NZIER, "Digital trade is the way forward for New Zealand" 2021.



Options for reducing administrative burdens can be considered along a scale

There is a scale of what can be done to remove administrative burden, involving different degrees of human involvement in the trade administration and compliance process.

Digitising a paper-based process: Human involvement still required throughout

At one end of the scale, some of the administrative burden can be removed through shifting towards paperless trading, where administration and compliance documents are available and can be submitted online.

Provisions for this kind of paperless trading are common in trade treaties – for example, Article 2.2.1 of the Digital Economy Partnership Agreement. In practice, this could involve PDF or similar documents being available on the websites of customs authorities or other agencies, for traders to download, complete, and submit.

This digitisation of a paper-based process would still require a human to complete the various

steps all the way through the administrative process.

Web-based forms: A middle ground

The middle of the scale of human involvement can take a range of specific forms.

One form is a "Single Window", where declarations for a range of trade compliance processes can be submitted on one platform. Single Windows can operate as webforms with drop-down, restricted, or free-text entry, thereby reducing the number of documents in the trade compliance system.

Webforms can have some degree of auto-population, perhaps from previous entries. This starts to reduce the human interaction with the administration process, especially if there's an opportunity to auto-populate some of the required fields, for example through third party software.

However, this approach still involves a lot of duplication of information, because the information is not automatically shared across different purposes, and therefore still a material administrative burden. For example, the information on the value of the consignment would be entered into the webform, but also contained in the commercial invoices and possibly in the insurance certificates.

Data-enabled trading: Minimising human interaction

We heard that at the far end of the scale is a fully data-enabled trading system where human interactions are reduced, removed, or streamlined. Information along the whole trade journey is submitted or created just once and recycled as required.

For example, at the start of a trade transaction the purchase order can be linked with detailed information that the firm already holds about the product, perhaps under Stock Keeping Units (SKU) – a scannable code that enables the automatic tracking of inventory movement.

Information from the SKU can immediately populate various other documents (such as a bill of lading, an export/import declaration, a health/sanitary/or origin certificate, and an invoice) rather than requiring the trader to create new documents, therefore minimising human interaction.

Aiming for data-enabled trading

Taking steps towards a data-enabled trading system could have a wide range of benefits, including for inclusion and transparency. We acknowledge that steps have been taken already



across government to create a data-enabled trading system.

Done right, shifting to a data-enabled system can support both inclusion and transparency: first, by reducing the cost of trade and so making trade more accessible to more people; and second, by making processes clearer and easier to manage.

Some data-enabled trading is already emerging

We heard from some stakeholders that a range of data initiatives, including datasets, are already emerging. This technology can improve things like traceability in the supply chain to better inform consumers, for example, of the origin of their products and, for example, their environmental credentials.

This has been driven by both consumer and government expectations across the world. Those datasets could contain most (if not all) of the information required for other trade administration and related processes, like conformity assessment. It is likely that in time we will see greater investment in creating these datasets to meet wider consumer and government expectations.

Data-enabled trading minimises human error and manages risk

A system at the data-enabled end of the scale provides benefits through minimising human interactions and error. Human time adds costs, delays, and risk of error, compared to a system of datasets communicating with each other.

Data-enabled declarations and administration have a range of clear advantages. Declarations are more accurate because human error is reduced, and further information can be made available to customs authorities with minimal additional effort.

For example, a dataset tracing the movement of goods defined by the SKU numbers could share that data with a customs authority, providing information that is significantly more granular and detailed than the current Harmonised System (HS) codes. That data could also link directly with the HS codes to ensure tariff classifications are consistent and credible.

Equally, risk assessments at port, for both customs and biosecurity management, would benefit from increased access to data. With the appropriate tools, those border authorities could detect anomalies or unexpected movements of goods more easily, enabling physical inspections to be more targeted.

For example, we heard that if a supply chain commonly directs goods through one particular port, but one consignment takes a different path or is routed through a different factory, this could signal a higher risk of controlled goods (such as weapons) being included in that consignment, warranting further assessment or an inspection from border officials.

Some challenges will need to be overcome

This sort of data-enabled system is not without its challenges and complications, and these would need to be worked through.

Moving to online storage of documents, and eventually datasets, increases the need for cyber and authentication protection. While the paper-driven trading system is not without its own security risks, the consequences of a data breach for example would be much greater in a data-enabled system. A breach could erode users' trust in the system, especially if it resulted in the loss of personal or commercial information, and could negatively affect the integrity of New Zealand's assurance systems.

Cyber security, and other concerns about control of datasets, has implications beyond the protection of data on the movement of goods, and is discussed in later sections of this report.



With datasets emerging across the trading system for different purposes, we heard that it is imperative to avoid duplication and any unnecessary friction between those purposes. Any initiative the New Zealand government promotes, and any unilateral action it may take, should lean on internationally recognised standards. The government should also focus on building interoperability frameworks as much as possible and eventually mutual recognition arrangements.

Removing paper from the compliance framework in international trade is not without costs. A comprehensive and secure digitised trading system requires significant investment in IT systems to support and protect that trading system.

New systems will also come with some necessary user-training. There will also be a need to ensure there is an appropriate governing environment that balances the need for legal liability with the need to recognise that humans will no longer be validating data at each step along the trading journey.

The design of the new systems will also need to take into account wider considerations like accessibility for people with disabilities.

Global ambition

Different countries have drastically different levels of ambition and very different approaches to digital trade.

We heard from stakeholders that in their experience, some countries, like Indonesia, still rely very heavily on paper documents. And we heard that others, like Singapore and the UK, are implementing domestic laws and agreeing to treaty provisions that enable a more digitised trading environment.

COVID-19 shifted the practice for some countries

We heard from stakeholders that during the COVID-19 pandemic, China made significant strides towards digitising its trade processes, removing a substantial volume of paper from its trading system. To date, it appears that China is continuing with that new digital approach.

Conversely, we heard that other countries in the Asia Pacific region, such as Thailand, made significant strides towards paperless trading during the pandemic but have since reverted to a paper-heavy trading system.

Push to digitise priority documents in our trade treaties

While it is attractive to imagine a world of data-enabled trade, there is work to be done across the spectrum to reduce the administration burden for traders in the shorter term and take other countries on the journey.

Some participants told us that much of the value of taking the first step from paper-based documents to online submissions of PDFs (or similar) comes in speeding up transactions and helping to avoid delays at port. Therefore, the bulk of the benefits of making a document available online may not be realised until the last document is digitised.

For example, if you have to courier documents across the world to release a consignment, then it makes little difference if that consignment needs one or several paper documents.

Health certificates are a particular pain point

We heard from several different stakeholders that health certificates are a particular pain point in administering consignments. Health certificates are official documents confirming that exports meet the health requirements of the destination



country. It is particularly common that traders are required to provide paper versions of health certificates in order to clear consignments at foreign ports.

We have not tried to quantify the cost to New Zealand traders of being required by our trading partners to present paper-based health certificates. However, it is reasonable to assume that the cost is significant. New Zealand's export profile is heavily weighted to animal and plant products, and many of those products are highly perishable and risk degradation with port delays.

We recommend that the New Zealand government continues advocating and negotiating for recognition of our electronic health certificates with our trading partners, as well as regional advocacy of paperless trading through forums like APEC and participating in international rules and standards development.

It may be unrealistic to plan to digitise all documents in the short term

There is a range of less commonly used documents that consistently remain in paper form across the world trading . For example, certificates under CITES (the Convention on the International Trade of Endangered Species) and Kimberley Process certificates for diamonds are still required to be in paper form. This is often to

adhere to international conventions, which makes it difficult or impossible for New Zealand to unilaterally digitise such documents. However, we understand that trade volumes in those areas are not high for New Zealand.

It may therefore not be of sufficiently high value for New Zealand exporters to seek the digitisation of those documents.

Principle - Promote the online availability and submission of government trade compliance documents among partners with enduring paper-based processes.

Principle - Promote data as acceptable evidence for government trade compliance

Digital documents should be sufficient

We also heard of examples where some but not all parts of the process of submitting trade documents were paperless.

For example, we heard of exporters to China who would electronically send documents to their importing agents there, the agents would then print the documents and submit them in paper to local authorities.

To get the benefits of shifting to paperless trading, it is important to ensure that documents submitted electronically are sufficient for the entire process.

Principle - Promote digital documents as sufficient for the processes that they respond to.

Improving systems at home

Partner with the private sector

We heard that the paper-based processes extend beyond government authorities. Many



shipping companies, insurers, and banks in New Zealand and across the world continue to expect paper-based documents.

Onerous and outdated paper-driven processes add significant costs to traders and suppress opportunities. McKinsey & Company estimates that digitising the bill of lading document alone could save US\$6.5 billion in direct costs globally, and enable a further US\$40 billion in trade.¹³

We heard from banking representatives that the paper-driven processes are primarily driven by risk assessments of liability in the face of legal uncertainty.

SWIFT (Society for Worldwide Interbank Financial Telecommunication) points out:

"International trade has often been associated with the need to hold key documents such as a bill of lading, which may, for instance, permit the holder to take delivery of the goods... however, it has not always been clear if those rights would still apply when the document is in electronic form... the banking industry therefore

*wrestles with legal uncertainties around electronic transferable documents."*¹⁴

We have not considered which domestic policy, legal, or regulatory settings need to change to enable the private sector to move to paperless trading, noting that this review is focused on international policy settings.

We acknowledge that initiatives to improve trust in the digital world, like digital identities, can be important in helping the banking sector move towards paperless or data-enabled verification and authentication. We discuss digital identities in later sections of this report.

Action to consider:

Work with domestic agencies to determine what changes in settings are needed to enable and encourage the private sector to digitise its trade processes, including trade agreements.

Progress through DEPA

Stakeholders we heard from acknowledged the work that the Ministry had done in negotiating DEPA. They recognised that it extends New Zealand's ambition in facilitating digital trade, and further pushes New Zealand's position in support of the rules-based trading system.

Further comments acknowledged that with the potential for increasing use of data in trade processes, there were also risks around interoperability, such as different countries having different expectations for data formats.

Stakeholders praised the "concerted open plurilateralism" that DEPA represents, whereby a small number of like-minded countries agree on a new standard of trade rules and welcome other countries to join the agreement. We heard that these efforts have big potential to alleviate risks around interoperability and help build a new precedent for future trade agreements.

DEPA also represents some of the most extensive and innovative approaches of New Zealand's digital trade agreements, including in its ambition to grow its membership.

¹³ McKinsey & Company, "The multi-billion-dollar paper jam: Unlocking trade by digitalizing documentation", <https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/the-multi-billion-dollar-paper-jam-unlocking-trade-by-digitalizing-documentation>, retrieved 20 Jun 2023

¹⁴ SWIFT, "Digitising Trade: the time is now", 2021, [swift-paper-digitisingtrade.pdf](https://www.swift.com/~/media/2021/09/swift-paper-digitisingtrade.pdf)



Focus needs to be on DEPA “post-signature”

However, along with that praise, we often heard words of caution, suggesting that New Zealand’s leadership position is fragile. Criticism focused on post-signing work to:

- facilitate the implementation of DEPA
- develop and use information-sharing mechanisms within DEPA, and
- advocate for other countries in the region to join the agreement.

Some suggested that our ambition in DEPA has not been met with the dedicated resourcing that the Ministry has allocated and our domestic willingness to implement its commitments.

This review has not considered resourcing on DEPA, post-signing. We recommend, however, that the Ministry review this and critically assess whether it has allocated sufficient resource for the level of ambition that New Zealand has communicated.

¹⁵ DEPA Article 2.3, clause 1(b)

Action to consider:

Consider aligning ambitions and resourcing for DEPA and other commitments, post-signature.

Leadership in implementation

We also heard from stakeholders that New Zealand is not placing enough emphasis on implementing DEPA and its other modern trade agreements like the UK FTA.

As an example, DEPA commits each Party to “endeavour to adopt the UNCITRAL Model Law on Electronic Transferable Records (2017)”.¹⁵ A recent UN overview of the adoption of model laws on electronic commerce and other matters observed that New Zealand had not yet signed nor implemented the Model Law.¹⁶

It is important that, in the domestic government setting, the Ministry leads and drives the implementation of the rules that New Zealand has signed up to. It is important to implement our commitments, both the spirit and the letter, to

¹⁶ United Nations, “Overview of the status of UNCITRAL Conventions and Model Laws”, <https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/overview-status-table.pdf>, retrieved 20 Jun 2023

protect our international reputation and harness the economic benefits of those commitments.

Action to consider:

Drive effective implementation of the digitisation of trade processes among other government agencies to demonstrate leadership abroad.

Stakeholders identified Singapore as a world leader in digitising paper-based trade processes, having adopted the UNCITRAL Model Law on Electronic Transferable Records (2017). The UK and Chinese Taipei were also mentioned.

Stakeholders observed that UNCITRAL had developed model laws for adoption across the world to support smoother digital trading, and that agreements like DEPA include endeavours to implement those laws. Those stakeholders pushed the value of adopting those model laws for digitising trade processes.

We have highlighted that health certificates are a particular pain point for our exporters. Stakeholders did not comment on the New



Zealand import process for products requiring a health certificate and whether paper-based documents remained. We have also not researched those processes. We recommend that the New Zealand government assesses whether there are any paper-based health certification documents required in its import compliance process and consider what steps are necessary to digitise those documents.

We note the Ministry for Primary Industries' investment in modernising electronic certification processes through the Future of Certification programme.¹⁷

International leadership There is an ecosystem of international digital trade forums now established to help manage the proliferation of standards and rules. The New Zealand government, led primarily by the Ministry, and in consultation with its partner agencies, should strategically consider which of those international forums it wishes to prioritise participating in.

Action to consider:

Review and prioritise engagement in international digital trade forums with partner agencies.

Digitisation of trade processes is a rapidly evolving discipline across the world and there is much to learn from our trading partners' experience. Cooperation with other countries, using established agreements, provides a great mechanism for this sort of experience-sharing.

Leadership in our region

Some stakeholders argued that in the rapidly evolving area of digital trade, New Zealand has a leadership role to play in the Pacific. Many of the issues are complex and some of the opportunities for efficiencies require investing in infrastructure.

It is likely that those of our Pacific neighbours with smaller capacities will face significant challenges in managing this evolving landscape, and New Zealand may be able to help.

Case study - In October 2021, the UK government introduced the Electronic Trade Documents Bill to parliament. The Bill aims to make administration and compliance in trading with the UK simpler and smoother. The Bill extends to governing business-to-business documents, including bills of lading, by giving digital trade documents the same legal recognition as paper-based equivalents.

Once passed, the UK government expects the Bill to give businesses an opportunity to increase efficiency by reducing trade contract processing times, reducing operating costs, and improving security. The Bill provides the basis for industry to establish standards and develop technology platforms to harness opportunities.

¹⁷ Ministry for Primary Industries, "Future of Certification programme, <https://www.mpi.govt.nz/export/exporting-from-nz-how->

[it-works/mpis-role-in-exporting/replacing-our-electronic-certification-systems](https://www.mpi.govt.nz/export/exporting-from-nz-how-it-works/mpis-role-in-exporting/replacing-our-electronic-certification-systems) retrieved 28 July 2023



Weightless trading



This section discusses issues raised by businesses that trade weightlessly – that is, goods or services that can be delivered electronically.

Weightless trading encompasses a wide range of activities that involve traders using digital technologies in their delivery model. It includes sectors such as the software and creative industries, as well as other knowledge-based services and products.

The traditional distinction between goods and services becomes particularly blurred in digital trade, with the emergence of things like subscription services. For this review, we did not attempt to distinguish between trade in goods and trade in services.

For this area of the review, we talked with representatives from the software and creative sectors. Our discussions with them focused mainly on barriers to selling to overseas markets.

Māori participants also noted that these were emerging areas of trade and services for Māori and referenced Māori currently working in these sectors, including the gaming industry.

This section focuses on platforms and the government's potential role

Stakeholders talked a lot about the role of platforms in their respective industries, including the opportunities and challenges they presented. This section of this report therefore focuses on the role of platforms and the role that government can potentially take as a regulator.

Some discussions in this section step beyond facilitating weightless trade, where those points relate to managing risks and opportunities from platforms.

Weightless trading does not feature strongly in international trade treaties. New Zealand's recent trade agreements include provisions in the digital trade chapter covering topics like:

- non-discriminatory treatment of digital products
- preventing Parties from requiring the other to surrender encryption keys, except in certain cases, and
- prohibiting the collection of customs duties on electronic transmissions.

We heard very little comment on those points in our engagement with stakeholders. We do however make some observations about them at the end of this section.

The future of weightless trading

Weightless sectors have grown significantly

Throughout our engagement with the weightless goods sectors, we heard about the opportunities for growth. Participants observed that once you develop a successful product, you can increase sales infinitely with minimal delivery or servicing costs.

Weightless trade makes up a large and growing part of the New Zealand economy. According to WeCreate, the creative sector contributes \$17.5 billion to GDP.¹⁸ The New Zealand Game Developers Association also claims that the interactive media and video game sectors earned \$407 million in 2022, of which only 3% of revenue came from domestic sales.¹⁹

¹⁸ NZIER, WeCreate, "The evolution of kiwi innovation", <https://wecreate.org.nz/wp-content/uploads/2020/11/NZIER-Summary-2020.pdf>, retrieved 20 Jun 2023

¹⁹ New Zealand Game Developers Association, "NZ Interactive Media Industry Survey 2022", <https://nzqda.com/news/nz-interactive-media-industry-survey-2022/>, retrieved 20 Jun 2023



The tech sector in New Zealand also exported \$8.6 billion in 2021, an increase of more than 10% from the previous year, and is expected to continue to grow.

The weightless goods sectors also demonstrated strong resilience through COVID-19, while other sectors suffered from supply chain disruptions. After the pandemic, a report by the Ministry noted that computer and information services and intellectual property exports were more resilient during the pandemic than most other sectors, with revenue growing by almost \$600 million in 2021.²⁰

Weightless trading alleviates traditional limitations or challenges that New Zealand faces in trading internationally, like geographic isolation and a small market.

The barriers to entry in some weightless trading are also low compared to other sectors. Small businesses can develop ideas and take them to the international market more quickly than ever before.

Challenges faced by specific sectors

We heard from different sectors about the unique challenges that may be curtailing their further growth.

We heard about the international competition for talent and how various weightless-trading sectors struggle to recruit and retain talent. Some countries, like Australia, are providing subsidy programmes to develop their own gaming industries. We heard examples of Māori gaming experts being affected by programmes like these and losing talent.

We also heard about the mixed incentive structures that platforms place on content creators and how their market segmentation leads to unhelpful incentives. For example, we heard that Netflix groups Australian and New Zealand markets, which creates a difficult competitive environment for New Zealand content creators.

Many of these cases involve an awkward interface between domestic and international trade policy. However, some of the issues we heard about, like industries competing with subsidy programmes in other countries, can draw

parallels with multilateral trade policy rules on goods trade.

The classification of weightless trade, and whether the items in question are products or services, means that the WTO rules on subsidies for these industries are not always certain. Further, options for trade remedies against the subsidisation of weightless trade for importing member countries is less well-defined than for the goods sectors. Agreement or clarification on these rules, including for weightless products, will be important in the future.

As we discuss in a later section, different standards across countries, in areas such as privacy, can also directly affect the ability of New Zealand businesses to expand. We heard from the software-development sector that navigating the different expectations in different markets can be challenging. If the original software is not developed with other countries' privacy standards in mind, it may require expensive reconfiguration to meet local standards for, for example, data transfer and privacy.

We heard a particular example where a start-up business had developed a saleable product that complied with New Zealand privacy laws, but found they had to redesign their code for another market. Some stakeholders told us that much of

²⁰ Ministry of Foreign Affairs and Trade, "An overview of New Zealand trade in 2021", [An overview of New Zealand's trade in](#)

[2021 | New Zealand Ministry of Foreign Affairs and Trade \(mfat.govt.nz\)](#), retrieved 20 Jun 2023



this friction is down to New Zealand businesses being used to the principles-based privacy rules that we enjoy. Others thought the problem was that the pace at which new ideas were implemented in the software sector meant that often businesses did not carry out due diligence before reaching into a new market.

Calls for a modern industry strategy

While the issue is out of scope for this review, we want to acknowledge that some stakeholders called for a digital strategy, with a particular focus on digital industries, or industry transformation plans.

They argued it would be difficult for the Ministry, or indeed any other government agency, to prioritise sectors trading in weightless goods without a clear strategy. Some pointed to the UK as a model for New Zealand to replicate.²¹

We acknowledge that since the engagement phase of this review, the government has released the digital industries transformation plan.²²

Recognise diversity and unique challenges

Each sector in the weightless goods area faces its own unique challenges and opportunities and they cannot all be treated as one homogeneous group.

Part of this is also recognising that many of these challenges, while not traditional trade barriers, still present an important role for government. For example, while the subsidisation of growing industries is not normally something considered in digital trade chapters, there are clear parallels with other traditional trade principles.

Traditional trade principles may not neatly fit into the new digital world, but it may be in our interest to advocate for the avoidance of subsidisation of weightless industries across the world.

Action to consider:

Advocate for a modern, international level playing field in digital trade.

Case study - The **screen sector** spoke about the misalignment of funding expectations and commercial incentives with platforms. Local funding mechanisms often valued "telling the New Zealand story", however in telling the New Zealand story, those productions faced a challenging commercial environment. It was noted that large platforms amalgamate the New Zealand and Australian markets. With the Australian audience making up a significant portion of that total market, for a production to be considered a success in this Netflix-segmented market, it needs to appeal to an Australian audience.

This leaves content creators in a tricky position in attempting to win funding grants, while making a commercially-sustainable product.

²¹ Department for Digital, Culture, Media & Sport, "UK Digital Strategy", <https://www.gov.uk/government/publications/uk-digital-strategy/uk-digital-strategy>, retrieved 20 Jun 2023

²² Ministry of Business, Innovation and Employment, "Digital Technologies Industry Transformation Plan",

<https://www.mbie.govt.nz/assets/digital-technologies-industry-transformation-plan.pdf>, retrieved 3 July 2023



The dominance of platforms

Platforms are sites or businesses that facilitate a relationship between users and third parties. They are playing an increasingly large role in international trade across almost all weightless good sectors and in the transaction of many physical goods.

In the last few years, platforms have changed how we get products to consumers. Their critical role in controlling access and distribution of goods and services makes them the new gateways to markets.

Platforms can provide a space for businesses of all sizes to easily engage with the digital economy across borders. They do this by providing reach, by streamlining processes and reducing costs, and by facilitating payment. They also help users and traders to navigate international rules and regulations, for example, with compliance requirements in different markets, such as localised privacy laws.

We heard from Māori businesses that platforms allow them global reach and opportunities previously not available.

Platforms dominate and control the market

Along with those opportunities, however, come challenges resulting from the market power that platforms hold and their lack of transparency around aspects such as algorithms and access to consumer data. These challenges can be an impediment to digital trade. When traders use a platform, they are completely reliant on it.

We also heard about the influence that platforms can have on the content that New Zealand exports. Platforms are ultimately driven by commercial incentives and view content and markets through that lens. Those incentives can be at odds with government or societal objectives.

From a competition perspective, platforms also control both the supply and demand side of digital products. Platforms often maintain detailed and comprehensive data collection, so commonly maintain information asymmetries over their suppliers and customers.

The cross-jurisdictional nature of platforms in particular makes regulating them more challenging, especially for smaller countries like New Zealand.

One of the big problems is that the recourse to changing a platform's approach is left to public opinion and the subsequent consumer and

business behaviour, rather than the institutional governments that we are used to.

This manifests in different ways. We heard, for example, that exposure to customers depends entirely on the platforms' algorithms. Those algorithms are set to maintain or increase consumer attention, engagement, or spend. However, the algorithms themselves are not well understood by traders.

A new approach to risks and opportunities presented by platforms

The problems and challenges with platforms discussed above are difficult to resolve through traditional trade treaties that bind governments, rather than firms or individuals.

Nevertheless, stakeholders advocated for thinking about how we can better respond to platforms and represent New Zealand's weightless exporters' interests to large multi-national platforms.

Enforcing regulations and supporting local content

We have seen examples of governments attempting to challenge platforms for breaching local laws or regulations. For example:

- European Union regulators fined Meta €1.2 billion for violating EU privacy laws by



transferring the personal data of Facebook users to servers in the US, in breach of the General Data Protection Regulation.²³

- The European Commission fined Google €2.42 billion for breaching EU antitrust rules.²⁴

We are also seeing countries attempt to compel platforms to fund and produce local content. Earlier in 2023, Australia implemented its updated cultural policy, which includes a commitment to "take the necessary action so that Australians continue to be able to see and hear quality home-grown content, regardless of which platform they are using."²⁵

Changing approaches to representation

We have also seen countries deploying ambassadors to specific companies – see the accompanying case study from Denmark.

To our knowledge, while countries such as France, Australia, Britain, and Germany have created tech-centric postings, Denmark is the only country with a dedicated ambassador posted overseas.

Case study - In 2017, Denmark became the first nation to formally create a diplomatic post to represent its interests before companies such as Facebook and Google – a "Tech Ambassador". Denmark's strategy for "TechPlomacy" notes that "tech companies ... have unprecedented influence on the development of society and the daily lives of ordinary people – and they often play the role of de facto foreign policy actors." Denmark now has one ambassador based in Silicon Valley and one in the Danish Embassy in Beijing, with coordination roles in Copenhagen. These representatives liaise with big technology firms, and advocate on behalf of the government and industries.

New Zealand is exploring similar approaches. The Prime Minister's Special Representative on Cyber and Digital, and Cyber Coordinator, is responsible for building and maintaining relationships with the key players in domestic and international technology industries.

Similarly, we heard from Māori that they want opportunities for specific representation. This includes opportunities to cultivate relationships with the technology industry with the aim of promoting the unique value of Māori businesses and of educating industry to recognise and value indigenous rights and perspectives.

We recommend that the Ministry consider whether New Zealand's own approaches are sufficient. We recommend that it explore new approaches such as appointing ambassadors or other special representatives to large technology firms, to better represent the interests of New Zealand's businesses or of specific sectors such as Māori businesses. Part of these considerations could include mechanisms to share lessons with other similar trade partners in managing relationships with large technology firms.

²³ European Data Protection Board, "1.2 billion euro fine for Facebook as a result of EDPB binding decision", https://edpb.europa.eu/news/news/2023/12-billion-euro-fine-facebook-result-edpb-binding-decision_en, retrieved 20 Jun 2023

²⁴ European Union, "Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service – Factsheet", https://ec.europa.eu/commission/presscorner/detail/es/MEMO_17_1785, retrieved 20 Jun 2023

²⁵ Australian Government, "Revive", <https://www.arts.gov.au/sites/default/files/documents/national-culturalpolicy-8february2023.pdf>, retrieved Jun 2023



Action to consider:

Consider New Zealand's approaches to relationship management with large technology firms.

Continuing with trade missions

Stakeholders we heard from stressed the need to continue pursuing trade missions with our trade partners, both in weightless goods and in other exports. There was some concern that, with the move towards digital trade, opportunities to build relationships in person would be lost.

Māori businesses made that point particularly strongly, emphasising the value of relationship-building in trade.

Interaction with tax rules

Stakeholders shared insights from a few different perspectives on taxation rules for the evolving digital environment. Although these thoughts are not directly within the scope of this review, they provide important context to the digital trade discussion.

High-volume, low-value trade

With the rise of e-commerce, and online shopping becoming increasingly common, governments around the world will need to review their taxation and collection policies to ensure that domestic retailers are not unfairly disadvantaged. In New Zealand, issues such as the threshold for collecting GST and customs duties are relevant to this discussion.

We heard that issues such as those also affect our exporters, who could find themselves needing to register or comply with overseas tax regimes.

It is possible that platforms will play a role in facilitating these tax arrangements with their retailers.

Digital services taxes

There is also public debate internationally about how governments can gather taxes fairly from digital services. In 2019, the New Zealand government released a discussion document on options for taxing the digital economy, which included options for taxing platforms on their gross turnover.²⁶

There is still a role for trade treaties

While we did not hear many comments on the rules for the treatment of digital products, that does not necessarily mean that problems do not exist.

Participants in the discussions about weightless trading commonly noted that their primary markets were those with a similar culture to New Zealand: Australia, the United States, Canada, and Europe. Some noted that the focus on these markets rests on the cultural preferences of consumers for the products that those New Zealand businesses produce, rather than necessarily any barriers preventing trade with other countries.

DEPA reaffirms commitments under the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership) for treatment of goods delivered digitally and includes a further long-standing commitment to not impose customs duties on electronic transmissions. There are good reasons to continue to pursue these provisions.

²⁶ Inland Revenue, "Options for taxing the digital economy", <https://www.taxpolicy.ird.govt.nz/publications/2019/2019-dd-digital-economy>, retrieved 20 Jun 2023



Principle - Seek protections for source code and encryption keys in our export markets.

Banning customs duties on electronic transmissions helps maintain an open trading environment and provides a predictability for business and consumers, while encouraging participation in the digital economy. Ensuring the non-discriminatory treatment of digital products maintains a fair international trading environment. Requirements to disclose or modify encryption keys can be a significant impediment to operating in a market and can stifle investment and innovation. Using trade treaties to prevent those requirements helps to maintain business confidence and protect investments.

Principle - Seek the prohibition of customs duties on electronic transactions and non-discrimination of digital products.

These provisions could help take small steps to creating a more predictable, business-friendly environment for weightless traders in general.



Māori and digital trade



This section covers points raised by Māori participants in discussions of digital trade for this review.

The discussions covered:

- business opportunities
- engaging with the Crown on digital trade issues, and
- current and emerging threats in the evolving technology landscape.

We engaged with Māori through a series of one-on-one interviews with representatives of key Māori interest groups and pan-Māori interests, targeted online public hui, and an in-person public hui at Waikato University. There was limited engagement from iwi and hapū directly.

Waitangi Tribunal claim

In approaching these issues, we acknowledge the Waitangi Tribunal findings that relate to digital trade, especially WAI2522 on the CPTPP. Part of WAI2522 considered a small number of the e-commerce provisions in CPTPP and whether they were consistent with the Crown's Treaty obligations.

The Tribunal found that in negotiating this chapter, the Crown breached the principles of partnership and active protection for the taonga that is mātauranga Māori.

Part of the assessment focused on the extent to which the e-commerce chapter of CPTPP constricts policy or is likely to inhibit or weaken the Crown's political commitment to its domestic Treaty obligations. The Tribunal noted: *"This is a difficult assessment based as it is on predicting future circumstances and conduct about which precision is not possible."*

The report also shares findings of mātauranga Māori in the digital domain, including issues relating to data.

We do not attempt to provide advice on a Crown response to the WAI2522 claim,²⁷ rather this review provides an opportunity to seek wide-ranging perspectives and explore key aspects within the scope of the review. Ngā Toki Whakarururanga also wanted to point out that that they consider that this review is not an adequate process for addressing the WAI2522 findings.

Our key findings and recommendations

Our key findings and observations relate to the need:

- to cultivate relationships with Māori at all levels and across the domains identified through this review
- to continuously focus efforts on building mature and enduring Treaty partnerships in order to develop stronger information-sharing and knowledge-sharing mechanisms
- to seek a protected right for the Crown to meet its Treaty obligations, and
- to recognise that the Treaty partnership is maturing and evolving with the digital trade landscape.

²⁷ Ministry of Foreign Affairs and Trade, "Wai 2522 E-commerce Report – Findings and proposed response", <https://www.mfat.govt.nz/assets/Trade->

[agreements/CPTPP/Submission-on-Wai2522-E-Commerce-Report.pdf](#), retrieved 3 Jul 2023



Principle - Protect the Crown's ability to meet its responsibilities and obligations to Māori under Te Tiriti o Waitangi/Treaty of Waitangi.

Principle - Acknowledge the Crown's responsibility and obligation to work in partnership with Māori and facilitate pathways to enable influence and decision-making in an evolving and changing environment.

Māori rights and interests

During discussions, Māori participants saw digital trade as falling within the scope of their wider economic wellbeing and aspirations. They saw it as an area in which they have rights and interests as tangata whenua and the indigenous people of Aotearoa.

For some, digital trade is an emerging area of interest. Others have been deeply engaged in it in various ways, including through carrying out research, participating in forums, acting as interest groups, participating in trade initiatives, and as traders themselves.

We observed a tension between two quite different perspectives on digital trade. Some were mainly concerned about ensuring that Treaty rights are not compromised in an evolving and often uncertain digital environment. Others were looking for practical steps to take to leverage opportunities and achieve trade benefits for Māori.

Participants also voiced concerns that Māori could be left behind if fundamental inequities are not addressed, such as lack of access to digital technologies.

Overall, Māori rights and interests were broadly defined as, but not limited to: rangatiratanga and mana motuhake (sovereignty and autonomy); taonga (treasure); whakapapa (genealogy and descent); te reo Māori; indigenous identity; whenua (land and country); mahinga kai (traditional food and other natural resources); indigenous knowledge and wisdom; tikanga (custom); content; design; ancestral names; data; and genealogical and biological data.

We observed that Māori rights and interests in digital trade exist in cultural and economic

domains and are interrelated. We identified different levels and types of interest, such as inherent interests of iwi and hapū and interests of Māori individuals and businesses.

We should note here again that direct input from iwi and hapū for this review has been limited, as we spoke directly with representatives from just one iwi/hapū. We should also note that we did not make a specific effort to target iwi/hapū representatives in our engagement, focusing instead on Māori with a broad range of interests in digital trade.

Developing Tiriti-based policy for digital trade

Further work to determine Treaty rights and interests, informed by the findings of WAI2522, is needed to establish Tiriti-based policy in digital trade.

While provisions around data localisation are a focus area, Treaty rights extend to wider aspects of digital trade, including evolving areas like maintaining domestic rights to regulating emerging technologies like AI.



Action to consider:

Develop and communicate a clear statement on how Te Tiriti o Waitangi/Treaty of Waitangi applies to digital trade.

Connecting digital trade with other policy areas

It is important to acknowledge that digital trade does not exist in isolation, and in particular, Māori view digital trade as interrelated with many other aspects of government policy. It is vital, therefore, for government to be joined up in its approach to engaging with Māori on digital trade and other topics.

Action to consider:

Bolster cross-agency collaboration to support Māori participation and representation in the digital economy, including digital trade.

Mātauranga Māori

Participants in the discussions identified a key challenge in how mātauranga Māori should be recognised and respected in trade instruments to

ensure the safe transfer of Māori knowledge through trade.

Some participants saw a need for more leadership from the Ministry in developing prescription about what mātauranga Māori means in the context of digital trade and what it looks like in practice, so that it can be protected and supported. Of course, this will need to be developed in partnership with Māori.

This included a desire to educate our trading partners to understand a Māori worldview and to protect indigenous knowledge. That would lead to first establishing an in-principle commitment between Māori and Crown, as a basis for then delving into architecture and instruments, including influencing trade negotiation positions.

The issues of intellectual property sovereignty, Māori data sovereignty, and Māori data governance were repeatedly raised throughout the discussion as areas where Māori want to have control over decision-making. Participants told us this requires early and ongoing conversations in order to develop detailed positions.

We heard strong views that Māori want more help to identify potential threats and future opportunities so they can anticipate and respond to them. This included support to understand trade policy and the rules of trade. There were also practical suggestions such as being able to access tools to understand and assess digital

opportunities arising from trade agreements (like Plain English explanations of rules and location maps).

Action to consider:

Create mechanisms to make digital trade opportunities and threats more visible to Māori so they can anticipate and respond to them.

During discussions, Māori participants connected with a wide range of digital trade issues from several different perspectives, including a Treaty lens, an indigenous lens, and a trade lens.

To leverage the current momentum and progress of conversations about the future of digital trade, agencies could benefit from increasing their focus and capability in this key area of Tiriti-based rights and interests, so that these issues become an intrinsic part of future trade negotiations.

Action to consider:

Continue developing an understanding of mātauranga Māori, including how it could be treated in future trade treaties and digital trade chapters.



Applications to trade treaty text

To advance what we have heard, we have attempted to interpret how mātauranga Māori could be applied to a modern digital trade chapter. We offer two examples which draw from our understanding of mātauranga Māori in its conceptual application to digital trade, applying it to specific provisions in digital trade chapters.

These two examples derive from possible areas where free trade agreement text could play a role in reflecting Treaty commitments. Further analysis and agreement with Māori would be required before developing into trade positions.

It is critical to develop a detailed understanding of both mātauranga Māori and Treaty applications to each provision of digital trade policy. This would enable informed positions throughout negotiations, as well as the communication of these positions and outcomes possible with Treaty partners. It is also important to acknowledge that the partnership under Te Tiriti o Waitangi/Treaty of Waitangi is dynamic, and will continually adapt with a changing digital trade landscape.

Furthermore, it is important to outline that mātauranga Māori and the Crown's Treaty

obligations extend beyond individual provisions in trade treaty text, so consideration of proposed trade treaty text should undergo full analysis of Te Tiriti o Waitangi/Treaty of Waitangi.

Possible application digital identities - In te ao Māori, identity is whakapapa.²⁸ In this context, and with the emergence of digital identities, early conversations have been progressing between Māori and the government on the establishment of a domestic digital identities trust framework.

It is possible that there is an unexplored role for trade treaties in recognising the specific features of indigeneity as it relates to digital identities, trust frameworks, and endeavours to promote interoperability and standards alignment.

Possible application emerging

technologies - There is likely a strong cultural interaction with emerging technologies like AI. Some modern digital trade treaties commit Parties to "recognise the economic and social importance of developing ethical and governance frameworks... for AI" There is likely value in recognising the cultural importance to indigenous peoples, as well as the economic and social importance of ethical AI governance frameworks.

²⁸ CFO Tech, "It's time for Kiwis to define the meaning of digital identity in Aotearoa", <https://cfotech.co.nz/story/it-s-time->

[for-kiwis-to-define-the-meaning-of-digital-identity-in-aotearoa](https://cfotech.co.nz/story/it-s-time-), retrieved 3 Jul 2023



Trust in the digital world



This section covers the aspects of digital trade relevant to the issue of trust in a digital world, including protection for consumers and businesses, and consumer and business confidence. It covers topics such as:

- privacy
- cyber security
- marketing activities and related consent
- protection from scams and fraud
- the emergence of digital identities
- consumer welfare and protection, and
- the safety interface between the digital and physical worlds.

This section does not cover the free flow of data and the intersection with trust, as this is covered in the next section.

Some of the concepts discussed here have featured in various forms in New Zealand's modern trade agreements, including DEPA.

Like many other trade topics, we can observe a fine balance emerging between regulating for legitimate purposes and setting up trade restrictions with protectionist ambitions. It is likely that societies around the world will face difficult public discussions on the role of the

government in protecting people using the internet and increasingly digital world.

Trust emerged as a key theme during our engagement phase, as a way of capturing a wide range of different initiatives and provisions whose purpose is to help people and businesses feel safe online. Trust in a modern digitised world means different things to different people, driven by their experiences, but almost everyone we spoke to had a view to share.

Conversations on trust were emotive and some shared personal anecdotes. It illustrated that trust is a fragile concept to be protected and people are willing to adjust their online interactions, spending, or trading if they feel that their trust is at risk of being compromised.

Trust is fragile but fundamental

While difficult to completely remove oneself from the digital world, given how intertwined with modern society it now is, we heard anecdotes from participants where they scaled back on online interactions following a shift in perception about online safety. Some of those anecdotes included businesses reducing their data gathering and analysis after concerns about data breaches and the associated ramifications, as

well as consumers being less willing to shop online after a bad experience.

The role of trade policy

Trade policy can have a role in encouraging the establishment of better systems between and within trading partners on a range of matters relating to trust. It can also help avoid friction between systems by aligning standards or approaches where possible. This section breaks down the elements of trust that we identified.

It is important to note that when these ideas of trust work well, they have the potential to provide the right protection for consumers and businesses, while acting as an enabler in digital trading.

Privacy

Participants acknowledged that privacy rights and their associated regulations are vital for maintaining trust in a digitised world and praised New Zealand's domestic regime for privacy protection.

There was frustration in trading across borders and having to recode software, or make expensive alterations to business operations, to meet a new market's compliance. Some argued



that the privacy outcomes were no better, indeed sometimes worse, after going through the process of proving compliance with a new market.

Efforts to achieve mutual recognition with other markets in privacy standards, where those other regimes genuinely achieve satisfactory outcomes, could help with reducing barriers for New Zealand developers while adhering to our standards. There may also be a role for unilateral recognition of other countries' privacy standards, as demonstrated with the European Union recognising New Zealand's privacy regime as "adequate" by the General Data Protection Regulation.

We recognise that, like many other topics in digital trade, other agencies hold primary responsibility for privacy.

Principle - Ensure New Zealand's privacy standards are upheld online and seek mutual recognition arrangements.

Cyber security

We heard about the challenges of managing good cyber security practices while operating in the modern digital trade world, especially for small businesses. Some participants spoke with fear and caution about the consequences of being part of a major data breach, and the subsequent fines and reputational damage. Some spoke about the cost in protecting the data from breaches.

For consumers, cyber security is vital and has a direct interaction with trust. We heard anecdotes suggesting that the recent Latitude Financial Services data breach had impacted consumers' willingness to share sensitive data. While some of this apprehension may be helpful in reducing the volume of unnecessary data shared, it is likely that some people will be avoiding interactions or trading online because of that event.

Participants generally spoke about the increasing threat from cyber security breaches, the implications for trading online, and were unsure how government and trade policy could help.

Cyber security provisions appear in many modern trade treaties, with promises around cooperation and building capabilities of national entities. We recommend continuing to pursue these outcomes.

Principle - Push for cooperation on cyber security matters, including sharing best practice among trading partners.

Marketing activities and related consent

Unsolicited commercial email (otherwise known as "spam") is a topic that appears in many modern digital trade chapters and is often associated with broader concepts of trust.

We heard very little about spam in our engagement. It is likely that with well-established regulatory systems in New Zealand, and larger markets like the EU, good regulation against unsolicited marketing has become the norm. Furthermore, private companies have taken leaps in filtering spam messages into junk folders, thereby limiting the nuisance from these messages.

Nevertheless, there is likely value in keeping up the momentum on reducing unsolicited commercial email traffic by continuing to pursue well-established provisions.



Scams and fraud

In the context of online safety and security, and trust in general, some participants raised concerns about online scams. Participants noted that it felt like petty scams had recently increased in frequency and sophistication. Some participants wondered whether there was a role for inter-governmental agreements.

We have not researched inter-governmental agreements on managing broad-reach online scams or targeted fraudulent behaviour beyond trade treaties. However, the nature of the discussion had strong parallels with the spam provisions negotiated into modern FTAs, where Parties commit to maintaining a domestic regime for policing non-compliant behaviour.

Further work on scams and fraud, including provisions in digital trade chapters, should follow engagement with domestic agencies that have a role in managing these risks, such as Police and the Department of Internal Affairs.

Principle - Promote the application of measures to manage unsolicited marketing messages and enforcement on scams and fraud.

Digital identities

Digital identities have emerged as a mechanism for formalising trust in digital trade. Digital identities are digital representations of identity information to help individuals and organisations prove who they are online.

For example, a firm or individual overseas could verify the identity of a New Zealand firm through a digital identity, as issued by the New Zealand government. Therefore, insofar as that firm or individual overseas trusts the New Zealand government, they can trust that that digital identity confirms the identity of the firm.

Participants in our engagement mentioned the significant opportunities that digital identities can offer. Once embedded and commonly accepted, digital identities have the potential to increase regional and global connectivity if they are interoperable.

We understand that digital identities are emerging from a range of different authorising actors beyond just governments, including banks, which some participants pointed out may prove a useful opportunity to trial interoperability between different trust frameworks. Trust frameworks may play an important role in open banking in the future, where authorised third parties can draw data from, or send data to, banking institutions on behalf of users.

New Zealand has recently introduced and passed the Digital Identity Services Trust Framework Act 2023, which aims to promote the provision of secure and trusted digital identity services that meet essential minimum requirements for security, privacy, identification management, and interoperability.

Trade policy should continue playing a role in ensuring that digital identities among like-minded countries are interoperable, to help harness the opportunities in improving trust that they offer.²⁹

²⁹ Module 7 of DEPA provides an example



Principle - Promote standards development, alignment, interoperability, and cooperation on digital identities.

Consumer welfare

In discussions on consumer welfare, we heard a mix of comments about the unregulated internet, with some participants sharing personal anecdotes of buying clothes or other products online to find that they did not meet their expectations when they arrived.

Some participants noted that things like online reviews on large platforms helped provide some reassurance of the standard of the products for sale, but that they were easily exploitable with fake reviews. Furthermore, we observe that those review mechanisms are commercially driven and ultimately there to increase sales.

Other platforms offered some dispute or consumer refund mechanism, but stakeholders indicated that it was often onerous and not worth their time relative to the value of the product that they had purchased.

We observed that the level of consumer protection afforded to purchases offline and in-store, does not translate to the international

online environment due to vendors and consumers being in different jurisdictions and therefore regulatory systems.

The net effect of this is likely to be a wariness from consumers in purchasing products online, except for well-known brands and platforms, thus having a negative effect on competition.

We also heard from stakeholders that there is a risk to consumers in buying products online, perhaps not realising that they were from offshore and potentially being in breach of biosecurity regulations.

Principle - Promote the same levels of protection for online consumers as any other consumers.

Interface with digital and physical worlds

We heard from some participants, with a particular interest in digital security, that they believed the policy interface between the digital and physical worlds needs deeper consideration. As discussed at length in this report, the distinction between digital and physical worlds is becoming irrelevant.

Participants pointed out that we maintain safety standards on many physical things in societies, like safety checks for cars, but that there is very little regulatory assurance over the technology components of those physical goods. An example spoken of, though not verified by us, is around vehicles with an increasing reliance on software. For example, at the lower end of current technology, sensors in cars to inform the driver of a nearby moving vehicle and at the higher end, auto-stopping to avoid collisions. A warrant of fitness requires brakes to be checked, but not the software that automatically engages those brakes in an incident.

This could become a larger issue as society increasingly automates the movement, networking, and operation of physical objects, especially where the technology is helping to manage a degree of risk.

This issue could extend to cyber security protection mechanisms, for example, ensuring that downloaded updates to software in cars is not compromised. We have not explored that issue any further and observe in the first instance that it is an issue for domestic regulators. Nevertheless, it is likely that trade agreements have a role to play in managing the interface between the digital and physical worlds.

It is uncertain what the role of digital trade commitments will be on the digital and physical



world interface in future. A narrow view could have some form of digital assessments on physical goods as they enter the border and a corresponding standards and accreditation scheme. This could be akin to initial safety tests on road vehicles. A wider view could consider that those physical goods require periodic software updates, which may need oversight and governing, and therefore could interact with digital trade commitments. While this landscape remains uncertain, we recommend building cooperation and sharing of best practice.

Principle - Promote cooperation on matters relating to digitising the physical world and ensure the government's right to regulate.

Mis- and disinformation

We heard concerns about the rising threat from mis- and disinformation online. Some participants questioned the role of government and whether trade treaties were a tool we could use to combat its spread.

It is possible that provisions committing Parties to manage mis- and disinformation could start appearing in trade treaties. For example, by requiring Parties to develop and enforce domestic settings banning the use of spambots to disseminate disinformation across borders and requiring firms to authenticate users attempting to disseminate disinformation across borders.³⁰

We note, however, the fine balance that societies need to strike in protecting rights to free speech, while reducing the reach and proliferation of mis- and disinformation. These are decisions that domestic governments would need to work through before committing to action in a trade treaty.

³⁰ Centre for International Governance Innovation, "Could Trade Agreements Help Address the Wicked Problem of Cross-Border Disinformation?" <https://www.cigionline.org/publications/could-trade-agreements-help-address-the-wicked-problem-of-cross-border-disinformation/>, retrieved 20 Jun 2023



Preparing for new technology



This section speaks about the rapidly changing technological landscape. It covers new applications for technology, the associated evolving societal attitudes, and the role of digital trade commitments.

DEPA and the UK FTA include provisions on emerging technologies like artificial intelligence, recognising the emerging opportunity and threat landscape that those technologies represent.

The rapidly evolving landscape of technology, and ever-more sophisticated data collection and analysis techniques, presents an enormous opportunity for society. AI will further liberate us of repetitive tasks and the better use of data can help us further our understanding of the world around us.

A wide range of people, both individuals and those representing businesses or other entities, wanted to comment on these topics, particularly AI. Participants expressed a range of positions, from uneasiness about the unknown and how quickly new technologies were evolving, through to excitement for the emerging opportunities.

We acknowledged in our engagements that AI was the contemporary topic that was generating the most attention. We highlighted, however, that trade agreements often outlive technology cycles and that discussions in five years, or five years ago, might have generated a different balance of comments. It was recognised, for example, that 3D printing would have generated a lot of discussion a few years ago.

Some people, especially Māori, discussed data challenges, particularly focusing on jurisdictional challenges that data storage and processing represented.

Technology is changing rapidly

The technological landscape is changing rapidly. New technology frequently emerges and societal attitudes and attention are continually evolving. For example, AI has entered into our general conscience following the emergence of applications like ChatGPT, despite the technology behind it existing for longer.

We heard that the evolution of technology is happening faster than many people can keep up with. Consumers, businesses, and Māori leaders struggle to quickly assess the threats and opportunities that new technology, or its applications, can present.

Māori in particular start from a point of disadvantage in assessing the risks and opportunities of new technology shifts, with lower digital uptake than the wider population.³¹ Furthermore, Māori business owners mentioned that they often have limited capacity and capability to meaningfully use these innovations.

Lastly, the distinction between digital and physical worlds is becoming less clear, and less relevant, with the emergence of the Internet of Things, for example. We discussed the interface between the digital and physical worlds in the previous section.

³¹ Motu Economic and Public Policy Research 2019. "Digital inclusion and wellbeing in New Zealand" Wellington, New Zealand.



New technologies are front of mind

Artificial intelligence

With the emergence of ChatGPT and other generative AI applications that are accessible to the general public, AI is front and centre of our participants' minds.

We heard various concerns about AI technology, from a lack of understanding of the algorithms that it uses to concerns around the interface with Māori culture and identify.

We heard concerns about the translation of te reo Māori and the preparation of karakia and whakataukī. Some participants saw the value in having better translations more readily available to people, while some noted that the translations may be of lower quality than for other languages with larger volumes of data. Others spoke of the opportunities that more accessible translation services could create in improving language competency across the country. They also, however, raised concerns about taonga like the whakataukī, which carry specific cultural protocols.

3D printing and other technologies

Participants spent little time talking about other technologies. When prompted, they acknowledged that it's difficult to predict what

is coming next and what society will need to do to respond to its opportunities and threats.

Some participants raised 3D printing as a potential challenge for managing intellectual property (for example, 3D printing taonga like carvings) and security (for example, 3D printing controlled weapons).

Governments are under pressure to 'get ahead'

There is complexity in the intersection between businesses' desire to make use of new tools (like AI), but also government regulations that aim to manage policy problems.

We heard concern from participants about the ability and pace of governments across the world to properly respond to the emerging opportunities and threats.

Some mentioned opportunities to have an open dialogue and share experiences and lessons with other countries that are facing similar challenges.

Approach future technology flexibly

Technological neutrality

With technology moving at the pace it is, it is unclear about what changes will be at the forefront next. While new emerging technology such as AI is front of mind now, it is likely that another new technology, or new application of a current technology, will command our attention in the near future.

We also do not yet know enough about particular technologies to effectively regulate, so a principles-based approach is appropriate, such as DEPA's promotion of AI governance frameworks.

Above all, given how technology and its application change, there is a need to consider regulation, standards alignment, and protection in general, in a technology agnostic way and to enable individual countries to regulate to protect its own people.

Right to regulate

New technologies and their threats and opportunities will likely further reveal unique contexts of different countries, like the New Zealand government's relationship with



tangata whenua or different social attitudes among different cultures around the world. As such, it is important to respect and protect individual countries' right to regulate emerging technologies, but work together and promote international standards alignment where possible.

Principle - Remain technology-agnostic and respect governments' right to regulate to protect against emerging threats.



Managing the storage, location and flows of data



In its summary of digital trade, the OECD points out:

“Underpinning digital trade is the movement of data. Data is not only a means of production, it is also an asset that can itself be traded, and a means through which [Global Value Chains] are organised and services delivered.”³²

Data issues are emerging as common features of modern trade agreements, covering things like the location of computing facilities, preventing Parties from requiring a person to use or locate computing facilities in a country as a condition for conducting business.

There are a range of challenges and balances for governments to make in provisions relating to data, for example, in balancing opportunities from smoother flowing trade while recognising jurisdictional challenges.

The smooth flow of data

The smooth flow of data is a core component of digital trade. When data is flowing smoothly across borders with trust, there is a better ability

to harness the opportunities of the digital economy and support the trade of goods and services.

Recognising the critical role that it plays in digital trade, it is important to eliminate unnecessary or unjustified restrictions on the flow of data, while maintaining the space to regulate for legitimate policy objectives.

Principle - Seek to remove restrictions on the flow of data across borders.

Data standards and interoperability

There are significant opportunities to alleviate barriers and harness opportunities when trading partners encourage the adoption of common data formats and languages in their own countries, supporting interoperability between markets and firms.

We heard concerns through our engagement that the fragmentation of data standards can

impede the ability of data flows and increase barriers and compliance costs to businesses.

Interoperable global data standards are a way to avoid this fragmentation by helping to manage the responsible and smooth flow of data across borders. Interoperable standards will make digital trade more efficient.

Through our engagement, advocates of smoother, more enabling trade praised recent agreements, including DEPA. DEPA was seen as a good foundation, although one that needs to continue to evolve through further implementation efforts and further accession from other countries.

Some participants cited the proliferation of agreements covering digital trade matters in the Asia Pacific region, highlighting an emerging risk of fragmentation in data standards in the region. DEPA's branding as an open agreement, with South Korea recently concluding negotiations to join, and further interest from China, Costa Rica, Peru, Canada and the United Arab Emirates, makes it a promising mechanism to help alleviate fragmentation of data exchange in the region.

³² OECD "The impact of digitalisation on trade" Retrieved from: <https://www.oecd.org/trade/topics/digital-trade/> 30 June 2023

Setting global data standards

There are a range of established international initiatives for preparing global data standards, with participation from a wide range of countries. We acknowledge that participating and influencing the direction of global data standard-setting is a resource-intensive exercise. We therefore recommend that the Ministry promotes the adoption and implementation of existing standards from international bodies and, working with partner agencies, prioritises which global data processes the New Zealand government should participate in.

Principle - Participate in setting, and promoting alignment with, international standards on the exchange and interoperability of data.

We have not considered which international bodies New Zealand should prioritise participating in, or promoting and adopting standards from. We recommend further work in determining which international standards bodies to work with.

Data localisation and data sovereignty

The WAI2522 claim included findings on data localisation and sovereignty.

Data localisation measures, such as the requirements for data to be stored and processed in a country's territory, can act as a barrier to digital trade.

Recent digital trade agreements, such as DEPA, include commitments to support cross-border transfers and limit localisation mandates.

These measures can increase costs for businesses by requiring them to build data storage centres or use local facilities in the countries they are trading with. While larger businesses may have the resources to navigate data localisation requirements, many smaller businesses do not have the same capacity and can miss out on these trade opportunities.

On the other hand, there are proponents of localisation measures. This is often linked to concerns about data sovereignty and other countries' governments' ability to require sharing of that data.

Concerns were raised about the prospect of storing sensitive personal data offshore. There were concerns about the overreach of foreign

governments, which is something that we do not fully understand the risks of yet.

When asked about the nature of sensitive data, participants generally referred to information that the government gathers and holds, including information on income and welfare, health, and education, especially as it relates to children.

There was also concern about breaches and associated remediation when data is stored overseas in a country where our laws don't have an influence.

We also heard that Māori view data about themselves as an extension of themselves, which makes the collection, processing, and storage of that data overseas uncomfortable. Some Māori participants, however, acknowledged that there is a spectrum of data collection in society, with some accepting that requiring data collected in social media presents a substantially different challenge to government-collected data.

Those comments were not, however, limited to discussions with Māori. Many other participants expressed concern about the idea of storing personal information in data centres that are beholden to jurisdictions and rules other than those set by the New Zealand government.



The link between location and security

We heard some push back on localisation arguments, particularly framed around security perceptions. Some participants advocating for the removal of localisation requirements argued that the security of data is not dependent on location, but rather the specific security practices that the data centre maintains. They argued that, all else being equal, data stored in New Zealand or any other country is no more or less secure.

Those participants argued that the focus should shift away from localisation, and more towards methods used to store that information securely including technical, physical, and administrative controls implemented by the service provider.

Jurisdictional challenges

Other participants pitched that the primary argument for localisation is clarity on the jurisdictions within which that data resided. For example, data collected, processed, and stored in New Zealand, by a New Zealand entity, about New Zealanders, should be beholden only to the laws and regulations set by the New Zealand government. If that same data is stored in other countries, then participants argued that those rules start to become murkier.

Some argued that by allowing our information to be stored in other countries, we are heavily relying on the goodwill of those countries to govern that data in a similar or consistent way as we would expect in New Zealand. The concerns shared were bolstered with observations that data is becoming increasingly valuable and sought-after.

Principle - Seek the removal of data localisation requirements, while maintaining the right to regulate for legitimate policy purposes.

Carve-outs and exemptions

Data localisation provisions in trade treaties are commonly accompanied with exemptions to achieve a legitimate policy objective.

Some participants raised concerns that these carve-outs in trade treaties create the risk of loopholes that other governments with protectionist motivations could exploit. Some further argued that in negotiating these provisions, the Ministry should properly assess and understand these risks, and consider tighter language where possible, while ensuring that the

New Zealand government can use the exemptions for its intended purposes.

Cloud computing

Cloud computing is also becoming increasingly common and offers opportunities to reduce physical reliance on servers. It can reduce the startup costs of data collection and storage, by shifting the investment from a capital cost in establishing a server to a subscription service with costs proportionate to the individual requirements.

However, we heard that we shouldn't assume that the move away from having localised databases is inevitable, with some participants observing a renaissance of localised servers. The primary reasons shared were around cost and perception of control. Some argued that after a certain amount of data is stored, the business case to invest in physical servers starts to stack up. On control, the concerns were as outlined above in the jurisdictional challenges.

New Zealand's trade treaties, like DEPA, ensure that Parties do not require localisation of computing facilities in their territory as a condition of doing business, except in certain circumstances. This enables commercial flexibility on where to store and process data when doing business in countries subject to those agreements.



Open government data

We did not hear many comments on trade rules around open government data, though we acknowledge that does not necessarily mean there are not opportunities available.

Open government data provisions often acknowledge the value of making certain government data available to the public. Where that data is made available, treaties often compel Parties to make that data available in machine-readable formats.

These are sensible provisions for maximising the social and economic value of data collected and shared by government entities.



Future engagement on digital trade



Engagement on digital trade has challenges

Digital trade has an enormous breadth and depth

While we know that there is no single agreed definition of digital trade, our engagement made clear that digital trade means different things to different people.

We observed how extensive and ambiguous the concept of digital trade is. Almost everyone we spoke to had a different perspective about what comes under the banner of digital trade.

Some wanted to focus on narrow issues such as how technology can help lower the administrative burden of trading physical goods across borders, while others wanted to focus on everything that takes place on a digital platform, such as cyber security and emerging technology like AI.

This mix of breadth and depth is particularly challenging in an engagement context. Very few of those we spoke to were confident in speaking to both the breadth and depth of digital trade.

There are opportunities for future engagement

Digital trade needs to be made "real"

Through the engagement, we heard different requests to make trade, and digital trade, real and applicable for those on the ground.

Part of this is breaking down digital trade into different topics and components for participants to engage with, such as the role of future technology in trading goods online.

This helped participants see themselves and their interest in digital trade, though many still felt challenged to comment on the technical specifics.

In future engagements on digital trade matters, it may make more sense to consider and engage on topics within digital trade individually. We hypothesise that hosting a workshop on the possible future treaties governing artificial intelligence will gather a strong audience, for example.

Making trade more accessible

Through our engagement, we heard a desire for more practical tools to understand digital trade and the opportunities arising from trade agreements.

There was an unfamiliarity of international agreements and digital trade chapters, and what they meant in practice. This sentiment was strongly echoed in workshops with Māori.

As part of this, we heard requests to make trade and digital trade, real and applicable for those on the ground. Suggestions included plain English explanation of rules, with maps of where they apply to.

Building trust in policy development

Digital trade, and trade more generally, is complex and hard to engage with when it is not your everyday environment. Negotiations are necessarily often kept behind closed doors, and information shared is often high-level covering complex topics that some people struggle to navigate.

We have suggested in this report that the Ministry considers approaches to better communicate the opportunities and trade-offs in digital trade, including in the provisions that it is



negotiating. It is likely that as these communications improve, the understanding, and eventually trust, in digital trade may also improve.

As suggested by the participants, some practical steps could be developing plain English explanations of provisions in trade agreements and maps of the markets they apply to.

With a greater understanding of the digital trade environment, Māori and other stakeholders will be able to share perspectives on a wider range of topics in digital trade, thereby further informing New Zealand's position.

Action to consider:

Ensure communication of opportunities and trade-offs in digital trade is clear and transparent to both stakeholders and Te Tiriti o Waitangi/Treaty of Waitangi partners.

Digital capability building

Some participants praised recent efforts from the Ministry of Business, Innovation and Employment

in its digital boost programme, noting that it had helped many small businesses draw on opportunities that technology offers. Those participants suggested that the Ministry considers a similar approach, or connects with existing networks, to help boost understanding of digital trade opportunities and how to harness them.³³

Inclusion in digital trade

Stakeholders spoke about inclusion in digital trade across different topics, across most of the engagement. Some observed that objectives on digital inclusion are better suited to domestic policy processes and that provisions in trade agreements are only general.

Other stakeholders made broader observations that decreasing the fixed costs of doing business, such as enabling subscription services over capital investments, would support inclusion of more small and medium enterprises in digital trade.

Efforts in building digital capability and making trade policy initiatives more accessible will likely improve inclusion in trade, including digital trade, as more people become aware of the

opportunities available and develop the skills to harness those opportunities.

³³ We note the work from New Zealand Trade and Enterprise in digital capability building



Appendices



Appendix 1: Our approach to the review

Engagement methodology

We set out to achieve a set of engagement outcomes

We set out to achieve four key outcomes through our engagement:

- Focus on the real-world experiences of people that conduct international trade and what they feel will improve digital trade policy.
- Identify what is working well and what opportunities may exist to improve our digital trade policy settings.
- Gather views on what is most important to Māori and how to give effect to Te Tiriti o Waitangi/Treaty of Waitangi in digital trade.
- Focus on getting information that can be used in the development of digital trade principles to guide future digital trade policy, including negotiations and advocacy domestically and internationally.

We undertook pre-engagement with key stakeholders

We engaged early with several stakeholders to understand the best approach we could take that would yield high-quality input. This included Stephen Jacobi from the New Zealand International Business Forum, Carrie Stoddart-Smith from Opinio-Native, Victoria Blood and Paula Browning from WeCreate, Graeme Muller from NZTech, and Jeremy Gardiner from New Zealand Trade and Enterprise.

We tabled our initial framework for engagement, 'areas of investigation' (outlined below), and asked for views on how people would like to engage with digital trade.

We heard that stakeholders were more likely to engage with individual topics within digital trade that we could support with our framework. We also heard that online channels are likely to be the most effective.

Our engagement was extensive and broad

Our engagement spanned from targeted interviews across a range of stakeholder groups

through to broad workshops where a range of stakeholders could participate.

This report seeks to capture as many of the views expressed as possible, but naturally, not everything will be covered in the detail shared with us.

We gathered input from:

- Māori and Māori business owners and networks
- industry groups
- businesses that trade in physical and weightless goods
- organisations that provide digital trade services
- individuals who have an interest in digital trade
- a range of businesses and representative bodies with perspectives on cyber security, data, privacy and protection, and
- New Zealand government agencies.

We did this across:

- 30 in-depth interviews, which allowed us to delve deeper into emerging themes and specific topics within digital trade



- three online public general interest workshops where we were able to gather broad sentiment and capture wide perspectives
- two Māori and digital trade workshops to gather insights on Māori interests (one online and one in-person in Hamilton)
- three industry workshops that allowed us to explore particular areas with different industries and network groups
- two regional public workshops that enabled us to diversify our input and gather local perspectives, and
- two government workshops where we outlined emerging themes and gathered input on what they might mean for policy settings.

These are outlined in Appendix 2.

We want to acknowledge that many stakeholders are approached for these sorts of reviews often, which adds up to a significant request for time from the government. It is likely that others with helpful perspectives were not able to share that time with us in this review.

Organising digital trade discussions

Six areas of investigation led our engagement

We developed an 'areas of investigation' framework to provide a lens for us to explore a range of topics across digital trade.

These areas of investigation are across digital trade, Free Trade Agreement chapters, international public announcements of digital trade priorities, and our own interpretation of what is specific to Aotearoa.

Māori rights and interests sit across all six areas of investigation, with specific points on protection in digital trade and opportunities highlighted in "Mātauranga Māori".

Protection in digital trade

This is focused on aspects such as consumer protection (including privacy rights); data protection; cyber security; the protection of intellectual property; and the regulation for legitimate goals such as responding to changes in societal views.

Digital trade is enabling

This is focused on avoiding and eliminating unnecessary trade barriers; the digitisation of

trade documents; non-discriminatory rules between goods and services; the free-flow of data across international borders; and the interoperability of regulation.

Transparent (open) digital trade

This is focused on transparent government rules and regulations; communication of changes to rules and regulations with trading partners and the public; valuing open government data; and best-practice sharing between trade partners.

Note that we have revised the language on this focus area, changing to 'transparency' rather than "openness" following feedback from stakeholders.

Future-focused digital trade

This is focused on the rapidly evolving technological landscape, ensuring that our settings are right to ensure the responsible development of emerging technologies, while getting ourselves ready to harness the opportunities that they present.

Mātauranga Māori in digital trade

This is focused on aspects such as the protection of Māori rights and interests in data management; enabling and engaging Māori to harness opportunities in digital trade; and recognising and protecting taonga and mātauranga Māori.



Inclusive digital trade

This is focused on aspects such as ensuring the benefits of trade flow to all parts of the community; promoting digital trade participation in developing countries; and ensuring digital trade opportunities can be realised by all businesses.

We then moved to sub-topics

The 'areas for investigation' framework served as a list of considerations to apply throughout engagement. After this engagement, we reviewed how to best present and share findings, principles, and further considerations.

We adapted our structure from areas of investigation into sub-sections based on two factors:

- themes in our engagement discussions, and
- the modular structure of the Digital Economy Partnership Agreement (DEPA).

Using digital tools to facilitate physical goods across borders covers topics like paperless and data-enabled trading, electronic invoicing, and electronic signatures to help smooth trade processes from customs compliance procedures through to banking and insurance.

Trading in weightless goods considers the opportunities and challenges faced by New Zealand exporters of goods that can be delivered

digitally. It covers topics like our evolving representation requirements to big technology firms, and trade topics like customs duties on digital goods and protecting source code.

Māori and digital trade considers the application of Te Tiriti o Waitangi in the context of digital trade, the protection of mātauranga Māori, and opportunities for Māori participation in digital trade.

Trust in the digital world covers different factors that influence whether and how consumers and businesses can feel safe operating online, considering things like privacy, cyber security, spam and scams, consumer welfare, considerations where the digital and physical worlds intersect, and the role of digital identities in building trust online.

Preparing for new technology and managing storage, location and flows of data considers the rapidly evolving climate of technology and data, and the social attitudes surrounding it. It considers challenges like localisation requirements for computing facilities and global data standards.

Naturally, there are some discussions that straddle these subsections.

Trade language

We heard in the engagement that language used in trade policy is difficult to understand for those not deeply involved in the topic. Equally, we acknowledge that some jargon is necessary.

In this report, we have applied plain English principles, avoiding jargon terms where possible and where unavoidable, we have explained their meaning.

Managing the scope

We also acknowledge that digital trade does not exist in a vacuum. It has clear interactions with domestic government policy, and other areas of trade policy.

As expected, we heard a broad set of issues that participants wanted to raise but were tangential to digital trade and therefore this review. To respect the time that participants shared with us, we have captured these comments in this report but noted when they are considered out of scope.



Appendix 2: Engagement

30 1:1 INTERVIEWS

Amazon Web Services — *Judith Hanna**
Business New Zealand — *Josh Tan*
CatalystIT — *Chris Cormack*
CertNZ — *John Mollo*
Digital Health Association — *Ryl Jensen*
Digital Natives — *Nikora Ngaropo*
Dinosaur Polo Club — *Chantelle Cole*
Fintech — *Jason Roberts*
Fonterra — *Justine Arroll, Dan Wright*
GS1 New Zealand — *Peter Stevens*
Honey Consulting — *Stephanie Honey*
Innovise — *Roger Ford*
Kiwa Digital — *Steven Renata*
Kiwigarden — *Joanne Edwards*
KiwiSaas — *Bruce Jarvis*
Netsafe — *Brent Carey*
NewFound — *James Brown*
New Zealand International Business Forum — *Stephen Jacobi*
NZCTU — *Jack Foster, Richard Wagstaff*
PaymentsNZ — *Jane Retimana*
Poutama Trust — *Koro Dickinson*
RedShield — *Andy Prow*
Te Matarau — *Lee Timutimu*
Te Matarau/Māori Tech network — *Elle Archer*
University of Auckland — *Jane Kelsey*
Te Kotahi Research Institute, University of Waikato — *Jason Mika, Maui Hudson*
Te Taumata — *Chris Insley*
Victoria University of Wellington — *Alan Bollard*
WeCreate — *Paula Browning, Jo Oliver, Sandy Gildea, Tāwera Tahuri*

3 INDUSTRY WORKSHOPS

New Zealand International Business Forum
 (including a range of business leaders from across New Zealand's largest internationally-orientated companies).

New Zealand Tech
 (including representatives from gaming, InsureTech, FinTech industries).

WeCreate
 (including representatives from film, books, and music industries).

5 OPEN WORKSHOPS

Three **online public** general interest workshops.

Two **Māori and digital trade workshops** (one online, and one in-person in Hamilton).

One **in-person public general interest workshop** in Hamilton and one in-person public general interest workshop in Auckland.

2 GOVERNMENT WORKSHOPS

Two workshops with officials across government (including the **Ministry for Primary Industries, New Zealand Customs Service, Department of Internal Affairs, Ministry of Business, Innovation and Employment, Ministry of Justice, Office of the Privacy Commissioner**).



Appendix 3: Glossary of terminology

APEC	Asia Pacific Economic Cooperation
CITES	Convention on the International Trade of Endangered Species
Concerted Open Plurilateralism	<p>Concerted open plurilateralism has an explicitly global focus and hinges on three interrelated elements:</p> <ul style="list-style-type: none"> • it is an instrument open to all that can meet the standard established through the agreement • the negotiation of the instrument is undertaken in a way that supports and complements the multilateral trading system, • the plurilateral instrument should contain institutional mechanisms that ensure the agreement can be closely aligned and integrated into the WTO over time.
CPTPP	<p>Comprehensive and Progressive agreement for the Trans-Pacific Partnership.</p> <p>A trade agreement between: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru Singapore and Viet Nam. The United Kingdom has also since concluded negotiations to join the bloc.</p>
DEPA	<p>Digital Economy Partnership Agreement.</p> <p>A digital trade agreement between: Chile, New Zealand and Singapore. The Republic of Korea has also agreed to join the agreement.</p>
FTA	Free Trade Agreement.
HS	<p>Harmonised System.</p> <p>A standardised numeric method for classifying traded products.</p>



Internet of things	Describes devices with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the internet or other communications networks.
Kimberley Process	An international certification scheme to prevent conflict diamonds from entering the mainstream rough diamond market.
OECD	Organisation for Economic Cooperation and Development
SKU	Stock Keeping Unit. A unique identifier used in retail and manufacturing industries to keep track of inventory.
SPAM	Unsolicited messages sent in bulk by email.
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UNCITRAL	United Nations Commission on International Trade Law
Weightless trade	A term used in engagement during this review, to refer to goods and services that can be delivered digitally.
WTO	World Trade Organization



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