

STAFF PAPER

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World Standard-setters Meeting

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|----------------|--|-----------------|---------------------|
| Project | Conceptual Framework | | |
| Paper topic | Applying concepts in the <i>Conceptual Framework</i> | | |
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This paper has been prepared for discussion at a public meeting of the World Standard-setters and does not represent the views of the International Accounting Standards Board (Board) or any individual member of the Board. Comments on the application of IFRS® Standards do not purport to set out acceptable or unacceptable application of IFRS Standards. Technical decisions are made in public and reported in IASB® *Update*.

Please read the fact patterns in advance so that you are ready to discuss them as soon as you join your break-out group.

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Background

In March 2018 the International Accounting Standards Board (Board) issued the revised *Conceptual Framework for Financial Reporting* (*Conceptual Framework*). The purpose of the *Conceptual Framework* is to:

- (a) assist the Board to develop IFRS Standards (Standards) that are based on consistent concepts;
- (b) assist preparers to develop consistent accounting policies when no Standard applies to a particular transaction or other event, or when a Standard allows a choice of accounting policy; and
- (c) assist all parties to understand and interpret the Standards.

At this session, we will focus on the first purpose and consider how the revised concepts could guide the Board in its work.

Purpose of session

The revised *Conceptual Framework* is a comprehensive framework that discusses the most important topics that the Board needs to think about when it sets Standards. The *Conceptual Framework* will guide the Board when it develops requirements through all financial reporting stages:

- (a) determining what information would be useful to primary users of the entity's financial statements;
- (b) identifying assets and liabilities;
- (c) determining the unit of account;
- (d) setting recognition criteria;
- (e) setting requirements for derecognition;
- (f) selecting a measurement basis; and
- (g) setting presentation and disclosure requirements.

The purpose of this session is to demonstrate how the *Conceptual Framework* would work in action helping the Board to develop principle-based Standards. As illustrations, we invite you to consider how the concepts could guide the Board in developing accounting requirements in two areas not specifically covered by IFRS Standards: cryptocurrencies and variable and contingent consideration.

The *Conceptual Framework* will not provide clear answers to all the accounting questions that would need to be answered if the Board decides to develop Standards for these areas. However, it should provide a framework to guide the Board's thinking when the Board is developing new requirements.

Some aspects of examples included in this paper are covered by the requirements of IFRS Standards and entities have to apply those requirements.¹ For this session, please ignore those requirements and instead apply the concepts in the *Conceptual Framework* to develop appropriate accounting requirements.

In applying the *Conceptual Framework* to cryptocurrencies and variable and contingent consideration, we are not attempting to predict the future outcome of any research or standard-setting activities in these areas. However, your feedback will be provided to the IFRS Foundation staff who monitor developments in these areas.

For this session, we have not asked you to consider all the concepts that may be relevant in a particular area. Instead, we have highlighted the concepts that might be particularly important.

¹See Agenda Papers 4A–4C of September 2018 IFRS Interpretations Committee Meeting for the discussion of how entities might apply IFRS Standards in determining accounting for transactions involving cryptocurrencies.

Format of session

You will be divided into five break-out groups. Each group will be asked to look at the examples provided in this paper and apply the *Conceptual Framework* concepts to those examples.

We will ask three break-out groups to start with the examples on cryptocurrencies and two breakout groups to start with the examples on variable and contingent consideration.

Questions for break-out groups

For each of the examples please:

- (a) work through the questions included in the example; and
- (b) provide:
 - any comments about how easy or hard it was to get to an answer using the concepts in the *Conceptual Framework*; and
 - your observations or concerns about the results of your work.

To help you in considering the examples, we have included in this paper a summary of main concepts in the *Conceptual Framework*. In case you need further guidance, we have provided a pdf file of the full text of the *Conceptual Framework*.

Please do not distribute this copy of the *Conceptual Framework* to anybody else.

Summary of concepts—the objective of general purpose financial reporting and qualitative characteristics of useful financial information

The objective of general purpose financial reporting

The **objective** of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors (**primary users**) in making decisions relating to providing resources to the entity.

Those decisions involve decisions about:

- (a) buying, selling or holding equity and debt instruments;
- (b) providing or settling loans and other forms of credit; or
- (c) exercising rights to vote on, or otherwise influence, management's actions that affect the use of the entity's economic resources (for example, voting to select members of the Board of directors).

To make these decisions, primary users assess the prospects for future **net cash inflows** to the entity and management's **stewardship** of the entity's economic resources.

To make both these assessments, primary users need information about:

- (a) the economic resources of the entity, claims against the entity and changes in those resources and claims; and
- (b) how efficiently and effectively the entity's management have discharged their responsibilities to use the entity's economic resources.

Qualitative characteristics of useful financial information

For information to be **useful**, it must be both relevant and provide a faithful representation of what it purports to represent. Relevance and faithful representation are the fundamental qualitative characteristics of useful financial information and the guiding concepts that apply throughout the *Conceptual Framework*.

Relevant information is capable of making a difference in the decisions made by users. To be capable of making such a difference information needs to have predictive value, confirmatory value or both.

Financial information must **faithfully represent** the substance of phenomena that it purports to represent. A faithful representation is, to the maximum extent possible, complete, neutral and free from error. Neutrality is supported by the exercise of prudence, ie the exercise of caution when making judgements under conditions of uncertainty to avoid overstatement or understatement of assets, liabilities, income or expenses.

Comparability, verifiability, timeliness and understandability are qualitative characteristics that enhance the usefulness of information that both is relevant and provides a faithful representation. However, they cannot make non-useful information useful.

Cost is a pervasive constraint on the information that can be provided by financial reporting. Reporting financial information imposes costs, and it is important that those costs are justified by the benefits of reporting that information.

Summary of concepts—the definitions of an asset and a liability

Definition of an asset and key supporting concepts

An **asset** is a present economic resource controlled by the entity as a result of past events.

An **economic resource** is a right that has the potential to produce economic benefits.

In principle, each of an entity's **rights** is a separate asset. However, for accounting purposes, related rights are often treated as a single unit of account that is a single asset.

For a right to have the **potential to produce economic benefits**, it does not need to be certain, or even likely, that the right will produce economic benefits. It is only necessary that the right already exists and that, in at least one circumstance, it would produce for the entity economic benefits beyond those available to all other parties. (However, if the probability of future economic benefits is low, that low probability might affect decisions about what information to provide about the asset and how to provide that information, including decisions about whether the asset is recognised (see page 7) and how it is measured.)

An entity **controls** an economic resource if it has the present ability to direct the use of the economic resource and obtain the economic benefits that flow from it. Having exposure to variations in the amount of the economic benefits produced by an economic resource may indicate that the entity controls the resource.

Definition of a liability and key supporting concepts

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

An entity has an **obligation** if it has a duty or responsibility that it has no practical ability to avoid. Many obligations are legally enforceable. In some other situations, an entity's duty or responsibility to transfer an economic resource is conditional on a particular future action that the entity itself may take. In such situations, the entity has an obligation if it has no practical ability to avoid taking that action. For example, in some cases, an entity may have no practical ability to avoid a transfer if any action that it could take to avoid the transfer would have economic consequences significantly more adverse than the transfer itself.

An entity's obligation to transfer an economic resource must have the **potential to require the entity to transfer an economic resource to another party**. It does not need to be certain, or even likely, that the entity will be required to transfer an economic resource. It is only necessary that the obligation already exists and that, in at least one circumstance, it would require the entity to transfer an economic resource. (However, if the probability of a transfer is low, that low probability might affect decisions about what information to provide about the liability and how to provide that information, including decisions about whether the liability is recognised (see page 7) and how it is measured.)

A present obligation exists as a **result of past events** only if:

- (a) the entity has already obtained economic benefits or taken an action; and
- (b) as a consequence, the entity will or may have to transfer an economic resource that it would not otherwise have had to transfer.

Summary of concepts—recognition

In making decisions about the circumstances in which a particular asset or liability would be recognised, the Board would consider the concepts for recognition in the *Conceptual Framework*.

Even if an item meets the definition of an asset or a liability, an entity would not necessarily be permitted or required to recognise that asset or liability in its statement of financial position. The applicable IFRS Standard could prohibit recognition or specify that the asset or liability should be recognised only if particular criteria are met.

IFRS Standards may specify disclosure requirements for some unrecognised assets and liabilities. There would be no automatic requirement for an entity to disclose information about all unrecognised assets or liabilities.

Key aspects of the concepts for recognition

An asset or liability (and any resulting income, expenses or changes in equity) is recognised if recognition provides users of financial statements with information that is useful, ie with:

- (a) relevant information about the asset or liability and about any resulting income, expenses or changes in equity; and
- (b) a faithful representation of the asset or liability and of any resulting income, expenses or changes in equity.

Recognition of a particular asset or liability may not always provide **relevant** information. That may be the case if, for example:

- (a) if it is uncertain whether an asset or liability exists; or
- (b) an asset or liability exists, but the probability of an inflow or outflow of economic benefits is low.

It may be a combination of factors and not any single factor that determines whether recognition provides relevant information.

Recognition of a particular asset or liability may not always provide a **faithful representation**. That may be the case if, for example:

- (a) all relevant measures of the asset or liability are subject to such high measurement uncertainty that none would provide useful information, even accompanied by a description of the estimates made in producing it and an explanation of the uncertainties that affect those estimates; or
- (b) related assets and liabilities are not recognised (this may create a recognition inconsistency—accounting mismatch).

Just as **cost** constrains other financial reporting decisions, it also constrains recognition decisions. An asset or liability is recognised if the benefits of the information provided to users of financial statements by recognition are likely to justify the costs of providing and using that information.

Summary of concepts—measurement

Elements recognised in financial statements are quantified in monetary terms. This requires the selection of a measurement basis. A measurement basis is an identified feature—for example, historical cost, fair value or fulfilment value—of an item being measured. Applying a measurement basis to an asset or liability creates a measure for that asset or liability and for related income and expenses.

The *Conceptual Framework* classifies measurement bases into historical cost measurement bases and current value measurement bases.

Historical cost measures provide monetary information about assets, liabilities and related income and expenses, using information derived, at least in part, from the price of the transaction or other event that gave rise to them.

Current value measures provide monetary information about assets, liabilities and related income and expenses, using information updated to reflect conditions at the measurement date. Current value measurement bases include fair value, value in use for assets and fulfilment value for liabilities and current cost.

Key aspects of the measurement concepts

To be useful to users of financial statements, the information provided by a measurement basis must provide:

- (a) relevant information about the asset or liability and about any related income, expenses or changes in equity; and
- (b) a faithful representation of the asset or liability and of any related income, expenses or changes in equity.

The **relevance** of information provided by a measurement basis is affected by:

- (a) the characteristics of the asset or liability, in particular, the variability of cash flows and the sensitivity of the value to market factors or other risks. For example, if the value of an asset or liability is sensitive to market factors or other risks, its historical cost may not provide relevant information if information about changes in value is important to users of financial statements.
- (b) how that asset or liability contributes to future cash flows. For example, if assets are used in combination to produce goods or services, historical cost can provide relevant information about margins achieved in a period.

Whether a measurement basis can provide a **faithful representation** is affected by:

- (a) measurement inconsistency. If financial statements contain measurement inconsistencies (accounting mismatches), those financial statements may not faithfully represent some aspects of the entity's financial position and financial performance.
- (b) measurement uncertainty. Measurement uncertainty does not necessarily prevent the use of a measurement basis that provides relevant information. However, if measurement uncertainty is too high, it might make it necessary to consider selecting a different measurement basis.

The relative importance of each factor to be considered depends upon the facts and circumstances of individual cases.

In selecting a measurement basis, it is necessary to consider the nature of the information that the measurement basis will produce in both the statement of financial position and the statement(s) of financial performance.

Just as **cost** constrains other financial reporting decisions, it also constrains the selection of a measurement basis.

Summary of concepts—presentation and disclosure

The objective of financial statements is to provide financial information about the reporting entity's assets, liabilities, equity, income and expenses that is useful to users of financial statements.

That information is provided in the statement of financial position and in the statement(s) of financial performance by recognising assets, liabilities, equity, income and expenses. It is also provided in other statements and notes, by presenting and disclosing information about:

- (a) recognised assets, liabilities, equity, income and expenses, including information about their nature and about the risks arising from those recognised assets and liabilities;
- (b) assets and liabilities that have not been recognised, including information about their nature and about the risks arising from them;
- (c) cash flows;
- (d) contributions from holders of equity claims and distributions to them; and
- (e) the methods, assumptions and judgements used in estimating the amounts presented and disclosed, and changes in those methods, assumptions and judgements.

Presentation and disclosure objectives and principles

To facilitate effective communication of information in financial statements, when developing presentation and disclosure requirements in Standards a balance is needed between:

- (a) giving entities the flexibility to provide relevant information that faithfully represents the entity's assets, liabilities, equity, income and expenses; and
- (b) requiring information that is comparable, both from period to period for a reporting entity and in a single reporting period across entities.

Including presentation and disclosure objectives in Standards supports effective communication in financial statements because such objectives help entities to identify useful information and to decide how to communicate that information in the most effective manner.

Effective communication in financial statements is also supported by considering the following principles:

- (a) entity-specific information is more useful than standardised descriptions, sometimes referred to as 'boilerplate'; and
- (b) duplication of information in different parts of the financial statements is usually unnecessary and can make financial statements less understandable.

Key aspects of guidance on including income and expenses in the statement of profit or loss and in other comprehensive income

The **statement of profit or loss** is the primary source of information about the entity's financial performance for the reporting period.² That statement contains a total for profit or loss that provides a highly summarised depiction of the entity's financial performance for the period.

In principle, all income and expenses are classified and included in the statement of profit or loss.

However, in developing Standards, the Board may decide in exceptional circumstances to exclude from the statement of profit or loss income or expenses arising from a change in the current value of an asset or liability and to include those income and expenses in **other comprehensive income**. The Board may make such a decision when doing so would result in the statement of profit or loss providing more relevant information, or providing a more faithful representation of the entity's financial performance for that period.

In principle, income and expenses included in other comprehensive income in one period are **recycled** to the statement of profit or loss in a future period when doing so results in the statement of profit or loss providing more relevant information or a more faithful representation.

When recycling does not result in the statement of profit or loss providing more relevant information or a more faithful representation, the Board may decide income and expenses included in other comprehensive income are not to be subsequently recycled.

² The *Conceptual Framework* does not specify whether the statement(s) of financial performance comprise(s) a single statement or two statements. The *Conceptual Framework* uses the term 'statement of profit or loss' to refer to both a separate statement and to a separate section within a single statement of financial performance.

Section 1—Transactions involving cryptocurrencies

This section asks you to apply the concepts in the Conceptual Framework to a range of examples of transactions involving cryptocurrencies.

What is a cryptocurrency?

A **cryptocurrency** is a digital or virtual currency that uses cryptography for security.³

The first and most widely known cryptocurrency **Bitcoin (฿)** was introduced as an alternative to traditional money following the 2008 financial crisis. Bitcoin was the world's first decentralised digital currency, and it was designed to work without a central bank or single administrator.

As of July 2018 there were over 17 million Bitcoins in circulation with a total market value of 132.2 billion US dollars.⁴ Since Bitcoin's introduction, more than 1,600 cryptocurrencies have been created and the awareness and use of cryptocurrencies has grown exponentially.

Cryptocurrencies fall within a broader asset class known as cryptoassets. A cryptoasset is a digital asset class that includes assets recorded on a public distributed ledger called a **blockchain**. Cryptoassets could be intended for use as a medium of exchange (eg cryptocurrencies) or may be an asset that provides the holder with particular rights (eg crypto tokens, see page 27).

Potential **benefits** of using cryptocurrency are stated to include:

- (a) independence from governments, banks and corporations. Cryptocurrency is fungible and transcends borders. Unlike fiat money, cryptocurrency is not influenced by macroeconomic variables such as interest rates or fiscal policies.
- (b) relatively low cost and fast peer-to-peer transactions between parties regardless of geographic location.
- (c) limited exposure to threat from hackers because of blockchain technology used to store a ledger. Every new transaction must be verified by all users, making it almost impossible to forge transaction histories.

On the other hand, cryptocurrencies are stated to have these **drawbacks**:

- (a) they are not backed by any government and have no inherent value. Prices are based on supply and demand and can fluctuate widely.
- (b) their creation requires high electricity usage.
- (c) they are not immune to theft through hacking. In Bitcoin's short history, it has been subject to over 40 thefts, including a few that exceeded US dollar 1 million in value.

³ See <https://www.investopedia.com/terms/c/cryptocurrency.asp>.

⁴ Data extracted on 23 July 2018 from <https://coinmarketcap.com/all/views/all/>.

Staff research suggests that at present few companies applying IFRS Standards hold or are involved in cryptocurrency transactions to such an extent that information about them would be material to the financial statements. Whether cryptocurrency transactions are common in a jurisdiction appears to be related to the regulatory and legal environment in the jurisdiction. For some jurisdictions, the number of cryptocurrency transactions is increasing or expected to increase. Questions about the application of IFRS Standards to cryptocurrency transactions are increasing in number.

IFRS Standards do not specifically address cryptocurrencies. In July 2018 the Board discussed transactions involving cryptocurrencies. The Board decided to ask the IFRS Interpretations Committee to provide further information about how an entity might apply existing IFRS Standards in determining its accounting for some transactions involving cryptocurrencies. This information is provided in Agenda Papers 4A–4C for September 2018 IFRS Interpretations Committee Meeting.

We have identified that entities may need to develop accounting policies for three types of transactions involving cryptocurrencies:

- (a) holding cryptocurrencies (see examples 1.1 and 1.2);
- (b) ‘mining’ cryptocurrencies (see example 1.3); and
- (c) Initial Coin Offerings (see example 1.4).

The following examples ask you to apply concepts in the *Conceptual Framework* to develop accounting requirements that would provide useful information about these transactions.

Although entities that develop accounting policies for transactions involving cryptocurrencies are required to apply the requirements of IFRS Standards, for the purposes of this exercise please ignore those requirements.

Example 1.1—Holding cryptocurrency for investment purposes

Facts

On 30 April 20X0, Company A acquired 100 units of one cryptocurrency, Crypto, for CU450 per unit (total value CU45,000) and 2,000 units of another cryptocurrency, NewCoin, for CU3.5 per unit (total value CU7,000). These cryptocurrencies were acquired to diversify Company A's long-term investment portfolio.

Crypto has been in circulation for five years and is actively traded on cryptocurrency exchanges. On 31 December 20X0 the price of 1 Crypto was CU630. NewCoin is a newly issued cryptocurrency and has not proven to be popular. There have been very few transactions in NewCoin since the company purchased its units and the latest available data for 20X0 shows that NewCoin was traded for CU0.6 per unit.

Please, consider the following questions in developing accounting requirements for cryptocurrencies held for investment purposes.

Background information

Reasons for holding cryptocurrencies vary. Some entities hold them to pay for goods or services (ie as a medium of exchange similar to cash). Others hold cryptocurrencies for investment purposes, either as a long-term investment or for trading purposes. At present there are few specialised cryptocurrency investment funds, but some entities invest in cryptocurrencies even though doing so is not a core component of their business model.

Investments in cryptocurrencies are associated with a high degree of risk. As noted on page 11, the price of a cryptocurrency is determined solely by supply and demand and it fluctuates significantly, even for more established cryptocurrencies. For example, in 2018 the price of Bitcoin decreased from 13,437 US dollars on 1 January 2018 to 6,352 US dollars on 1 July 2018 with significant fluctuations in between.⁵

⁵ The data extracted from <https://coinmarketcap.com/currencies/bitcoin/>.

Question 1. Do you think that Company A has an asset as a result of acquiring cryptocurrencies?

| Criterion | Met? | | Comments |
|--|--------|---------|----------|
| | Crypto | NewCoin | |
| Right | | | |
| Controlled by entity | | | |
| As a result of past events | | | |
| Potential to produce economic benefits | | | |
| Asset? | | | |

Question 2. If the acquired cryptocurrencies are assets of the company, do you think that company A should recognise them in its financial statements as at 31 December 20X0?

| Factor | Comments |
|--|----------|
| <p>The following factors might suggest that recognition would not provide relevant information. Do any of them apply to these cryptocurrencies?</p> <ul style="list-style-type: none"> (a) existence uncertainty (b) low probability of inflow of economic benefits | |
| <p>Would any of these factors affect whether recognition of these cryptocurrencies can provide a faithful representation?</p> <ul style="list-style-type: none"> (a) measurement uncertainty (b) accounting mismatch (c) presentation and disclosure of resulting income, expenses and changes in equity. For example, if acquired in exchange for cash, would recognising an expense provide a faithful representation? | |
| <p>Would the benefit of the information provided by recognition justify the costs of providing and using that information?</p> | |
| <p>Recognise?</p> | |

Question 3. If Company A recognises its cryptocurrencies, how should they be measured?

| Factor | Comments | |
|--|----------|---------|
| | Crypto | NewCoin |
| <i>Which measurement basis would provide most relevant information?</i> | | |
| Characteristics (variability / sensitivity) | | |
| Contribution to cash flows | | |
| <i>Would information provided by the most relevant measurement basis provide a faithful representation of Company A's holdings of cryptocurrencies?</i> | | |
| Measurement uncertainty | | |
| Accounting mismatch | | |
| <i>Cost constraint</i> | | |
| <i>Selected measurement basis?</i> | | |

Please, fill in the grid summarising what information is provided in the statement of financial position and the statement(s) of financial performance by your selected measurement basis. You might find it helpful to consider Table 6.1 and paragraphs 6.23–6.42 of the *Conceptual Framework*.

| Statement of financial position | |
|---------------------------------------|--|
| Carrying amount | |
| Statement(s) of financial performance | |
| Initial recognition | |
| Sale or consumption of the asset | |
| Impairment | |
| Value changes | |

Are you satisfied that information provided by your selected measurement basis would provide useful information in both Company A's statement of financial position and statement(s) of financial performance?

Question 4. If a current value measurement basis is selected, are there any factors that would suggest to the Board that income or expenses from remeasurements should be included in other comprehensive income?

Question 5. Would your answers to questions 3 and 4 change if Company A was trading cryptocurrencies rather than holding them as an investment?

Question 6. What disclosures do you think would be necessary about Company A's holdings of cryptocurrencies?

Example 1.2—Holding cryptocurrency as a medium of exchange

Facts

On 31 March 20X0, Company B, an IT company, acquired 2 TradeUCoins for CU10,540. TradeUCoin is a popular cryptocurrency and has an active market. Company B intends to use TradeUCoins to gain access to a new e-commerce platform that only accepts payments in TradeUCoins. On 31 December 20X0 the company still holds the TradeUCoins. The fair value of Company B's holding of TradeUCoins has increased to CU13,200.

Background information

For an item to be a medium of exchange, it acts as an intermediary in the exchange of goods and services—ie it replaces barter transactions in which counterparties must have opposite but equal needs to transact.

At present, there is little evidence that cryptocurrencies are widely accepted as a medium of exchange. A report by Morgan Stanley, published in June 2018, shows that only four of the top 500 e-commerce websites in the US accept cryptocurrencies.⁶ Globally, 99Bitcoins, an entity that provides web-based information on cryptocurrencies, identifies 91 entities accepting Bitcoin as a form of payments as at June 2018.⁷

In contrast, <http://spendbitcoins.com/> says there are over 100,000 businesses worldwide that accept Bitcoin, although many of these are small businesses that do not apply IFRS Standards.

Further, staff research suggests that entities do not price their goods or services in cryptocurrencies. Although those entities may quote an amount of Bitcoin or other cryptocurrency they would accept, they tend to determine the prices in a conventional fiat currency (money without intrinsic value but backed by a government authority, eg US dollars or Euros), and convert that price regularly—often each day—into an amount of Bitcoin or other cryptocurrency. Thus, the price quoted in the cryptocurrency changes each day in response to changes in the value of the cryptocurrency.

⁶ See <https://www.macrobusiness.com.au/wp-content/uploads/2018/06/82012860.pdf>.

⁷ See <https://99bitcoins.com/who-accepts-bitcoins-payment-companies-stores-take-bitcoins/>.

Question 1. Are there any differences between TradeUCoins and the cryptocurrencies in Example 1.1 that would lead you to different conclusions about whether TradeUCoins meet the definition of an asset and, if so, whether the asset should be recognised in the statement of financial position? If yes, why?

Question 2. Would you select the same measurement basis for cryptocurrency held as a medium of exchange as the one you have chosen for cryptocurrencies held for investment purposes? If not, why?

Example 1.3—‘Mining’ cryptocurrency

Facts

In October 20X0 Company C, an IT company, started a ‘mining’ operation to mine CryptoMCoin using its spare hardware capacity. CryptoMCoins have been in circulation for two years and there is an active market for them.

As a result of its mining operations, Company C received 18 CryptoMCoins in November and 8 CryptoMCoins in December.

Monthly depreciation of hardware involved in mining is CU1,000 and monthly electricity costs related to running and cooling the hardware are CU800.

Please, consider the following questions in developing accounting requirements for cryptocurrency received as a result of mining operations.

Background information

Mining is a record-keeping service aimed at keeping the blockchain (distributed ledger) up-to date, complete and safe, as well as unalterable. All the information on the blockchain is encoded into data blocks which are linked to other blocks, in a chain. For a fast network to exist these blocks must be analysed quickly, so transactions can be confirmed as genuine by the network. As noted on page 11, there is no central authority which maintains the network, so the network needs ‘miners’ to use their own computational power to validate the blocks for the network.

Miners use their computers to run programs which attempt to solve very complicated mathematical problems which are used to validate and embed blocks. Mining uses a very large amount of computing power and in turn also uses a lot of electricity. So as an incentive, the network rewards those who mine.

When the mining process is completed the solution is submitted to the network, and once verified again by other miners on the network, the miner is awarded a specified amount of cryptocurrency.

In many blockchains miners are competing against each other to try and submit the solution first. However, they might not always be successful and the amount of cryptocurrency earned may fluctuate.

Question 1. Do you think that Company C has an asset as a result of mining CryptoMCoins?

| Criterion | Met? | Comments |
|--|------|----------|
| Right | | |
| Controlled by entity | | |
| As a result of past events | | |
| Potential to produce economic benefits | | |
| Asset? | | |

Question 2. If the CryptoMCoins received as a reward for mining are assets of the company, do you think that Company C should recognise them in its financial statements as at 31 December 20X0?

| Factor | Comments |
|--|----------|
| <p>The following factors might suggest that recognition would not provide <i>relevant</i> information. Do any of them apply to these cryptocurrencies?</p> <ul style="list-style-type: none"> (a) existence uncertainty (b) low probability of inflow of economic benefits | |
| <p>Would any of these factors affect whether recognition of these cryptocurrencies can provide a <i>faithful representation</i>?</p> <ul style="list-style-type: none"> (a) measurement uncertainty (b) accounting mismatch (c) presentation and disclosure of resulting income, expenses and changes in equity | |
| <p>Would the benefit of the information provided by recognition justify the costs of providing and using that information?</p> | |
| <p>Recognise?</p> | |

Question 3. If Company C recognises its holding of CryptoMCoins, how should it be measured?

| Factor | Comments |
|---|----------|
| <i>Which measurement basis would provide most relevant information?</i> | |
| Characteristics (variability / sensitivity) | |
| Contribution to cash flows | |
| <i>Would information provided by the most relevant measurement basis provide a faithful representation of Company C's holding of CryptoMCoins?</i> | |
| Measurement uncertainty | |
| Accounting mismatch | |
| <i>Cost constraint</i> | |
| <i>Selected measurement basis?</i> | |

Please, fill in the grid summarising what information is provided in the statement of financial position and the statement(s) of financial performance by your selected measurement basis. You might find it helpful to consider Table 6.1 and paragraphs 6.23–6.42 of the *Conceptual Framework*.

| Statement of financial position | |
|---------------------------------------|--|
| Carrying amount | |
| Statement(s) of financial performance | |
| Initial recognition | |
| Sale or consumption of the asset | |
| Impairment | |
| Value changes | |

Are you satisfied that information provided by your selected measurement basis would provide useful information in both Company C’s statement of financial position and statement(s) of financial performance?

Question 4. If a current value measurement basis is selected, are there any factors that would suggest to the Board that income or expenses from remeasurements should be included in other comprehensive income?

Question 5. What disclosures do you think would be necessary about cryptocurrencies acquired as a reward for providing mining services?

Example 1.4—Initial Coin Offerings (ICO)

Facts

On 25 June 20X0 a new start-up company announced an Initial Coin Offering. The company will issue crypto tokens (AccoTokens) in exchange for cash. It is planning to use funds from the ICO to develop a new e-accounting platform. Acquirers of the AccoTokens will be able to use those tokens to pay transaction fees on the new platform when it becomes operational. All tokens were sold within a week of the ICO. Accounting firm D bought 1,000 AccoTokens for CU9,400. At the end of the year, the e-accounting platform is still under development. The price of AccoToken on the cryptocurrency exchange on 31 December 20X0 is CU5.3 per token.

Background information

An **Initial Coin Offering** (ICO) is unregulated⁸ means by which funds are raised for a new cryptocurrency venture. An ICO is used by start-up entities to bypass the rigorous and regulated capital-raising process required by venture capitalists or banks.

To raise capital through an ICO an entity issues a **white paper**. This typically includes, among other things, details of the proposed financing requirements (eg the number of cryptoassets to be issued), rights and restrictions applicable to holders and the intended use of the financing secured. The white paper serves a similar purpose to a prospectus in a conventional equity initial public offering.

In an ICO an entity issues crypto tokens or coins to investors in exchange for cash or other cryptocurrencies, usually Bitcoin. As part of an ICO an entity typically makes a promise to the investor. This varies depending on the terms of the ICO. Examples of promises an entity may make to a subscriber participating in ICO include the following:

- (a) the holder is entitled to free or discounted access to the entity's goods or services for a specified or indefinite period of time;
- (b) the holder has access to an exchange through which they are able to buy or sell goods or services to other users of the exchange; or
- (c) the holder is entitled to a share of the profits of the entity.

Cryptoassets issued in ICOs may, in some cases, be capable of being traded in a secondary market. Where such a transaction occurs, the issuing entity has the same obligation to the new holder as it did to the original holder.

In this session, we will not explore the accounting by the issuer of crypto tokens and whether the ICO would result in the recognition of equity, liability or income. We will focus on the accounting by the acquirer of the crypto tokens.

⁸ This definition has been copied from Investopedia (<https://www.investopedia.com/terms/i/initial-coinofferingico.asp>). The staff are aware that securities regulators in some jurisdictions published communications indicating that some ICOs may be regulated. See <http://www.iosco.org/publications/?subsection=ico-statements> for some announcements by regulators on ICOs.

Question 1. Do you think that Company D has an asset as a result of acquiring AccoTokens?

| Criterion | Met? | Comments |
|--|------|----------|
| Right | | |
| Controlled by entity | | |
| As a result of past events | | |
| Potential to produce economic benefits | | |
| Asset? | | |

Question 2. If acquired AccoTokens are assets of the company, do you think that Company D should recognise them in its financial statements as at 31 December 20X0?

| Factor | Comments |
|--|----------|
| <p>The following factors might suggest that recognition would not provide relevant information. Do any of them apply to these cryptocurrencies?</p> <ul style="list-style-type: none"> (a) existence uncertainty (b) low probability of inflow of economic benefits | |
| <p>Would any of these factors affect whether recognition of these cryptocurrencies can provide a faithful representation?</p> <ul style="list-style-type: none"> (a) measurement uncertainty (b) accounting mismatch (c) presentation and disclosure of resulting income, expenses and changes in equity (if Company D does not recognise the crypto tokens as an asset, it will need to recognise an expense of CU9,400 when it acquires them.) | |
| <p>Would the benefit of the information provided by recognition justify the costs of providing and using that information?</p> | |
| Recognise? | |

Question 3. If Company D recognises its holding of AccoTokens, how should it be measured?

| Factor | Comments |
|---|----------|
| <i>Which measurement basis would provide most relevant information?</i> | |
| Characteristics (variability / sensitivity) | |
| Contribution to cash flows | |
| <i>Would information provided by the most relevant measurement basis provide a faithful representation of Company D's holding of AccoTokens?</i> | |
| Measurement uncertainty | |
| Accounting mismatch | |
| <i>Cost constraint</i> | |
| <i>Selected measurement basis?</i> | |

Please, fill in the grid summarising what information is provided in the statement of financial position and the statement(s) of financial performance by your selected measurement basis. You might find it helpful to consider Table 6.1 and paragraphs 6.23–6.42 of the *Conceptual Framework*.

| Statement of financial position | |
|---------------------------------------|--|
| Carrying amount | |
| Statement(s) of financial performance | |
| Initial recognition | |
| Sale or consumption of the asset | |
| Impairment | |
| Value changes | |

Are you satisfied that information provided by your selected measurement basis would provide useful information in both Company D's statement of financial position and statement(s) of financial performance?

Question 4. If a current value measurement basis is selected, are there any factors that would suggest to the Board that income or expenses from remeasurements should be included in other comprehensive income?

Question 5. What disclosures do you think would be necessary about Company D's crypto tokens acquired through the ICO?

Section 2—Variable and contingent consideration

This section asks you to apply the concepts in the Conceptual Framework to examples involving variable or contingent consideration.

IFRS Standards specify how to account for variable and contingent consideration payable for assets acquired in a business combination or through a lease. However, they do not provide guidance for other asset acquisitions involving variable or contingent consideration. As a result, companies account for such transactions in various ways, which makes it difficult for users to compare the effects of those transactions on the financial position and financial performance of companies. Evidence suggests that transactions involving variable or contingent consideration are widespread, particularly in extractive industries, pharmaceutical and biotech industries, and real estate and telecommunications sectors.

As a result of its 2015 Agenda Consultation, the Board added a project on variable and contingent consideration to its research pipeline. The Board is planning to start this project before the end of 2018. The Board will explore whether it can develop accounting requirements that would improve the reporting on variable and contingent consideration for asset acquisitions other than those acquired in a business combination or through a lease.

One of the main objectives of the project would be to decide when a liability arises for variable or contingent consideration that depends on the acquirer's future activity. In this session, we do not intend to predict the outcome of the Board's deliberations in its research project on variable and contingent consideration.

Background

Variable or contingent consideration is contractual payments for an asset that may vary if facts or circumstances change after the acquisition date of the asset. Examples of such payments include:

- (a) payments that are dependent on an index or a rate (such as LIBOR, inflation or the consumer price index). These payments are common in licence agreements with the amount increasing at the end of each year based on the consumer price index or some other index or rate. In this paper we will refer to such payments as 'variable consideration'.
- (b) payments that are dependent on the acquirer's future activity (such as payments based on sales, revenues or outputs produced). These payments are also common in licence agreements. For example, a contract for the purchase of an intangible asset (such as a licence) may specify that the payments are based on a specific percentage of sales made from using the asset. Other examples include payments that are made if the acquirer reaches a specific milestone when using the asset acquired in a research and development project. These payments are common, for example, at various stages of the research and development of a new drug in the pharmaceutical industry. In this paper we will refer to such payments as 'contingent consideration'.

Different accounting models may be appropriate if the variable or contingent consideration reflects different types of transactions.

Example 2.1—Contingent consideration payable if a milestone is reached

Facts

On 5 January 20X0 Company E, a pharmaceutical company, acquires a patent related to a new chemical compound and agrees to make a first fixed payment of CU1,000 at the date of acquisition. Company E intends to use the compound to develop a new drug as part of a research and development project. The company has agreed to make an additional payment of CU400 to the vendor if approval to sell the new drug in a specified market is obtained. At the end of 20X0 the research and development project is progressing as planned. Although approval to sell the new drug has not yet been granted, Company E expects to receive the approval and make the payment on 30 June 20X1.

This is an example of contingent consideration that depends on the activities of the acquirer.

Please, consider the following questions in developing accounting requirements for contingent consideration in this case.

Question 1. What rights has Company E acquired when it acquired the patent? Is there only a single right (ie the right to use the patent in the development of the drug) or has the entity acquired more than one right?

Question 2. What obligations did Company E assume when it acquired the rights identified in question 1? Is there a single obligation to pay for a patent of uncertain value? Or are there two obligations, for example, to pay the fixed amount for the acquired patent and to pay contingent consideration for some other right?

Question 3. If Company E assumes two obligations when it acquires the patent, does the obligation to pay contingent consideration meet the definition of a liability at the acquisition date?

| Criterion | Met? | Comments |
|---|------|----------|
| Obligation with potential to require transfer of an economic resource | | |
| No practical ability to avoid | | |
| As a result of past events | | |
| <i>Does the entity have a liability?</i> | | |

Question 4. What would be the main factors to consider in deciding whether to recognise any liability to pay the contingent consideration?

Question 5. If Company E assumes a single obligation when it acquires the patent, should the measurement of that liability include an estimate of the contingent consideration payable?

Question 6. If the liability includes an estimate of the contingent consideration payable and that liability is remeasured in subsequent periods, where should the company present changes in carrying amount?

- (a) The change in the carrying amount of the liability should lead to a corresponding increase or decrease in the carrying amount of the related asset;
- (b) The change in the carrying amount of the liability should be included in the statement of profit or loss; or
- (c) The change in the carrying amount of the liability should be included in other comprehensive income.

Question 7. What disclosures do you think would be necessary about Company E's liabilities that involve contingent consideration?

Example 2.2—Contingent consideration that depends on the number of users

Facts

On 30 November 20X0 Company F, a TV company, buys from an idea developer a right to produce a new cooking programme for 3 years. It agrees to pay an initial fixed payment of CU50,000 and additional consideration that is contingent on the viewing figures for each year: CU100 for each 10,000 viewers over 1 million viewers.

The company estimates future viewing figures as:

- (a) 1.6 million viewers in 20X1;
- (b) 2.8 million viewers in 20X2; and
- (c) 3.5 million viewers in 20X3.

This is an example of contingent consideration that depends on the activities of the acquirer.

Please, consider the following questions in developing accounting requirements for contingent consideration in this case.

For the purposes of this example, please ignore time value of money.

Question 1. What rights has Company F acquired when it acquired the right to produce the programme? Is there only a single right (ie the right to produce a new cooking programme) or has the entity acquired more than one right?

Question 2. What obligations did Company F assume when it acquired the rights identified in question 1? Is there a single obligation to pay for a right of uncertain value? Or are there two obligations, for example, to pay the fixed amount for the acquired right and to pay contingent consideration for some other right?

Question 3. If Company F assumes two obligations when it acquires the right to produce the programme, does the obligation to pay contingent consideration meet the definition of a liability at the acquisition date?

| Criterion | Met? | Comments |
|---|------|----------|
| Obligation with potential to require transfer of an economic resource | | |
| No practical ability to avoid | | |
| As a result of past events | | |
| <i>Does the entity have a liability?</i> | | |

Question 4. What would be the main factors to consider in deciding whether to recognise any liability to pay the contingent consideration?

Question 5. If Company F assumes a single obligation when it acquires the right to produce the programme, should the measurement of a liability include an estimate of the contingent consideration payable?

Question 6. If the liability includes an estimate of contingent consideration payable and that liability is remeasured in subsequent periods, where should the company present changes in carrying amount?

- (a) The change in the carrying amount of the liability should lead to a corresponding increase or decrease in the carrying amount of the related asset;
- (b) The change in the carrying amount of the liability should be included in the statement of profit or loss; or
- (c) The change in the carrying amount of the liability should be included in other comprehensive income.