IFWG Crypto Assets Regulatory Working Group

POSITION PAPER ON CRYPTO ASSETS

Financial Intelligence Centre

FSCA Financial Sector Conduct Authority

national treasury Department: National Treasury REPUBLIC OF SOUTH AFRICA

NCR National Credit Regulator

SARS South African Revenue Service

South African Reserve Bank

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1. Introduction

1.1 Background

1.1.1 The initial public statement on crypto assets[1] was issued by National Treasury (NT) in 2014 as a joint initiative with the South African Reserve Bank (SARB), the Financial Services Board (now the Financial Sector Conduct Authority (FSCA))[2], the South African Revenue Service (SARS) and the Financial Intelligence Centre (FIC)[3] (hereinafter referred to as 'regulatory authorities'). The public statement warned members of the public about the risks associated with the use of crypto assets for the purpose of transacting or investing, and advised users to apply caution in this regard. The cautionary tone was directly linked to the fact that no specific legislation or regulation existed for the use of crypto assets. Therefore, no legal protection or recourse was being offered to users of, or investors in, crypto assets.

1.1.2 Following the user alert, the SARB, through its National Payment System Department (NPSD), issued a position paper on crypto assets in 2014[4]. The position paper highlighted the risks surrounding crypto assets, such as money laundering and the financing of terrorism (ML/TF). It noted the lack of a legal and regulatory framework, the absence of consumer protection laws, and the inability to enforce the principle of finality and irrevocability as required in existing payment systems as well as the circumvention of the Exchange Control Regulations. The position paper stated that the SARB did not oversee, supervise or regulate the crypto assets landscape, systems or intermediaries. Therefore, all activities related to the acquisition, trading and/or use of crypto assets were done at the end users' sole and independent risk, with no recourse to the SARB. The SARB stated that it would continue monitoring activities and developments in this area.

1.1.3 In 2016, the Intergovernmental Fintech Working Group (IFWG) was established, comprising members from NT, SARB, FSCA and FIC. The National Credit Regulator (NCR) and SARS joined the IFWG in 2019. The aim of the IFWG is to develop a common understanding among regulators and policymakers of financial technology (fintech) developments as well as the regulatory and policy implications for the financial sector and the economy. Additionally, the IFWG aims to assist in developing and adopting a coordinated approach to policymaking in respect of financial services activities emanating from fintech. The overall objective of the IFWG is to foster fintech innovation by supporting the creation of an enabling regulatory environment and reviewing both the risks and the benefits of emerging innovations, thus adopting a balanced and responsible approach to such innovation.

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[1] At the time this statement was issued, the term 'virtual currencies' was used to refer to crypto assets.
[2] On 1 April 2018, the Financial Services Board was replaced by the Financial Sector Conduct Authority (FSCA) as a result of the Twin Peaks reforms. The FSCA is responsible for market conduct supervision.
[3] See user alert: http://www.treasury.gov.za/comm_media/press/2014/2014091801%20-%20User%20Alert%20Virtual%20currencies.pdf
[4] See the Position Paper: Position Paper Virtual Currencies 02of2014.pdf

1.1.4 At the start of 2018, a joint working group was formed under the auspices of the IFWG to specifically review the position on crypto assets. The members of the IFWG are represented on this working group, referred to as the Crypto Assets Regulatory Working Group (CAR WG). The objective of the CAR WG is to formulate a coherent and comprehensive policy stance on crypto assets, while ensuring the continued integrity and efficient functioning of financial markets, maintaining financial stability, protecting the rights and interests of customers and investors, and combating illegitimate cross-border financial flows, ML/TF.

1.1.5 The CAR WG released a consultation paper at the start of 2019, which provided an overview of the perceived risks and benefits associated with crypto assets, discussed some of the available regulatory approaches, and presented initial recommendations to industry participants and stakeholders. The consultation paper offered an opportunity for industry participants and stakeholders to provide input to formulating a revised policy position on crypto assets. The regulatory authorities considered these comments carefully in drafting the position paper.

1.2 Problem statements

1.2.1 The need to develop a regulatory and policy response to crypto asset activities in South Africa is driven by the following:

1.2.1.1 *Crypto assets are a form of fintech innovation that may impact on the financial sector of the country:* Fintech is defined as technology applied to financial services, resulting in new business models, applications, processes, products and services with an associated disruptive effect on financial markets and institutions[5]. This definition emphasises the focus on technology-driven innovations that could potentially reshape how the financial services industry operates as it evolves. Given the wide range of innovations across financial services, the existing regulatory architecture should be assessed to determine its appropriateness and effectiveness, and if any enhancements are required. Crypto assets are regarded as an innovation that could materially affect financial services, as some view crypto assets as a new form of money or currency (albeit privately issued) that has a direct impact on economic activities such as payments, investments and capital raising, among other things.

1.2.1.2 *Crypto assets operate within a regulatory void as no globally harmonised approach or position has been reached as yet:* Regulators have not yet sufficiently addressed the phenomenon of crypto assets, and have not yet settled on a collective approach to this innovation. From conceptualisation to the definition and potential usage, it remains an area that requires further clarity for regulators. Various approaches have been adopted.[6] Some

[5] See https://www.fsb.org/2019/02/fsb-report-assesses-fintech-developments-and-potential-financial-stability-implications/.
[6] Regulation of Crypto currency in selected jurisdictions: https://www.loc.gov/law/help/cryptocurrency/regulation-of-cryptocurrency.pdf

countries have issued communications declaring restrictions or a downright ban on the use of crypto assets. Others have stated that they regard crypto assets as intangible assets exempt from tax.[7] Whilst others have issued statements indicating that crypto assets are not recognised forms of legal tender, without outright declaring them to be illegal. However, the Financial Action Task Force (FATF)[8] recently provided direction on the treatment of crypto assets by amending FATF Recommendation 15 (on New Technologies). This amended Recommendation 15 now requires jurisdictions to regulate crypto assets[9] and crypto asset service providers (CASPs) for anti-money laundering and combatting the financing of terrorism (AML/CFT). Further, jurisdictions must now ensure that CASPs are licensed or registered, and subject to effective AML/CFT systems for monitoring and supervision.[10]

1.2.1.3 *Crypto assets may create conditions for regulatory arbitrage while posing risks:* The financial sector and its participants operate in a highly regulated environment, which assists in ensuring a sound and safe financial system. However, crypto assets perform similar financial service activities but operate without similar regulatory safety mechanisms. In the case of peer-to-peer trades, financial transactions are concluded without the need for third-party intermediaries. In other cases, newly created intermediaries (such as crypto asset trading platforms) are participating in financial transactions, but these entities operate outside of a regulatory framework. This leaves the crypto asset environment exposed to risks such as financial and consumer risks. Some of the perceived risks of crypto assets include an increase in undetected illegitimate cross-border financial flows, ML/TF, and consumer and investor protection concerns, including market manipulation and tax evasion. Other areas of risk include the circumvention of exchange controls and balance of payments reporting requirements, data- and cybersecurity risk, as well as financial stability risk.

1.2.1.4 *Crypto assets may become systemic, as interest, investment and participation in crypto assets continually grows:* Financial institutions, new technology firms and big techs[11], as well as individuals, have been showing an ever-growing interest in crypto asset activities. There are more than 5 300 different crypto coins and tokens in circulation.[12] This number keeps increasing as new schemes, through initial coin offerings (ICOs), are continually launched. The available measures to determine the exact size of the crypto asset market are limited. A tool often used by industry players is the price-checking website

[7] Regulatory framework for crypto currencies: https://www.loc.gov/law/help/cryptocurrency/map2.pdf
[8] The Financial Action Task Force (FATF) is an intergovernmental body that sets standards and promotes the effective implementation of legal, regulatory and operational measures for combating money laundering, terrorism financing and other related threats to the integrity of the international financial system. See http://www.fatf-gafi.org/home/.
[9] The FATF defines crypto assets and crypto asset service providers as virtual assets and virtual asset service providers.
[10] See http://www.fatf-gafi.org/publications/fatfrecommendations/documents/public-statement-virtual-assets.html.
[11] These are large technology firms such as Alibaba, Amazon, Facebook, Google and Tencent. See https://www.bis.org/publ/arpdf/ar2019e3.pdf.
[12] See: https://coinmarketcap.com/

Coinmarketcap, which indicates a perceived market capitalisation of about US$210 billion[13] for all crypto assets. In South Africa, there are approximately 12 different crypto asset trading platforms[14], with a market capitalisation value of approximately R6.5 billion. A complete list of the crypto asset trading platforms operating in South Africa will be pursued.

1.2.2 In summary, crypto assets and the various activities associated with this innovation can no longer remain outside of the regulatory perimeter. Clear policy stances on the variety of emerging use cases must be taken in order to deepen regulatory certainty.

1.3 Approach by the Crypto Assets Regulatory Working Group

1.3.1 The CAR WG is following a structured approach in developing recommendations. Its approach can be illustrated in terms of three pillars.

(i) *Pillar 1:* The descriptive characterisation of crypto assets and related activities. This was achieved through the issuance of a consultation paper to the industry at the start of 2019. It has been noted that, due to the evolving nature of crypto assets, continuous analysis is required to identify and investigate other developing crypto asset activities.

(ii) *Pillar 2:* The identification of the critical areas of risk, and the development of mitigating measures to address these areas of risk through regulatory intervention. This position paper highlights these critical risk factors and the recommendations towards a regulatory framework.

(iii) *Pillar 3:* The continuous monitoring of crypto assets and related activities, and the identification of the evolution of channels for the possible transmission of risks to the financial sector and the economy. A monitoring programme should be implemented by the regulatory authorities for crypto assets.

1.3.2 In order to develop regulatory and policy responses to the emergence of crypto assets in South Africa, the CAR WG conducted a functional analysis of crypto assets. This means that the economic function of crypto assets was assessed, rather than the specific technology applied or the entity involved. From this viewpoint, the following five crypto asset specific use cases were identified:

(i) purchasing/buying and/or selling;

(ii) payments;

[13] This amount was correct at the time of writing the position paper.
[14] This includes companies such as Altcoin Trader, Bitcoin.com, Chainex, CoinBR, CoinDirect, Edcoin, Ice3X, Luno, ProjectUbu, ProsperiProp and VALR.

(iii) capital raising through ICOs[15];

(iv) crypto asset funds and derivatives; and

(v) market support.

1.3.3 It is acknowledged that new use cases may arise as the crypto asset market is a rapidly evolving market. Similarly, the underlying economic function and related activity will be assessed.

1.3.4 The functional approach is consistent with the approach adopted across a number of jurisdictions, and the use cases should be read collectively. A number of the recommendations might therefore have broader application and cut across the different use cases.

1.3.5 The CAR WG conducted an in-depth analysis of the applicable use cases to determine the purpose, processes, relevant role players or participants, and the function that each role player fulfils. The consultation paper that was issued in 2019 focused on two of these use cases, namely (i) the buying and selling of crypto assets, and (ii) making payments using crypto assets. This position paper includes recommendations for all five use cases.

1.3.6 This position paper highlights the implicit risks of each of the use cases, and determines the most appropriate policy recommendation that aims to mitigate the identified risks involved. Applicable standards and guidance from international standard-setting bodies were considered, along with the approaches taken by various other jurisdictions.

1.4 Purpose and scope of the position paper on crypto assets

1.4.1 The purpose of this position paper is to present the South African policy position on crypto assets. Such policy stances should enable the development of a regulatory framework, including suggestions on the required regulatory changes to be implemented.

1.4.2 This position paper focuses exclusively on non-government, or non-central-bank-issued, crypto assets. It does not address central-bank-issued digital currencies[16], including central-bank crypto currencies[17].

[15] Initial coin offerings (ICOs) are a means of raising capital using distributed ledger technology (DLT). On the side of the issuer, the collected funds are typically used to finance a project (e.g. the building of a software program). In exchange for the financing, the investor receives a token which may be connected with the right to receive, for example, a dividend, a voting right, a licence, a property right, or a right to participate in the future performance of the issuer.

[16] The term ‘central-bank digital currency’ refers to a central-bank liability, such as cash or deposits, issued in digital or electronic form, denominated in a sovereign currency and backed by the central bank’s assets (Panetta, 2018).

[17] In contrast, a ‘central-bank crypto currency’ specifically refers to the use of cryptography and distributed ledger technology (DLT) in the underlying application (BIS, 2018).

1.4.3 The position paper focuses on all five of the aforementioned crypto asset use cases, namely:

(i) the purchasing/buying and/or selling of crypto assets by consumers and legal persons;

(ii) using crypto assets to pay for goods and services (payments);

(iii) ICOs;

(iv) crypto asset funds and derivatives; and

(v) crypto asset market support services.

1.4.4 The CAR WG acknowledges that this list of use cases is not necessarily exhaustive. This position paper is based on the definition and classification of crypto assets as provided below. The use cases flow from, and are limited to, this specific definition. The paper represents a policy position at a specific point in time, in a rapidly evolving field.

2. Defining and classifying crypto assets

2.1 Defining crypto assets

2.1.1 From a regulatory perspective, having clarity on the term ‘crypto assets’ is fundamental as it directly influences the term’s classification and concomitant regulatory treatment. Various naming conventions have been adopted in just a few years, from ‘digital tokens’ and ‘digital assets’ to, most recently, ‘crypto tokens’ and ‘crypto assets’ (CPMI, 2015; FSB, 2018; BIS, 2018; Carney, 2018a). Despite the various terminology used, the crypto phenomenon is commonly based on decentralised technology such as blockchain and distributed ledger technology (DLT). The definitions used generally focus on its electronic nature, its potential role as a medium of exchange, and its perceived role as a representation of value. Some jurisdictions have classified it as a unit of account, while others have rejected it as a financial instrument such as a security or other financial product. Central banks, in particular, have been reluctant to refer to the phenomenon as ‘currency’ as it is not deemed to be a form of legal tender nor fiat currency. Annexure 2 describes the regulatory positions that have been adopted by some jurisdictions.

2.1.2 The regulatory authorities have taken a functional approach, focusing on the economic activities being performed, compared to a more generic, ‘all-encompassing’ classification. It is acknowledged that crypto assets may perform certain functions similar to those of ‘traditional’ currencies, securities or financial products and commodities.

2.1.3 The term ‘crypto assets’ is thus preferred, as it encapsulates and extends to these functions. It is used throughout this position paper. Furthermore, ‘crypto assets’ are seen as a broader, or ‘umbrella’, term for different crypto asset tokens. These tokens can be classified into three types of crypto asset

tokens[18]:

(i) *Exchange or payment token:* These are tokens designed to be used as a means of exchange or payment for buying goods and services. Some users also utilise it for investment purposes.

(ii) *Security token:* These tokens provide rights such as ownership, the repayment of a specific sum of money, or entitlement to a share in future profits.

(iii) *Utility token:* These tokens can be redeemed for access to a specific product or service that is typically provided using a DLT platform.

2.1.4 The following definition of crypto assets is adopted by the regulatory authorities, through the IFWG:

A crypto asset is a digital representation of value that is not issued by a central bank, but is traded, transferred and stored electronically by natural and legal persons for the purpose of payment, investment and other forms of utility, and applies cryptography techniques in the underlying technology.

2.1.4.1 The definition of crypto assets presupposes the inclusion of stablecoins and, by extension, global stablecoins. The Financial Stability Board (FSB) defines a stablecoin as 'as a crypto asset designed to maintain a stable value relative to another asset (typically a unit of currency or commodity) or a basket of assets' (FSB, 2019). Global stablecoins are stablecoins 'with a potential global reach and the ability to rapidly scale in terms of [the] users/holders of the crypto asset' (FSB, 2019).

2.1.4.2 However, this definition of crypto assets does not include digital representations of sovereign currencies, and is therefore not regarded as legal tender[19] or public money.

3. Description of use cases

3.1 The development of a common understanding of the use cases of crypto assets is important for grasping the scope of the policy recommendations and identifying the service providers for crypto asset activities.

3.2 The purchasing/buying and/or selling of crypto assets

3.2.1 Crypto assets are purchased for different reasons, such as speculative investing (a perceived increased future value), as a medium of exchange in facilitating transactions for goods and/or services, or for access to specific

[18] See https://www.fca.org.uk/publication/consultation/cp19-03.pdf.
[19] Legal tender refers to banknotes or coins that may be legally offered in payment of an obligation and that a creditor is obliged to accept. Refer to https://www.resbank.co.za/BanknotesandCoin/CurrencyManagement/Pages/Currencymanagement-Home.aspx.

products, services and utilities. Crypto assets can also be purchased for the specific purpose of on-selling or trading.

3.2.2 Crypto assets can be purchased using three available options. The buyer can purchase crypto assets from:

(i) a crypto asset trading platform (domestically or internationally based)[20],

(ii) crypto asset vending machines[21], or

(iii) bilateral transactions with other existing holders (peer-to-peer transactions). The buyer may require a digital wallet[22] to acquire crypto assets, which can be obtained through software platforms or can be provided by a digital wallet service provider or a crypto asset trading platform.

3.2.3 This use case identifies CASPs that facilitate the trading of crypto assets. Therefore, it includes entities providing services related to:

(i) the purchasing/buying, selling or transfer of crypto assets, including the use of crypto asset vending machine facilities;

(ii) the trading, conversion or exchange of fiat currency or other value into crypto assets;

(iii) the trading, conversion or exchange of crypto assets into fiat currency or other value; and

(iv) the trading, conversion or exchange of crypto assets into other crypto assets.

3.3 Using crypto assets to pay for goods and services (payments)

3.3.1 This use case was envisioned as the original purpose of crypto assets, namely providing users with an alternative to existing payment systems as described in the white paper on Bitcoin written by Satoshi Nakamoto.[23] The white paper describes a purely peer-to-peer means of payment that allows parties to transact without the need for intermediation by a financial institution to execute online or digital payments. Crypto assets are used to make payments[24], that

[20] A variation of a crypto asset platform is a decentralised exchange. It uses an artificial intelligence (AI) system that is able to connect crypto asset traders electronically. These trades are done simultaneously through an atomic swap using a smart contract and without any intermediation from a third party.
[21] The crypto asset vending machine allows the user to make a physical deposit or an electronic deposit using fiat currency that is credited to a digital wallet. The operator of these machines acts as the counterparty to all transactions.
[22] A crypto asset digital wallet is defined as a software program with the ability to store private and public keys that are used to interact with various blockchain protocols that enable the user to send and receive crypto assets with the ability to monitor balances.
[23] See https://nakamotoinstitute.org/static/docs/bitcoin.pdf
[24] However, this value is not recognised as currency or legal tender in the majority of jurisdictions.

is, to exchange value between participants within the crypto assets user community. Crypto assets are thus used to buy and sell goods and services between transacting parties who accept such crypto assets (tokens) as payment. They are used as a medium of exchange and as a store of value, as opposed to using fiat currencies. The associated value of crypto assets is still largely tied to fiat currency exchange rates, which attests to the fact that crypto assets have not yet been adopted as a unit of account.

3.3.2 Crypto assets challenge not only how the movement of 'funds' gets processed or verified (through, for example, 'proof of work' or 'proof of stake' protocols). They also challenge how the traditional underlying store of value is essentially displaced. The token is not government-decreed, not currency, not central bank money and not commercial bank money. Rather, it is an online network-created perceived store of value.

3.3.3 In the absence of a legal or regulatory framework for South Africa, the acceptance of crypto assets for the payment of goods and services is currently at the discretion of willing merchants. Crypto assets are used for online purchases and purchases at physical stores. The majority of crypto asset payment transactions in South Africa use the crypto asset Bitcoin as the medium of exchange. Crypto assets are accepted at certain physical stores across a variety of industries in South Africa.[25] For both physical and online transactions, the retailers usually display a crypto asset logo, such as the 'Bitcoin accepted here' logo, in their physical store or on their website. Local consumers can also make payments to international merchants using crypto assets, and South African merchants can accept crypto assets from international consumers. Where this is done for services provided (e.g. paying for website design services), everything can occur electronically. In such scenarios, no goods are exchanged, and border customs control for tax purposes[26] as well as cross-border exchange control for capital flows could potentially be circumvented. Retailers often prefer to outsource the processing of transactions to technical service providers in order to accept crypto assets as payment. Some of these entities are referred to as 'payment processors'. They are contracted to merchants to provide acceptance, settlement and reconciliation services.

3.3.4 Besides using crypto assets for the payment for goods and services, they can also be used for person-to-person credit transfers, such as remittances. Crypto assets have specifically made advances in positioning themselves as a 'money remittance' alternative.

[25] At the time of writing this position paper, specific data for physical and online acceptance were not available.

[26] In 2014, South Africa introduced value-added tax (VAT) regulations to tax the inbound digital supplies of services. Effective from 1 April 2019, the list of services subject to VAT was extended. There is a legal requirement on the supplier of the services to register for VAT and charge VAT on the services supplied to South African residents if the registration threshold is met.

3.3.5 This use case identifies CASPs that facilitate the payment for goods and services using crypto assets as a means of payment or a store of value being exchanged. It therefore includes all the entities providing payment intermediary services when using crypto assets as the medium of exchange.

3.4 Initial coin offerings

3.4.1 ICOs, also called 'token launch' or 'token generation', are a means of raising capital. They describe a process whereby a firm sells a predefined number of digital tokens to the public, typically in exchange for other major crypto tokens. The issuer typically uses the collected funds to finance a specific project, for example the development of software. In exchange for the financing, the investor receives a token which may be connected with the right to receive value in return. This value may be in different forms, ranging from voting rights or a licence, to a property right or a right to participate in the future performance of the issuer.

3.4.2 In an ICO, a percentage of the crypto assets is sold to early backers of the project and a percentage is kept for the firm's requirements. This means of raising capital can be used as an alternative to the rigorous classic debt or capital funding processes provided by venture capitalists, private equity firms and banks. The proceeds are intended to be used to develop and bring to market products, services and platforms to which access can be purchased with the digital tokens issued by the enterprise. The goal then is to generate profits which, in some cases, may be shared with those holding the digital tokens issued through the ICO. These tokens may provide certain rights to their holders, such as access to a network, distribution of the earnings generated by the project, or voting rights in the governance of the project, typically managed through smart contracts[27].

3.4.3 A start-up firm that wants to raise money through an ICO typically develops a project plan, commonly referred to as a white paper[28], which states what the

[27] A smart contract is a programmable distributed application that can trigger financial flows or changes of ownership if specific events occur. See, for example, the Financial Stability Board (FSB), June 2017, 'Financial stability implications from fintech'.

[28] A 'white paper' is prepared by a party prior to launching a new token. It details what the potential investor requires in order to make an informed decision to participate in the issuance. This includes the commercial, technological and financial details of the new token. Elements in an ICO white paper could include the following:

- a technical paper explaining the problems, solutions and notable features of the project, and prospects to the investors;
- a description of the decentralised system or blockchain technological platform on which the idea will be executed;
- a road map explaining the milestones to be accomplished by the organisation when the start-up commences;
- a presale date (pre-ICO), if needed;
- a project capitalisation (soft cap and hard cap);
- a detailed explanation of how the funds raised will be managed;
- a logical calculation of how investors' profits will be generated and rewards distributed;
- a timeline to track the processes during development;
- the team of experts in relevant fields;

project is about, what needs the project will fulfil upon completion, how much money is needed to undertake the venture, how many tokens the pioneers of the project will keep, what type of money (crypto assets or fiat currency) is accepted, and how long the ICO campaign will run for. The white paper is a foundational component of an ICO.

3.4.4 ICOs are usually announced on crypto asset forums, corporate websites and social media platforms. This allows potential investors and partners to assess what to expect from the start-up and what, if any, returns are to be expected once the project reaches its target market capitalisation. After the ICO, if the money raised does not meet the minimum funds required by the firm, it is returned to the initial investors backing the ICO, and the ICO is deemed to have been unsuccessful. However, if the funding requirements are met within the specified timeframe, the money raised is used to either initiate a new scheme or complete an existing one.

3.4.5 The tokens issued can have different functions, which prescribes how they should be treated from a legal perspective. This can include tokens with the following characteristics:

(i) *Security token:* These are tokens with characteristics closely associated with security, e.g. debt, equity or derivatives, with an income-generating component and potential rights vis-à-vis the issuer, e.g. in performing governance duties, active participation and/or ownership.

(ii) *Digital asset or currency:* These are tokens with an attributed value for exchange or transactional purposes, with use as a store of value, an asset and/or a unit of account.

(iii) *Asset-backed token:* These tokens provide underlying exposure to assets, e.g. to gold, diamonds, securities, cash and real-estate.

(iv) *Utility token:* These tokens are used for supporting services or functionalities on a blockchain-based or DLT platform.

3.4.6 This use case identifies CASPs that offer tokens as a method to raise capital for their projects. Other intermediaries involved in this use case can be advisory firms or legal consultants assisting the entities in offering the tokens to raise capital or providing financial services related to an issuer's offer and/or sale of crypto assets.

- the team of advisors with professional, legal and financial expertise; and
- a program on how to effectively manage the project's publicity and crowd-funding management.

3.5 Crypto asset funds and derivatives

3.5.1 Crypto assets could potentially be used as the underlying referenced asset in different investment funds. This includes hedge funds, private equity funds, collective investment schemes, exchange-traded funds and pension funds. The current regulatory framework prohibits this, specifically in terms of the Collective Investment Schemes Control Act 45 of 2002 (Board Notice 90 of 2014 and Board Notice 52 of 2015), regulation 28 of the Pension Funds Act 24 of 1956, and the Financial Markets Act 19 of 2012, which does not include crypto assets in the definition of 'securities'.

3.5.2 Crypto assets could also be used in derivative products, where they are referenced as the underlying asset class. These types of derivative instruments could be used to manage the risk or exposure to crypto assets. In a crypto asset derivatives use case, a market participant uses a derivative product with crypto assets as the underlying asset for speculation, risk management, arbitrage and/or some other financial engineering activity. The spot market may benefit from the introduction of derivatives trading, since the spot volatility reduces and the market liquidity increases.

3.5.3 This use case identifies CASPs that offer investment fund or derivative product options with crypto tokens as the underlying asset.

3.6 Crypto asset market support services

3.6.1 Crypto asset market support includes ancillary or support services provided in respect of crypto asset activities. These activities may include services such as safe custody services for crypto assets, digital wallet provisioning for crypto assets and crypto asset mining.

3.6.2 Safe custody services for crypto assets can be performed by existing crypto asset trading platforms, stand-alone entities, or any other entity that intends to provide such services to its customers within a legal arrangement. This is similar to 'traditional' custodial services, where customers' assets or other items of value are stored on their behalf for safekeeping and the custodian takes responsibility for their safety. Currently, crypto asset custodial service offerings seem limited, but some firms are already investigating the possibility of offering such services and anticipate forthcoming regulatory requirements.

3.6.3 A digital wallet stores the public and private keys of crypto asset owners which can be used to receive and spend crypto assets. These digital wallets support different crypto assets or tokens. As crypto assets do not exist in any physical shape or form, private keys[29] are used to access a public crypto address and sign for transactions that need to be securely stored. It is a combination of the recipient's public key[30] and the transferor's private key that makes a transaction possible. Digital wallets come in different forms, such as an

[29] A private key is a secret number, usually a 256-bit encryption technique number, which the holder keeps securely to allow spending (outbound).
[30] A public key is a cryptographic code or number that allows a user to receive crypto assets into his/her account (inbound). This code is mathematically derived from the allocated private key.

application installed locally on a computer, cellphone or tablet. When using a web-based wallet, the private keys can be managed by a trusted third party, who can use two-factor authentication for additional security. Crypto asset trading platforms link the users' wallets to their centrally managed wallet, and trading between users is written on their private ledger, also referred to as an off-chain transaction. If a user wants to enter his/her crypto assets onto the exchange or move them off the exchange, the transaction is written on the public blockchain, also referred to as an on-chain transaction. In order to initiate or verify a transaction, the digital wallet connects to a client or node on the network to process the request.

3.6.4 An alternative to purchasing crypto assets from crypto asset trading platforms is acquiring them through the primary sourcing of crypto assets: by means of 'mining'[31]. Crypto asset mining is mostly done by big companies or mining pools[32] with specialised computing equipment. Crypto asset mining refers to the process by which transactions are verified and added to a public ledger, known as the blockchain. Theoretically, anyone with access to the Internet and suitable hardware can participate in the mining of crypto assets. The mining process involves compiling recent transactions into blocks and trying to solve a computationally difficult puzzle. In the case of Bitcoin mining, the participant who first solves the puzzle gets to place the next block on the blockchain and claims the rewards. The rewards incentivise mining through the receipt of transaction fees associated with the transactions compiled in a block, and through the receipt of newly released crypto assets. Some miners pool their resources and share their processing power over a network to split the rewards equally, according to the amount of work they each contributed to the probability of finding a block. A 'share' is awarded to members of a mining pool who present a valid partial proof of work[33]. Mining service companies have been created to allow customers to buy the infrastructure needed to mine crypto assets.

3.6.5 This use case identifies CASPs for any support services in crypto asset activities.

4. The risks of crypto assets

4.1 The generic risks posed by crypto assets

4.1.1 *The risk of a parallel, fragmented, non-sovereign monetary system:* The risk with potentially the widest-ranging implications is the threat to the existing financial system, in which central banks ensure an efficient monetary system through the execution of monetary policy and influence the supply of money or fiat currencies. The risk posed by crypto assets to the monetary policy

[31] Crypto mining is the process of solving complex problems to verify digital transactions using computer hardware. Miners can either create a crypto asset or get paid for the use of their processing power. Source: www.luno.com.
[32] 'Mining pools' refers to a network of computers required to achieve the necessary computer powers.
[33] Proof of work is a protocol based on a reward system where the miner is rewarded for solving complex equations. A different protocol called 'proof of stake' is where the individual that creates the next block is based on how many coins the person owns on the blockchain it is attempting to mine on.

transmission mechanism is that a significant increase in the demand for crypto assets would lead to the creation of a parallel and ultimately fragmented monetary system. The central bank's role in ensuring an efficient monetary system could become less effective, as the demand for fiat currency would decrease and crypto assets would effectively compete with fiat currencies. In essence, the monetary system would be executed by private entities with individual objectives. Given the current use of crypto assets observed, crypto assets are not seen as posing a systemic risk as yet, and this risk is not probable of materialising in the near future.

4.1.2 *Consumer protection as well as market efficiency and integrity risks:* The risks related to crypto assets that are of immediate concern include the lack of consumer protection, threats to market efficiency and integrity, the possible misuse related to ML/TF, circumvention of exchange controls, the increase of undetected illegitimate cross-border financial flows, inaccurate balance of payments data, illegitimate purchases (stemming from the anonymity or pseudonymity associated with crypto assets) and possible tax evasion.

4.1.3 *The risk of an undefined legal and regulatory framework:* The absence of an appropriate regulatory framework and oversight, equivalent to what is applicable to fiat currency to address the risks posed, as well as the ability to have a holistic view of the actual inflow and outflow of the volume and monetary equivalent of such crypto assets within South Africa, holds regulatory risk.

4.2 As some of the above risks have already materialised, a revised policy stance needs to be taken, and the South African authorities need to adopt an appropriate regulatory response to mitigate such risks.

4.3 The next section highlights some of the specific risks identified per use case.

4.4 The specific risks posed by crypto assets in the use cases identified

4.4.1 The purchasing/buying and/or selling of crypto assets

4.4.1.1 *Money laundering and terrorism financing:* In the case of purchasing crypto assets from CASPs, there are currently no regulatory requirements for customers to be identified. If such customers were involved in ML/TF and/or masking illegitimate cross-border financial flows, it would be extremely difficult to identify such customers and trace such transactions. Although some CASPs, such as crypto asset trading platforms, have voluntarily implemented customer identification and verification (due diligence) processes, this is not a standard process for all CASPs, and not yet a regulatory requirement. It is currently at the discretion of the CASPs to implement customer due diligence measures and sanction screening. The only obligation on CASPs in the Financial Intelligence Centre Act 38 of 2001 (FIC Act), as with all other businesses, is the reporting of suspicious and unusual transactions in terms of section 29 of the FIC Act.

4.4.1.2 *The exchange control risk:* In certain cases, crypto assets have been used to circumvent existing exchange control rules for the movement of capital out of South Africa without adhering to regulatory reporting requirements. Transparency in the financial system is thereby lost, and the tracking of the flow of funds by regulatory authorities becomes very difficult. On the aspect of CASPs' or crypto asset sellers' side, they may wish to buy crypto assets from international providers for the purpose of creating more liquidity in the South African market. For a company, the Currency and Exchanges Manual for Authorised Dealers (AD Manual) does not allow cross-border or foreign exchange transfers for the explicit purpose of purchasing crypto assets, since crypto assets are not officially recognised as legal tender in South Africa, nor have they officially been allocated to a specific asset class. These CASPs are left to find alternative measures to buy or obtain crypto assets. The underlying risk is that companies are forced to come up with inventive means to acquire crypto assets, which measures may not necessarily hold up to regulatory compliance. The South African authorities are thus exposed to incomplete information on the flow of funds or the movement of capital.

4.4.1.3 *The market conduct risk:* Consumers are left vulnerable as CASPs are not regulated. Therefore, no specified rules exist to protect customers or provide customer resolution mechanisms in the case of disputes. Customers are seldom sufficiently informed of the risks of crypto assets and the losses that can be incurred as a result of investing and trading in crypto assets. There is no regulation or independent oversight to ensure that prices as well as the fees and charges involved in buying and selling crypto assets, are set fairly and transparently. Users with large holdings of crypto assets may potentially have exploited the market with market manipulation tactics whereby publicity and hype is created around specific crypto assets. This artificially increases prices, and the crypto assets are subsequently sold in masses after significant profits have been made by these users. Illegal Ponzi schemes have also emerged under the guise of investment opportunities in crypto assets. These intentionally fraudulent operators need to be identified and such activity criminalised to disincentivise further development.

4.4.1.4 *Operational risk, including cybersecurity risk:* Crypto asset trading platforms are exposed to operational risk, as various incidents of platforms being attacked through cybercrime incidents and consumers losing their funds have been reported.[34] Fraud can also be committed through accounting practices on internal financial systems, as various transactions occur off the blockchain according to some of the crypto asset trading platforms' processes. CASPs such as crypto asset trading platforms may not have adequate mechanisms in place to guard against such fraud and hacking incidents.

4.4.2 Using crypto assets to pay for goods and services

4.4.2.1 *The risk of parallel, unregulated and fragmented payment systems:* The non-objection to crypto assets by regulators as a means of payment for the purchase of goods and services (with or without a defined regulatory regime)

[34] See https://www.coindesk.com/2018-a-record-breaking-year-for-crypto-exchange-hacks

implies the acceptance of multiple new decentralised stores of value, different from fiat currencies. Although the shifts to such crypto assets are still negligible, larger shifts away from traditional deposits at banks to these decentralised stores of value may reduce a stable source of deposits for banks, which banks generally use to augment their balance sheets in the intermediation process. This intermediation process aids the financial system in achieving and maintaining financial stability. The creation of competing stores of value may thus have negative network effects. If these shifts occur, to crypto asset trading platforms that are not locally based, these impacts may be even greater. These crypto asset wallets and related stores of tokenised value would thus be different from commercial or central bank money, yet they would perform the same function as deposits reserved for payment purposes. Participants wanting to offer payment services could simply shift funds to crypto assets and then offer payment services, without the need to comply with any regulatory requirements applied to fiat stores of value for payment purposes. Consequently, the rules and requirements of the current payment systems are unjustifiably circumvented due to the alternative payment system being used.

4.4.2.2 *The risk of a reduction in the efficiency of the national payment system:* Alternate crypto asset payment systems imply the creation of parallel, closed-loop payment systems. These payment systems will conceptually result in closed 'three-party payment systems'. Merchants will have to be contracted for multiple crypto asset wallets, potentially under various schemes. Consumers will have to sign up for each of these schemes. These competing schemes will in all likelihood not be interoperable. This could potentially prove inefficient for the system as a whole, and may result in the inefficient allocation of resources at the system or national level. Allowing these new competing crypto asset payment systems to operate may result in transactions moving away from current national payment system. If these shifts happen on a large scale, this may reduce the efficiency of the existing national payment system. This use case is different from the other use cases of crypto assets, as the negative consequences associated with this use case are higher, with minimum conceivable benefits, for the national payment system as a whole. Multiple closed-loop payment systems are created with no definitive clearing and settlement rules, leading to a fragmented and inefficient national payment system.

4.4.2.3 *The risk of perceived regulatory acceptance:* Crypto assets are currently not widely accepted as a means of payment by merchants or retailers. They have equally battled to become accepted as a means of exchange among users. By allowing crypto assets into the regulatory ambit, their perceived value will increase. Crypto asset proponents potentially require this regulatory intervention in order for crypto assets to move beyond being instruments of speculative investments to their initial intended purpose: a medium of exchange. Regulators thus need to reflect carefully on the appropriateness of any regulatory intervention and review the unintended consequences. Accommodative regulatory intervention would create the potential market perception of regulatory acceptance and/or the endorsement of such instruments.

4.4.2.4 *Operational risk and a lack of consumer protection for crypto asset payments:* No consumer protection exists for payments in crypto assets, and it is unclear whether payments can be reversed in cases of errors, overpayment or even fraud.

4.4.3 Initial coin offerings

4.4.3.1 *Highly speculative and limited exit opportunities:* There are clear risks associated with ICOs as they are highly speculative investments in which investors' full invested capital is at risk. Investors must be prepared to face volatility and potential loss. An ICO white paper may state an impressive return target, but this is only a goal set and not a certainty. Investors can possibly mitigate some of the financial risks by consulting in-depth ICO research reports and only investing in start-ups with an experienced team and a cogent business model. Investors may also be unable to trade their coins or tokens, or to exchange them for fiat currencies. Not all the coins and tokens are traded on crypto asset trading platforms, and investors may be exposed to the lack of exit options or may be unable to redeem their coin or token for a prolonged period of time. In addition, the lack of fundamental valuation analysis and a suitable due diligence process by regulators and potential investors may lead to extreme volatility of the ICO market.

4.4.3.2 *The high risk of failure:* The vast majority of ICOs are launched by businesses that are at a very early stage of development. These types of businesses have an inherently high risk of failure. Many of the coins and tokens that are being issued have no intrinsic value other than the possibility of using them to obtain or use a product or service that is yet to be developed by the issuer. There is no guarantee that the products or services will be successfully developed. Even assuming that the project is successful, any eventual benefit may be extremely low relative to the invested capital. Investors must therefore recognise that although ICOs provide start-ups with the opportunity to raise the capital they need to launch their projects, the majority of start-ups have a high probability of failure.

4.4.3.3 *The risk of unclear legal frameworks and ICOs being prone to fraudulent activity:* As ICOs can have different functions and perform different economic activities, it is difficult to determine the specific legal classification. ICOs are not standardised, and their legal and regulatory status is likely to depend on the circumstances of the specific ICO issued. Depending on how they are structured, ICOs may not be captured by the existing rules, and may fall outside of the regulated space. Some ICOs may be used for fraudulent or illegitimate activities, with several ICOs having been identified as fraudulent and some as being used for money-laundering purposes. In a case where an ICO does not fall under existing regulations, investors cannot benefit from the protection that legal and regulatory frameworks provide. In addition, different countries have varying levels of regulatory strictness for ICOs, leaving vulnerabilities in the market. As a result, issuers who wilfully intend to conduct illegal activities move to jurisdictions where the regulators take a 'light touch' approach towards ICOs.

4.4.3.4 *The lack of a fiscal framework:* When it comes to the nascent nature of ICOs and their legal classification, most tax authorities do not have specific regulations in place as yet. While many ICOs were initially positioned as a 'foundation' or a 'non-profit', fewer have been exploring such models recently, opting instead for a 'for profit' model.

4.4.3.5 *Cybersecurity risks:* Many ICOs still lack proper cybersecurity controls, which poses a major threat for investors. As most ICOs raise capital in the form of crypto assets (e.g. Bitcoin or Ether), high-volume transactions become an attractive target for criminals. Cybersecurity hackers benefit from the hype, the irreversibility of blockchain-based transactions and basic coding errors that could have been avoided had the ICO been carefully reviewed by experienced developers and cybersecurity analysts. Thus, without clear regulatory guidelines being enforced or best practice, cybercriminals attempt to find opportunities to steal funds from investors.

4.4.3.6 *Risks related to incomplete and/or inaccurate disclosure:* The information that is made available to investors in the white papers issued (if any) is, in most cases, unaudited, incomplete, unbalanced and even misleading. It typically places the emphasis on the potential benefits but not the risks. It is technical and not easily comprehensible. Investors may therefore not fully understand the risks that they are taking, and may make investments that are not appropriate for their needs.

4.4.4 Crypto asset funds and derivatives

4.4.4.1 *No defined legal framework for using crypto assets:* South African legislation makes provision for the regulation of most investment vehicles, including pooled investment vehicles and most types of exchange-traded funds. Given that crypto assets have not been classified as a specific asset class yet, the existing regulatory provisions do not allow investment vehicles that use crypto assets as the underlying asset.

4.4.4.2 *The risk of volatility of crypto assets:* The use of crypto asset funds for investment purposes is closely linked to their ability to be considered as a tool for capital appreciation over the long term. The volatility of the crypto asset market has made it difficult to consider crypto assets as a safe store of value; they are rather seen as a speculative investment.

4.4.4.3 *Unsystematic risk:* Crypto asset investment funds are difficult to manage as an investment return, seeing as the crypto asset market has presented unsystematic risk with little correlation to the general market risk.

4.4.4.4 *Uncorrelated price movements:* The price movements of crypto assets are perceived as highly uncorrelated to the general market, and crypto assets are thus perceived as exhibiting more unsystematic risk traits than systematic (market-correlated) risk traits. The advent of derivative products for crypto assets has prompted more market-related movements, although the correlation between price movements in equity markets and crypto assets has not been significant thus far.

4.4.4.5 *Liquidity risk:* Due to its low levels of acceptability and trading, the crypto asset market is exposed to liquidity risk. Crypto assets are not easily convertible to other liquid assets, and ownership tends to be concentrated.

4.4.4.6 *Increased risk due to volatility:* Crypto asset derivatives such as futures represent a volatile trading environment that becomes even more risky with leverage and margins that have characteristics of the traditional futures market. Derivative trading is more complex than other forms of investment in the sector, as it does not follow market trends. Derivative products have an opaque pricing mechanism and trade at large premiums over the value of the underlying asset, exerting negative pressure on the market.

4.4.4.7 *Difficulty in setting risk levels:* It is difficult to adequately model the risk exposure based on historical data and liquidity assumptions, making it difficult to set risk levels and effective management measures.

4.4.5 Crypto asset market support services

4.4.5.1 *Cybersecurity risk:* CASPs should ensure that they meet the international cybersecurity standards for the safeguarding of crypto assets. Crypto assets may be exposed to cybersecurity incidents that allow hackers to unlawfully access crypto assets held in safe custody. In the case of digital wallets, the security of information and access to wallets is of high concern and important to keep safe. Scams have arisen that divert crypto assets from users' mining rigs to malicious wallets, as victims' login credentials are compromised.

4.4.5.2 *Environmental risk:* In crypto asset mining, environmental risk has emerged as one of the biggest concerns, as high electricity usage is required to conduct mining, which may have negative consequences on natural resources.

5. Developing a regulatory response to crypto assets in South Africa

5.1 The challenges of regulating crypto assets

5.1.1 One of the most pertinent reasons why crypto assets are challenging to regulate is because they operate at a global level and could potentially be classified under various economic functions. As a result, responsibility for regulation often cuts across various different regulators and national jurisdictions.[35]

5.1.2 The danger of a fragmented international regulatory approach and national authorities reacting with varying degrees of regulatory stringency is that crypto asset-related activities might potentially migrate towards jurisdictions that are regulated less stringently in a 'race to the bottom' as crypto assets are borderless. A coordinated global approach is therefore vital.[36]

[35] He et al, 2016
[36] Lagarde, 2018a

5.1.3 Similarly, if there is no coherent regulatory approach at a national level, regulatory arbitrage could challenge the effectiveness of regulatory actions. Crypto assets are borderless, and their anonymous and pseudonymous nature increases the difficulty of implementing the correct regulatory and monitoring tools.

6. Objectives for regulating crypto assets

6.1 The IFWG and CAR WG have agreed on the following objectives for a crypto framework:

(i) ensure the safety and efficiency of the financial system and financial institutions;

(ii) ensure consumer and investor protection, which includes financial consumer education;

(iii) minimise opportunities for regulatory arbitrage;

(iv) combat the circumvention of exchange control policy and regulations;

(v) combat illegitimate cross-border financial flows, ML/TF;

(vi) combat tax evasion and impermissible tax avoidance arrangements; and

(vii) support financial inclusion efforts and the advancement of technological innovation in a responsible and balanced manner.

7. Principles for regulating crypto assets

7.1 The regulatory response by South Africa to crypto assets should be undertaken in line with the principles stipulated below:

7.1.1 *Adopting a risk-based approach:* Regulatory actions will be undertaken in a manner and intensity that is commensurate with the level of risks posed while balancing potential benefits, also taking into account the developments and requirements of relevant standard-setting bodies. The South African authorities do, however, reiterate their responsibility for the safety, stability and integrity of the wider financial system given the societal benefits associated with ensuring such safety, stability and integrity.

7.1.2 *Adopting a unified regulatory approach:* The regulatory approach adopted should be a joint determination by all the affected regulatory authorities. This paper aims to ensure clear and consistent regulatory treatment by relevant regulatory authorities, taking cognisance of international approaches.

7.1.3 *Adopting a phased approach:* A phased approach, where possible, should be followed, where the regulatory treatment is timeously assessed before increased stringent regulatory requirements are imposed.

7.1.4 *Being technology-neutral and primarily principles-based:* In general terms, principles-based regulation means moving away from reliance on detailed, prescriptive rules and relying more on high-level, broadly stated principles. The term 'principles' can be used to refer to general requirements and can express the fundamental obligations that all users should observe.[37] Principles can be supported by more detailed regulatory rules and standards, where appropriate. The regulatory framework should also be based on the specific activity or function performed, rather than the specific entity or the type of technology used. The principle imperative is applied to the activity or function with the support of regulatory rules and standards.

7.1.5 *Being resilient and adaptive:* All new legislation and future amendments or guidance should provide for rapid changes in this environment that can be applied to existing technologies and should be sufficiently adaptive to allow application to emerging technologies with no or limited amendment.

8. Overall policy position for crypto assets in South Africa

8.1 The regulatory authorities acknowledge crypto assets as a new financial innovation and recommend accommodating it within the regulatory framework, where appropriate and sufficient regulatory safeguards can be implemented. The policy recommendations are based on the existing landscape and current levels of adoption, acceptance and use. The regulatory authorities therefore reserve the right to amend their policy stance should crypto assets pose a material risk to their respective regulatory mandates in future.

8.2 Both general and specific risks have been highlighted that are pertinent in the crypto assets environment. In line with the objectives and principles set out, specific requirements are highlighted per crypto asset use case. The policy position will set out the regulatory approach which will be implemented by the appropriate and relevant regulatory authorities.

8.3 The policy position considered existing legal and regulatory frameworks as well as regulatory developments under consideration, such as the draft Conduct of Financial Institutions Bill (CoFI Bill) and the 2020 Financial Markets Review.[38]

[37] J Black, M Hopper and C Band, 2007, 'Making a success of principles-based regulation', *Law and Financial Markets Review Volume 1 of 2007 Issue 3*.

[38] Also refer to the discussion paper on 'Building competitive financial markets for innovation and growth – a work programme for structural reforms to South Africa's financial markets' released by National Treasury on 28 February 2020.

8.4 Overall recommendations

8.4.1 *Recommendation 1:* It is recommended that entities providing crypto asset services be regarded as CASPs, taking cognisance of the revised Recommendation 15 of the FATF Recommendations on new technologies and virtual assets.

8.4.1.1 The following entities and activities are classified within CASP functions:

Crypto asset service provider	**Services offered**
Crypto asset trading platform (or any other entity facilitating or providing the mentioned services)	These are CASPs providing the following: • intermediary services for the buying and selling of crypto assets; • the trading, conversion or exchange of fiat currency or other value into crypto assets; • the trading, conversion or exchange of crypto assets into fiat currency or other value; • the trading, conversion or exchange of crypto assets into other crypto assets; and • remittance services using crypto assets as a means of facilitating credit transfers (remitter or value transfer provider).
Crypto asset vending machine provider	• Providing intermediary services for the buying and selling of crypto assets (including any of the above-mentioned services).
Crypto asset token issuer	These are CASPs conducting token issuances, including: • ICOs; • the issuance of stablecoins; • the issuance of global stablecoins; and • the participation in, and provision of, financial services related to an issuer's offer or sale of crypto assets.
Crypto asset fund or derivative service provider	These are entities offering investment funds or derivative products with crypto assets as the underlying asset.
Crypto asset digital wallet provider (custodial wallet)	These entities offer a software program with the ability to store private and public keys that are used to interact with various digital protocols which enable the user to send and receive crypto assets, with the additional ability to monitor balances and execute control over the customers' crypto assets.
Crypto asset safe custody service provider (custodial service)	These entities safeguard, store, hold or maintain custody of crypto assets belonging to another party.

8.4.2 *Recommendation 2:* It is recommended that Schedule 1 to the FIC Act be amended by adding CASPs to the list of accountable institutions. Therefore, all CASPs will be required to register with the FIC as an accountable institution. Once registered, all the relevant provisions of the FIC Act will become applicable to CASPs. This will mean that CASPs will be required to adhere to the legislative requirements aimed at AML/CFT. This will include conducting customer identification and verification, conducting customer due diligence, keeping records, monitoring for suspicious and unusual activity on an ongoing basis, reporting to the FIC any suspicious and unusual transactions, reporting cash transactions of R25 000.00 and above (or the applicable threshold at any given time), and reporting in respect of control of property that might be linked to terrorist activity or terrorist organisations. Other obligations will include developing, documenting, maintaining and implementing a Risk Management and Compliance Programme (RMCP)[39], ensuring compliance with the FIC Act, and training employees related to AML/CFT compliance.

8.4.2.1 Entities that are subject to the requirements of the FIC Act are required to apply a risk-based approach to customer identification and verification, and are required to conduct an ML/TF risk assessment in respect of their institution/business. This includes the ability to distinguish between different categories of risk, and to apply enhanced customer due diligence where business with customers is deemed as higher risk and simplified customer due diligence where business with customers is deemed as lower risk. The result of this risk assessment must be linked to the degree of measures and controls adopted by the institution in addressing the degree of the risk posed, i.e. the higher the risk associated with a client, the greater the degree of due diligence required, and more frequent and enhanced monitoring must be conducted to mitigate the degree of the risk posed.

8.4.2.2 CASPs will be required to implement Recommendation 16 (‘the travel rule’) of the FATF Recommendations. The originating CASP should obtain, and hold, required and accurate originator information as well as required and accurate beneficiary information of the crypto asset transaction, submit this information to the beneficiary CASP or another obliged entity, and make this information available on request to the appropriate regulatory and/or law enforcement authorities. The beneficiary CASP should obtain, and hold, required and accurate originator information as well as required and accurate beneficiary information of the crypto asset transaction, and make this information available to the appropriate regulatory and/or law enforcement authorities if and when requested to do so. It is not required that this information be directly attached or encoded to the crypto asset transaction, but this information should be transmitted immediately and securely on request by the appropriate authorities.

[39] The RMCP can be described as the foundation of an accountable institution’s efforts to comply with its FIC Act obligations on a risk-sensitive basis.

8.4.3 *Recommendation 3:* The FIC should assume the supervisory role and duties to ensure compliance by those CASP business entities that would become accountable institutions with the requirements of the FIC Act. The FIC may impose administrative penalties where there is non-compliance. This supervisory role and duties may be reviewed at a later stage to determine the appropriate authority in line with Recommendation 9. Compliance by such business entities with obligations pursuant to the FIC Act will be monitored, and remedial actions will be required of those that fail to meet these requirements. In egregious cases of non-compliance with these requirements, or in cases where remedial actions do not have the desired effect of improving compliance with the relevant requirements, criminal sanctions may be imposed.

8.4.4 *Recommendation 4:* The CAR WG should continue monitoring crypto assets and should define the specific focus of a crypto assets monitoring programme[40], including the following aspects:

(i) monitoring the overall market capitalisation of crypto assets in order to proactively assess the market's growth and its systemic significance on a continuous basis;

(ii) monitoring the number and client base of crypto asset trading platforms domiciled in South Africa to build a profile of each crypto asset trading platform (this could extend to the functions performed, the services offered, crypto assets trading volume, the variety in crypto assets traded, insurance obtained and the governance mechanism);

(iii) monitoring the crypto asset payment service providers and the number of merchants or retailers accepting crypto assets as payment within South Africa, regionally and internationally;

(iv) monitoring the volume of crypto assets bought and sold via crypto asset vending machines; and

(v) monitoring the cross-border flows of crypto asset transactions.

8.4.5 *Recommendation 5:* It is recommended that crypto assets remain without legal tender status and not be recognised as electronic money.

8.4.6 *Recommendation 6:* It is recommended that crypto assets not be allowed for the conduct of money settlements in financial market infrastructures such as the South African Multiple Option Settlement (SAMOS) system, which is the real-time gross settlement system of South Africa. It is further recommended

[40] Regulatory authorities are mindful of the possible implications for financial stability as a result of the risks posed by crypto assets and possible future linkages to the wider financial sector and economy. If issues of financial stability are identified, it could potentially trigger increased or more stringent regulatory actions.

that all existing financial market infrastructures[41] (regardless of whether the financial market infrastructure is systemically important or not) not interface with crypto assets in the absence of a regulatory framework that sets out how crypto assets can interface with market infrastructures. The NPSD of the SARB, the Prudential Authority and the FSCA should consider the appropriate policy stance on the interaction of financial market infrastructures with crypto assets.

8.4.7 *Recommendation 7:* The Prudential Authority should consider the appropriate supervisory and regulatory approach for the treatment of crypto assets, including the reporting on prudential entities' direct exposures to crypto assets and the treatment of the prudential and accounting practices for crypto assets.

8.4.8 *Recommendation 8:* The CAR WG recommends that NT's Tax Policy Unit, alongside SARS, consider the adoption of a uniform definition of crypto assets within the South African regulatory framework, if required and appropriate. The existing definition adopted by SARS refers to 'crypto currencies', not to 'crypto assets'. However, the existing tax structure for the treatment of crypto assets within the Income Tax Act 58 of 1962 and the Value-Added Tax (VAT) Act 89 of 1991[42] is supported.

9. Policy position and recommendation for each crypto asset use case

9.1 The buying and/or selling of crypto assets by consumers and legal persons

9.1.1 Policy position

9.1.1.1 The buying and selling of crypto assets is to be provided for in the regulatory framework under Twin Peaks. Specified services, set out in Recommendation 1, which are rendered in respect of crypto assets, should be classified as financial services, and should be supervised and regulated from a conduct-of-business perspective.

9.1.2 Recommendations

9.1.2.1 *Recommendation 9:* The specified services rendered in respect of crypto assets referred to in paragraph 9.1.1.1 must be included in the definition of 'financial services' in section 3(1)(a) of the Financial Sector Regulation Act 9 of 2017 (FSR Act). As a financial service, 'services related to the buying and selling of crypto assets' must be included in the licensing activities under the CoFI Bill.

[41] A financial market infrastructure (FMI) is defined by the Bank for International Settlements (BIS) as a multilateral system among participating financial institutions, including the operator of the system, used for the purposes of recording, clearing or settling payments, securities, derivatives or other financial transactions. See https://www.bis.org/cpmi/publ/d101a.pdf.

[42] In terms of the value-added tax (VAT) applicable, National Treasury (NT) amended the Value-Added Tax Act 89 of 1991 (VAT Act) in April 2019 to treat 'the issue, acquisition, collection, buying or selling or transfer of ownership of any crypto currency' as being exempt financial services. However, any fee related to that service will be subject to VAT at 15%, provided that the supplier of the service / the fee earner exceeds the registration threshold.

9.1.2.2 *Recommendation 10:* Pursuant to Recommendation 9, FSCA should become the responsible authority for the licensing of 'services related to the buying and selling of crypto assets'. Furthermore, specific conduct standards should be developed for these services.

9.1.2.3 *Recommendation 11:* The Financial Surveillance Department of the SARB should assume the supervisory and regulatory responsibility for the monitoring of illegitimate cross-border financial flows in respect of crypto asset services.

9.1.2.4 *Recommendation 12:* The Financial Surveillance Department of the SARB should request the Minister of Finance to amend Exchange Control Regulation 10(4) to include crypto assets in the definition of 'capital' for the purposes of Exchange Control Regulation 10(1)(c).

9.1.2.5 *Recommendation 13:* The Financial Surveillance Department of the SARB should amend the AD Manual to enable authorised dealers to facilitate and report cross-border transactions in respect of crypto assets (including the transfer of fiat currency for the purpose of buying crypto assets across borders by CATPs). A specific balance of payments category for the reporting of crypto asset transactions should be created, which should be a mandatory obligation.

9.1.2.6 *Recommendation 14:* The Financial Surveillance Department of the SARB should expand the Authorised Dealer in foreign exchange with limited authority (ADLA) framework to allow the appointment of CATPs. CATPs should be authorised and supervised in terms of requirements similar to the current ADLA requirements.

9.1.2.7 *Recommendation 15:* The CAR WG recommends that the Financial Surveillance Department of the SARB explicitly allow individuals, through an amendment of the Exchange Control Regulations, to purchase crypto assets within the single discretionary allowance (SDA) and the foreign capital allowance (FCA).

9.1.2.8 *Recommendation 16:* A new dispensation should be created under the exchange control framework to allow CATPs (licensed as above) to source or buy crypto assets offshore for the purpose of selling to the local market.

9.1.2.9 *Recommendation 17:* CATPs should be required to report crypto asset transactions to the Financial Surveillance Department of the SARB. The trigger event of reporting should be specified by the Financial Surveillance Department of the SARB.

9.1.2.10 *Recommendation 18:* Exemption should be provided for under Section G of the AD Manual as a market maker or arbitrageur for crypto assets, as appointed in Recommendation 14 above.

9.1.2.11 *Recommendation 19:* The FIC should amend Schedule 1 of the FIC Act to include all CASPs as a new category of accountable institutions to be enacted through section 73(3) of the FIC Act.

9.1.2.12 *Recommendation 20:* All requirements in terms of the FATF Recommendations for virtual assets and virtual asset service providers should become applicable to CASPs. (Refer to Recommendations 1-3 above.)

9.2 Payments using crypto assets

9.2.1 Policy position

9.2.1.1 The ability to make payments using crypto assets is currently not provided for under the existing regulatory frameworks. The National Payment System Act 78 of 1998 (NPS Act) does not contain any requirements relating to the use of crypto assets. However, Recommendation 15 of the National Payment System Act Review policy paper[43] provides that the SARB should be required to monitor and respond to emerging risk, and that the NPS Act should have an enabling provision for the SARB to intervene by incorporating a new or unregulated activity into the regulatory framework. The use of crypto assets for payment purposes may therefore be considered, and may be tentatively allowed at users' own risk, by the NPSD of the SARB on a case-by-case basis.

9.2.2 Recommendations

9.2.2.1 *Recommendation 21:* The NPS Act is in the process of being reviewed. It is therefore recommended that consideration be made for the inclusion of an enabling provision in the legislative framework for the regulation of the use of crypto assets for domestic payment purposes and/or the regulation of payment services associated with crypto assets. Payments using crypto assets will, in the interim period, be subjected to a regulatory sandbox approach, where the use of crypto assets for domestic payments may be assessed in a controlled environment to determine the consequences of potential adoption. A regulatory sandbox approach assists in determining the benefits and risks of crypto assets as a means of payment, as well as the progression of a formal and final regulatory stance on the use of crypto assets for payment.

9.3 Initial coin offerings

9.3.1 Policy position

9.3.1.1 The use of ICOs[44] as a means of raising capital is accommodated within the regulatory framework for start-up firms to raise capital. A regulatory framework would ensure that this alternative means of raising capital takes place within a defined framework.

[43] More specifically, this was a policy paper on the *Review of the National Payment System Act 78 of 1998*, published by the SARB in September 2018.
[44] A coin split or fork is not interpreted as an inclusion in the issuance of an ICO.

9.3.2 Recommendations

9.3.2.1 *Recommendation 22:* The CAR WG recommends that the regulation of ICO issuers must be aligned, as far as possible, to the regulation of issuers of securities or 'over-the-counter' financial instruments. It is therefore recommended that security token offerings be subjected to regulation under the securities legislation, as per the Financial Markets Act 19 of 2012.

9.3.2.2 *Recommendation 23:* It is, however, also recommended that ICO issuances for payment or exchange and utility token offerings be aligned to Recommendations 9 and 10 as a financial service, subject to the CoFI Bill licensing requirements and the specific conduct standards to be developed. These standards should provide that ICO issuers (for payment or exchange and utility token offerings) are required to prepare a detailed prospectus, which is the equivalent of a white paper. The document should set out specific requirements and details on disclosures about the company, a governance plan, any agreement(s) between the customers and ICO issuers, comprehensive independent audits, and specific reports (to be confirmed) to regulators.

9.3.2.3 *Recommendation 24:* The CASP that issues the token or provides financial services related to an issuer's offer or sale of a crypto asset should be required to adhere to AML/CFT requirements, and should become an accountable institution as referred to in the proposed amendment to Schedule 1 to the FIC Act. Also refer to Recommendations 1-3 above.

9.4 Crypto asset funds and derivatives

9.4.1 Policy position

9.4.1.1 The current approach to regulation is to specify the asset classes into which investment schemes and pension funds may invest. It is recommended that crypto assets be accommodated as the underlying asset in the development of specific investment fund and derivative products within the regulatory framework. It is therefore recommended that the pooling of crypto assets be regarded as constituting an alternative investment fund, and that such funds be allowed to include crypto assets within their portfolios.

9.4.1.2 The Financial Market Act 19 of 2012 (FMA) regulates derivative instruments. The definition of a 'derivative instrument' in the FMA is agnostic as to the nature of the underlying or referenced asset. It would therefore be possible to create a derivative instrument with reference to crypto assets as an underlying asset.

9.4.2 Recommendations

9.4.2.1 *Recommendation 25:* It is recommended that the pooling of crypto assets be regarded as constituting an alternative investment fund, which should therefore become a licensing activity in terms of the CoFI Bill. However, a collective investment scheme should not be allowed to include crypto assets in its portfolios.

9.4.2.2 *Recommendation 26:* The FSCA should make a determination on whether crypto assets should be considered as allowable assets for the asset-spreading requirements of pension funds, as contemplated in item 8.1(c) of Table 1 of regulation 28 of the Regulations made in terms of the Pension Funds Act 24 of 1956.

9.4.2.3 *Recommendation 27:* Institutions which issue over-the-counter instruments with crypto assets as the underlying asset class should be required to be licensed by the FSCA. It is further recommended that the current regulatory framework be extended to include specific requirements for crypto asset derivative instruments, including that settlement must occur in cash or fiat currency.

9.4.2.4 *Recommendation 28:* The CASP that provides the crypto asset alternative investment fund or derivative instruments should be required to adhere to the AML/CFT requirements, as per item 5 of Schedule 1 to the FIC Act.

9.5 Crypto asset market support services

9.5.1 Policy position

9.5.1.1 A CASP that provides specific services, such as safe custody services or digital wallet provisioning services, is included within the scope of regulatory obligations specified below. The extent to which it is possible to accommodate all these support activities in the regulatory framework must, however, still be considered by the regulatory authorities. The mining of crypto assets is not considered a material risk. Therefore, no specific regulatory obligations are required for entities participating in such activities at this stage. However, where additional financial services or investment vehicles are derived from crypto asset mining, such financial services or investment vehicles must be considered within the scope of crypto asset services declared as a financial service.

9.5.2 Recommendations

9.5.2.1 *Recommendation 29:* In line with Recommendations 9 and 10, it is recommended that a CASP offering custodial services and/or digital wallet provisioning be considered as providing financial services, as contemplated in Section 3 of the FSR Act, and that this should therefore become a licensing activity under the CoFI Bill. The specific conduct standards to be made applicable to the provision of such activities should include requirements relating to operational risk, auditing, the segregation of roles, and any other relevant requirements.

9.5.2.2 *Recommendation 30:* CASPs that provide safe custody and digital wallet services (custodial wallets only) should be required to adhere to AML/CFT requirements and should become accountable institutions, as referred to in the proposed amendment to Schedule 1 to the FIC Act. Also refer to Recommendations 1-3 above.

10. Conclusion and the way forward

10.1 This position paper sets out the recommendations for a revised policy and regulatory position on crypto asset activities.

10.2 The position paper is a joint initiative by the IFWG and the CAR WG.

10.3 This position paper is published by all the regulatory authorities, which includes NT in its role as policymaker.

10.4 Stakeholders and interested parties are invited to forward their comments on this position paper to the IFWG at the email address: innovation@ifwg.co.za.

10.5 The position paper follows a consultative process, and all comments on this document should be submitted by 15 May 2020.

10.6 Upon conclusion of the consultation phase, the regulatory authorities, in conjunction with NT, will consider all the input received on the position paper, and the preferred policy position will be communicated accordingly, through a final position paper.

10.7 This paper represents a policy position that is based on the identification and definition of use cases at the time of drafting the position paper. The need for continuous refinements, amendments and additions is expected within the context of the evolutionary nature of the subject matter.

11. Abbreviations

ADLA	Authorised Dealer with in foreign exchange with limited authority
AD Manual	Currency and Exchanges Manual for Authorised Dealers
AML/CFT	Anti-money laundering/combating the financing of terrorism
BIS	Bank for International Settlements
CAR WG	Crypto Assets Regulatory Working Group
CASP	Crypto Asset Service Provider
CATP	Crypto asset trading platform
CoFI Bill	Conduct of Financial Institutions Bill
CPMI	Committee on Payments and Market Infrastructures
DLT	Distributed ledger technology
FATF	Financial Action Task Force
FIC	Financial Intelligence Centre
FIC Act	Financial Intelligence Centre Act 38 of 2001
Fintech	Financial technology
FMA	Financial Markets Act, 19 of 2012
FMI	Financial Market Infrastructure
FSB	Financial Stability Board
FSCA	Financial Sector Conduct Authority
FSR Act	Financial Sector Regulation Act 9 of 2017
ICO	Initial coin offering
IFWG	Intergovernmental Fintech Working Group
ML/TF	Money laundering/terrorist financing
NCR	National Credit Regulator
NPS Act	National Payment System Act 78 of 1998
NPSD	National Payment System Department
NT	National Treasury
RMCP	Risk Management and Compliance Programme
SAMOS system	South African Multiple Option Settlement system
SARB	South African Reserve Bank
SARS	South African Revenue Service
VAT Act	Value-Added Tax Act 89 of 1991

Annexure 1: Summary of comments from consultation paper

No.	Theme of issues raised	Detail of issues	Comments from CAR WG
1.	AML/CFT rules	Application of risk based approach for crypto assets in respect of AML/CFT requirement with further specification on risk assessment criteria.	Refer to Recommendation 2. Entities subject to the requirements of the FIC Act are required to apply a risk based approach to customer identification and verification and are required to conduct a ML/TF risk assessment in respect of their business. Entities are required to consider their own risk assessment and develop a capability to distinguish between different categories of risk.
		Lowered regulatory requirements for crypto asset to crypto asset transaction.	Refer to Recommendation 2. Entities subject to the requirements of the FIC Act are required to apply a risk based approach in conducting a ML/TF risk assessment and required to consider their own risk assessment and develop a capability to distinguish between different categories of risk.
		Phased approach to implementation of requirements, which will allow CASPs to build AML/CFT capability. Therefore, proposal for CASPs to voluntarily submit AML/CFT requirements, without punitive measures imposed, whilst allowing testing period and familiarisation with requirements.	Refer to Recommendation 2. The FATF recently provided guidance on crypto assets and all jurisdictions are now required to regulate crypto assets and to implement a licensing and supervisory regime.
		Proposal to consider other methods and systems to implement AML/CFT requirements.	Refer to Recommendation 2. The systems and methods used by CASPs to implement the FATF Recommendations are not prescribed by regulatory authorities. Industry participants are required to develop appropriate solutions to adhere to the AML/CFT requirements (i.e. adherence to the 'travel rule' requirements as referred to in Recommendation 16 of the FATF Recommendations).
2.	Consumer protection rules	Proposal to include consumer and investor protection rules, preventing market abuse and protection of customers' funds requirements applicable to CASPs.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA.

No.	Theme of issues raised	Detail of issues	Comments from CAR WG
		Ombudsman to be appointed for crypto asset transaction disputes.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. Further the FSR Act refers to the establishment of the Ombud Council to assist in ensuring that customers are treated fairly and have access to alternative dispute resolution processes for complaints about financial products and financial services.
		Further recommendations to be included on issues such as safe custody, client asset segregation and enhanced transparency and disclosure.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services.
		Imposing market entry requirements for CASPs.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. CASPs will require a licence from the FSCA to conduct services related to crypto assets.
3.	Exchange control policy and regulations	Allowance required for CATPs to open foreign currency accounts to source crypto assets from abroad.	Refer to Recommendations 11 and 16. The Financial Surveillance Department of the SARB will assume the regulatory and supervisory responsibility for the monitoring of illegitimate cross-border financial flows. CATPs under the licence from the Financial Surveillance Department of the SARB provides for the offshore purchasing of crypto assets for selling to the local market.
		Recommend that business entities are allowed to buy crypto assets from abroad.	Refer to Recommendations 11, 15 and 16. The Financial Surveillance Department of the SARB will assume the regulatory and supervisory responsibility for the monitoring of illegitimate cross-border financial flows. CATPs under the licence from the Financial Surveillance Department of the SARB provides for the offshore purchasing of crypto assets for selling to the local market. Additionally individuals are allowed to buy

No.	Theme of issues raised	Detail of issues	Comments from CAR WG
			crypto assets from abroad within the SDA and FCA provisions. Business entities that are not licenced as a CATP by the Financial Surveillance Department of the SARB are not authorised to purchase crypto assets from abroad.
4.	Scope of regulatory proposals	Proposal to exclude non-custodial digital wallet service providers as these entities are not providing financial service activities.	Refer to Recommendation 1. Only digital wallet service providers that execute control over the customers' crypto assets are included within the scope of CASPs.
		Proposal to exclude merchants and retailers, as these entities are not providing services related to crypto assets.	Refer to Recommendation 1. The entities classified as CASPs do not include general retailers and merchants.
		Proposal to include independent providers of safe custody services for crypto assets.	Refer to Recommendation 1. Entities providing safe custody services that enable control over the crypto assets of customers are within the scope of CASPs.
		Proposal for crypto asset mining to be included in scope.	Refer to Recommendation 29. At this point with the information available the mining of crypto assets is not considered a material risk and therefore no specific regulatory recommendations included.
		Proposal to provide clarity on crypto asset payment processing services.	Refer to recommendation 21. The NPS Act is in the process of being reviewed and within this review consideration will be made for the regulation of payment services associated with crypto assets.
5.	Further clarifications required	Clarify AML/CFT rules for commercial banks to be applied for crypto asset transactions.	As an existing accountable institution all AML/CFT requirements should be adhered to.
		Clarify crypto asset cross border reporting requirements.	Refer to Recommendations 13 and 17. The Financial Surveillance Department of the SARB aims to create a specific balance of payments category for the reporting of crypto asset transactions and specify the trigger event for reporting. Input received from industry participants on the event of reporting are being considered currently.

No.	Theme of issues raised	Detail of issues	Comments from CAR WG
		Clarity required on the regulatory treatment of ICOs.	Refer to Recommendations 22 and 23. The use of ICOs are accommodated within the regulatory framework and the requirements are dependent on the type of token issued (security, exchange or utility token).
		Clarity required on security tokens issued.	Refer to Recommendation 22. Security token offerings will be subjected to securities regulation as per the FMA.
		Clarify treatment of crypto asset investment funds and intermediary services.	Refer to Recommendation 25. An investment fund using crypto assets will constitute an alternative investment fund and become a licencing activity in terms of the CoFI Bill.
		Clarity required for treatment of all crypto asset use cases identified.	The Recommendations include all the specified use cases.
		Clarity required on proposed definition as not all tokens are decentralised.	Refer to section 2.1.4 for the revised definition of crypto assets.
		Clarification required on requirements for different crypto asset service providers.	The Recommendations include an overall position for crypto assets and for each crypto asset use case.
		Clarification on legal status of crypto assets - thus not illegal to conduct crypto business activities.	Refer to Recommendation 5 and the Recommendations per use case. Crypto assets remain without legal tender status and not recognised as public or electronic money.
		Clarify central point of registration, process and reporting.	Refer to the Recommendations, as revised.
		Clarification on tax treatment of crypto assets required.	Refer to Recommendation 8. Crypto assets are regulated in terms of the Income Tax Act 58 of 1962 and VAT Act.
6.	Proposed additional regulatory proposals	Proposal to include business conduct obligations: Audits, regulatory reporting, capital requirements, business plan.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services that

No.	Theme of issues raised	Detail of issues	Comments from CAR WG
			could include these proposed requirements.
		Assessment of all tokens/coins before CATP allowed to offer on trading platform (only approved coins).	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services that could include these proposed requirements to specify allowable criteria for tokens/coins.
		Consistent & stringent information security rules to be applied.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services that could include requirements related to information security rules.
		Registration process insufficient, recommend inclusion of additional stricter requirements.	Refer to the Recommendations, as revised.
		CATPs should have head office located in South Africa, have client contact centre, data warehoused in South Africa and, capability of automated analysis (mitigating human errors).	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services that could include these proposed requirements. A business providing services to local South African customers should adhere to local regulatory requirements.
		The movement of crypto assets abroad should only occur through vetted and approved CATPs or CASPs with a limit on the allowable funds leaving South Africa.	Refer to Recommendations 11, 15 and 16. The Financial Surveillance Department of the SARB will assume the regulatory and supervisory responsibility for the monitoring of illegitimate cross-border financial flows. CATPs under the licence from the Financial Surveillance Department of the SARB provides for the offshore purchasing of crypto assets for selling to the local market. Additionally individuals are allowed to buy crypto assets from abroad within the SDA and FCA provisions and limits.
		The robustness of CATP systems' and underlying technology	Refer to Recommendations 9 and 10. Crypto assets will be

No.	Theme of issues raised	Detail of issues	Comments from CAR WG
		should adhere to minimum requirements.	included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services that could include requirements related to information security rules.
		The custody of crypto assets should have minimum online and offline storage requirements.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA. The FSCA will develop specific conduct standards for the provision of crypto asset services that could include requirements related to storage of customers' crypto assets.
		Development of common standards for financial message transfers.	Refer to Recommendation 2. The systems and methods (including common standards) used by CASPs to implement the FATF Recommendations are not prescribed by regulatory authorities. Industry participants are required to develop appropriate solutions to adhere to the AML/CFT requirements (i.e. adherence to the 'travel rule' requirements as referred to in Recommendation 16 of the FATF Recommendations).
		Promote a harmonised approach across regulatory authorities.	Refer to the approach adopted by the IFWG in section 7.1.3. The Recommendations adopted have been developed by all impacted regulatory authorities.
7.	Unintended consequences	Additional financial costs to implementation of compliance requirements such as AML/CFT.	Refer to Recommendation 2. The FATF recently provided guidance on crypto assets and all jurisdictions are now required to regulate crypto assets and to implement a licensing and supervisory regime.
		Excessive regulatory frameworks may be too harmful to market, regulatory recommendations should focus on protection of customers.	Refer to Recommendations 9 and 10. Crypto assets will be included in the definition of financial services and CAPS will be regulated and supervised from a conduct of business perspective by the FSCA.
		Be cognisant of other regulatory changes and obligations.	The Recommendations takes cognisance of existing regulatory frameworks and regulatory developments currently under consideration.

Annexure 2: Jurisdictional approaches to regulating crypto assets

1. Criteria for selecting jurisdictions

1.1 According to CryptoCompare[45], some of the top fiat currencies used for Bitcoin trading[46] globally, includes the Japanese Yen, United States Dollar, Euro, South Korean Won, Polish Zloty, British Pound, Canadian Dollar and Russian Ruble.

1.2 These corresponding countries are therefore included in the jurisdictional review of crypto assets classification and the regulatory approaches employed. In addition, the BRICS countries not already included above are Brazil, India and China. Given the significant work the Monetary Authority of Singapore, the Dutch Central Bank, Norway, Sweden and Australia have done, they too are included in the review to ensure a more representative sample. In addition to the European Central Bank being included, the two largest economies in the European Union, namely Germany and France, are also included.

2. Components to be reviewed

2.1 In addition, it is proposed the following components be reviewed of the identified jurisdictions' approaches to regulating crypto assets:

(i) Crypto asset classification – do jurisdictions classify crypto assets as a currency, commodity, medium of exchange, share, property, asset, store of value or combination thereof?

(ii) Central bank regulatory stance – has the central bank indicated that it will or intends to regulate crypto assets? What is the current approach (banned, regulated/licensed or observing/monitoring)?

(iii) Regulations or other guidance issued by central bank – has the central bank issued regulations regarding crypto assets (and if so, what has been issued)?

(iv) Regulations or other guidance issued by other authorities – has any other national authority issued regulations regarding crypto assets (and if so, what has been issued)?

(v) Overall country position on fintech – have the selected countries come out with a strong view on fintech (either positive or negative)? Do countries see fintech more as an enabler or more as a threat?

3. Summary of jurisdictional approaches

3.1 See the table below for a review of regulatory approaches employed by specific countries.

[45] CryptoCompare is a private firm collecting and providing global crypto asset market data.
[46] As the most-widely traded crypto asset globally, Bitcoin is used as a proxy for crypto asset trading.

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
1.	Australia	• Central bank: Not yet classified but not legally recognised as a unit of account or means of payment (RBA, 2014) • Finance ministry: Not yet classified • Tax authority: Neither money nor Australian or other foreign currency, but property and an asset for capital gains tax purposes (ATO, 2017; ATO, 2018)	Monitoring	• None	• Australian Tax Office provided clarity of tax treatment of crypto-assets (https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/) • Crypto Exchanges required to register with AUSTRAC and implement an AML/CFT program (https://www.austrac.gov.au/new-australian-laws-regulate-cryptocurrency-providers).	• Neutral • Aligned tax treatment of crypto-assets with that of money on 9 May 2017 (ATO, 2017) • No immediate plans to issue a CBDC (Lowe, 2017) • Central bank does not currently any issues for it to address in terms of the payments system, monetary policy or financial stability (RBA, 2014)
2.	Brazil	• Central bank: Not yet classified but not legal tender (Bank of Brazil, 2017) • Finance ministry: Not yet classified • Tax authority: Not yet classified	Monitoring	• Warning on the use of crypto-assets (https://www.bcb.gov.br/ingles/norms/Virtual-currencies-Communique-31379-English.pdf)	• Brazilian Securities and Exchange Commission prohibited local investment funds from investing in crypto-assets (https://www.reuters.com/article/brazil-bitcoin/brazil-regulator-bans-funds-from-buying-cryptocurrencies-idUSL1N1P71DV)	• Neutral to hostile • Some mixed signals: Executive Manager of Bank of Brazil's Digital Affairs Directorate is supportive of financial innovation and called for creating rules that would allow a more favourable environment for crypto-assets (De Souza, 2017), while the Governor labelled crypto-assets a Ponzi-scheme (Goldfajn, 2017) • Central bank discourages use of crypto-assets (Bank of Brazil, 2017)
3.	Canada	• Central bank: Crypto-assets not legal tender (Financial Consumer Agency of Canada, 2018); not money but	Monitoring	• Bitcoin awareness working paper (https://www.bankofcanada. ca/wp-content/uploads/ 2017/ 12/swp 2017-56.pdf)	• Canadian Financial Consumer Agency issued statement on crypto-assets (https://www.canada.ca/en/financial-consumer-	• Neutral

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
		securities or assets (Wilkins, 2017) • Finance ministry: Not yet classified • Tax authority: Crypto-assets are commodities (Rotfleisch, 2017) and therefore subject to the Canadian Income Tax Act (Financial Consumer Agency of Canada, 2018)		• Bitcoin standard vs gold standard working paper ((https://www.bankof canada.ca/wp-content/uploads/2016/03/swp 2016-14.pdf) • Note on decentralised money (https://www.bankofcanada.ca/wp-content/uploads/2014/04/Decentralize-E-Money.pdf) • Briefing on crypto-assets (https://www.bankofcanada.ca/wp-content/uploads/2014/04/Senate_statement.pdf) • Staff analytical note on blockchain (https://www.bankofcanada.ca/wp-content/uploads/2018/03/san2018-5.pdf) • Paper on the value of crypto-assets (https://www.bankofcanada.ca/wp-content/uploads/2016/04/value-virtual-currencies.pdf) • The economics of private crypto-currencies (https://www.bankofcanada.ca/wp-content/uploads/2013/11/wp2013-38.pdf) • Central bank crypto-currency (https://www.bankofcanada.ca	agency/services/payment/digital-currency.html) • Consumers Council of Canada issued consumer advisory statement (https://www.fin.gc.ca/consultresp/fcpf-cpcpsf/082-fcpf-cpcpsf.pdf) • Fintrac releases key updates to AML obligations, including virtual currency exchange MSB registration (https://www.fintrac-canafe.gc.ca/guidance-directives/overview-apercu/FINS/2-eng?s=12)	

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
				/wp-content/uploads/2017/11/sdp2017-16.pdf) • Competition in the crypto-assets market (https://www.bankofcanada.ca/wp-content/uploads/2014/08/wp2014-33.pdf)		
4.	China	• Central bank: Crypto-assets are not currency but a virtual good (Reuters, 2017) • Finance ministry: Not classified • Tax authority: Crypto-assets not legal tender (Chinese Ministry of Commerce, 2013)	Banned ICOs and crypto-asset trading (Atkins, 2018)	• Banned crypto-asset exchanges in 2017 and blocked access to all domestic and foreign cryptocurrency exchanges, and ICO websites in 2018 (https://www.businessinsider.in/China-is-moving-to-eliminate-all-crypto currency-trading-with-a-ban-on-foreign-exchanges/articleshow/62798523.cms) • Prohibited financial institutions from handling cryptocurrency transactions (https://www.bloomberg.com/news/articles/2013-12-05/china-s-pboc-bans-financial-companies-from-bitcoin-transactions) • Ordered commercial banks and payment companies to close bitcoin trading accounts (https://www.wsj.com/articles/china-cracks-down-on-bitcoin-1396361492?tesla=y)	• Chinese finance ministry issued educational note (http://english.mofcom.gov.cn/article/newsrelease/counselorsoffice/westernasiaandafricareport/201602/20160201 259312.shtml)	• Hostile • However, the central bank set up research team in 2014 to develop digital fiat money

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
				• Ordered a crackdown on bitcoin mining (http://www.chinadaily.com.cn/a/201801/05/WS5a4eb4cba31008cf16da527c.html)		
5.	European Union	• Central bank: Not a currency (Cœuré and Loh, 2018) • Finance ministry: Not applicable • Tax authority: Not applicable	Monitoring	• Electronic Money Directive 2009/110/EC (https://www.ecb.europa.eu/ecb/legal/pdf/en_regulation_ecb_2013_43_f_sign.pdf) • Crypto-assets opinion piece (https://www.ecb.europa.eu/press/inter/date/2018/html/ecb.in180313.en.html) • Crypto-assets information piece (https://www.ecb.europa.eu/explainers/tell-me/html/what-is-bitcoin.en.html) • Virtual currency opinion piece (https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180208.en.html) • Virtual currency opinion piece (https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf)	• European Banking Authority issued crypto-assets warning (https://www.eba.europa.eu/documents/10180/598344/EBA +Warning+on+Virtual+Currencies.pdf) • European Securities and Markets Authority issued a report on distributed ledger technology (https://www.esma.europa.eu/system/files_force/library/dlt_report_-_esma50-1121423017-285.pdf)	• Neutral

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
6.	France	• Central bank: Not a currency but an asset (De Galhau, 2017) • Finance ministry: Not classified • Tax authority: Not classified	Monitoring	• Warning on the use of crypto-assets (https://publications.banque-france.fr/en/ dangers-linked-emergence-virtual-currencies-example-bitcoins) • Crypto-assets opinion piece (https://publica tions.banque-france.fr/en/emergence-bitcoin-and-other-crypto-assets-challenges-risks-and-outlook) • Working paper on monetary policy and crypto-assets (https://publications.banque-france.fr/sites/default/files/medias/documents/dt-642.pdf)	• Finance ministry issued position paper on regulating virtual currencies (https://www.economie.gouv.fr/files/ regulatingvirtualcurrencies.pdf) • Finance ministry issued report on virtual currencies (https://www.economie.gouv. fr/rapport-sur-monnaies-virtuelles-2014) • Finance ministry issued paper on monetary innovation (http://blogs.economie.gouv.fr/ les-cafes-economiques-de-bercy/ innovation-monetaire-enjeux/) • Finance ministry issued fintech information paper (https://www.economie.gouv.fr/ entreprises/fintech-innovation-finance)	• Neutral
7.	Germany	• Central bank: Not a virtual currency but a crypto-token (Deutsche Bundesbank, 2018) • Finance ministry: Not classified but recognises Bitcoin as a unit of account, private money and as financial instruments (BaFin, 2013; Clinch, 2013) • Tax authority: Same tax treatment as legal tender (BZSt, 2018)	Regulating (by BaFin amending guidance on the definition of 'financial instruments' in the German Banking Code, Germany became the first country to 'regulate'	• Opinion piece on Bitcoin as a virtual currency or crypto-token (https://www.bundesbank.de/ Redaktion/EN/ Topics/2018/2018_02_19_diskussion_bitcoin. html?submit=Search&searchIssued=0& template QueryString= bitcoin&search Archive=0)	• Finance ministry conducted a study on fintech in Germany (https://www.bundesfinanzministerium .de/Content/EN/Standardartikel/ Topics/Inter national_affairs/Articles/2016-12-13-study-fintech-market-in-germany.pdf?__blob= publicationFile&v=2) • German Federal Financial Supervisory Authority issued	• Friendly • Germany officially recognises crypto-assets as financial instruments and private money (BaFin, 2013; Clinch, 2013)

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
			crypto-assets (Stefan, 2013))	• User advisory warning (https://www.bundesbank.de/Redaktion/EN/Standardartikel/Press/Contributions/2018_02_04_thiele_fas.html?searchArchive=0&submit=Search&searchIssued=0&templateQueryString=bitcoin)	information piece on virtual currencies (https://www.bafin.de/EN/Aufsicht/FinTech/VirtualCurrency/virtual_currency_node_en.html) • German Federal Financial Supervisory Authority issued user advisory on crypto-assets (https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2014/fa_bj_1401_bitcoins_en.html) • German Federal Financial Supervisory Authority issued advisory note on ICOs (https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/WA/dl_hinweisschreiben_einordnung_ICOs_en.html) • German Federal Financial Supervisory Authority issued explanatory note on DLT (https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2016/fa_bj_1602_blockchain_en.html) • Tax authority issued note on the tax treatment of crypto-assets (https://www.ethnews.com/german-ministry-of-finance-provides-guidance-on-bitcoin-taxation)	

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
8.	India	• Central bank: Not legal tender • Finance ministry: Not legal tender (Jaitley, 2018) • Tax authority: Not currency or legal tender, but an asset for capital gains tax purposes (Wadhwa, 2018)	Banned crypto-assets for payments (Jaitley, 2018)	• User advisory on virtual currencies (https://rbi.org.in/scripts/BS_PressRelease Display.aspx?prid=39435) • Press release on the risks associated with virtual currencies (https://rbi.org.in/scripts/BS_PressRelease Display.aspx?prid=42462)	• Tax authority sent notices to 100 000 crypto-assets investors reminding them of declaring to declare crypto-asset profits (https://www. reuters.com/article/us-markets-bitcoin-india-taxes/india-sends-tax-notices-to-crypto currency-investors-as-trading-hits-3-5-billion-idUSKBN1F8190)	• Hostile • Finance Minister quoted as saying in the budget speech "The Government does not consider cryptocurrencies legal tender or coin and will take all measures to eliminate use of these crypto-assets in financing illegitimate activities or as part of the payment system" (Jaitley, 2018) • Central bank issued several advisory warnings over crypto-assets
9.	Japan	• Central bank: Legal tender (Nemazie, 2017) • Finance ministry: Legal tender (Nemazie, 2017) • Tax authority: Not classified yet (but is taxing profits from crypto-assets (Southurst, 2017))	Regulating (via the revised portions of the Banking Act ((Nemazie, 2017))	• Central bank perspective on Fintech (https://www.boj.or.jp/en/announcements /press/koen_2016/data/ko160823a.pdf)	• Tax authority taxing profits from crypto-assets as miscellaneous income (https://www.bitsonline.com/japan-tax-digital-asset-gains/)	• Friendly • Passed Virtual Currency Act in March 2017, making crypto-assets legal tender in Japan (Nemazie, 2017) • Supportive of crypto-assets, attributing 0.3% of 2017 GDP growth to its crypto-friendly stance • Established Fintech Centre on 1 April 2016 and the Bank of Japan is "dedicated to supporting the healthy development of FinTech" (Kuroda, 2016) • Not currently considering issuing a CBDC
10.	Netherlands	• Central bank: Not considered as money (DNB, 2018) • Finance ministry: Treated as a barter item (Peaster, 2018) • Tax authority: Barter items and taxed according to	Monitoring	• Consumer advisory warning (https://www.dnb.nl/en/news/news-and-archive/nieuws-2013/dnb300672.jsp) • Working paper on Bitcoin adoption (https://www.dnb.nl/en/binarie	• Finance ministry announced Bitcoin will be taxed (http://www.24oranges.nl/2013/06/17 /bitcoin-income-shall-be-taxed-dijsselbloem-says/)	• Neutral

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
		individual tax brackets (Peaster, 2018)		s/Working%20 Paper%20No.%20585_tcm47 -373269.pdf) • Working paper on the value of Bitcoin (https://www.dnb.nl/binaries/ Working%20 Paper%20521_tcm46- 346438.pdf) • Position paper on crypto-assets and ICOs (https://www.dnb.nl/en/binarie s/TR17025 %20Position%20paper%20Cr yptocurrencies_tcm47- 371493.pdf)		
11.	Norway	• Central bank: Not yet classified • Finance ministry: Not money or currency but assets (Mckenna, 2017) • Tax authority: Assets and therefore subject to capital gains taxes (Mckenna, 2017)	Monitoring	• None found	• Tax authority classified crypto-assets as property, not as currency (http://www.loc.gov/law/foreign-news/article/norway-bitcoins-are-capital-property-not-currency-says-norwegian-tax-authority/)	• Neutral
12.	Poland	• Central bank: Not legal tender (Polish Central Bank, 2017) • Finance ministry: Not recognised as a currency (Library of Congress, 2016) • Tax authority: Not legal tender but subject to tax (Library of Congress, 2016)	Monitoring	• Statement on cryptocurrencies (http://www.loc.gov/law/help/bitcoin-survey/index.php#poland) • User advisory/consumer education statement (http://www.nbp.pl/home.aspx	• Tax authority issued a statement indicating that VAT will be imposed on profits received from sales of Bitcoin (http://www.loc.gov/law/help/bitcoin-survey/index.php#poland) • Financial supervision authority issued statement on crypto-	• Neutral

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
				?f=/aktualnosci /wiadomosci_2017/uwazaj-kryptowaluty.html)	currencies (http://www.loc.gov/law/help/bitcoin-survey/index.php#poland) • Financial supervision authority issued User advisory/consumer education statement (http://www.nbp.pl/home.aspx?f=/aktualnosci /wiadomosci_2017/uwazaj-kryptowaluty.html)	
13.	Russia	• Central bank: Not legal tender (Bank of Russia, 2014) • Finance ministry: Not legal tender (Library of Congress, 2016) • Tax authority: Not classified yet	Monitoring	• Advisory notice on the use of crypto-assets (http://www.cbr.ru/press/PR/?file=27012014_1825052.htm)	• Ministry of finance submitted legislature that will make transacting in crypto-assets classified as a misdemeanour ((http://www.loc. gov/law/foreign-news/article/russia-fines-for-bitcoin-transactions-will-be-introduced/)	• Hostile • Finance ministry proposed laws making transacting in crypto-assets classified a misdemeanour (Library of Congress, 2016)
14.	Singapore	• Central bank: Not legal tender (MAS, 2018). All crypto businesses in Singapore are now required to first register and then apply for a license to operate in the jurisdiction under the Payment Services Act 2019 framework. It will set out effective and appropriate regulations for AML/CFT to mitigate risks posed by entities (including existing financial institutions under MAS' purview) which conduct crypto-related activities.	Monitoring	• Warning issued (http://www.mas.gov.sg/News-and-Publications/Media-Releases/2017/MAS-cautions-against-investments-in-cryptocurrencies.aspx) • User advisory issued (http://business.asiaone .com/news/bitcoin-users-beware-mas) • Confirmed it will not actively intervene in regulating crypto-assets (http://www.techinasia.com/si	• Tax authority issued guidance on the tax treatment of crypto-assets (http://www.zdnet. com/singa pore-issues-tax-guidance-on-bitcoins-7000024966/)	• Neutral

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
		• Finance ministry: Not yet classified • Tax authority: Not considered a good, money or currency (Lee, 2014)		ngapore-government-decides-interfere-bitcoin/)		
15.	South Korea	• Central bank: Not yet classified • Finance ministry: Not yet classified • Tax authority: Currently considering value-added taxation, gift taxes, income tax and capital gains tax (Peaster, 2018)	Banned anonymous crypto-asset trading (crypto trading accounts must be linked to real names – Reuters, 2018) and banned ICOs (Atkins, 2018)	• None found	• Users cautioned (https://businesstech.co.za /news/banking/223056/why-the-cryptocurrency-world-is-watching-south-korea/)	• Neutral
16.	Sweden	• Central bank: Not money (Soderberg, 2018) • Finance ministry: Not yet classified • Tax authority: Treated as a currency (Library of Congress, 2016); taxed as capital gains (Library of Congress, 2016)	Monitoring	• Article on crypto-assets as money (https://www.riksbank.se/en-gb/search/?query=bitcoin) • Article on crypto-assets in relation to payments (https://www.riksbank.se/en-gb/search/?query=bitcoin) • Article on Bitcoin (https://www.riksbank.se/en-gb/search/?query=bitcoin)	• Financial Supervisory Authority issued a statement on the treatment of crypto-assets (http://skatterattsnamnden.se/skatterattsnamnden/forhandsbesked/2013/forhandsbesked2013 /mervardesskatthandelmedbitcoins.5.46 ae6b26141980f1e2d29d9.html) • Tax authority issued guidance on the tax treatment of crypto-assets (https://www4. skatteverket.se/rattsligvagledning/33 8713.html?q=131+191846-15%2F111)	• Neutral

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
17.	Switzerland	• Central bank: Not classified yet • Finance ministry: Officially classified Bitcoin as a foreign currency (Peaster, 2018); crypto-assets are securities (Reuters, 2018c) • Tax authority: To be treated like any other payment option or currency (Prisco, 2015)	Monitoring	• Educational article on the nature of money in relation to crypto-assets (https://www.snb.ch/en/system/search?searchInput=bitcoin)	• Finance ministry announced Switzerland intends to become "the crypto-nation" (https://www.ft.com/content/c2098ef6-ff84-11e7-9650-9c0ad2d7c5b5) • Financial Market Supervisory Authority announced it will treat crypto-assets as securities (https://www.reuters.com/article/us-crypto-currencies-swiss/swiss-watchdog-to-treat-some-cryptocurrency-offerings-as-securities-idUSKCN1G00ZG)	• Friendly • Swiss finance minister wants Switzerland to become "the crypto-nation" (Atkins, 2018)
18.	United Kingdom	• Central bank: Not yet classified • Finance ministry: Not yet classified • Tax authority: Single purpose vouchers, thus subject to VAT (Library of Congress, 2016); asset subject to capital gains tax (Crypto Tax, 2018)	Monitoring	• Crypto-assets a formal research area for the Bank of England (https://www.bankofengland.co.uk/research) • Article on the economics of crypto-assets (https://www.bankofengland.co.uk/-/media /boe/files/digital-currencies/the-economics-of-digital-currencies.pdf?la=en&hash=BE28BE59F18E79CCE705643CF14F36DF8897E56D) • Informational note on crypto-assets in the Bank of England's *Quarterly Bulletin*	• Tax authority clarified tax treatment of crypto-assets (https://www.gov.uk/government/publications/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies) • Tax authority launched a website detailing tax treatment and FAQs of crypto-assets (https://cryptotax.uk/guide/) • Financial Conduct Authority issued warning to consumers (https://www.fca.org.uk/news/news-stories/consumer-warning-about-risks-investing-cryptocurrency-cfds)	• Neutral • Launched fintech accelerator in 2016 (https://www.bankofengland.co.uk/research/ fintech)

No.	Jurisdiction	Crypto assets classification/treatment	Central bank regulatory stance	Regulations/guidance issued by central bank	Regulations/guidance issued by other authorities	Overall position on fintech (friendly, hostile or neutral)
				(https://www.bankofengland.co.uk/quarterly-bulletin/2014/q3/innovations-in-payment-technologies-and-the-emergence-of-digital-currencies)		
19.	United States of America	• Central bank: Fed does not have authority to regulate crypto-assets (Buck, 2017) • Finance ministry: Classified Bitcoin as a convertible decentralised virtual currency (Calvery, 2013) • Tax authority: Classified as property (IRS, 2014)	Monitoring	• Janet Yellen confirmed the Fed has no authority to regulate crypto-assets (https://cointelegraph.com/news/us-fed-chair-speaks-out-on-bitcoin-and-national-crypto) • Published paper on blockchain (http://bitcoinist.com/federal-reserve-paper-bitcoin-blockchain/)	• US Internal Revenue Service provided clarity of tax treatment of crypto-assets (https://www.irs.gov/pub/irs-drop/n-14-21.pdf) • CFTC issued a customer advisory notice on pump-and-dump schemes (https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory_pump dump0218.pdf) • SEC released a statement on crypto-assets and ICOs (https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11)	• Friendly • Not currently considering issuing a CBDC

Annexure 3: Implementation plan for Recommendations as outlined in position paper on crypto assets

Theme of Recommendations	Responsible authorities	Activities	Estimated timelines	Risks
Theme 1: Implementation of AML/CFT regulatory regime	FIC and NT	Aligning the regulations with the FATF Recommendations.	6 – 9 months	Delays in administrative processes. Given the inherent features of crypto assets, such as anonymity, a lack of in-built geographic limitations and irreversibility of transactions, the customer identification and verification and other customer due diligence procedures on which the existing AML regime depends pose a significant challenge for CASPs including but not limited to the requirement to identify beneficial owners.
		Proposed amended Schedule 1 of the FIC Act to include CASPs as an Accountable Institution.		
		Approval from the Minister of Finance.		
		Draft amendments to be published for public consultation period of 60 days.		
		After consideration of comments received, review and redraft of proposed amendments to Minister of Finance.		
		Final approval from the Minister of Finance.		
		Process to obtain Parliamentary approval (redrafts from input).		
		Publication by Minister of Finance through Government Gazette.		
		CASPs to register with the FIC and implement regulatory requirements.		
Theme 2: Implementing a monitoring and analysis programme for crypto assets	IFWG Innovation Hub and CAR WG	Development of a reporting framework for CATPs.	6 - 9 months	Misalignment of data requirements and non-streamlined reporting process.
		Defining the data requirements.		
		Developing a platform for reporting by CATPs.		

Theme of Recommendations	Responsible authorities	Activities	Estimated timelines	Risks
Theme 3: Confirmation of legal status, prudential treatment of crypto assets, FMI interaction and tax application	SARB	Crypto assets not to be classified as currency, legal tender or electronic money. Reference to previous position paper of 2014.	N/A	No further action required.
	SARB - Prudential Authority	Prudential Authority to consider the appropriate regulatory and supervisory approach for the treatment of crypto assets for prudential entities. Prudential Authority to consider guidance from the BIS Basel Committee on Banking Supervision.	6- 9 months	The capital accounting treatment for crypto assets could lead to significant capital requirements for prudentially regulated entities due to the inherent volatility risk of crypto assets.
	SARB and FSCA	The NPSD of the SARB, the Prudential Authority and the FSCA to consider the appropriate policy stance on the interaction of financial market infrastructures with crypto assets.	3- 6 months	The prohibition of crypto assets as an acceptable form of consideration for financial market transactions could lead to securities holders or issuers who wish to accept settlement in crypto assets entering into off-exchange transactions. These transactions undermine the price discovery aspect of an exchange and lead to so-called 'dark pools' (as there is no order book visible to the public to reflect these trades).
	SARS and NT	The National Treasury Tax Policy Unit alongside SARS to consider the adoption of a uniform definition of crypto assets, if required and appropriate.	3 months	Misalignment in the regulatory treatment of crypto assets.
Theme 4: Implementing a licensing and supervisory regime for crypto assets	FSCA and NT	Proposed Recommendation for crypto assets to be declared a financial service**,** and included in the licensing activities under the COFI Bill.	9 – 12 months	Administrative procedures delaying process, including delays in the CoFI Bill process. Complexity exists in understanding the crypto asset types and classification of each. Currently, no specific financial sector law provides for the licensing of CASPs, therefore
		With the agreement from NT, the FSCA to approach the Minister of Finance to declare crypto asset as a financial service and included as a licensing activity under the CoFI Bill.		

Theme of Recommendations	Responsible authorities	Activities	Estimated timelines	Risks
				new licensing requirements to be developed by the responsible authority.
		Approval from the Minister of Finance.		
		Draft amendments to be published for public consultation period of 60 days.		
		After consideration of comments received, review and redraft of proposed amendments to Minister of Finance.		
		Final approval from the Minister of Finance.		
		Process to obtain Parliamentary approval (redrafts from input).		
		Publication by Minister of Finance through Government Gazette.		
		FSCA becomes the responsible authority for licensing of services related to crypto assets and setting conduct standards under the CoFI Bill.		
		CASPs to obtain licence from the FSCA and implement regulatory requirements.		
Theme 5: Implementing a cross border regulatory framework	SARB's Financial Surveillance Department and NT	The Financial Surveillance Department of the SARB assumes the regulatory and supervisory responsibility for monitoring of illegitimate cross-border financial flows in respect of crypto assets.	9 – 12 months	Careful consideration of the ADLA framework for the inclusion of CATPs and applicable monetary limits for individuals to purchase crypto assets abroad. Development of an appropriate process and determination of the point of reporting for crypto asset transactions. One of the main features of crypto assets is the
		The Financial Surveillance Department of SARB to develop a process and system for the reporting of crypto asset transactions.		
		With the agreement from NT, the Financial		

Theme of Recommendations	Responsible authorities	Activities	Estimated timelines	Risks
		Surveillance Department of SARB to approach the Minister of Finance to amend exchange control policy to explicitly include crypto assets in the definition of capital and to expand to ADLA framework to allow the appointment of CATPs.		absence of in-built geographic limitations as well as the anonymity of the counterparties to the transaction. This presents a challenge for CATPs to monitor whether or not a transaction is a cross-border transaction and if it strictly deemed to the export of capital.
		Approval from the Minister of Finance.		
		Draft amendments to be published for public consultation period of 60 days.		
		After consideration of comments received, review and redraft of proposed amendments to Minister of Finance.		
		Final approval from the Minister of Finance.		
		Process to obtain Parliamentary approval (redrafts from input).		
		Publication by Minister of Finance through Government Gazette.		
		Financial Surveillance Department of the SARB becomes the responsible authority for the regulation and supervision of CATPs for the purpose of monitoring illegitimate cross-border financial flows and implementing a system for reporting of crypto asset transactions.		
		CATPs to obtain authorisation from the Financial Surveillance Department of the SARB and implement regulatory requirements.		

Theme of Recommendations	Responsible authorities	Activities	Estimated timelines	Risks
Theme 6: Implementing a regulatory framework for payment system providers for crypto assets	SARB National Payment System Department and NT	The NPSD is in the process of reviewing the NPS Act and within this review consideration will be made for the use of crypto assets for domestic payment purposes and the regulation of payment services associated with crypto assets.	6 – 9 months	Lack of regulatory clarity on the use of crypto assets for domestic payments and providing payment services related to crypto assets.
Theme 7: Implementing a framework for ICOs.	FSCA and NT	ICO issuances to be classified in terms of the specific token issued and categorised as security, payment/exchange or utility token. ICO issuances through security token offerings will be subjected to securities legislation as per the FMA. The FMA to be reviewed for possible inclusion of crypto assets deemed as security tokens. Review of the definition of securities. ICO issuances through payment/ exchange or utility token offerings will be subjected to the regulatory requirements as a financial service (Theme 4 above). In addition specific conduct standards for this activity to be developed by the FSCA.	Dependant on classification of ICO token and review process of the FMA.	Review process of the FMA could lead to delays in process. Incorrect classification of token offerings may lead to further unintended consequences.
Theme 8: Implementing a framework for the use of crypto assets within alternative investment funds and derivative instruments.	FSCA and NT	Crypto assets allowed as underlying asset for alternative investment funds and derivative instruments. These alternative investment funds and derivative instruments using crypto assets will be subjected to the regulatory requirements as	9 – 12 months	Impact on resource requirement within the FSCA.

Theme of Recommendations	Responsible authorities	Activities	Estimated timelines	Risks
		a financial service (Theme 4 above). In addition specific conduct standards for this activity to be developed by the FSCA.		
Theme 9: Implementing a framework for crypto asset market support services.	FSCA and NT	CASP providing safe custody and digital wallet provisioning (custodial) will be considered as providing financial services. These crypto asset market support services will be subjected to the regulatory requirements as a financial service (Theme 4 above). In addition specific conduct standards for this activity to be developed by the FSCA.	9 – 12 months	Insufficient coverage of all crypto asset market support activities.