

February 28, 2022



Bank of Thailand
273 Samsen Road
Watsamphraya
Phra Nakhon District
Bangkok 10200

Email: finlandscape@bot.or.th

Dear Sir or Madam,

Ripple Labs Inc. ("Ripple") welcomes the opportunity to comment on the Consultation Paper on Financial Landscape - Repositioning Thailand's Financial Sector for a Sustainable Digital Economy (the "Consultation") published by the Bank of Thailand ("BOT") on February 1, 2022.¹

Ripple would like to thank the BOT for the in-depth and comprehensive analysis that has been undertaken in the Consultation as well as the opportunity to provide our comments. We respectfully request you take them into consideration as you consider the policy direction and scope of intended regulation for repositioning Thailand's financial sector in the new digital economy. We welcome the opportunity for further engagement with the BOT on this Consultation and any other related consultations as may be appropriate.

Using blockchain technology, Ripple allows financial institutions to process payments instantly, reliably, cost-effectively, and with end-to-end visibility anywhere in the world. RippleNet, our enterprise software solution which is powered by a standardized application programming interface ("API") and built on the market-leading and open standard Interledger Protocol, enables financial institutions to facilitate faster and less costly cross-border payments, demonstrating that deep interoperability between commercial financial institutions can make payments truly efficient, particularly in eliminating the uncertainty and risk historically involved in moving money across borders using interbank messaging alone.

Some customers, in addition to deploying RippleNet, choose to leverage XRP - the digital asset native to the XRP Ledger, a distributed ledger platform - as a bridge between fiat

¹ See <https://www.bot.or.th/landscape/files/consultation-paper-en.pdf>, Bank of Thailand Consultation Paper on Financial Landscape - Repositioning Thailand's Financial Sector for a Sustainable Digital Economy.

currencies, further reducing the friction and costs for commercial financial institutions to transact across multiple global markets.

Although Ripple utilizes XRP and the XRP Ledger in its product offerings, XRP is independent of Ripple. The XRP Ledger is decentralized, open-source, and based on cryptography. While there are well over a hundred known use cases for XRP and the XRP Ledger, Ripple leverages XRP for use in its product suite because of XRP's suitability for cross-border payments. Key characteristics of XRP include speed, scalability, energy efficiency, and cost - all of which benefits the consumer and helps reduce friction in the market for cross border payments, thereby removing barriers to Thailand's growth as a technology and finance centre.

With this overview, Ripple respectfully submits the following responses to the issues for consultation set forth in key policies 2.2.2 (Develop Retail Central Bank Digital Currency) and 4.2.1 (Discourage the Adoption of Digital Assets as a Means of Payment) of the Consultation in the attached Appendix.

Ripple appreciates the opportunity to provide feedback on the Consultation as the BOT studies these important issues, and we would encourage and support further dialogue with all stakeholders. Should you wish to discuss any of the points raised in this letter, please do not hesitate to contact Rahul Advani (Policy Director, APAC) at radvani@ripple.com.

Sincerely,

Ripple Labs Inc.

APPENDIX

Ripple respectfully submits the following responses to the issues for consultation set forth in key policies 2.2.2 (Develop Retail Central Bank Digital Currency) and 4.2.1 (Discourage the Adoption of Digital Assets as a Means of Payment) of the Consultation.

1. Key Policy 2.2.2 - Develop Retail Central Bank Digital Currency

What financial service use cases do you wish to see on Retail CBDC? e.g. programmable conditional payments for welfare distribution based on recipients' occupations or types of goods and services purchased.

Ripple is appreciative of the in-depth research and analysis undertaken by the BOT on the development of a retail Central Bank Digital Currency ("CBDC"), and for the opportunity to provide feedback on the BOT Discussion Paper: The Way Forward for Retail Central Bank Digital Currency in Thailand (the "BOT CBDC Discussion Paper") published on April 2, 2021.² Ripple responded to the BOT CBDC Discussion Paper ("Ripple CBDC Response") on June 15, 2021.³

In the Ripple CBDC Response,⁴ we outlined a number of financial services use cases for a retail CBDC. Some key use cases include:

- a) **Cross-border remittances:** We believe that there is an important role for BOT and a retail CBDC to play in the cross-border remittance space. Overseas workers are often saddled with high transaction fees when sending money home to their families. Additionally, these remittance corridors are sometimes too small to warrant adequate attention from major financial institutions, and therefore cannot reach the economies of scale needed in order to reduce costs. A CBDC used to facilitate cross-border remittances will be a service to overseas Thai workers and will help support the country's economic growth.
- b) **Micropayments:** We also believe an effective retail CBDC should allow for the processing of micropayments (i.e., payments made for very small amounts), including cross-border micropayments. Currently, the transaction costs associated with fiat micropayments are too high to support their execution. It is also important to note that since a retail CBDC is expected to substantially lower these frictional costs, the number of transactions (whether micropayments or not) is likely to be much higher than observed today, leading to greater cross-border demand.

² See https://www.bot.or.th/Thai/DigitalCurrency/Documents/BOT_RetailCBDCPaper.pdf, Bank of Thailand Discussion Paper: The Way Forward for Retail Central Bank Digital Currency in Thailand.

³ See https://ripple.com/wp-content/uploads/2021/09/Ripple_Bank-of-Thailand-CBDC-Discussion-Paper-April-2021_final.pdf, Ripple response to BOT CBDC Discussion Paper.

⁴ See Ripple CBDC Response, page 5-7.

- c) Digital wallets and financial inclusion:** It is worth noting that one of the bigger drivers of financial inclusion over the past decade has been the rise of financial services from outside the banking sector, such as remittances providers and digital wallets. These services are pioneering new offerings and alternative experiences for traditional banking users. The issuance of a retail CBDC could occur in tandem with the creation of associated digital wallets that give consumers ownership to the digital currency and allow for a faster and more efficient method of distribution of money by the Thai government to its citizens. Digital wallets that enable payments, whether made domestically or cross-border, without requiring a bank account could succeed in promoting financial inclusion for the unbanked and underbanked population, which may not be adequately served by the traditional banking system.
- d) Tokenization of assets:** Ripple would also like to highlight the ability for a retail CBDC to extend the benefits of tokenization to the public. Allowing the private sector to develop on the ledger established for a retail CBDC, which would build on the work BOT has done on wholesale CBDCs,⁵ can create new opportunities for tokenization. Examples include protecting property rights for tangible property (such as property, art, and collectibles) as well as intangible assets (digital rights) via non-fungible tokens.
- e) Optimizing supply chain workflows:** Finally, the wholesale and retail CBDC workflows being explored by the BOT can also support efficiencies in supply chains by being used to escrow funds and pay invoices. Decentralized exchanges,⁶ such as those built into Ripple’s CBDC Private Ledger (discussed below), can ease friction in cross-border commercial payments by allowing the payor to choose the currencies they have, and the payee to choose the currencies they want to hold.

As highlighted in the Ripple CBDC Response,⁷ on March 3, 2021 Ripple announced a pilot of a private version of the public, open-source XRP Ledger that provides central banks a secure, controlled and flexible solution for the issuance and management of digital currencies (“the CBDC Private Ledger”).⁸ The CBDC Private Ledger is based on the same blockchain technology that powers the XRP Ledger, which has supported the management of billions of dollars of value for over 8 years, without any significant security or operational issues.

With respect to real world applications of the CBDC Private Ledger, on September 22, 2021, Ripple announced a partnership with Bhutan’s central bank, the Royal Monetary Authority of Bhutan, who will use Ripple’s CBDC Private Ledger solution to pilot retail,

⁵ See <https://www.bot.or.th/English/FinancialMarkets/ProjectInthanon/Documents/Inthanon-LionRock.pdf>, The outcomes and findings of Project Inthanon-LionRock and the next steps.

⁶ See <https://xrpl.org/decentralized-exchange.html>, XRPL Ledger Decentralized Exchange.

⁷ See Ripple CBDC Response, page 3.

⁸ See <https://ripple.com/lp/cbdc-whitepaper>, Ripple Report: The Future of CBDCs.

cross-border, and wholesale payment use cases for a digital Ngultrum.⁹ Ripple also announced a partnership with the Republic of Palau on November 23, 2021, which will initially focus on developing strategies for cross-border payments and a USD-backed digital currency for Palau.¹⁰

In an editorial published in the Bangkok Post in December 2021,¹¹ Ripple reiterated some key use cases for a retail CBDC in Thailand. Ripple welcomes the opportunity to discuss these use cases and opportunities to leverage the CBDC Private Ledger for a retail CBDC in Thailand in more detail.

2. Key Policy 4.2.1 - Discourage the Adoption of Digital Assets as a Means of Payment

What roles – except for as means of payment (MOP) – can digital assets play in enhancing financial services and innovation? What are appropriate ways to manage associated risks, such as those pertaining to consumer protection, IT system security, and data privacy?

Ripple understands that the BOT intends to discourage the adoption of digital assets as a ‘means of payment’ for goods and services, from the perspective of the security and stability of payment systems. We also understand that the Securities and Exchange Commission, Thailand recently concluded a public hearing on this matter as well.¹²

However, Ripple would like to highlight that leveraging digital assets such as XRP as a ‘means of settlement’ between fiat currencies can provide significant benefits, especially when it comes to cross-border payments.

Cross-border payments are costly, full of friction, and slow. A lot of this friction is the result of processes followed in cross-border payments, for long the domain of incumbent banks (referred to as correspondent banks). A definition cited by the Bank for International Settlements defines correspondent banking as *“the provision of current or other liability account and related services to other financial institutions (including affiliates), used for the execution of third-party payments and trade finance as well as its own cash clearing, liquidity management, short-term borrowing and investment needs in a particular currency”*.¹³

⁹ See <https://www.rma.org.bt/pressrelease/PRESS%20RELEASE%20CBDC.pdf>, Royal Monetary Authority of Bhutan Press Release on Pilot Project on CBDC.

¹⁰ See <https://ripple.com/insights/featured/republic-of-palau-partners-with-ripple-to-develop-digital-currency-strategy/>, Republic of Palau Partners with Ripple to Develop Digital Currency Strategy.

¹¹ See <https://www.bangkokpost.com/business/2239387/why-central-bank-digital-currencies-matter>, Why central bank digital currencies matter.

¹² See <https://www.sec.or.th/Documents/PHS/Main/776/hearing012565.pdf>, Public hearing on the proposed rules prohibiting digital asset businesses from providing services in a manner which facilitates or supports the use of digital assets as a means of payment for goods and services.

¹³ See <https://www.bis.org/cpmi/publ/d136.pdf>, Bank for International Settlements Committee on Payments and Market Infrastructures consultative report on correspondent banking.

As this definition highlights, banks use correspondent relationships – a network of *bilateral accounts-based* relationships - spread across the world to process payments originating from their corporate and retail clients. Although widely proliferated, the market structure of correspondent banking injects significant friction, delay and costs in processing payments for the respondent banks, primarily due to the need to pre-fund accounts.¹⁴

Digital assets such as XRP that are issued on blockchains and serve the same end-use as the incumbent correspondent banking model can offer a compelling alternative for end-users in Thailand, while still being compliant with global KYC and AML/CFT requirements. Global multilateral bodies have also recognized the potential digital assets and blockchain technology have in facilitating faster cross-border payments.¹⁵

We believe that a clear regulatory framework that supports the use of digital assets as a ‘means of settlement’ in Thailand can help support faster and more efficient cross-border payments.

Ripple respectfully outlines some potential policy recommendations that can help achieve such regulatory clarity. We believe that either of the policy proposals below - whether implemented separately or together - can succeed in achieving the policy goal of fostering innovation while ensuring sufficient safeguards.

a. Adopt a digital asset taxonomy aligned with global best practices

It is important to note that there is no single or generally recognised definition of digital assets at present. Ripple respectfully submits such assets should not be solely defined relative to a specific technology (e.g., cryptography), but, for the purposes of regulation, should instead fall under a broader heading such as “digital assets”, and subsequently classified depending on the particular economic function and purpose they serve. Such an approach is consistent with that taken by other jurisdictions like the United Kingdom (“UK”) and Singapore, which have issued classifications that do not depend on whether a business model uses distributed ledger technology or not.

We have summarised the taxonomies for the UK and Singapore respectively in Table 1 & Table 2 below.

¹⁴ See https://www.bis.org/publ/qtrpdf/r_qt2003f.pdf, Bank for International Settlements Quarterly Review March 2020.

¹⁵ See <https://blogs.worldbank.org/psd/paying-across-borders-can-distributed-ledgers-bring-us-closer-together>, World Bank blog.

Regulated Tokens

a. Security tokens: These are tokens that amount to a 'Specified Investment' under the Regulated Activities Order, excluding e-money. These may provide rights such as ownership, repayment of a specific sum of money, or entitlement to a share in future profits. They may also be transferable securities or other financial instrument under the EU's Markets in Financial Instruments Directive II. These tokens are likely to be inside the FCA's regulatory perimeter.

b. E-money tokens: These are tokens that meet the definition of e-money under the Electronic Money Regulations. These tokens fall within regulation.

Unregulated Tokens

Any tokens that are not security tokens or e-money tokens are unregulated tokens. This category includes utility tokens which can be redeemed for access to a specific product or service that is typically provided using a blockchain platform.

The category also includes tokens such as Bitcoin, Litecoin and equivalents, and often referred to as 'cryptocurrencies', 'cryptocoins' or 'payment tokens'. These tokens are usually decentralised and designed to be used primarily as a medium of exchange. We sometimes refer to them as exchange tokens and they do not provide the types of rights or access provided by security or utility tokens, but are used as a means of exchange or for investment.

Table 1: Summary of the UK Financial Conduct Authority taxonomy for digital asset

Digital Payment Tokens

Refers to "any digital representation of value that is expressed as a unit; is not denominated in any currency, and is not pegged by its issuer to any currency; is, or is intended to be, a medium of exchange accepted by the public, or a section of the public, as payment for goods or services or for the discharge of a debt; and can be transferred, stored or traded electronically".

Digital tokens which constitute capital markets products

MAS will examine the structure and characteristics of, including the rights attached to, a digital token in determining if the digital token is a type of capital markets products under the Securities and Futures Act. This includes, but is not limited to a share, a debenture, a unit in a business trust, a securities-based derivatives contract, or a unit in a collective investment scheme, as defined under the Securities and Futures Act.

Table 2: Summary of the Monetary Authority of Singapore taxonomy for digital assets

Taking into account the taxonomies of the UK and Singapore discussed above, Ripple respectfully recommends that the BOT consider adopting a digital asset taxonomy consistent with such global practices, thereby providing clarity to the legal character of digital assets in Thailand.

In line with global practices, we recommend that there be a clear distinction between payment tokens (as a 'means of settlement'), utility tokens, and security tokens, as outlined below:

- **Payments or Exchange tokens:** to describe non-fiat native digital assets that are used as means of exchange or settlement and have no rights that may be enforced against any issuer;

- **Utility tokens:** to describe those digital assets that create access rights for availing service or a network, usually offered through a blockchain platform; and
- **Security tokens:** to describe tokens that create rights mirroring those associated with traditional securities like shares, debentures, security-based derivatives, and collective investment schemes.

b. Implement a risk-sensitive regulatory framework for digital assets

Taking into account the regulatory frameworks of the UK and Singapore discussed above, we request that the BOT also consider adopting a digital asset regulatory framework consistent with these global practices, in order to provide legal certainty and encourage innovation in the blockchain and digital assets sector in Thailand.

We recommend that such a regulatory framework should align with the following principles outlined below:

- The regulatory framework should be technology-agnostic, and should not explicitly or otherwise endorse any particular technology. In practical terms, this means that financial services using digital assets as a solution should not be treated differently from financial services embedding legacy architectures, and there should be parity in the treatment of all technology;
- Given the dynamic nature of digital assets, prescriptive regulation risks obsolescence. Prescriptive regulation could also have the unintended consequence of hindering innovation. Therefore, we recommend considering a principles-based regulatory framework, which will guide market participants to regulatory and policy goals, without imposing an overly prescriptive and onerous process in doing so; and
- The regulatory framework should use a risk-based approach to identify digital asset services that pose sufficient risk to warrant regulation, and where such risks are crucial to address. This is in order to build a simple, secure, and accessible digital assets ecosystem that will encourage innovation while mitigating any potential risks.

The recommended regulatory framework, as proposed above, should be forward-looking and flexible while providing regulatory certainty and consumer safeguards, and at the same time meet the policy goals of encouraging innovation in Thailand with the principle of 'same risk, same activity, same treatment'.

Ripple welcomes the opportunity to discuss the appropriate taxonomy and regulatory framework to support the use of digital assets as a 'means of settlement' in Thailand in more detail.