

Accounting for Crypto-assets (liabilities)

Holder and Issuer perspective

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OVERVIEW

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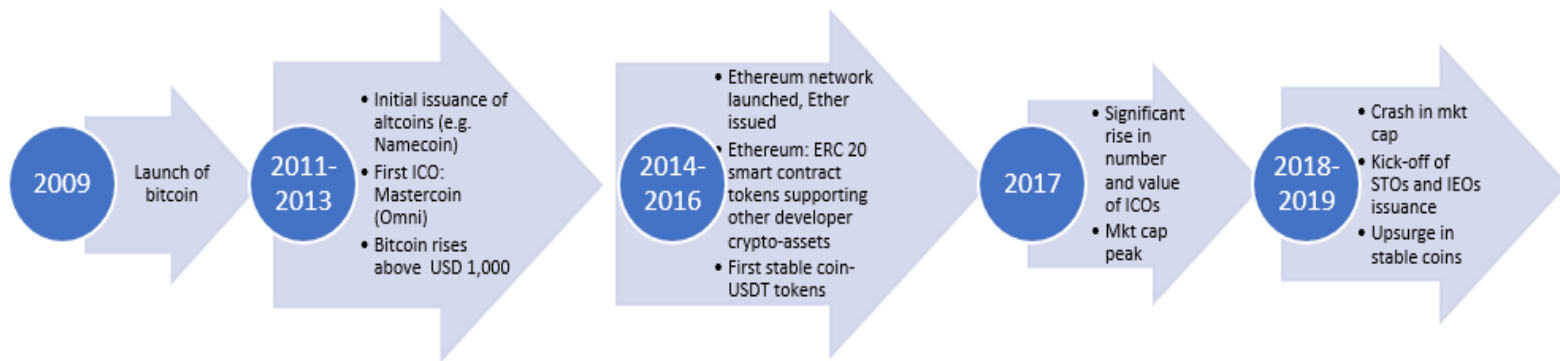
INTRODUCTION (CHAPTER 1)

Definitions

- For the purposes of this DP, the term crypto-asset is defined as:
a digital representation of value or contractual rights created, transferred and stored on some type of distributed ledger technology (DLT) network (e.g. Blockchain) and authenticated through cryptography
- In addition, “crypto-liabilities” are defined as
obligations that arise from the issuance of crypto-assets resulting in a present obligation for the issuing entity to transfer or grant access to an economic resource in digital or non-digital form
- The DP explains that other definitions of crypto-assets (liabilities) exist
- No legal definition, landscape of evolution and plurality in applied terminology

Background

- Bitcoin the first crypto-asset was launched in January 2009 by Satoshi Nakamoto, its pseudonymous creator
- Several failed virtual currencies pre-dated bitcoin (e.g. e-gold in existence from 1996-2008, E-Bullion, Liberty reserve, Digicash, Flooz, Benz)
- Bitcoin intended as an ‘electronic cash system’ solution based on a peer-to-peer payments network supported by blockchain online ledger, distributed and accessible to all network participants
- The bitcoin-inspired blockchain recording technology led to a proliferation of other types of crypto-assets including altcoins (coins other than Bitcoin)
- With their worth at approximately 300 bn USD, crypto-assets are still immaterial relative to mainstream asset classes (equity, currencies)

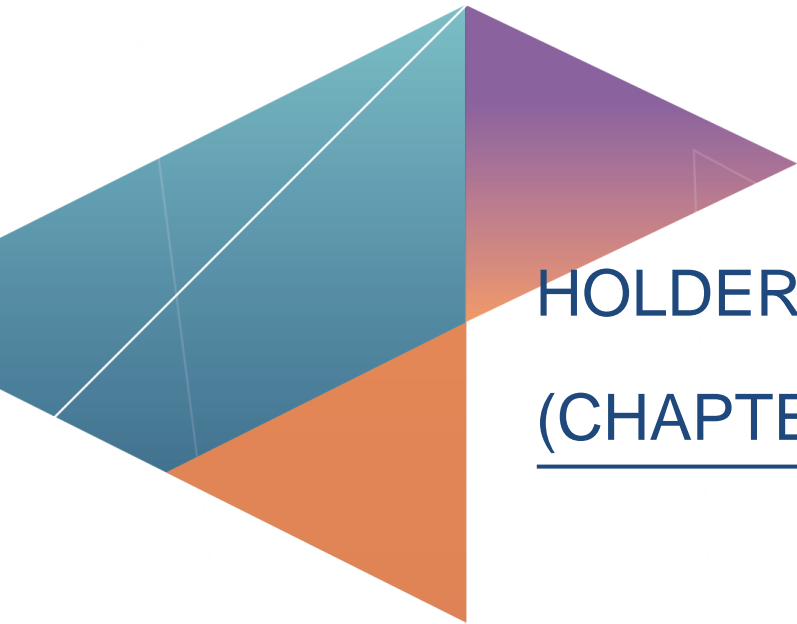


Heterogeneity of crypto-assets (liabilities)

- Varied modes of issuance (mining versus pre-mined, ICOs, SEOs, IEOs)
- Over 5,000 different crypto-assets
- Differences in economic uses and sources of value. Main uses are:
 - means of payment,
 - voucher-like application,
 - held as a trading or investment asset
- Coins versus tokens
- First generation cryptos (bitcoin) intended to be used mainly as means of payment versus subsequent generation (Ethereum onwards) that have added functionality
- Differences in the fungibility of different tokens
- Differences in the extent to which principles of decentralisation of networks are being implemented

Motivation for the project

- Growth potential, associated risks, heightened attention from different stakeholders and needed regulatory and accounting clarity
- Reasons to consider developing IFRS requirements
 - IFRS IC clarification only focused on holders of cryptocurrencies with no claim on the issuer
 - Some evidence of diversity in current practice
 - Updates could inform IFRS requirements for analogous transactions
 - Could be applicable for potential IFRS reporters and IFRS entities counterparties
 - Development of IFRS requirements can address limitations of NSS guidance



HOLDER ACCOUNTING (CHAPTER 3)

Holder accounting

- Are they assets?
- Applicable accounting for holders
- Holders on behalf of others
- Areas for possible update and clarification of IFRS

Are they assets? Conceptual Framework criteria

The Conceptual Framework defines an asset as *a resource controlled by the entity as a result of past events and from which future economic benefits are expected*

- ***Are a present economic resource*** (i.e. a rights or access to future economic benefits): crypto-assets are a digital representation of value or contractual rights created, transferred and stored on some type of DLT network
- ***Future economic benefits are expected*** (different crypto-assets have value in exchange and/or value in use)
- ***Can be controlled by the holder entity*** (e.g. holder of private key, other criteria depending on contractual arrangements, jurisdictional regulation etc)
- ***Arise from past transactions on the DLT network*** (mined, purchased)

Are they assets? Legal perspective

Emerging legal perspective, i.e. from the UK, considers **crypto-assets to be property** based on the following indicative attributes of property:

- **Definability or identifiability;**
- **Exclusivity and control:** putting aside situations of multi-signature private keys and intermediary holders, the holder of private key has exclusive control of the crypto-asset;
- **Assignability:** crypto-assets are capable of assumption by third parties; and
- **Certainty or Permanence:** crypto-assets appear to be as permanent as financial assets, which may exist only until they are, for example, cancelled, redeemed, repaid or exercised

Existing guidance: 2019 IFRS Agenda Decision

- **Scope of 2019 IFRS IC agenda decision** is limited to cryptocurrencies with no claim on issuer
- The agenda decision clarified that IAS 38 *Intangible Assets* or IAS 2 *Inventories* are the applicable standards for cryptocurrencies with no claim on the issuer
- IAS 38 does not apply to intangible assets held for sale in the normal course of business and such intangible assets should be accounted for in accordance with IAS 2. The Committee observed that:
 - IAS 2 applies if an entity holds cryptocurrencies for sale in the ordinary course of business; and
 - If an entity is a broker-trader of cryptocurrencies, then it should consider the requirements of paragraph 3 (b) of IAS 2 for commodities broker-trader who measure their inventories at fair value less costs to sell

Existing guidance: Classification of crypto-assets

Based on analysis of NSS guidance (seven jurisdictions), accounting firm and academic literature and feedback from outreach

Classification categories for crypto-assets are as follows:

- Unique or independent asset category (Japan ASBJ recognises crypto-assets as a unique asset);
- Intangible asset category usually applied for cryptocurrencies and utility tokens within different NSS guidance when not held in the ordinary course of business;
- Inventory category usually applied for cryptocurrencies and some utility tokens within different NSS guidance if held in the ordinary course of business;
- Financial asset (including long-term and short-term investment) category usually applied for security and asset tokens within different NSS guidance; and
- Prepayment assets category usually applied for some utility tokens within different NSS guidance

Existing guidance: Measurement of crypto-assets

Based on analysis of NSS guidance (seven jurisdictions), accounting firm and academic literature and feedback from outreach

Recognition and measurement: Varied approaches towards measurement including:

- FVPL if there is active market (e.g. Japan);
- Measurement based on intention of acquirer (e.g. French guidance where measurement depends on if held for own use or held for investment);
- Lower of cost or net realisable value when crypto-assets are recognised as inventories;
- Cost or revaluation approach for subsequent measurement of crypto-assets recognised as intangible assets; or
- Own accounting policy choice (IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*) suggested in accounting firms' guidance.

Table 3.4 summarises possible classification and measurement for holders of different crypto-assets

Holders on behalf of others- who has economic control?

Holders on behalf of others include: custodial service and wallet providers, exchanges and brokers

Who has economic control can depend on

- Contractual terms and conditions;
- Laws and regulation governing custodians in different jurisdictions
- How the custodian manages and stores the crypto-assets

Indicators that depositor client has economic control of crypto-assets	Indicators that intermediary holder has economic control of crypto-assets
<ul style="list-style-type: none">• Legal contract or jurisdiction regulatory frameworks stipulates intermediary holder is the agent• Client crypto-asset is segregated in a separate wallet• Restriction on use and transfer of crypto-assets by intermediary holder• Client bears risk of loss (i.e. no restitution) in the event of theft, hacking• Client can benefit from hard fork	<ul style="list-style-type: none">• Client crypto-asset are commingled with other clients crypto-assets• Client rights are unsecured in event of bankruptcy, liquidation or dissolution of intermediary holder entities• Intermediary holder has the ability to borrow, sell, transfer, loan, encumber or pledge the deposited crypto-assets for its own purposes without depositor client consent• Client could get restitution in the event of theft, hacking• Intermediary holder can benefit from hard fork

Holders on behalf of others- Accounting implications of who has economic control

	Depositor client accounting	Custodian or intermediary holder accounting
Situation 1: <i>Custodian or intermediary holder has economic control and bears significant risk and reward of crypto-assets</i>	Depositor client recognises an asset receivable tied to the value of the crypto-asset	Custodian or intermediary holder recognises crypto-assets as an asset and records a corresponding liability
Situation 2: <i>Depositor client has economic control and bears significant risk and reward of crypto-assets</i>	Depositor client recognises crypto-assets	Crypto-assets are off-balance sheet for the custodian or intermediary holder
Situation 3¹¹⁹: <i>Custodian has legal control but depositor client bears risk and reward of assets</i>	It depends: if all factors considered, whoever is deemed to have economic control should recognise crypto-assets	It depends: if all factors considered, whoever is deemed to have economic control should recognise crypto-assets

Holder accounting: Areas for possible update of IFRS

- **Lack of explicit IFRS guidance for when crypto-assets are non-financial assets held as investments**
 - Cross-cutting issue: Broader issue than the measurement of crypto-assets. Same gap is in place for the accounting of commodities, intangible assets held as investments (e.g. gold held by monetary authorities, water rights, emission rights)
 - Gap arose when IAS 25 *Accounting for Investments* was superceded by IAS 39 *Financial Instruments: Recognition and Measurement* and IAS 40 *Investment Property*
- **Need for relevant measurement for holders in all circumstances**
 - Feedback from outreach in respect of restrictions under IAS 38 towards applying FV measurement when there is no active market
 - Several publications (AASB) have argued that the characteristics of crypto-assets make the IAS 38, IAS 2 measurement approaches to be inappropriate

Holder accounting: Areas for possible update of IFRS

- **Need to ensure financial asset or similar classification where appropriate**
 - Some crypto-assets are held as investments and have functional equivalence to securities but do not meeting current definition of financial assets
 - Does IAS 32 *Financial Instruments Classification* need to be updated or is there a need for unique classification category for crypto-assets?

- **Cash or cash equivalent definition may need to be updated**
 - Need to consider implications of potential rollout of CDBC's, stable coins pegged to fiat currencies
 - Will definition of cash or cash equivalent need to be updated (i.e. does IAS 7 *Statement of Cash Flows*)?

Holder accounting: Areas for clarification

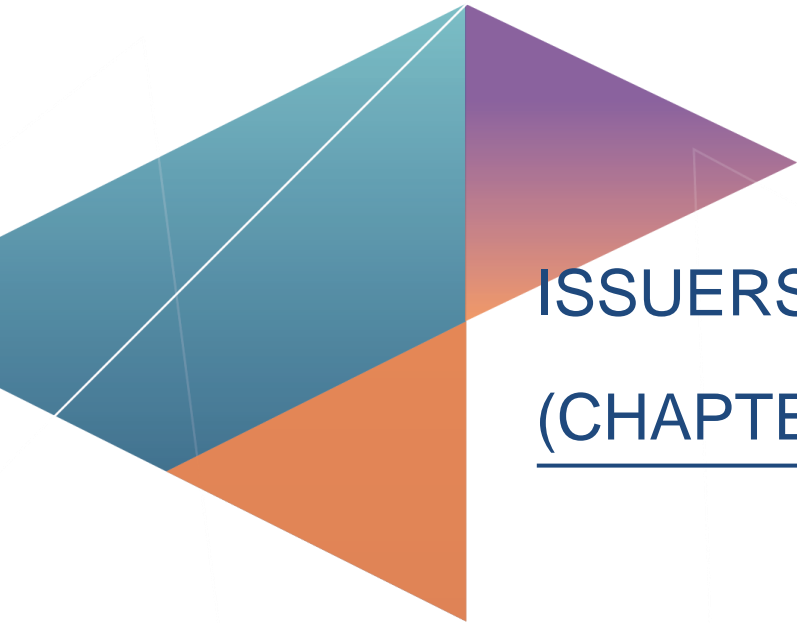
- **Accounting for holders of some utility and hybrid tokens may need clarification in several respects :**
 - Ongoing innovation has resulted in novel, atypical rights and obligations- particularly in relation to utility tokens (e.g. rights to: update network functionality; or contribute labour, effort, or resource to the system; launch of decentralised autonomous organisations)
 - It is likely to be difficult for holders to understand or readily analogise features of some utility tokens to more mainstream transactions
 - Utility tokens can be classified as prepayment assets but there is limited IFRS guidance on prepayment assets
 - Hybrid tokens: Is predominant characteristic or bifurcation the right accounting approach? If bifurcation, there is need for clarification of bifurcation principles for hybrid tokens

Holder accounting: Areas for clarification

- **Accounting by holders on behalf of others may need clarification**
 - Other than IAS 8- no IFRS guidance for holders on behalf of others
 - There is diversity of contractual arrangements and the existence and content of jurisdictional regulatory requirements in respect of third party holding of crypto-assets
 - There is need for IFRS clarification as follows:
 - Clarifying the application of indicative criteria to determine which party (depositor client versus intermediary holder) has economic control of the crypto-assets;
 - Clarifying which IFRS respectively applies for the depositor client that records an asset receivable and the intermediary holder (IAS 2, IAS 38, IFRS 9); and
 - Clarifying whether the custodian credit risk exposure should be considered when determining the value of the receivable asset.
 - Special situations (Questions of ownership/rights of pre-forked asset holder that may arise when hard forks occur)

Holder accounting: Areas for clarification

- Other areas for clarification
 - “Mining” activities-
 - if mined and considered to be held as an intangible asset- what is the carrying value?
 - If held as inventory- how are fixed production overheads allocated? How does one account for unsuccessful efforts?
 - Variety of mining business models (cloud based)- if/when do IFRS 11 *Joint Arrangements* and IFRS 16 *Leases* become applicable?
 - Barter exchanges- what is the carrying value when crypto for crypto exchanges or crypto is obtained in exchange for other goods or services?



ISSUERS ACCOUNTING (CHAPTER 4)

Issuers accounting

- Issuers (ICOs) overview
- If and what type of obligations arise on crypto-assets issuance?
- Applicable IFRS Standard for ICO Issuance (and similar offerings)
- Existing accounting firm and NSS issuer accounting guidance
- Other issues related to ICO issuance
- Concluding remarks and observations

Issuers (ICO's) overview

- Initial Coin Offering (ICO) – a **means of raising funds** for an existing or future crypto-asset project by issuing tokens (digital tokens) to subscribers/potential investors
- Issuers accounting (such as an ICO and other initial offerings) **is not addressed under IFRS**
- **Each ICO has unique terms and conditions** – which are generally set out in what is referred to as a “white paper”
- **A white paper should set out the rights** (of the holder) and obligations (of the issuer) - however because of lack of regulation they are often lacking information and their legal enforceability is unclear
- Tokens issued in an ICO (or similar offering) include:
 - Stable coins, Pre-functional tokens, Utility tokens, Security tokens

If and what type of obligations arise on crypto-assets issuance?

The question regarding the type of obligation only arises for the issuance of crypto-assets where the holder has a claim against the issuer

The Conceptual Framework defines a liability as:

A liability is a present obligation of the entity to transfer an economic resource as a result of past events.

The type of obligations that arise from an ICO can be summarised as follows:

- **Obligations** that are either claims on issuer entities, issuer entities' constructive obligations or performance obligations. These obligations can arise from the issuance of utility tokens, security tokens, hybrid tokens and pre-functional tokens; and
- **No obligations** arising from the issuance of crypto-assets where there is no claim on the issuer or any counterparty (e.g. cryptocurrencies including payment-only tokens). Such issuance results in income for the issuing entity.

Applicable IFRS Standards

- Users will need information about the amount, timing and risks associated with an entity's crypto-liabilities
- If no specific IFRS Standard applies an entity would need to turn to IAS 8 and develop an accounting policy that results in information that is relevant to users
- When applying IAS 8 an entity would consider:
 - the requirements in IFRSs dealing with similar and related issues; and
 - the definitions, recognition and measurement concepts outlined in the Conceptual Framework
- In the absence of IFRS guidance an entity should also consider recent pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices

Existing accounting firm and NSS guidance (1)

- Accounting Firm publications and outreach with Firms informed that currently in the absence of specific IFRS guidance, ICO issuing entities can apply one or a combination of the following IFRS Standards:
 - IFRS 9 *Financial Instruments*– as a financial liability likely to be applicable for issuance of security and asset-based tokens;
 - IAS 32 – as an equity instrument likely to be applicable for issuance of security and asset-based tokens;
 - IFRS 15 *Revenue from Contracts with Customers*– as a prepayment for future goods or services (for example access to a platform) likely to be applicable for issuance of utility tokens to holders that can be considered potential customers; and
 - IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* – as an obligation leading to a provision (such as a constructive obligation) is likely to be applicable for issuance of utility tokens to holders that may not qualify as contract customers.
- No commitment towards the holder or other party, an ICO issuing entity recognises a gain/ income in profit or loss

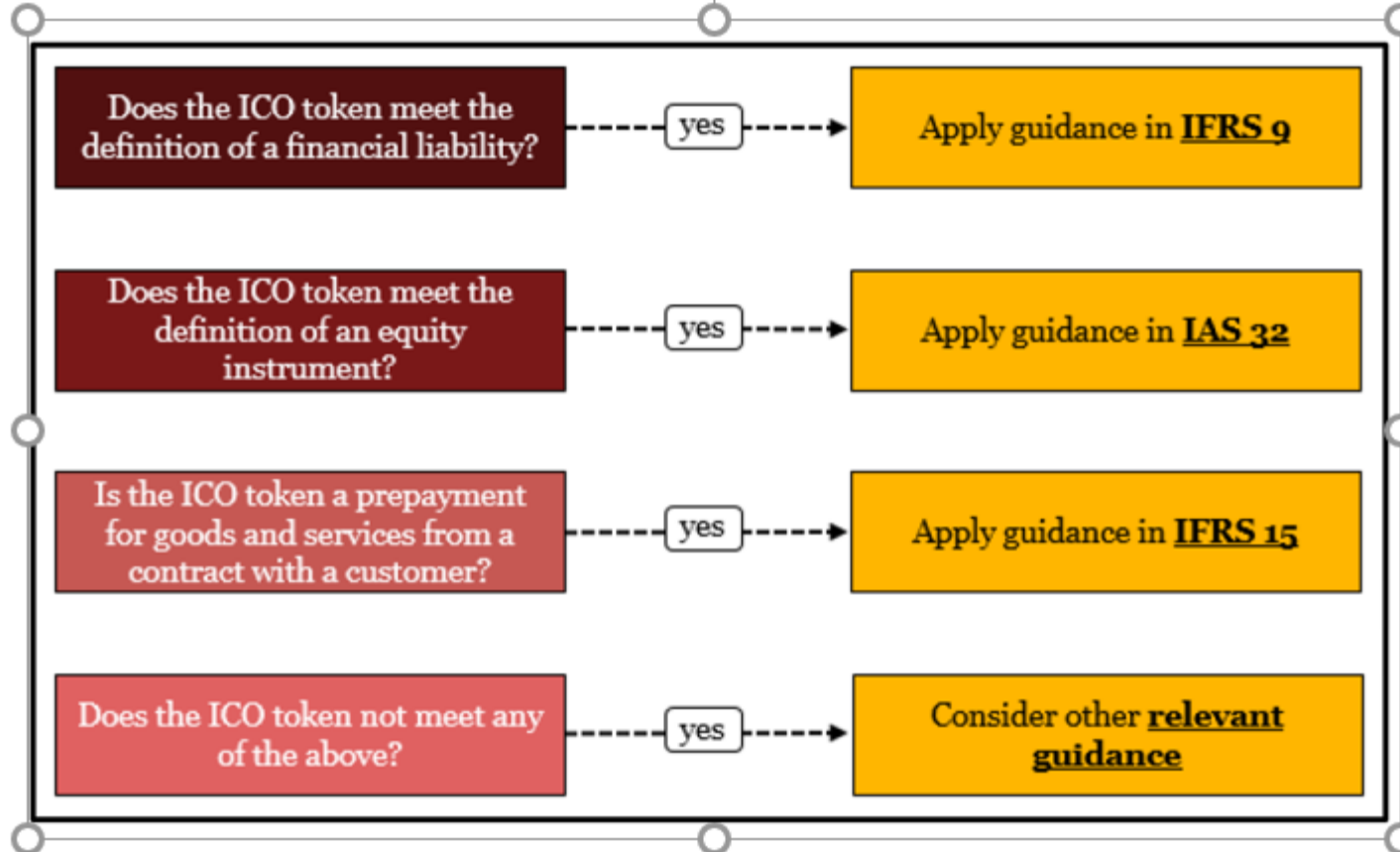
Existing accounting Firm and NSS guidance (2)

- Notable variation in accounting treatment by issuers across EU jurisdictions
- Some EU countries having developed specific ICO accounting guidance (following the development of local regulatory requirements for ICOs) – for example France and Lithuania
- Other EU jurisdictions recommending or requiring local GAAP accounting requirements which often follow tax accounting
- Japan is currently developing ICO and STO accounting guidance and an exposure draft is expected in the first half of 2020

Existing accounting Firm and NSS guidance (3)

PwC publication provides the following framework of accounting models to consider by an ICO issuing entity:

Source: PwC publication



Other issues related to ICO issuance

- The PwC publication considers the accounting for the following ICO related issues:
 - Pre-sale agreements of pre-functional tokens (SAFTs);
 - Own ICO tokens exchanged for third party services; and
 - Own tokens exchange for employee services

Pre-sale agreements of pre-functional tokens (SAFTs)

- A Simple Agreement for Future Tokens (SAFT) is a pre-ICO token issuance that occurs prior to a public ICO sale – allows entities to attract early investors and lock-in funding in private sales
- A key accounting question is whether a pre-functional token represents a financial liability – for example if an ICO issuer must return amount invested (or part of) in the event of product/platform failure
- If a pre-functional token represents a pre-payment for future goods or services the question is whether IFRS 15 should be applied, or whether the consideration received represents a pre-payment (if outside the scope of IFRS 15)
- Consider embedded features which require further assessment, such as embedded derivatives based on the specific terms of the arrangement

Own ICO tokens exchanged for third party services/ employee services

- ICO tokens can be used as payment for acquired goods or services or employee payments
- **Own tokens are exchanged for third party services** the issue might be different – PwC publication provides the following guidance:
 - if service is to develop software, assess whether the costs should be capitalised as part of the intangible asset, or expensed (for example, research and development guidance under IAS 38); and
 - accounting determined by the obligations that the issuing entity – if ICO tokens relate to the provision of future goods or services then IFRS 15 *Revenue from Contracts with Customers* might apply
- Some ICO entities might **reward their employees** in the form of a specific number of tokens generated through the ICO – if the token meets definition of an equity instrument then IFRS 2 *Share-based Payments* could apply; otherwise could fall under IAS 19 *Employee Benefits*

Other issues related to ICO issuance

- Additional specific issues that needed further analysis including:
 - **ICO issue costs:** accounting for ICO issue costs incurred by the issuer including development costs associated with setting up a platform to launch an ICO. These are analogous to IPO costs. Should they be capitalised or expensed?
 - **Own ICO tokens:** accounting for crypto-assets that remain in the property of the issuer of the ICO (also often the founder of the crypto-asset) and are not placed in circulation. Should they be treated liked
 - **Airdrops:** accounting for “airdrops” (i.e. crypto-assets given away for free in an ICO (or subsequent to the ICO)

Concluding remarks and observations

The diversity of crypto-assets with varied and sometimes unique economic features, rights and obligations; can make it difficult to assess which IFRS Standard should be applied for their issuance by reporting entities.

The analysis has shown that the possible applicable IFRS Standards for the issuance of crypto-assets are IFRS 9, IAS 32, IFRS 15 and IAS 37 even if crypto-assets are not explicitly referred to within these Standards



CRYPTO-ASSETS (LIABILITIS)

VALUATION (CHAPTER 5)

Crypto-assets (liabilities) valuation

- Crypto-assets valuation methodologies
- Other fair value considerations for crypto-assets
- Concluding remarks and observations

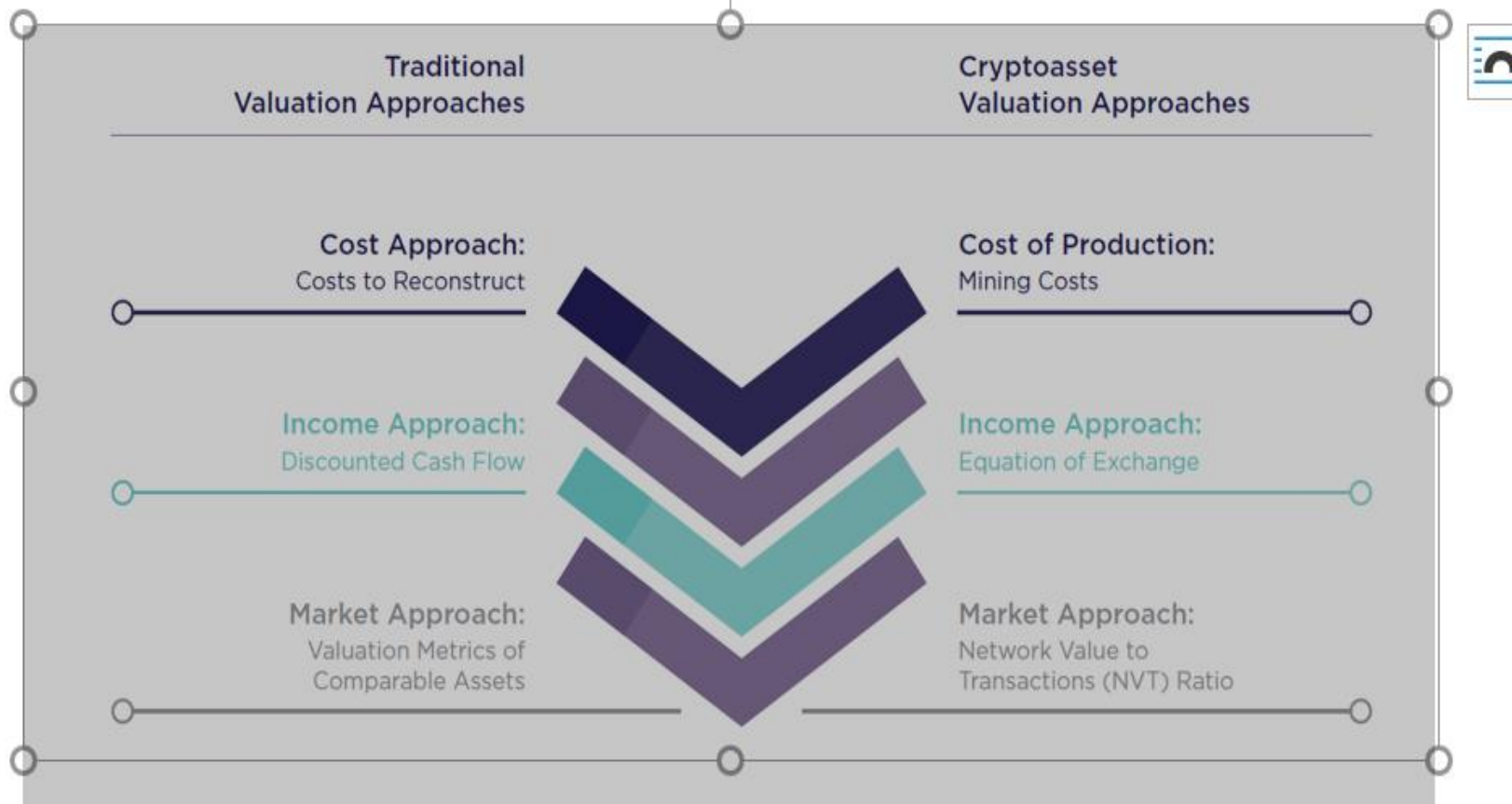
Crypto-assets valuation methodologies

- The unique and/or multiple element characteristics of different crypto-assets and the novel features of business models of entities that issue crypto-assets can make valuation complex
- Once tokens are listed on an exchange they can be sold in the secondary market by both customers and investor holders.
- Crypto-assets (liabilities) still in early stages of development making it hard to derive a robust methodology for their valuation - identifying active markets might be challenging
- Valuation methodologies indicate that three elements are important for crypto-asset value:
 - the current value of the crypto-currency to make payments;
 - the decision of forward-looking investors to buy crypto-currency, thereby effectively regulating its supply; and
 - the elements that jointly drive future consumer adoption and merchant acceptance of crypto-currency

CBV Institute research paper

- CBV Institute research paper published in 2019 provides an analysis of suitable valuation approaches for crypto-assets
- The CBV research paper examines three valuation approaches frequently included in the crypto-asset valuation discourse:
 - Cost of Production;
 - Equation of Exchange; and
 - Network Value to Transactions Ratio.
- The CBV research paper highlights parallels between emergent crypto-asset valuation approaches and the traditional valuation approaches that are recognised within accounting literature including IFRS Standards (i.e. cost approach, income approach and market approach) – see next slide

CBV Institute research paper



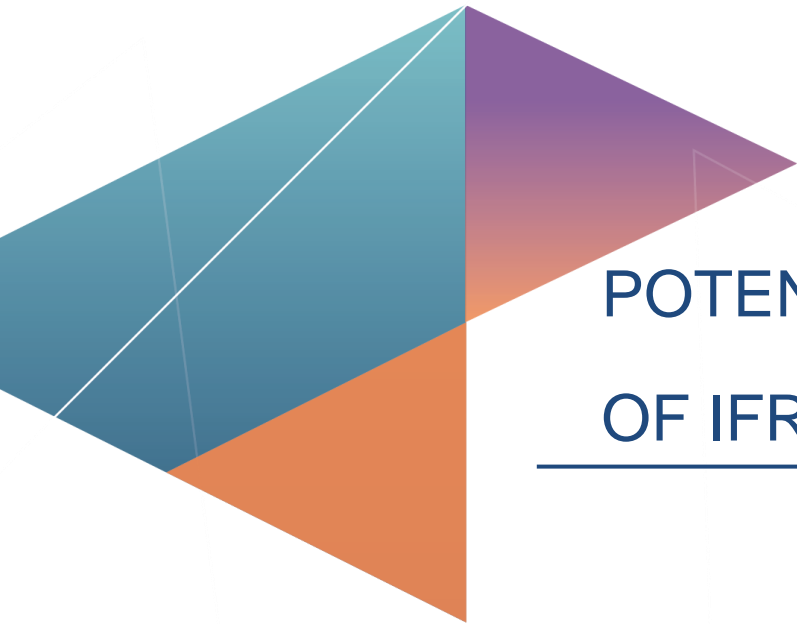
Source: CBV research paper

Other fair value considerations for crypto-assets

- Respondents to the EFRAG research noted that following valuation challenges:
 - many crypto-assets show a high intra-day volatility of prices;
 - there might be several markets for particular crypto-assets (liabilities) that meet the definition of an active market under IFRS 13 *Fair Value Measurement*, and each of those markets might have different prices at the measurement date - determining the principal market for the asset might be challenging; and
 - establishing whether an active market exists might be challenging because crypto-assets are frequently traded primarily into other crypto-assets, as opposed to fiat currencies. Some respondents to the EFRAG outreach viewed these non-fiat exchange as a constraint to meeting the definition of an active market

Concluding remarks and observations

The EFRAG research has established that there is an emergence of valuation methodologies tailored for crypto-assets. New valuation methodologies are comparable to and have some overlapping attributes with the traditional valuation approaches recognised within accounting literature including IFRS standards (i.e. cost, income and market based approaches) but also have differentiated feature particularly in respect of assessing the intrinsic value of utility tokens, which is typically derived from the issuing network's growth potential



POTENTIAL DEVELOPMENT
OF IFRS REQUIREMENTS (CHAPTER 6)

Potential development of IFRS requirements

Chapter 6 is informed by the analysis of crypto-assets (liabilities) accounting and valuation gaps identified in chapters 3, 4 and 5

- The analysis in Chapter 6 includes:
 - Proposed key principles for developing IFRS requirements
 - Possible approaches to the clarification or development of IFRS requirements
 - Considerations/ pros and cons of possible approaches to clarification or development of IFRS requirements

Proposed key principles

- Consider the development of a suitable (for accounting purposes) classification taxonomy as an initial step
- The following key considerations should underpin accounting requirements
 - **Emphasis on economic substance:** Emphasis should be on economic substance underlying rights and obligations
 - **Holder business purpose:** the asset classification should be determined through a combined consideration of the business purpose for holding the crypto-asset and its economic characteristics and underlying rights
 - **Nature of issuer obligation:** accounting by issuers should be based on the determination of whether there is an obligation and on the nature of the obligation

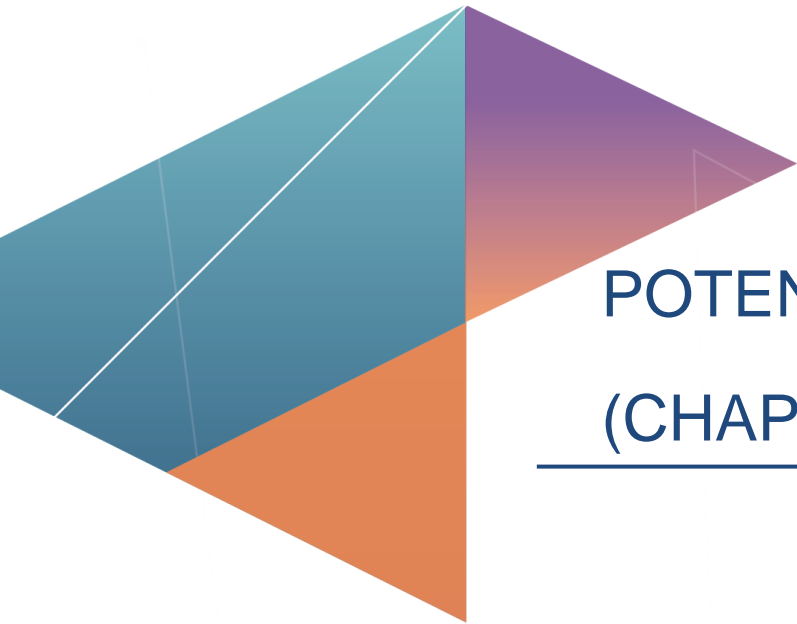
Possible approaches to the clarification or development of IFRS requirements

- **Option 1: Do nothing (No change in existing IFRS Standards):** Preparers continue to apply applicable IFRS Standards including IAS 8 *Accounting Policies and Accounting Estimates* under circumstances where they have to develop own accounting policy
- **Option 2: Amend and/or clarify existing IFRS Standards.**
 - Developing clarifying guidance for specific fact patterns
 - accounting by holders on behalf of others in all applicable holders Standards;
 - applicable accounting for utility and hybrid tokens;
 - determining the carrying value of holdings from barter transactions and mining activities;
 - circumstances that may affect eligibility for IFRS 9 for holders and issuers, and IFRS 15 and IAS 37 for issuers; and
 - identification of active crypto-asset markets as defined in IFRS 13
 - Possible amendment of measurement requirements in IAS 2 and IAS 38;
 - Possible update of cash or cash equivalent definition (IAS 7);
 - Possible update of definition of financial instruments, financial asset and financial liability (IAS 32)
- **Option 3: A new Standard on crypto-assets (liabilities) or digital assets (liabilities):** The scope of a new Standard could but does not need to include the next generation of blockchain applications and other digital assets that do not depend on cryptography or Distributed Ledger Technology (e.g., blockchain).

Considerations in assessing possible approaches to clarification or development of IFRS requirements

- The following key considerations should underpin development of IFRS requirements:
 - maturity of market including consideration of current and potential prevalence of crypto-assets transactions;
 - extent to which potential gaps in the accounting for crypto-assets (liabilities) can be addressed;
 - envisioned effect on diversity in current practice;
 - due process requirements and timeliness in addressing stakeholder needs for clarification or enhancement of accounting requirements; and
 - extent to which any amendments can be applied analogously in the accounting for non-financial instruments that are held as investments (i.e. could be applied under IAS 8).

Pros and cons of different possible approaches to developing IFRS requirements are outlined in Table 6.1



POTENTIAL MARKET DEVELOPMENT (CHAPTER 7)

Potential Market developments

- Objective of chapter 7 was to assess the potential for crypto-assets (liabilities) to become mainstream- as this would have implications on the extent of use of IFRS requirements
 - With entire crypto-assets worth near 300 bn USD market cap as at end of 2019- they are still immaterial relative to mainstream asset classes (equity, currencies)
 - Too date- crypto-assets mostly have niche uses (e.g. within blockchain economy networks), limited acceptance as a means of payment and mostly held by individual retail customers
-
- The analysis in the chapter is broken down into the following:
 - Scalability potential
 - Quest for price stability
 - Risks to financial stability
 - Implications of technology innovation

Scalability potential

- Factors that could influence greater institutionalisation
 - appropriate regulatory oversight and regulatory clarity
 - enhancement of transaction processing speed
 - ability to develop sustainable transaction validation process (i.e. to address massive energy consumption of “proof of work” /mining validation)
 - strengthening of network governance
 - availability of institutional grade data
 - mitigation of price volatility (stable coins)
- Various technological /innovation developments could influence the landscape including
 - quantum computing is both a threat and opportunity
 - greater interoperability across networks that could enhance usability

KEY TAKEAWAYS

Sub-optimalities hinder institutional uptake (theft, scams, illicit use, energy inefficiency, slow processing, fragmentation of networks, price volatility)

“Jury is out” on how market will develop and where it will all end up as a result of:

- Competition to be viable alternatives to fiat currencies is intense
- Competing vision for the future (e.g. On need for trusted third parties, centralisation of network)
- Experimentation, technology evolution is ongoing and presents both an opportunity and threat for the viability of current crypto-assets ecosystem

Appropriate regulation, regulatory clarity can make a difference



APPENDIX: SCOPE AND METHODOLOGY

Project scope

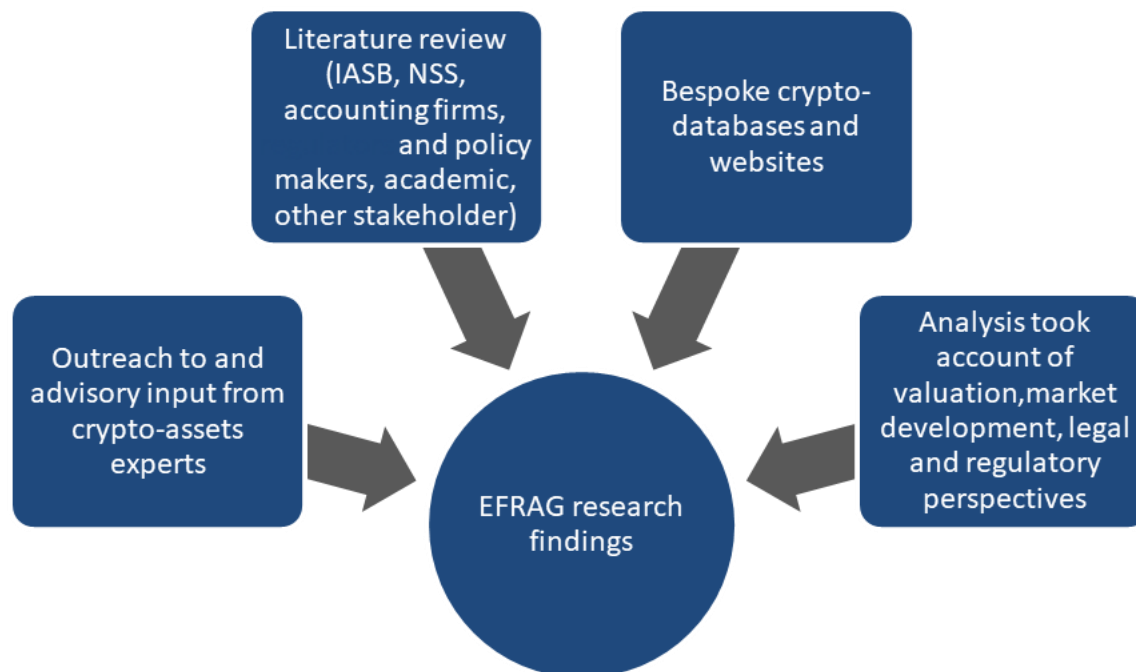
- Crypto-assets (liabilities) which are the first but not the only use case of the blockchain technology;
- Accounting for other emerging blockchain applications (e.g. supply chain management, land registry, medical records register etc) are outside scope
- The following related crypto-assets (liabilities) activities are within the scope of project
 - Holder activities including intermediated activities
 - Issuance via Initial Coin Offerings (ICOs) and other offerings (Security Token Offerings-STOs and Initial Exchange Offerings-IEOs)
 - Custodial and storage services
 - Crypto-assets (liabilities) valuation
 - Mining activities to the extent that these have a bearing on holder accounting

Project scope

- The following crypto-assets are within the scope of project:
 - Payment tokens including cryptocurrencies with no claim on the issuer;
 - Utility tokens;
 - Security and asset tokens (also referred to as investment tokens);
 - Hybrid tokens;
 - Stable coins- which can also fall into the above categories

Methodology

- The development of this DP was conducted in the following two sub-phases
 - A “desktop research” phase; and
 - A phase to corroborate and enhance findings that included outreach to crypto-assets experts



Outreach





APPENDIX: ACTIVITIES, CHARACTERISTICS AND REGULATION



Significance of crypto-assets issuance activities

- Detailed analysis of ICOs presented in Appendix 1
- The ICO market began in 2013, approximately USD 24.7 billion up to the end of Q1 2019 (>5,000 ICO projects, 50 countries), ICOs volume has outstripped that of venture capital
- Decline in 2019 in ICOs attributable to shift towards regulatory compliant SEOs and IEOs and increased regulatory scrutiny around ICOs
- Uptake in SEOs and IEOs increased in 2018 and 2019- evidence of IFRS reporting large institutions issuing tokenised bonds and loyalty referral programs

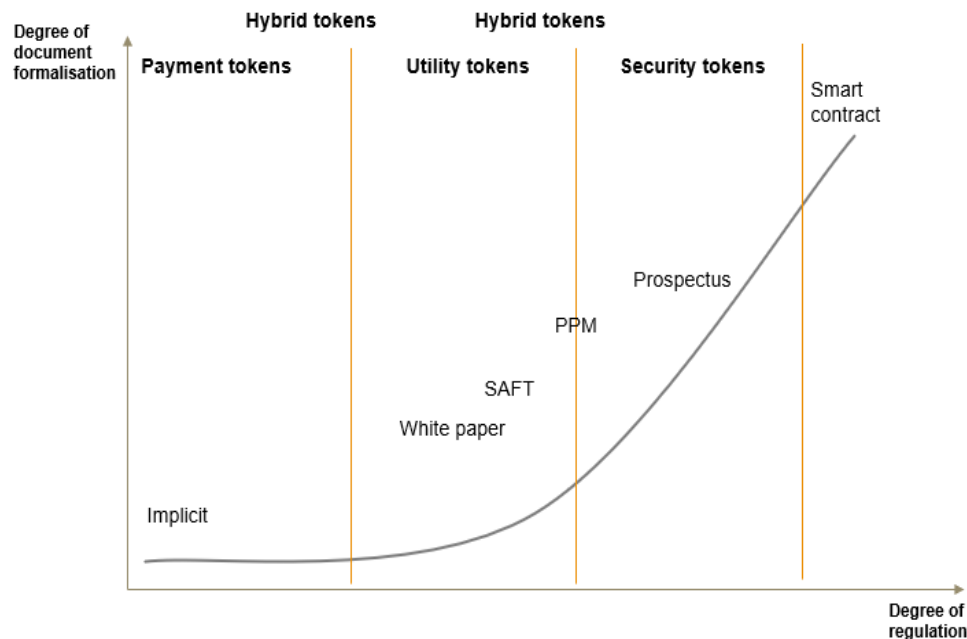
Significance of crypto-assets holder entities & mining activities

- Some evidence of growing institutional investor interest; American Bar Association publication highlights USD 10-15 billion allocated to crypto-funds as at end of 2018
- As per December 2019 IASB staff paper, there is limited exposure of IFRS reporting entities to cryptocurrencies- see table below

Jurisdiction	Search performed in July 2019 on financial statements ending 31 Dec 2018 or later		Search performed in July 2018 on financial statements ending 31 Dec 2017 or later	
	Total number of entities	Of which are 'miners'	Total number of entities	Of which are 'miners'
Australia	6	-	3	-
Bermuda	-	-	1	-
Canada	42	24	18	4
Hong Kong	6	2	-	-
Isle of Man	1	-	1	-
Japan	1	-	1	-
Jersey	1	-	-	-
South Africa	1	-	-	-
Switzerland	3	-	1	-
Thailand	1	-	-	-
UK	4	2	1	-
Total	66	28	26	4

Overview of economic characteristics, rights and obligations

- Detailed analysis of spectrum of rights including taxonomy and examples of crypto-assets are presented in Appendix 2
- Below is an outline of the spectrum of formalisation of contractual arrangements and documentation across different types of crypto-assets



Overview of regulation

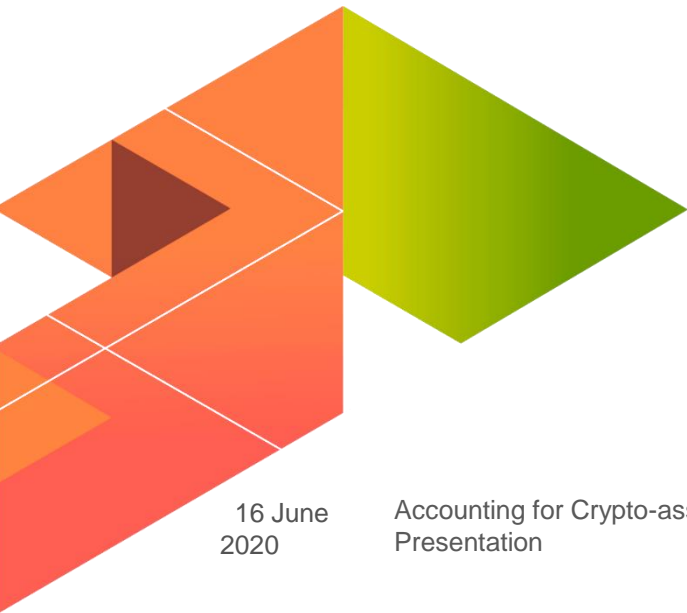
- A detailed analysis of regulatory requirements is in Appendix 3
- **Heterogeneity of regulatory approaches:** Approaches across 108 jurisdictions range from being:
 - unregulated;
 - implicit within existing regulation where there is an application of existing laws or regulations to crypto-asset activities (e.g., China, Hong Kong, Switzerland, U.S.);
 - retrofitted regulation where existing laws are amended to include crypto-asset activities (e.g., Australia-AML regulation, EU-AML regulation, Canada; Japan Payment Services Act);
 - bespoke regulation where new law or regulation is enacted to regulate crypto-asset activities (e.g. French AMF allows the optional Visa application for ICOs, Malta-Virtual Financial Services Act); and
 - outright prohibition (China, South Korea ban on ICOs).

Overview of regulation

- There is also variation across jurisdictions on the activities (e.g. issuance, brokerage and trading platforms, asset custody and segregation) and crypto-asset categories (e.g. type of tokens) that fall within regulatory perimeters
- Push for regulatory clarity and appropriately tailored regulation
 - Market commentator William Mougayar observes that *“Applying existing regulatory frameworks to the novelties of the blockchain, tokens and cryptocurrency is possible, but it is subject to various grey zones of interpretations leaving blind spots and uncovered areas that are causing undesirable outcomes including scammers being able to operate because exchanges are loosely regulated.”*



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EFRAG
Aisbl - ivzw
35 Square de Meeüs
B-1000 Brussel
Tel. +32 (0)2 207 93 00
www.efrag.org



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