

---

Te Moni Anamata – Aparangi ā  
Te Pūtea Matua

Future of Money – Central Bank  
Digital Currency

Payments NZ submission to the Reserve Bank

---

**December 2021**

## Introduction

1. Thank you for the opportunity to provide our views on the issues paper regarding a general-purpose Central Bank Digital Currency (CBDC).
2. We support the publication of the issues paper as an important first step in working through the benefits, risks, and practicalities of introducing a general purpose CBDC to provide Kiwis with a choice of central bank money in physical and digital forms.
3. For the purposes of this submission, unless the context requires otherwise, we use the term CBDC to refer to a general purpose CBDC. Payments NZ has opted to provide this written submission in lieu of answering the detailed questionnaire.

## Summary

4. We believe the time is right for the Reserve Bank to commence its engagement on the potential role of a CBDC in the domestic ecosystem.
5. The global digital transformation currently in progress around the world presents an opportunity:
  - To re-evaluate and shape the role of money within the future digital economy of Aotearoa New Zealand and to integrate this with efforts underway across government to define what is important for the nation's digital future.<sup>1</sup>
  - For the Reserve Bank and industry to coordinate their efforts to support the payments ecosystem of the future and, in that context, to determine the roles a CBDC would best fulfil.
6. We hold this view for the following reasons:
  - The next generation of payments will need to support a highly digital economy which is likely to be built on an increasingly diverse array of payment solutions offered by a growing number of players. Increasingly payments are tightly woven into the platforms and networks that are the hallmark of the digital economy.
  - Technology now means payments can potentially be initiated from anywhere, without human intervention and using forms of payment that have been designed solely from a digital-first perspective and which can scale rapidly both at an individual and aggregate level. Digital money and the payments ecosystem of the future needs to reflect these considerations.
  - A world class payments system is one of the fundamental preconditions for becoming a world class digital nation and a flourishing and prosperous digital economy for Aotearoa. Kiwis need to be able to access fast, efficient, and reliable payments, and to benefit from an inclusive, innovative, competitive, and resilient

---

<sup>1</sup> [Te koke ki tētahi Rautaki Matihiko mō Aotearoa: Pepa Matapaki -Towards a Digital Strategy for Aotearoa: Discussion Document](#)

payments system. This is a fundamental consideration for the work of Payments NZ and especially of our Payments Direction programme.

7. The exploration of the role of a CBDC in Aotearoa New Zealand should be:
  - Framed around national infrastructure which references other efforts currently underway to define our digital future, including the draft Digital Strategy for Aotearoa.
  - Informed by a deep and wide engagement with a broad spectrum of New Zealanders to allow a national lens to be brought to this important issue.
  - Less weighted towards current payment system constraints; the majority of which have a resolution path in place, and more focused on future-proofed system enablement.
  
8. We propose the issues paper could:
  - *Be more future focused* – at present it is under-weighted on the wider long term strategic rationale for establishing a CBDC and how that relates to other work underway across government to build an inclusive and trusted world-class digital nation and digital economy.
  - *Enhance its emphasis on maximising synergies* – investigating real time capability is a current industry priority, and we suggest the focus should be on maximising the potential synergies between a CBDC and any new real time capabilities that might be introduced.
  - *Expand the policy discussion* - to address, among other things, the potential role of a CBDC in furthering sustainability objectives, supporting future digital contexts and the use of a CBDC in both wholesale and industrial deployments.
  - *Include wholesale CBDC considerations in scope from the beginning* - the early broadening of the policy discussion and scope of considerations should include both wholesale and industrial CBDC deployments.
  - *Bring forward the discussion on use cases* – to help inform decisions about the role of a CBDC in the domestic ecosystem, how that role could be best supported by both current and future industry Initiatives, and the potential impact on the commercial banking sector.
  - *Give greater focus to a consumer data right and the digital identity trust framework* – so the full benefits of a CDR can be realised through information on CBDC balances and transaction histories being shared with third parties, and through the use of digital identify in any CBDC focused wallets.

- *Consider interoperability in the broadest sense* – in addition to interoperability with existing payment systems, the discussion should also extend to a full range of cross border scenarios, interoperability with all forms of private money, with other FMIs and where NZ accepts other nation's CBDCs at point of sale.
  - *Consider two additional design principles* – i) one which speaks to comparative advantage and ii) another which speaks directly to the treatment of data and the potential for a CBDC to support informative transactions.
  - *Signal that legislative support will be required* - the expectation of enabling legislation should be locked in early in the process and be reflected in the multi-stage approach set out in the issues paper.
  - *Expand the discussion of AML/CFT considerations* – specifically how applying the AML/CFT requirements to a CBDC could be used to improve the efficiency of current AML/CFT settings on payment systems generally.
9. Realising the full potential of a CBDC will require strategic alignment across all parties involved in the ecosystem. A task force structure like that used in the United Kingdom could be beneficial in that regard. We suggest Payments NZ could leverage its position as a coordinating industry body to assist in bringing about that strategic alignment.
10. In the balance of this submission we:
- Comment on delivering payments modernisation.
  - Comment on the innovation and competition landscape.
  - Make selected observations on the issues paper.
  - Set out suggested next steps.

## Delivering payments modernisation

11. Delivering payments modernisation through digital innovation is one of the opportunities for fostering a more resilient, productive, sustainable, and inclusive economy. As you know, the payment industry's current approach to achieving these outcomes can be found in the [Payments Modernisation Plan \(PMP\)](#).
12. The PMP sets out a blueprint for the future payments ecosystem in 2030 and discusses at a high-level what industry needs to do to prepare for and to contribute to that future. The PMP compliments our core clearing systems work where an ongoing priority is to ensure our existing payment systems remain interoperable, innovative, safe, open and efficient.
13. Putting issues of serving as a monetary anchor to one side, the opportunities associated with a CBDC that are set out in section 4 of the issues paper have a great deal of overlap with the principles for payments modernisation discussed in our PMP, especially where these relate to improving inclusion, giving Kiwis more choice in payments, and increasing

innovation and competition. The alignment with the principles for payments modernisation is encouraging and is another source of validation for the PMP.

14. Our PMP identifies nine capability building blocks. Collectively these represent a diverse range of capabilities from ensuring customers can make and receive real time payments to ensuring convenience in cross border payments to enabling customers and industry to realise the productivity, efficiency, and innovation benefits of richer data. The full set of capability building blocks can be found in Appendix 1.
15. Our stakeholder consultation confirmed these building blocks were on point and that a first task should be to focus on real time capability because that building block sets the context for many of the other potential improvements.
16. As you know, our market information gathering exercise for real time payments capability has just closed. The responses need to be carefully evaluated and then considered by our Participants who will provide Payments NZ with feedback on the evaluation.
17. We will use that feedback to determine where the real-time capability building block sits on our strategic roadmap and where the other capability building blocks should sit in relation to that.
18. As we pull together our strategic roadmap, we are going to need to consider the potential introduction of a CBDC and the relationship between that and industry plans for payments modernisation. For example, there will be a need to carefully work through how a CBDC might coexist with other means of exchanging value through the current Settlement Before Interchange system and any new real time payment capability that may be introduced. As you will appreciate there are a range of interoperability, privacy and security issues that would need to be considered, and we would need input from the Reserve Bank to properly work through these and other issues.
19. Concluding the evaluation of the MIG responses, liaising with our Participants, and progressing our strategic roadmap are key areas of focus in our 2022 work programme.

## **Innovation and competition landscape**

20. We note the Reserve Bank's observations about the room for improvement in innovation and competition across the domestic ecosystem. Our assessment is a range of complex factors explain the current innovation and competition landscape which go beyond the considerations identified in the issues paper, especially those outlined in Appendix A.

21. Our PMP identified that, while our existing payment systems have served current end users well, industry needs to now pivot towards delivering the ecosystem of the future by resolving current and emerging limitations. The PMP noted seven limitations<sup>2</sup>:
- Our inter-bank payment system is a batch system that does not support real time payments.
  - The messaging standard (BACHO) used with our inter-bank payment system limits the information carried from payer to payee.
  - Our inter-bank payment system is currently available only on a 5 day/15-hour basis (SBI365 will move that to 7 day/15-hours).
  - Our inter-bank payment system only supports limited overlay service offerings.
  - Each party does its own identity verification and due diligence processes.<sup>3</sup>
  - The industry does not have a shared tool set to manage and monitor payments fraud.
  - Standardised Application Programming Interfaces (API) in the marketplace are currently limited.
22. The capability building blocks noted in the previous section, and which are outlined in Appendix 1, have the potential to address at least one or more of the limitations noted above and to play an important part in delivering a more vibrant and dynamic future.
23. In principle we agree a CBDC could act as a platform for delivering some change in current levels of innovation and competition across the ecosystem. We also agree with the observation that care would have to be taken to avoid a CBDC from crowding out ecosystem innovation.
24. Similar observations about a CBDC acting as a catalyst for innovation and competition have been made in publications authored by other central banks across various jurisdictions. For example, the Bank of Canada has recently written on the potential role of a CBDC to support a vibrant digital economy by helping solve market failures and fostering competition and innovation in new digital payments markets.<sup>4</sup>
25. We suggest the prospective role for a CBDC in the domestic ecosystem should be evaluated against four factors.
- How current industry initiatives impact levels of competition and innovation.
  - The PMP and strategic roadmap for payments modernisation.
  - Whether and how the benefits of a CBDC could be achieved through further improvements to existing payment systems. We note this is one of the issues being considered by the House of Lords in its current inquiry into the key issues confronting HM Treasury and the Bank of England as they investigate the potential introduction of a CBDC in the UK.<sup>5</sup>

---

<sup>2</sup> Payments Modernisation Plan, Current limitations, page 9.

<sup>3</sup> Know Your Customer and Customer Due Diligence obligations

<sup>4</sup> [The Positive Case for a CBDC \(bankofcanada.ca\)](https://www.bankofcanada.ca/2018/05/24/positive-case-for-a-cbdc/)

<sup>5</sup> [Call for Evidence - Committees - UK Parliament](https://www.parliament.uk/business/committees/committees-a-z/commons-select/evidence/call-for-evidence-cbdc/)

- Whether the introduction of a CBDC would allow each party in the ecosystem to play the role they are best suited for.

26. A list of industry initiatives in train can be found in Appendix 2. These are focused on either delivering improvements to our existing payments system or acting as a catalyst for further improvements in innovation and competition.

## Selected observations

27. We see a CBDC as a potentially important component in Aotearoa New Zealand having a world class digital payment system needed for a world class digital economy. Against that backdrop we offer the following selected observations on the issues paper.

- *Be more future focused – not based on historical constraints*  
The issues paper references several current state constraints, particularly in payment systems, as a key rationale for establishing a CBDC. We note that in most cases, progress is being made to address each of those current constraints. The core rationale for establishing a CBDC needs to be focused on the strategic outcomes that are important for Aotearoa’s long-term digital future. We suggest the issues paper is over-weighted on using a CBDC as a potential solution to current constraints and is under-weighted on the wider long term strategic rationale for establishing a CBDC and how that relates to other work underway across government to build an inclusive and trusted world-class digital nation.
- *Emphasis on maximising synergies*  
The design principles in the issues paper acknowledge a CBDC should be interoperable. However, if a CBDC is to fully integrate into the wider ecosystem a persistent focus on interoperability will help support innovation, operational resilience, efficiency, and end user convenience. Accordingly, we suggest there would be benefits from commencing an early dialogue with industry on how to maximise the potential synergies between a CBDC and any new real time capabilities that might be introduced.
- *Expand the policy discussion*  
We support the Reserve Bank’s intention to let the policy discussion inform the technical design of the CBDC. There are a great many options for design and implementation and which of these might be appropriate depends on the policy goals that are set. For that reason, we think it would be worthwhile expanding the policy goals that are discussed beyond those set out in section 3 of the issues paper by acknowledging, for example, the potential role of a CBDC in:
  - Furthering sustainability objectives, especially given the recent consultation led by the Department of Internal Affairs on the nation’s digital future (Towards a Digital Strategy for Aotearoa).
  - Supporting future digital contexts, such as decentralised finance and the metaverse. While both areas are still relatively new, to gain true scale and

stability they may represent use cases for a CBDC that are unrelated to both the physical world and the current virtual world of electronic commerce.<sup>6</sup>

- *Include wholesale CBDC considerations in scope from the beginning*

The issues paper states the potential for wholesale deployment of a CBDC will be considered at a later juncture. We suggest the proposed approach of initially limiting the policy discussions to a general purpose CBDC could lead to, and potentially lock in, unintended consequences once wholesale deployments are considered. Further, by not considering wholesale related CBDC opportunities, it is likely that a significant amount of potential benefit will be excluded.

We would support an early broadening of the policy discussion to include both wholesale and industrial CBDC deployments (i.e., those deployments designed to meet the needs of specific industry sectors, including in the context of the Internet of Things and Machine to Machine transactions)<sup>7</sup>. A CBDC could support the efficient functioning of new markets that use these technologies.

- *Bring forward the discussion on use cases*

The issues paper notes subsequent policy development and consultations will consider use cases. Our suggestion would be to bring forward the discussion on use cases, even if just at a high level. This will help inform decisions about the role of a CBDC in the domestic ecosystem, how that role could be best supported by both current and future industry Initiatives, and the potential impact on the commercial banking sector. Consideration should be given to how these use cases speak to issues of interoperability, cyber security, digital identity, data privacy and competition and innovation across the ecosystem.

- *Give greater focus to a consumer data right and digital identity trust framework*

CBDC design and use should be integrated with other key pillars of New Zealand's future digital economy. The most notable examples of this are the Consumer Data Right (CDR) and the digital identity trust framework.

The Government has decided to implement a new legislative framework for a CDR to allow consumers to securely share data that is held about them with trusted third parties, using standardised data formats and interfaces. That new legislative framework is likely to designate the banking sector to expedite open banking. An individual might hold a CBDC in a digital wallet outside of the banking sector and transact from that wallet. To ensure the full benefits of a CDR can be realised it will be important that information on CBDC balances and transaction histories can also be shared with third parties. This is implicit in the observation in the issues paper about open API being an important common standard in any open CBDC platform.

---

<sup>6</sup> [Don't mock the metaverse | The Economist](#)

<sup>7</sup> [Press Contact for the Deutsche Kreditwirtschaft \(die-dk.de\)](#)



We note the Bank for International Settlements (BIS) has also signaled the treatment of data would play a significant role in CBDC ecosystem design.

New legislation to introduce a digital identity trust framework is now before the House. Use cases for a CBDC should be premised on leveraging the new digital identity trust framework.

- *Consider interoperability in the broadest context*  
The issues paper is clear interoperability is a key consideration and that a CBDC should be able to support cross-border payments. We support that focus on interoperability as this is key to reducing market fragmentation, and improving competition efficiency, inclusion, and convenience. Our suggestion is the interoperability lens should be expanded to include a wide range of scenarios, including interoperability between a CBDC and all forms of private money, a full set of cross border use scenarios (including CBDC to CBDC), other FMIs and interoperability where NZ accepts other nation's CBDCs at point of sale.
- *Additional design principles should be considered*  
We endorse the comment made in the issues paper that the development of a CBDC would require long lead times given the inherent complexities, multiple design choices and policy choices to be made. We note the multi-stage approach set out in the issues paper is consistent with these long lead times.

The multi-stage approach gives an opportunity to test and refine the design principles outlined in the issues paper. While we consider the stated design principles are appropriate, we also suggest two additional principles to properly capture the opportunities and challenges associated with a CBDC.

- Comparative advantage - any CBDC should be designed around comparative advantage. That would allow a CBDC to be built on the respective strengths of the Reserve Bank, the payments industry, and other potential contributors from the technology sector. An additional design principle which speaks to comparative advantage would reflect the position taken by the BIS that each party in the ecosystem should collaboratively play the role they are best suited for.<sup>8</sup>
- Informative CBDC - the information that travels with a CBDC transaction should, as a minimum, support existing business processes such as straight through processing and reconciliations. We suggest a design principle that speaks directly to the treatment of data and the potential for a CBDC to support informative transactions should be included.

---

<sup>8</sup> [CBDC - System design and interoperability \(bis.org\)](https://www.bis.org/cbdc/system-design-and-interoperability)

- *Need to signal legislative support required*  
The issues paper is clear the Reserve Bank does not intend to issue a CBDC soon and that further legislative powers might be required. We think it would be useful if the paper signaled the type of enabling legislation that would be required for the Reserve Bank to issue a CBDC. We consider the issuance of a new form of digital money would be more sustainable and robust if it were covered directly by legislation. We propose the expectation of enabling legislation gets set early in the process and is reflected in the multi-stage approach set out in the issues paper. This will give the stakeholders in the ecosystem more certainty in their own digital strategies and plans for their long-term infrastructure investments.
- *Expand discussion of AML/CFT considerations*  
The issues paper notes the distribution of a CBDC would need to comply with AML/CFT requirements as well as financial market infrastructure and consumer protection regulations. We support that statement and believe there would be benefits from considering how applying the AML/CFT requirements to a CBDC could yield insights on how to improve the efficiency of current AML/CFT settings on payment systems generally.

## Suggested next steps

28. The issues paper is a significant starting point for a dialogue on the potential for a CBDC in Aotearoa New Zealand. Depending on the policy objectives that are being pursued a CBDC has the potential to:
- Mitigate the risks that could emerge from new forms of private money creation.
  - Help support competition, efficiency, and innovation in payments.
  - Meet future payments needs in a digital economy.
  - Address the consequences of a decline in cash.
  - Act as an enabler for better cross-border payments both at a wholesale and retail level.
29. CBDC system designs are likely to vary across jurisdictions as central banks decide which policy objectives should be pursued, considering the structure of the domestic payments ecosystem. We imagine Aotearoa New Zealand will be no different in this regard.
30. The introduction of a CBDC of whatever form is a major national project which could deliver a new infrastructure for value transfer that acts as a platform for invention, sustained innovation, and inclusion. For that reason, we suggest the best outcomes are likely to be achieved if the relative strengths of the Reserve Bank and the payments industry are brought to bear on how to achieve these outcomes. We note a recent publication from the BIS anticipates that CBDC ecosystems would involve the public and private sectors working in concert.<sup>9</sup>

---

<sup>9</sup> [CBDC - System design and interoperability \(bis.org\)](https://www.bis.org/publ/ncg/ncg030.htm)

31. The complexities, multiple design and policy choices signaled in the issues paper, in addition to the possible wholesale and industrial deployments noted above, suggest to us significant benefits from the Reserve Bank working closely with industry in a multi-disciplinary approach. Such an approach would allow the Reserve Bank to:
- bring a national lens to this important issue;
  - leverage the contribution of industry in any decision to proceed with a CBDC; and
  - undertake a whole of ecosystem assessment.
32. We note the issues paper touches on the joint Bank of England and HM Treasury creation of a Central Bank Digital Currency Taskforce to coordinate the exploration of a potential UK CBDC. That Taskforce is complimented by a CBDC Engagement Forum and a CBDC Technology Forum to ensure relevant voices are heard in the policy development process. We believe structures such as these should be used to deliver a multi-disciplinary focus and to provide a whole of ecosystem assessment.
33. A whole of ecosystem assessment would help ensure proper consideration is given to the growth in the number of parties in the wider payments ecosystem, including the number of regulatory and policy agencies with an interest in payments. It would also give an opportunity for thorough consideration of how recent and pending legislation is likely to impact the ecosystem and the case for the introduction of a CBDC. Recent and pending legislation includes the Financial Market Infrastructures Act, the Retail Payment System Bill and the Digital Identity Services Trust Framework Bill now before Parliament, and the introduction of a CDR in New Zealand that could facilitate open banking.
34. We note the need for strategic alignment across all parties involved through a whole of ecosystem assessment was evident in the conclusions in the recently completed Payments System Review – “From System to Ecosystem” completed by Scott Farrell in Australia. One of the recommendations in that report spoke directly to the need for a strategic plan for the wider payment ecosystem in that country.<sup>10</sup>
35. Payments NZ could leverage its organising role in the payments ecosystem to assist with the delivery of a multi-disciplinary approach especially where that approach speaks to the network elements of payments, payments modernisation and allied matters, such as governance and strategic coordination.

---

<sup>10</sup> [Payments system review: From system to ecosystem \(treasury.gov.au\)](https://www.treasury.gov.au/~/media/136876/136876main.pdf)

36. The involvement of Payments NZ would help ensure design considerations and eventual adoption strategies are tailored to the economic structures and domestic payment landscapes and reflect the respective strengths of the Reserve Bank and industry.
37. We would welcome the opportunity to continue a dialogue on a CBDC for Aotearoa New Zealand and specifically how Payments NZ can best assist.



Steve Wiggins  
Chief Executive  
Payments NZ Limited

## **Appendix 1 – Capability building blocks**

1. Real time payments – customers can make and receive real time payments.
2. Greater payment choices – customers have greater choice about when and how to make or receive payments.
3. Payee identifiers – customers can use payee identifiers to make or receive payments.
4. Improved fraud solutions – industry can improve the detection and remediation of fraud.
5. Secure partnering – between banks and third parties using harmonised standards.
6. Cross border convenience – customers can make and receive cross border payments with convenience.
7. Richer data – customers and industry can realise the productivity, efficiency and innovation benefits of richer data.
8. Simple verification – customers enjoy improved experiences through simple verification.
9. Value added applications – the payments system supports value added applications and services.

## **Appendix 2 – Industry initiatives**

The list below is a summary of key activities that Payments NZ, alongside industry stakeholders, are progressing.

- SBI365 – a project that will allow for the operation of a seven-day settlement process, enabling payments to flow between customers of different banks during weekends and public holidays. We expect this to be in place early 2023.
- Enhancing the messaging standard for high value payments to be ISO 20022 compliant by November 2022 – to enable improved efficiency and compliance and a better customer experience.
- Real time payment capabilities – we have commenced a market information gathering exercise on the operation and delivery of real-time payments capabilities. The input we get from the market will help further shape our strategic roadmap.
- Strategic roadmap for payments modernisation – the Payments Modernisation Plan strategic roadmap will be further built out with additional detail at the conclusion of the real-time market information gathering exercise.
- API Centre's work to enable open banking in New Zealand.