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EFRAG Research project on Crypto-assets

Proposed scope and draft project plan

Objective

- 1 The objective of this session is to start the discussion on the EFRAG Research project on crypto-assets (the EFRAG Project) and obtain input from EFRAG TEG members on the scope of the EFRAG project, project plan and project timeline.
- 2 A separate briefing paper provides information on the crypto-asset ecosystem to help EFRAG TEG members in the discussion.

Structure of this paper

- 3 This paper provides the EFRAG Secretariat's initial views on the scope, project plan and project timeline and seeks EFRAG TEG members' input on these.
- 4 This paper is structured as follows:
 - (a) EFRAG project background;
 - (b) Proposed data gathering, research and scoping related questions;
 - (c) Potential broader scope research question;
 - (d) Proposed two-phase approach;
 - (e) Key elements of the proposed project plan; and
 - (f) Project timeline.

EFRAG project background

- 5 Following the completion of the EFRAG Research 2018 agenda Consultation, the EFRAG Board approved to add a project on Crypto-assets to EFRAG's research agenda at its meeting in August 2018. The EFRAG Board discussed an initial project plan at its meetings in September and October 2018.
- 6 The EFRAG project refers a commonly-accepted umbrella term 'crypto-assets' that encompasses 'cryptocurrencies', 'crypto-tokens' and hybrids.
- 7 Research conducted by the IASB staff and presented to the IFRS Interpretations Committee and the IASB during the course of 2018 indicated that very few IFRS preparers reported holding crypto-assets in their 2017 IFRS financial statements. The IASB agreed with the IASB staff's conclusion that crypto-assets were not sufficiently prevalent at this stage and decided not to add a project on crypto-assets to its agenda. The IASB would continue to monitor the developments in crypto-assets.
- 8 There have also been reservations aired by some stakeholders around whether this topic is merely a passing fad particularly as about 80% of token issuances via Initial

Coin Offerings (ICOs) have turned to be scams and there has been the backdrop of volatility and a significant drop in value of crypto-assets including the flagship crypto currencies - Bitcoin and Ethereum during the year 2018.

- 9 Notwithstanding the IASB's findings of low current prevalence amongst IFRS entities and adopting a "wait and see" stance on this topic; it is one that continues to attract attention. Regulatory and supervisory bodies including European Securities Markets Authority (ESMA)¹ and European Banking Authority (EBA)² have issued publications related to crypto-assets and these have highlighted the varied levels of market development, innovation and regulatory scrutiny across countries in respect of crypto-assets. Outside Europe, the US SEC has also signalled its intention of a heightened focus on crypto-assets for the 2019 period.
- 10 The ongoing monitoring by different regulators does not necessarily always signify that they are encountering issues with crypto-assets in their jurisdictions. But regulator attention could also be indicative of the potential of crypto-assets and related business activities to become more prevalent and present different risks including those related to investor and consumer protection as well as financial stability. Furthermore, several national accounting standard setters (Japan, Australia, Canada and EU-based ones such as France, Netherlands, Estonia and Lithuania) have issued requirements signalling that there are likely to be accounting challenges that are currently applicable for some EU reporting entities.
- 11 Some academic papers also cast light on market trends and institutional factors that could potentially positively impact the crypto-asset market. For example, two recently issued studies that focus on crypto-assets have been published by the University of Cambridge. The first study – Benchmarking Study of Cryptocurrencies – was published in April 2017³ and the second study – 2nd Global Crypto-asset Benchmarking Study⁴ – was published in December 2018. The latter study was based on data collected from more than 180 start-ups, established companies and individuals from across 47 countries. The study focuses on the evolution of the crypto-asset industry, global usage of crypto-assets, and provides an empirical analysis of the four key crypto-asset industry segments (activities). The study also provides an overview of the future outlook of crypto-assets concluding that the trend for crypto-asset support and related activities is likely to continue.

Proposed data gathering, research and scoping related questions

- 12 As noted, this topic is of interest to many stakeholders and several national accounting standard setters have proposed accounting solutions. Hence, there is a broad need to identify - based on evidence and a precise understanding of state of play - what distinct contribution EFRAG can bring to the table.
- 13 The EFRAG Secretariat proposes the following potential data gathering and research questions for the EFRAG project:
 - (a) Are crypto-assets and related activities likely to become prevalent or material for some EU IFRS reporting preparers in the near to medium term? ⁵

¹ This document can be found [here](#).

² This document can be found [here](#).

³ This document can be found [here](#).

⁴ This document can be found [here](#).

⁵ The focus would be on EU listed companies

- (b) Do IFRS requirements and emerging national accounting standard literature sufficiently address the recognition, measurement, presentation and disclosure requirements for crypto-assets? In other words, are there outstanding gaps and/or accounting challenges⁶ that exist for EU reporting entities?
 - (c) What are the economic or business model characteristics of crypto-assets that are at the heart of any currently experienced accounting challenges?
 - (d) What crypto-assets, related business activities and types of entities should be within the scope of the project? Table 1 has EFRAG Secretariat's initial views on the proposed areas for further analysis and whether it is likely that there will be a need for EFRAG to propose accounting solutions.
 - (e) Should accounting requirements be aligned with regulatory definition and requirements (e.g. MIFID II)?
- 14 A potential broader scope for the EFRAG project is discussed in paragraphs 15 to 22.

⁶ An accounting problem could be deemed to exist if

- (a) it is unclear how an entity might apply existing IFRS Standards for crypto-assets; and
- (b) existing IFRS Standards do not provide decision-useful information for users of financial statements

– Table 1

Different types of activities	Analyse	Research the Prevalence and Trends	EFRAG Secretariat view on likely need for accounting solution	Reasons for the EFRAG Secretariat view
Mining	✓	✓	✓	Potential prevalence in Europe
Custody	✓	✓	✓	Support for ICO and STO market
Holding investing /	✓	✓	✓	Support for ICO and STO market
Payment services	✓	✓	✓	Support for payments services
ICOs and STOs	✓	✓	✓	Prevalence Support of a specific segment of funding market

Table 2

Different types of assets	Analyse	Research the Prevalence and Trends	EFRAG Secretariat view on likely need for accounting solution	Reasons for the EFRAG Secretariat view
Coins	✓	✓	✓	Support for payments services
Payment tokens	✓	✓	✓	Support of a specific segment of funding market
Utility tokens	✓	✓	✓	Support of a specific segment of funding market
Asset-tokens	✓	✓	✓	Support of a specific segment of funding market

Potential broader scope research question

- 15 As noted, the IASB has concluded that at this point in time, crypto-assets are not prevalent within IFRS reporting entities. Furthermore, for jurisdictions where there is a concern, several national accounting standard setters have already put forward guidance related to crypto-assets. This raises a possibility that any data gathering and research undertaken by EFRAG that is confined to the issues and research questions raised in paragraph 13 could end up only being confirmatory and

descriptive of what others have done. It might also lead to a conclusion that there is no need for EFRAG to propose accounting solutions beyond what is available under current IFRS requirement or within the guidance that has been put forward by different national accounting standard setters. Hence, the EFRAG Secretariat proposes to also do some further groundwork to ascertain if there are other aspects of digital assets - other than crypto-assets - that pose accounting challenges and where EFRAG could potentially make a distinctive contribution.

- 16 If an assumption is made that crypto-assets are a special type of digital asset and that in analogous fashion - there could be other digital assets (e.g. some types of smart contracts⁷) whereby their features could raise accounting recognition, measurement and disclosure questions.
- 17 For example: assume an insurance contract providing compensation for the risk of delays of flights occurring. When a flight is delayed more than 2 hours, the claim is immediately and automatically paid to the account of the policyholder, without any further administrative actions. In measuring such contracts, the insurer would use (in accordance with IFRS 17 *Insurance Contracts*) a probability-weighted average estimate of how many policyholders would ask for a compensation. The research question that arises is whether a probability-weighted average measurement would be appropriate in other areas than insurance when smart contracts are being used.
- 18 Based on the need to assess whether there is an opportunity for EFRAG's research project to make an incremental contribution beyond the topic of crypto-assets (coins, tokens and ICOs/STOs)- while still being within the realm of a project that is focused on digital-assets - the EFRAG Secretariat proposes the following additional potential questions (in addition to the questions in paragraph 13) to inform initial information gathering that includes outreach conversations with expert stakeholders:
 - (a) Similar to the emergence of accounting challenges for crypto-assets, could there be broader and yet to be addressed accounting implications that could arise from the adoption of blockchain technologies within reporting entities? *The appendix to this paper has illustrative examples of use cases of distributed ledger technologies (DLT) across different industries. In most instances, these use cases are likely to only be technology enabled applications towards already established business processes with no arising accounting implications. However, it is possible that some of these use cases may be creating digital assets that present unclear or unresolved accounting challenges.*
 - (b) What are the digital assets – other than crypto-assets - that could be recognised or disclosed as intangible assets in IFRS financial statements?
 - (c) Is the notion of 'control' affected by the fact that crypto-assets are related to a distributed ledger technology (DLT) which comprises a number of risks including the risk of (hard) forks occurring⁸ and storage of crypto-assets⁹?
 - (d) How to deal with acquisition cash flows when contracts are concluded directly between the entity and the customer (through DLT)?

⁷ A computerised transaction protocol that executes the terms of a contract. Based upon Nick Szabo, 1997, Formalising and Securing Relationships on Public Networks.

⁸ A fork is a change to the DLT protocol. A hard fork is a change to a DLT protocol that requires all nodes or users to upgrade to the latest version of the protocol software or creates two versions of the protocol going forward.

⁹ There are currently a number of risks associated with storing crypto-assets in crypto exchanges, and safeguard of private 'keys' using crypto wallets or other means.

- 19 The impact on the notion on control may need further analysis. For example, in an exchange of cryptocurrencies supported by the DLT technique, the EFRAG Secretariat understands that consensus cannot be reached solely between the contracting parties, but rather the contracting parties depend on the validation of their transition by all nodes of the DLT community (for that particular coin). This generally takes limited time, however, a bigger issue lies in the risk of (hard) forks occurring in the chain (of transactions). The EFRAG Secretariat understands that (hard) forks can occur. When a 'chain forks', branches of the chain i) may turn into something else (one coin is partly exchanged for another one) or ii) may be abandoned by the DLT-community entirely (which may turn coins previously acquired through the now abandoned chain less valuable or even worthless).
- 20 The IFRS 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 to flow to the entity. The EFRAG Secretariat understands that control in a DLT environment is exercised by the DLT community, *not* by individual contractual parties. When validating a particular transaction, the EFRAG Secretariat understands the DLT community conveys control to the contracting parties, but that control can be altered when (hard) forks subsequently occur in the chain of transactions.
- 21 In summary, EFRAG Secretariat is proposing to develop a 'problem definition' oriented initial discussion paper that will address a combination of questions that focus on examining the prevalence of crypto-asset activities (in the near to medium term) and identifying the accounting challenges arising from these activities for EU IFRS reporting entities. In addition, the EFRAG Secretariat also proposes to gather information around other digital assets with a view to ascertaining whether these are posing any accounting challenges.
- 22 This evidence based discussion paper can then inform an updated scope definition of the EFRAG project and identify the areas that EFRAG could contribute towards the potential formulation of accounting solutions.

Proposed two-phase approach

- 23 The EFRAG Secretariat proposes a two-phase approach to the EFRAG project
 - (a) Phase 1 ('problem definition phase'): Gather evidence with a view to examining the prevalence of crypto-asset activities (in the near to medium term) identifying if and where there are gaps in accountings requirements. These should be presented in a discussion paper and should be used to update the scope. The output would be a discussion paper, issued for consultation that tries to respond to the questions in paragraphs 13 and 18.
 - (b) Phase 2 ('potential solutions phase'): Propose accounting solutions based on conclusions made in phase1.
- 24 Feedback from the consultation could help determine whether, and if so to what extent, EFRAG should undertake a more comprehensive examination of potential accounting solutions for crypto-assets including broader implications to accounting created by other digital assets with the blockchain technology. If considered necessary, EFRAG will constitute an advisory panel.

Key elements of the project plan- Phase 1- Problem definition discussion paper

Scope – crypto-assets and other digital assets

- 25 The EFRAG Secretariat understands that the current main crypto-asset related activities are:
 - (a) Mining of crypto-assets;

- (b) Custody and holding of crypto-assets
 - (c) Investing;
 - (d) Payment services transactions;
 - (e) Transaction fees and other 'exchange' transactions; and
 - (f) Initial Coin Offerings (ICO's); Security Token Offerings (STO); and
 - (g) Issuance of tokens (Post-IPO and STO).
- 26 The EFRAG Secretariat proposes to analyse each of these activities and undertake research to assess their prevalence and trends for EU IFRS reporting companies. The EFRAG Secretariat is however conscious that given the infancy of the crypto-asset industry new activities and/or changes to existing segments are likely to arise as the EFRAG project is being developed.
- 27 The EFRAG Secretariat also proposes to include all categories of crypto-assets in the scope. Based on preliminary research undertaken by the EFRAG Secretariat, most crypto-assets can be distilled down into three basic main categories:
- (a) Payment tokens and cryptocurrencies (coins);
 - (b) Utility tokens;
 - (c) Asset-backed tokens (includes security tokens).
- 28 A more detailed description of these three basic main categories is provided in agenda paper 12.03.
- 29 The EFRAG Secretariat is of the view that at this stage of the EFRAG project it will be appropriate not to exclude any crypto-asset activities or categories. This is because the main objective of this first phase of the EFRAG project is to provide insight on the prevalence and trends of crypto-assets and to gauge the current and potential materiality for IFRS reports in the EU. Including all crypto-asset activities and categories in the assessment of whether an accounting problem exists will also help to ascertain for which activities are potential proposals for accounting solutions required.
- 30 As described in paragraph 18, EFRAG Secretariat also proposes to gather information around other digital assets that may present accounting challenges.

Preliminary structure- Phase 1 discussion paper

- 31 To achieve the objective of defining the problem and having an evidence based definition of where EFRAG could propose accounting solutions, the EFRAG Secretariat proposes to develop a discussion paper that will try to examine and respond to the research questions in paragraphs 13 and 18 by addressing the following main areas:
- (a) Background on crypto-assets and the blockchain;
 - (b) Prevalence and trend analysis (quantitative data and qualitative indicators);
 - (c) Overview of nature and characteristics of crypto-assets and other digital assets;
 - (d) Does current IFRS guidance provide suitable solutions for the accounting for crypto-assets and other digital assets?
 - (e) Who is using crypto-assets and other digital assets and would benefit from IFRS accounting guidance?
 - (f) Existing accounting guidance under European and non-European GAAP's.
 - (g) Regulatory framework on crypto-assets within the EU that may have implications for accounting.

Stakeholder consultation

- 32 As mentioned in paragraph 24, feedback from the consultation could help inform whether, and if so to what extent, EFRAG should undertake a more comprehensive examination of potential accounting solutions for crypto-assets including broader implications to accounting. In other words, the feedback will help inform a potential phase 2 (potential solutions phase).

Resources and partnerships

- 33 We have received preliminary expression of interest from the Lithuanian authority (standard-setter), the Belgium accounting standard setter, and the UK FRC (support in background material). As we understand, the Lithuanian authority and the UK FRC are willing to share information, but they do not plan to work on our discussion paper. We are in the process of further confirming the nature of collaboration with potential partners.

Advisory Group

- 34 At this stage of the EFRAG project, the EFRAG Secretariat do not see a need to create a dedicated EFRAG Advisory Group before completing phase 1 (problem definition phase). In our view, this initial stage of the project requires research and further analysis on market prevalence and prevailing accounting issues to determine if and how much input from an advisory group is required. The creation of an Advisory Group could be considered during a phase 2 (potential solutions phase). However, during phase 1, we may contact and gather information from relevant experts in external organisations.

Project timeline

- 35 The EFRAG Secretariat has started gathering relevant data and evidence available through academic research papers and other public sources. We have also contacted some European organisations, including national European standards-setters to enquire about their initiatives regarding crypto-assets.
- 36 The EFRAG Secretariat thinks that a discussion paper can be published sometime in H2 2019.
- 37 We envisage the various main EFRAG TEG, EFRAG Board and other EFRAG Advisory Group’s discussion and approval steps in 2019 as follows:

Timeline 2019	EFRAG TEG	EFRAG TEG/CFSS	EFRAG User Panel/ Academic Panel	EFRAG Board
February	Discuss initial thoughts on the scope and project plan and if possible agree on the scope and project plan			
March	Further discussion on the scope and other aspects of the work plan if needed	Discuss issues and developments		
April	Discuss issues and developments	Project Update		

Timeline 2019	EFRAG TEG	EFRAG TEG/CFSS	EFRAG User Panel/ Academic Panel	EFRAG Board
May	Present initial draft of discussion paper	Written consultation CFSS members	<u>Academic Panel</u> : issues and developments	
June			<u>User Panel</u> : Discuss issues and developments	
July	Recommend discussion paper for consultation		<u>User Panel</u> : Approve discussion paper	

Questions for EFRAG TEG

- 38 Do EFRAG TEG members agree with the EFRAG Secretariat preliminary view of scope and research questions in paragraphs 12 to 21? If not what changes do you recommend and why?
- 39 Do EFRAG TEG members have comments or views on the next steps and research being proposed by the EFRAG Secretariat in paragraphs 23 to 34?
- 40 Do EFRAG TEG members have comments or views on the proposed project timeline in paragraphs 36 and 37?

APPENDIX

Illustrative use cases of DLT technologies

Financial services	Technology, media & telecoms	Consumer / industrial products
<p>Potential uses:</p> <ul style="list-style-type: none"> • Trade finance • Payments • Regulatory info provision • Settlement and clearing • Fund distribution • Fund distribution 	<p>Potential uses:</p> <ul style="list-style-type: none"> • Supports 'Internet of Things' • Lower priced micropayments • Securing intellectual property and digital creative works 	<p>Potential uses:</p> <ul style="list-style-type: none"> • Payments for retail transactions • Digital signature technology
<p>Company projects:</p> <ul style="list-style-type: none"> • R3 consortium of 43 banks • Nasdaq Linq 	<p>Company projects:</p> <ul style="list-style-type: none"> • Microsoft partnership with R3 • IBM, Samsung 	<p>Company projects:</p> <ul style="list-style-type: none"> • DocuSign and Visa partnership
Healthcare	Transportation	Public Sector
<p>Potential uses:</p> <ul style="list-style-type: none"> • Record keeping • Security of confidential patient information 	<p>Potential uses:</p> <ul style="list-style-type: none"> • Self-driving cars • Car self maintenance • Shipping and supply payments • Ride sharing app 	<p>Potential uses:</p> <ul style="list-style-type: none"> • Official registry for government assets • Secure and faster voting mechanism for elections
<p>Company projects:</p> <ul style="list-style-type: none"> • Factom/Health Nautica tie-up • Philips Blockchain Lab 	<p>Company projects:</p> <ul style="list-style-type: none"> • Arcade City (ridesharing app) 	<p>Company projects:</p> <ul style="list-style-type: none"> • Factom pilot with Honduras government

Source: JP Morgan Research, 2018- Some but not all of these use cases may be creating unclear accounting implications. Most of these use cases are simply technology-enabled applications of existing business processes that ought not to have any accounting implications but it is not clear whether there could be arising implications for intangible assets recognition and disclosures for some of these use cases.