

ADVICE TO ESMA

Own Initiative Report on Initial Coin Offerings and Crypto-Assets

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I. Executive Summary

1. *Goal.* The goal of this report is to give advice to ESMA on steps it can take to contain the risks of ICO's and crypto assets, on top of existing regulation. Since there are no obvious stability risks yet in this respect, this report mainly focuses on risks for investors.

2. *Overview.* After a short introduction, Section III of the report engages in a fact finding exercise. It first defines the relevant concepts, including "crypto asset", "virtual currency", cryptocurrency, "token" and ICO. For purposes of this report, the term "crypto assets" is used to refer to coins, tokens, virtual and crypto currencies or other digital or virtual assets collectively. The acronym ICO is used for the initial offering of any crypto asset. The report then provides a taxonomy of crypto assets, based on the Swiss FINMA distinction between payment tokens, utility tokens, asset tokens and hybrids. In order to inspire potential regulatory initiatives, the report further provides an overview of recent ICOs and market developments in respect of crypto assets, and of the most important existing regulations of crypto assets, ICO's and sandboxes and innovation hubs in 36 jurisdictions: the EU and EEA Member States, Gibraltar, Switzerland, Jersey, Guernsey and the Isle of Man.

The second part of the report builds up to advice to ESMA on the question whether and how ICO's and/or crypto assets should be regulated. The potential benefits and risk of payment tokens, utility tokens and asset tokens are charted. In order to determine whether asset tokens are covered by MiFID II, the Prospectus Regulation, and the Market Abuse Regulation, the SMSG has attempted to determine whether they are financial instruments (for MiFID purposes and the MAR) and transferable securities (for purposes of the Prospectus Regulation). This proved a challenging exercise in view of the uncertainty about the exact scope of those concepts.

3. *Advice to ESMA.* On that basis, the SMSG provides the following advice to ESMA.

First, the SMSG advises ESMA to provide level 3 guidelines or to aim at supervisory convergence on:

- (i) the interpretation of the **MIFID definition of "transferable securities"**, and clarify whether transferable asset tokens which have features typical of transferable securities (see IV.2.c, situations 1, 2 and 4.1) are subject to MiFID II and the Prospectus Regulation;
- (ii) the interpretation of the **MiFID definition of "commodities"**, since that concept is crucial to determine whether an asset token with features typical of a derivative is a MiFID financial instrument or not (see IV.2.c, situation 4.2.2)
- (iii) the interpretation of **the MTF and OTF concepts**, clarifying whether the organisation of a secondary market in asset tokens which qualify as MiFID financial instruments is indeed an MTF or an OTF (see IV.2.c, situations 1, 2, 4.1 and 4.2.2.2);
- (iv) the fact that when issuers of asset tokens are to be considered to organize an MTF or an OTF in accordance with the above, **the MAR applies to such MTFs and OTFs.**
- (v) the fact that in all situations where an asset token is to be considered a MiFID financial instrument, **persons giving investment advice on those asset tokens or executing orders in those asset tokens**, are to be considered investment firms, which should have a licence as such, unless they qualify for an exemption under MiFID II.

Second, transferable payment and utility tokens are often used as investment products, while the asset tokens mentioned in IV.2.c, situation 4.2.1 may in the future be used as such. In view of the transferability and fungibility of those tokens, risks arise that are very similar to risks on the capital markets (in terms of investor protection and market abuse). The SMSG recognizes that **ESMA is not competent to change the level 1 MiFID II text listing the MiFID II financial instruments**. The SMSG nevertheless urges ESMA to consider **sending a letter to the Commission** asking it to consider adding these tokens to the MiFID list of financial instruments. If those tokens would become MiFID financial instruments, secondary markets in such payment tokens would also qualify as MiFID MTFs or OTFs, subject to the MAR, and advisors in respect of such tokens would become subject to MiFID.

Finally, the SMSG is of the opinion that although sandboxes and innovation hubs should not be overly regulated, some coordination is necessary. The SMSG advises ESMA to provide **guidelines with minimum criteria for national authorities which operate or want to operate a sandbox or innovation hub**. Those minimum criteria should relate to (i) information to ESMA on the exact scope, operating conditions of the sandbox or innovation hub, as well as on the measures taken to ensure investor protection; (ii) transparency to the public in respect of the same; (iii) regular reporting to ESMA and to the public on the experiences with the use of the sandbox or innovation hub and with the FinTech initiatives tested in the sandbox or innovation hub.

II. Introduction

4. This report presents the SMSG's advice to ESMA on crypto assets that could present risks to investors or financial stability but might also provide innovation in the field of finance.

5. The goal of this report is to give advice to ESMA on potential steps it can take in order to contain the risks of ICO's and virtual currencies, on top of existing regulation. For purposes of this report we mainly focus on risks for investors.

6. The first part of the report provides necessary background information. It first defines the relevant concepts. The report then provides a taxonomy of crypto assets, distinguishing between payment tokens, utility tokens, asset tokens and hybrids. In order to inspire potential regulatory initiatives, the report further provides an overview of recent ICOs of crypto assets and of the most important existing regulations of crypto assets in the EU.

The second part of the report builds up to advice to ESMA on the question whether and how ICO's and/or Crypto assets should be regulated. Therefore, this report considers the following questions:

- (i) Are there any benefits to ICO's or Crypto assets which are not attained as efficiently by previously existing solutions?
- (ii) Are ICO's sufficiently covered by existing regulation?
- (iii) Should existing regulation be modified (if so, at what level?) or are new initiatives needed?

7. Since there are no obvious stability risks yet in this respect, this report mainly focuses on consumer/investor protection, but also takes into the potential benefits that a start-up issuer could gain from these assets.

III. Background information: Fact finding

8. There is a large number of crypto assets (1930 cryptocurrencies identified in CoinMarketCap as of 11 September 2018) and most use distributed ledger technology (DLT) in one form (blockchain) or other. The use of words like "currency" or "initial offering" provides an appearance of legitimacy and protection to various schemes. These concepts are, however, improperly used in the world of crypto assets and may mislead investors and lower their risk awareness. It is therefore crucial to define the concepts used in this report.

1. Definitions

9. This report uses the term “crypto asset” as a generic term for crypto currencies, virtual currencies, virtual assets and digital tokens.

10. A virtual currency is a digital representation of value that is neither issued by a central bank or a public authority¹, rarely attached to a fiat currency², but is accepted by a growing number of natural or legal persons as a means of payment and can be transferred, stored or traded electronically³.

11. A cryptocurrency is a virtual currency which is secured using cryptography. Generally, cryptocurrencies transactions are recorded on Distributed Ledger Technology database, either public or permissioned by a central authority.⁴

12. The term “token” is more neutral as it does not carry the implicit legitimacy of “currency”. It is a broad term that encompasses many virtual assets and can be defined by opposing it to account-based assets. An account-based system relies on the ability to verify the identity of the owner, while a token-based one relies on the ability to verify the validity of the token itself⁵. A token, like a banknote, is a bearer’s asset. Banknotes include multiple physical security features. In the crypto asset world, tokens are secured by cryptographic keys. There are other definitions of tokens and coins, based on the existence of a specific network⁶. We did not use them because it added complexity and did not change in our view at this stage the regulatory evaluation.

13. The acronym ICO is used for the initial offering of any crypto asset.

2. Taxonomy

14. There is no universal classification of crypto assets. However, the SMSG has found Switzerland’s FINMA’s taxonomy⁷ useful, based on the economic function of tokens: payment tokens, utility tokens and asset tokens.⁸ The SMSG will use this taxonomy throughout this report, being well aware that there can

¹ “The Case for Central Bank Electronic Money and the Non-case for Central Bank Cryptocurrencies”, Fed Saint Louis February 2018

² To our knowledge, there is today only one exception. In February 2018, Venezuela launched a national cryptocurrency called the Petro and announced it was backed by the country’s oil reserves. In July 2018, when Venezuela rebased its currency by dividing the notional by 100 000 and introduced the new sovereign bolivar, it tied the new currency to the Petro. See Financial Times, 26 July 2018. Besides that, the Central Bank of Thailand is planning to launch a virtual currency (<https://www.bangkokpost.com/business/finance/1526094/bank-of-thailand-digital-currency-scheduled-for-2019>).

³ EBA’s opinion on virtual currencies, 4 July 2014, Background, paragraph 2

⁴ In decentralised networks the authorization to change the ledger is restricted to a limited number of nodes while in a fully distributed ledger the authorization is with all network participants and agreed by an algorithmic consensus. In distributed ledger the validation and verification of the new information to be written in the database is done by an automatically running software algorithms called “consensus mechanism”.

⁵ BIS annual Economic report 2018, Section V. Cryptocurrencies: looking beyond the hype

⁶ Satis group July 2018, Crypto-asset market coverage initiation: Network creation

⁷ FINMA’s Guidelines for enquiries regarding the regulatory framework for initial coin offering (16 February 2018).

⁸ Malta has enacted three laws specifically dealing with the framework of DLT and offering of crypto assets through this technology. The Virtual Financial Asset Act, one of the three legislative instruments, provides a definition of a “virtual financial asset”. The MFSA, the financial regulator, has also made available a test for the purpose of determining whether a DLT asset qualifies as electronic money, a financial instrument or a virtual financial asset. Besides differences in terminology, the categories are similar to the ones defined by FINMA. The three Acts are expected to come into force in October 2018. Further information is available at <https://www.mfsa.com.mt/pages/viewcontent.aspx?id=674>.

be some ambiguity at the margins and that regulatory analysis based on this taxonomy is only as robust as the taxonomy itself. At certain points in this report, the SMSG has therefore made additional distinctions within these categories.

15. Payment tokens are a means of payment for acquiring goods or services. The holder has no claim on the issuer. These tokens are virtual currencies in the true sense of the word. The most prominent example is Bitcoin.

16. Utility tokens are intended to provide access to a specific application or service but are not accepted as a means of payment for other applications.

17. Asset tokens represent assets such as a debt or equity claim on the issuer. Asset tokens promise, for example, a share in future company earnings or future capital flows. In terms of their economic function, therefore, these tokens are analogous to equities, bonds or derivatives. Tokens which enable physical assets to be traded on the blockchain also fall into this category.

18. The above token classifications are not mutually exclusive. Hybrid tokens represent features of different categories.

19. Additionally, certain tokens do not seem to represent any entitlement. In this report they will be referred to as donation-based tokens.

3. Most notable recent ICOs and market developments

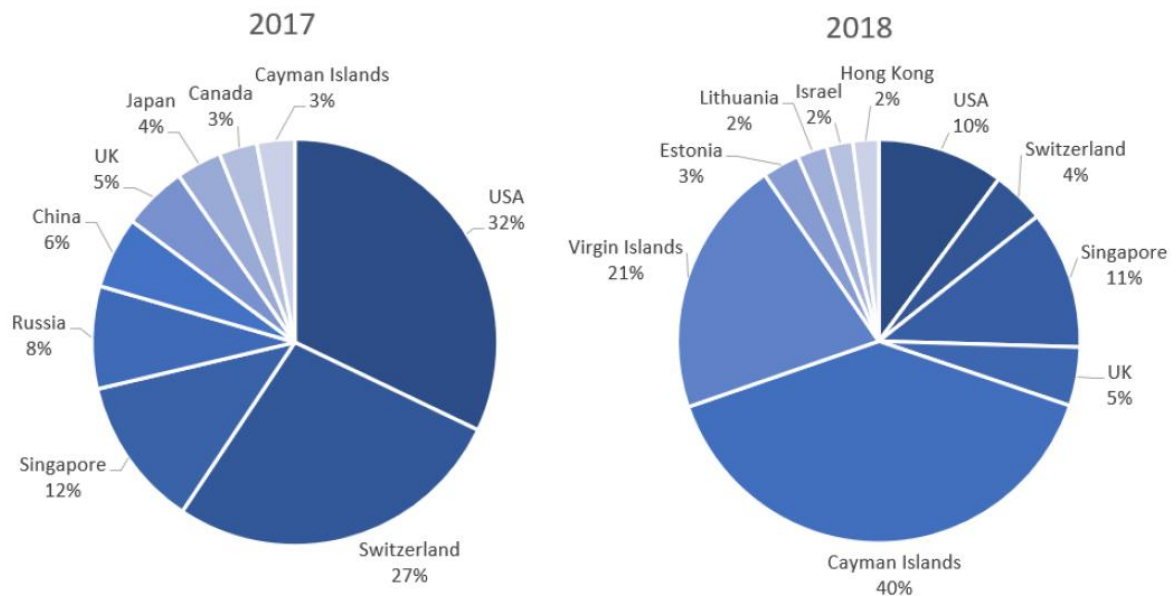
20. The following table provides a small sample of large ICOs. Due to continuous evolution and still elusive nature of crypto assets, readers should consider the following as purely illustrative.

Name	Amount	When	Location(s)	Comment	Category
Tezos ⁹	USD 232 mio	July 2017	Switzerland (Zug), USA (Delaware)	Infrastructure, “self-amending crypto-ledger”. Business model unclear but legal document carefully drafted (“Donation”) to avoid financial regulations. After feud between founding partners and executive management, multiple class actions were launched in California and Florida.	Contribution terms carefully drafted and avoid regulatory classification Donation-based
Filecoin	USD 257 mio	Sept 2017	USA (Delaware)	Decentralized cooperative data storage solution (“InterPlanetary File System”). ICO was preceded by a private placement.	Utility token
Bankera ¹⁰	EUR 108 mio	Nov 2017	Lithuania	New banking solutions, but investigated by Lithuanian authorities because promise of profit sharing	Asset token
Telegram	USD 1 700 mio planned	Cancelled		Instead of an ICO, the already successful Telegram company finally chose to raise money through 200 private investors.	

⁹ Tezos whitepaper and contribution note. Wired magazine 19 June 2018 “Inside the crypto world’s biggest scandal”

¹⁰ Bankera whitepaper and <https://www.ccn.com/lithuanias-central-bank-investigates-100-million-euro-bankera-ico/>

21. The following chart¹¹ shows the significant change in country of issuance of crypto-assets between 2017 and 2018. The shift from USA, Switzerland, Singapore to the Cayman and Virgin Islands and other jurisdictions may be a consequence of risk awareness and regulatory pressure in some countries, resulting in a shift of issuance of crypto-assets towards less regulated or unregulated countries. This increases investor protection and transparency concerns, to the extent such crypto-assets are still offered or available to EU investors.



Source: Satis Research

22. The following two charts represent an attempt by the Satis group to classify 2017 ICOs by a range of success/failure criteria, although we note that “success” refers here to the ongoing nature of the project funded rather than successful delivery of the underlying project objective. The first chart represents figures by numbers, the second by dollar value¹².

¹¹ Satis group July 2018, Crypto-asset market coverage initiation: Network creation

¹² Satis group defines “success” in its report as

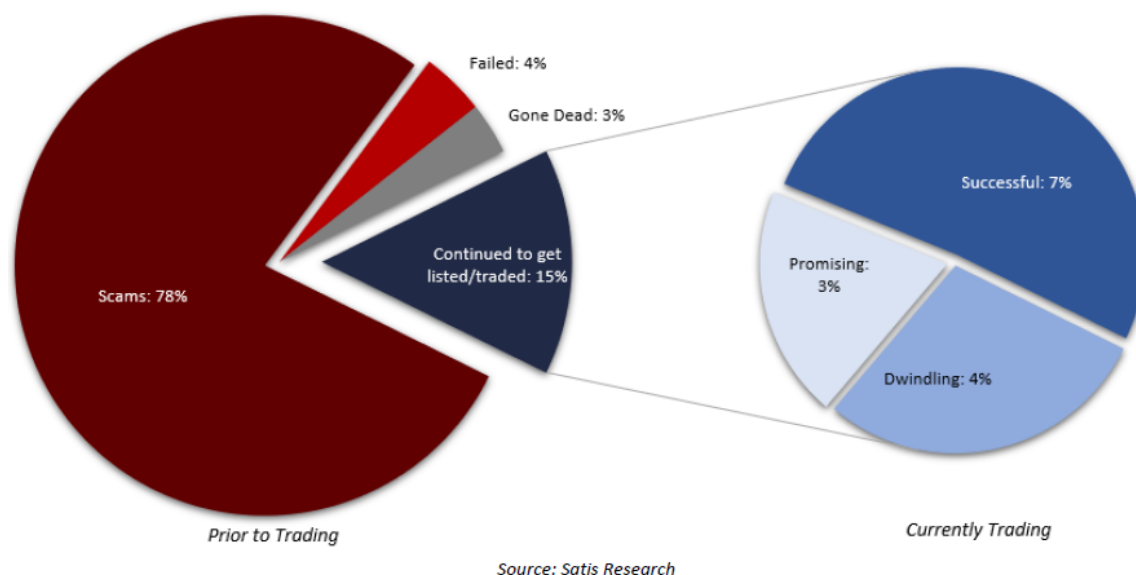
“Successful (trading): Succeeded to raise funding and completed the process and was listed on an exchange and began trading and has all three of the following success criteria.

- Deployment (in test/beta, at minimum) of a chain/distributed ledger (in the case of a base-layer protocol) or product/platform (in the case of an app/utility token),
- Had a transparent project roadmap posted on their website, and
- Had Github code contribution activity in a surrounding three-month period (“Success Criteria”) “

By the Numbers

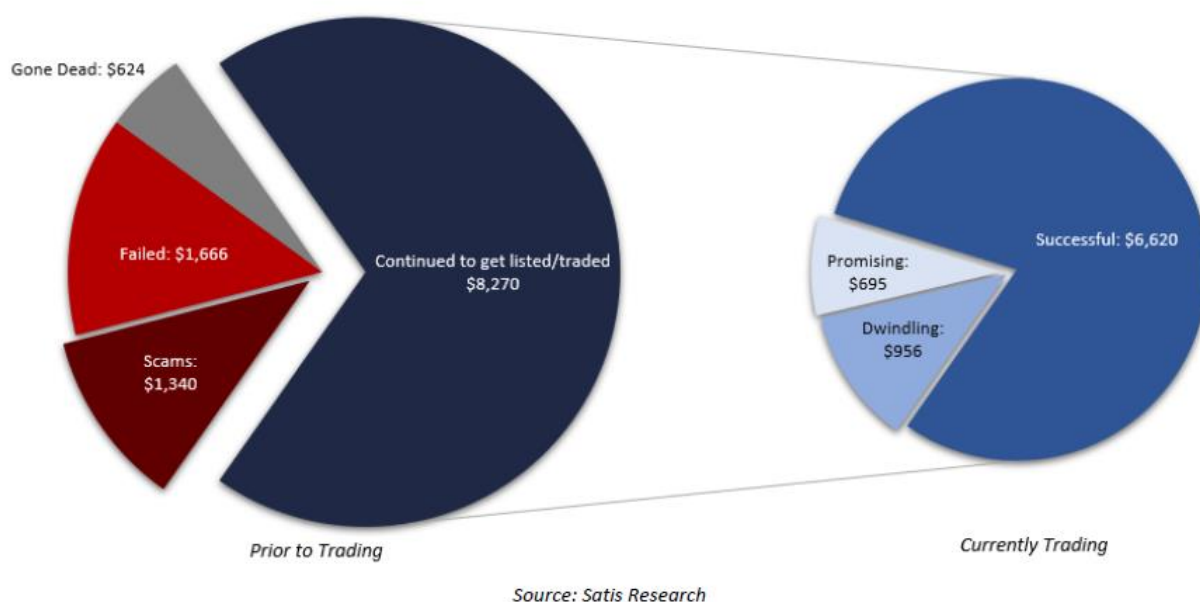
On the basis of the above classification, as a percentage of the total number of ICOs, we found that approximately **78% of ICO's were Identified Scams**, **~4% Failed**, **~3% had Gone Dead**, and **~15% went on to trade** on an exchange.

Figure 29: Listed Coins/Tokens (in \$M USD), \$50M+ Market Cap



The number of scams (78%) is very high. Even though the dollar value chart show that those are ICOs of smaller size, the high level of failure, fraud and money-laundering through crypto-assets should be of high concern for the EU regulators.

Figure 31: Funding of Listed Coins/Tokens (in \$M USD), \$50M+ Market Cap



4. Mapping of securities authorities' positions and initiatives on ICOs and digital currencies in the EU, EEA and other European jurisdictions

23. The SMSG carried out¹³ a desktop-research exercise to map relevant legislative developments or regulatory approaches taken by national securities supervisory authorities in the EU and EEA Member States in regard to *Initial Coin Offerings (ICOs) and digital currencies*. The mapping exercise was also extended to include Gibraltar, Switzerland, Jersey, Guernsey and Isle of Man. Thirty-six jurisdictions are covered in this research.

24. In respect of each jurisdiction, the SMSG examined the website of the national securities authority for any statements made in respect of these two areas, as well as warnings which may have been issued to the public concerning investments in ICOs and crypto assets.¹⁴ The results of this research are available in Annex 1.

25. Evidently, not all countries have taken the same approach towards this nascent development in financial services. Indeed, the impression that comes across when analysing this research is that countries have either taken a nuanced approach or not expressed a clear / definite approach to the evolving nature, typography or offer of ICOs and crypto assets. Of the countries covered herein, no jurisdiction appears to have imposed severe limitations or outright bans for ICOs and crypto assets initiatives or offerings within its territory. The countries covered by our research can be broadly classified into three categories:

1) ***Evident proactive approach (7 jurisdictions)***

Malta, Switzerland, Lithuania, Gibraltar, Jersey and Isle of Man have expressly legislated or specifically developed methodologies, criteria or guidelines for assessing how and to what extent ICOs could be considered as financial instruments, thus falling under their respective framework of financial services legislation. Current rules on securities business, prospectus, anti-money laundering, financing of terrorism and/or market abuse continue to apply to such offerings, as applicable. **France** is in the process of doing so following recent statements.

2) ***Careful consideration (15 jurisdictions)***

Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, Germany, Ireland, Luxembourg, Netherlands, Portugal, Spain, United Kingdom, Lichtenstein and Guernsey appear to take a “wait-and-see” or “guarded” approach. They do not specifically restrict or prohibit ICO’s or crypto assets initiatives but would take a measured approach to related proposals on a case by case basis and in full consideration of, and conformity to, legislative instruments already in force within their territory and, where applicable, in the EU (such as those on securities business, prospectus, anti-money laundering, financing of terrorism and/or market abuse). Initiatives would not be allowed to bypass rules simply because of the manner in which such assets are created or offered (mainly DLT technology).

3) ***Undefined approach (14 jurisdictions)***

The websites of the securities authorities in **Croatia, Czech Republic, Greece, Hungary, Italy, Latvia, Poland, Republic of Cyprus, Romania, Slovakia, Slovenia, Sweden, Norway and Iceland** do not appear to provide clear information as to their stance in these areas. The fact that information was lacking or not easily traceable at the time of this research does not necessarily imply that ICOs and crypto assets initiatives are being completely restricted or ruled out, nor that they are always unconditionally allowed.

¹³ This research was carried out during the month of August 2018.

¹⁴ Relevant web links accompany the descriptions for each country by way of footnotes. Our research did not extend to central bank and finance ministry websites, although some links may occasionally point to such websites. Links to documents or webpages provided in the Annex are generally in English.

26. Nearly all securities' authorities have published warnings to the public about investment risks inherent to ICO and crypto assets. The majority of such warnings were issued on or a few days after ESMA's warning in November 2017. However, some authorities have been warning consumers about cryptocurrency risks since 2013. It is striking, however, to note the high number of investors who, in the late 2017 and early 2018, bought crypto assets, often without carrying out some checks or going through the white paper. The warnings issued by national authorities and ESMA seem to have had insufficient effect. A robust regulatory framework and an effective enforcement regime, seem therefore necessary tools of investor protection in this area.

27. This country overview of legislative and regulatory initiatives shows that there are **very divergent regulatory approaches to crypto assets**. Within the European Union this creates an **unequal playing field** and hampers the creation of an internal market in this innovative field. The SMSG is therefore of the opinion that **ESMA**, as a first step, **should take steps to clarify the application of existing financial regulation to virtual assets** (see IV.2 of this report).

28. Next to the above-mentioned national regulatory initiatives, a range of non-legislative initiatives have been charted, especially initiatives relating to regulatory sandboxes and innovation hubs, aimed at understanding and allowing the development of new ways of offering financial services, mainly through innovative technology, in a controlled environment. The SMSG has mapped such initiatives (see Annex II). The **conditions of such national regulatory sandboxes and innovation hubs**, however, **widely differ among Member States**.

29. The SMSG therefore also proposes that ESMA coordinates the manner in which national supervisory authorities deploy regulatory sandboxes and innovation hubs (see IV. 2 of this report).

IV. Should ESMA act in respect of Crypto assets?

1. Can ICOs or crypto assets be beneficial? For whom? and if so, under what conditions? What are the risks?

a. Payment tokens

Benefits:

30. Payment tokens may increase competition in the payment markets, and inspire traditional payment methods to increase efficiency in respect of cost, speed, user-friendliness and security and thus be beneficial to all users of payment systems in general. The open-source network approach empowers the individual as it provides open access to businesses and services without institutional barriers. For instance, network peers could execute payments autonomously by using certain types of payment tokens peer-to-peer without the need of having a bank account and submit a payment order to a bank. For people lacking a bank account (e.g. migrants) it may facilitate financial inclusion. We note however that some of those benefits are also attributable to existing e-money facilities and are not specifically tied to the encrypted and distributed nature of payment tokens.

31. Furthermore, permissionless DLT networks are based on a distributed concept of identification: every network participant is the sovereign of his/her own private data and especially his/her digital identification. Identity is defined by the possession of cryptographic keys. This also creates risks (see below).

Risks:

32. There is a risk that new types of fraud are developed and a risk that these payment tokens, which are typically based on anonymity of its users, are used for money laundering or other criminal purposes. There is also a custody risk, if the token or the access code is lost.

33. Moreover, some of these payment tokens are not used as payment instruments but as speculative investment, creating additional investor protection problems. Since payment tokens do not represent a claim on any financial or physical asset, and do not represent any entitlement, they are subject to price fluctuation, high volatility and resulting value risk (this is the same with certain emerging-market fiat currencies, but the main difference is that payment tokens are not legal tender)¹⁵. Since no Central Bank will intervene to smooth extreme price fluctuations, payment tokens volatility will be higher than fiat currencies'. Absent a legal tender status or central banking backing, the market price of such tokens cannot be rationally assessed and merely depends on offer and demand. Moreover, there is also a risk of market abuse. It has been argued that some "investors" in payment tokens are actually diversifying their holdings from large cryptocurrencies (ETH, BTC¹⁶) into others. 10 "whales" own 50% of the largest ICOs.¹⁷ A collusion among them could result in (i) prices being maintained artificially high, and in (ii) manipulation of a block of transactions (possible with more than half of the mining power).

Moreover there are risks that private data or digital identification get lost or are stolen.

34. The lack of centralization means that there is no control of the payment tokens' monetary mass, comparable with central banks' tasks for legal tender. This may be considered a feature or a drawback, depending on the user's perspective; however it is likely to hinder the development of such tokens as a meaningful substitute for fiat currencies.

35. Furthermore, a relatively small number of nodes are able to decide on modifications of a system used by potentially millions of people. This raises questions in terms of democracy and governance of the Distributed Ledger Technology¹⁸.

36. Finally, concerns have been raised that public proof-of-work¹⁹ payment tokens such as bitcoin have a high cost of transaction validation, and use a lot of computing power, raising environmental issues and making them difficult to scale as highlighted in the following graph, reproduced from the 2018 BIS annual report²⁰.

¹⁵ In April 2018, Venezuela announced that the Petro would be legal tender within 120 days.

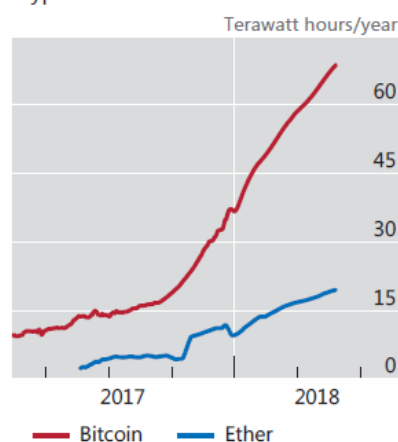
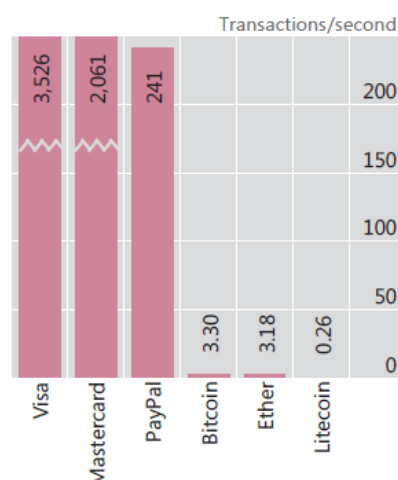
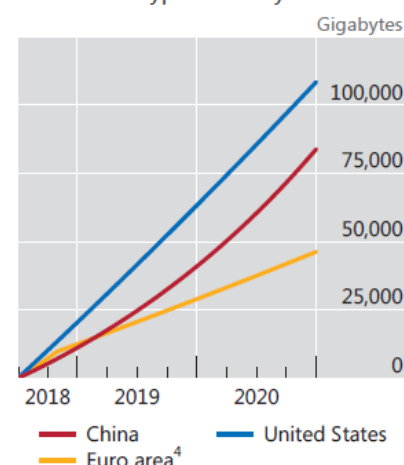
¹⁶ ETH = Ethereum, BTC = Bitcoin

¹⁷ [Bloomberg quoting Etherscan <https://www.bloomberg.com/news/articles/2018-06-05/crypto-whales-own-almost-half-of-tokens-from-biggest-ever-ico>

¹⁸ <https://www.coindesk.com/miners-involved-bitcoin-code-changes-anyway/> paragraph "Supporting the code"

¹⁹ In proof-of-work systems, like Bitcoin mining, a block of transaction is validated and incorporated in the blockchain by the first miner who solved a computationally-intensive cryptographic puzzle. The miner receives a coin-based reward. Proof-of-work is a libertarian fully distributed scheme but is inefficient from a resource point of view and difficult to scale. The nodes of the network would consensually accept that the cryptographic puzzle is solved and only a group of miners controlling more than half of computing power could manipulate the blockchain. Other non-centralised systems exists, such as proof-of-stake, where the next block is validated by the node that owns the most wealth (stake). A proof-of-stake system is considerably quicker and more efficient than a proof-of-work but is partly centralized and diverge from the libertarian and democratic principles of Bitcoin-like networks.

²⁰ Chapter V. Cryptocurrencies: looking beyond the hype, July 2018

Energy usage of select cryptocurrencies¹Number of transactions per second²Hypothetical ledger size for nationwide retail cryptocurrency³

b. Utility tokens

Benefits:

37. Utility tokens representing services may facilitate trading in such services and present an alternate source of early stage funding for innovative projects. They are comparable to a voucher and to crowdfunding by coupon. They allow prefunding of a future business without diluting ownership. In this respect they represent an alternative model to traditional venture capital funding, insofar as the project-owner transfers a proportion of the project risk to future consumers without diluting ownership interests.

38. Apart from funding, those tokens also have a business dimension: by issuing those tokens the issuer creates a network of users, which further increases the value of the business.

Risks:

39. The main risk of utility tokens is counterparty and performance risks: the issuer of the token may not deliver the service as expected, or may go out of business, making the token useless.

40. If there is a secondary market for utility tokens, there is a risk of market abuse and potentially the risk of it being actually purchased as a speculative investment.

41. This may not be a durable model: it depends on users being willing to pay for a future service, which may not materialize. If a free-to-the-consumer alternative exists, that model will be difficult to sustain. Moreover, users take part of the risk from the owners, without being rewarded for that (except for the chance of an increase in value of the services / applications for which they received a utility token).

c. Asset tokens

Benefits:

42. **Asset tokens representing physical goods** can be used to prefinance a new business project. If the underlying assets are commodities these asset tokens share characteristics with commodity derivatives or with securitized commodities, such as a commodity ETF. They may facilitate trading in such goods, without the good physically changing hands. It can furthermore make it easier to use the underlying physical goods as collateral to secure payment.

Asset tokens also function as a digital identifier for the underlying physical asset. If a physical object has its own ID, it can record its own history of origin. This information provides any buyer very accurate representation of current condition of the object. Furthermore, the object becomes traceable within the

supply chain which is beneficial for the corporates involved. The digital ID linked to products could solve problems of counterfeiting and product piracy as well.

Assets tokens could facilitate trade and documentary credit operations. Assets tokens could be used to represent title and title transfer could be recorded on a blockchain making it secure and accessible by all relevant parties. Smart contracts could provide automated way to trigger letter of credit payments to supplier once performance has been proven by tokens. Several initiatives are in progress by major players²¹

43. Asset tokens representing a monetary claim on the issuer share characteristics with securities or derivatives. They may therefore have similar benefits: facilitating financing and risk-transfer.

Risks:

44. Asset tokens representing a physical good may facilitate increased traded trading for speculative purposes. The use of encryption favours anonymity and would diminish supervisory oversight, which may result in increased market abuse.

An important risk is also counterparty risk, i.e. that the good is not delivered or is damaged.

45. Since asset tokens representing a monetary claim on the issuer resemble securities, they pose much the same risk, including counterparty risk and dilution risk if there's not issuance control, as well as custody risk. At this stage the SMSG has not identified any societal advantage from the issuance of such asset tokens relative to the issuance of traditional securities. Using the term "ICO" rather than "IPO" in these situations seems motivated by seeking regulatory loopholes and avoiding investor protection regulation in situations not differing from regulated activity.

Moreover many investors may think the ICO smart contract 'enforces' an entitlement, whereas it actually only 'represents' an entitlement. In some instances the smart contract could indeed be seen to enforce the contract, where an ICO automatically delivers another crypto-asset programmatically. However if the ICO gives an entitlement to a physical asset, then the contract can only be enforced via traditional means. In such instances it may be insufficiently clear to investors what the terms and conditions of the contract actually are.

In principle, the contractual relationship should be described in the "whitepaper" ("prospectus") of the ICO. Some studies²² point out that there is "code risk" because the instructions programmed into the token software may not always reflect the algorithm and features described in the whitepaper. Investors trusting blindly the system should be mindful of this risk. This risk is not necessarily new, as many users today trust the bank statement they receive without checking if numbers sum up, but the level of complexity of crypto assets allocation algorithms makes verification far more difficult, and the format and the content of the whitepaper is not clearly regulated.

Finally, if there is a secondary market for asset tokens, the same risks exist as on traditional venues, such as, for example market abuse (insider dealing and market manipulation).

2. Are Crypto-assets covered by existing regulation, and if not, should they?

46. Most crypto-assets are covered by the Unfair Commercial Practices Directive (UCPD 2005/29/EC), to the extent the issuer is a business undertaking and the buyer of the crypto-asset a consumer.

²¹ Marco Polo is a consortium of the 100+ banks present in R3(<https://www.marcopolo.finance/>). In January 2018, IBM and Maersk created the joint venture *Tradelens* to digitize global trade with blockchain technology (www.tradelens.com).

²² Coin Operated Capitalism, University of Pennsylvania, Shaanan Cohn, David Hoffman, Jeremy Sklaroff and David Wishnick, 2018

Since a number of transferable payment tokens, such as Bitcoin, are, however, increasingly considered as investment objects, risks arise that are very similar to risks on the capital markets (investor protection concerns and market abuse concerns). It should therefore be considered whether it would be useful to include such payment tokens in the MiFID II list of financial instruments, as Germany has recently done. This would also allow to consider secondary markets in such payment tokens as MiFID Multilateral Trading Facilities or Organised Trading Facilities, subject to the Market Abuse Regulation.

This is however not in ESMA's power, since it would require a change in the Level 1 Text of MiFID II, so the SMSG can only **urge ESMA to consult with EBA on this matter and take this up with the European Commission**.

b. Utility tokens

49. Utility tokens are currently not covered by financial regulation.

If they are only usable in relationship with the issuer, and **not transferable**, the SMSG is of the opinion that they should not be covered by MiFID II, the Prospectus Regulation or the Market Abuse Regulation.

If they are, on the contrary **transferable**, such as Filecoin, they have the potential to become investment objects. In such a case, risks arise that are very similar to risks on the capital markets (investor protection concerns and market abuse concerns). It should therefore be considered whether it would be useful to include such transferable utility tokens in the MiFID II list of financial instruments. This would also allow to consider secondary markets in such transferable utility tokens as MiFID Multilateral Trading Facilities or Organised Trading Facilities, subject to the Market Abuse Regulation.

This is however not in ESMA's power, since it would require a change in the Level 1 Text of MiFID II, so the SMSG can only **urge ESMA to consult with EBA on this matter and take this up with the European Commission**.

c. Asset tokens

50. In order to determine whether asset tokens are covered by MiFID II, the Prospectus Regulation, and the Market Abuse Regulation, it should be determined whether they are financial instruments (for MiFID purposes and the MAR) and transferable securities (for purposes of the Prospectus Regulation).

51. In this respect further distinctions are necessary.

1. If the **asset token gives right to a financial entitlement**, the SMSG is of the opinion that they represent the features of either bonds or shares: a bond if the entitlement is a predetermined cash flow; a share if the entitlement is a share of profit, such as Bankera. If those asset tokens are **transferable**, they share important characteristics with transferable securities under MiFID, and are therefore subject to MiFID II and the Prospectus Regulation. The SMSG urges ESMA to clarify the MiFID definition of "transferable security" in Level 3 Guidelines (what is a security, when is it considered to be transferable) and to clarify whether transferable asset tokens which give right to a financial entitlement are to be considered MiFID transferable securities. The SMSG is of the opinion that every organisation of a secondary market for such tokens should be covered by either the "MTF" concept or the "OTF" concept. The SMSG therefore urges ESMA to clarify the definitions of "MTF" and "OTF" and to clarify whether the organisation of a secondary market for such asset tokens can be considered an "MTF" or an "OTF".
2. If the **asset token gives right to an entitlement in kind**, and the holder gets **decision power** into the project, the asset tokens share important characteristics with shares. If they are **transferable**, there are good arguments to consider them transferable securities subject to MiFID II and the Prospectus Regulation. The SMSG urges ESMA to clarify the MiFID definition of "transferable security" in Level 3 Guidelines (can a security give right to an entitlement in kind?) and to clarify whether transferable asset tokens which give right to an entitlement in kind and give the holder decision power in the project, are to be considered MiFID transferable securities.

3. If the **asset token gives right to an entitlement in kind, without** giving the holder **decision power**, and the asset token is **not transferable**, these tokens share much characteristics with prepaid assets. The SMSG is of the opinion that they currently do not fall under the scope of application of financial regulation and the SMSG sees no need for those asset tokens to be covered in the future.
4. If the **asset token gives right to an entitlement in kind, without** giving the holder **decision power**, but the asset token is **transferable**, a distinction should be made in respect of (i) the way the token is structured and (ii) the nature of underlying asset.
 - 4.1. A number of such asset tokens will **share characteristics with asset-linked notes**, in which case there are good arguments to consider them transferable securities subject to MiFID II and the Prospectus Regulation. The SMSG urges ESMA to clarify the MiFID definition of “transferable security” in Level 3 Guidelines (can a security give right to an entitlement in kind and not give the holder decision power?) and to clarify whether transferable asset tokens which give right to an entitlement in kind but give the holder decision power in the project, are to be considered MiFID transferable securities.
 - 4.2. Other such asset tokens may rather **share characteristics with derivatives**, in which case the following distinction should be made.
 - 4.2.1. If the underlying asset is **no commodity**, the SMSG is of the opinion that they are not financial instruments, since they cannot be related to any of the categories of Annex I C of MiFID II.

Still, some investors may consider these tokens as investment objects so that they may raise investor protection concerns. ESMA could therefore consider to ask the Commission to add such tokens to the MiFID list of financial instruments.
 - 4.2.2. If the underlying asset is **a commodity**, the SMSG is of the opinion that they share important characteristics with derivative contracts relating to commodities.
 - 4.2.2.1. **If they are settled in cash**, there are good arguments to consider them as covered by MiFID as financial instruments under Annex I, Section C (5).
 - 4.2.2.2. **If they are physically settled**, they could only be covered by MiFID as derivative products under Annex I, Section C (6) of MiFID II, if they are tradable on a regulated market, an MTF or an OTF.

A number of issuers of such asset tokens indeed organise secondary markets. The SMSG is of the opinion that every organisation of a secondary market for such tokens should be covered by either the “MTF” concept or the “OTF” concept.

The SMSG urges ESMA to clarify (i) the definition of “commodity” in level 3 guidelines and to clarify the circumstances in which asset tokens which give a right to a commodity are to be considered MiFID II financial instruments; and (ii) the definitions of “MTF” and “OTF” and to clarify whether the organisation of a secondary market for such asset tokens can be considered an “MTF” or an “OTF”.

52. In sum, the SMSG advises ESMA to provide level 3 guidelines or the aim at supervisory convergence on:

- (i) the interpretation of the **MiFID definition of “transferable securities”**, and clarify whether transferable asset tokens in situations 1, 2 and 4.1 are subject to MiFID II and the Prospectus Regulation;
- (ii) the interpretation of the **MiFID definition of “commodities”**, since that concept is crucial to determine whether an asset token is a MiFID financial instrument or not (see 4.2.2)
- (iii) the interpretation of **the MTF and OTF concepts**, clarifying whether the organisation of a secondary market in asset tokens in situations 1, 2, 4.1 and 4.2.2.2 is indeed an MTF or an OTF;
- (iv) whether asset tokens under 4.2.2.2 are therefore MiFID financial instruments if the issuers organize a secondary market;
- (v) the fact that when issuers of asset tokens are to be considered to organize an MTF or an OTF in accordance with the above, the **MAR applies to such MTFs and OTFs**.
- (vi) the fact that in all situations where an asset token is to be considered a MiFID financial instrument (situations 1, 2, 4.1, 4.2.2.1 and 4.2.2.2), **persons giving investment advice on those asset tokens or executing orders in those asset tokens**, are to be considered investment firms, which should have a licence as such, unless they qualify for an exemption under MiFID II.

53. The SMSG recognizes that ESMA is not competent to change the level 1 MiFID II text listing the MiFID II financial instruments. The SMSG nevertheless urges ESMA to consider sending a letter to the Commission asking it to consider adding transferable payment and utility tokens and the tokens mentioned in 4.2.1 to the MiFID list of financial instruments, since they are often used as investment products or may in the future be used as such. If those tokens would become MiFID financial instruments, secondary markets in such payment tokens would also qualify as MiFID MTFs or OTFs, subject to the MAR.

d. Sandboxes and innovation hubs

54. The SMSG considers the creation of national sandboxes and innovation hubs as a positive evolution. It also believes that these initiatives should not be overly coordinated at the European level, in order to allow sufficient experimenting with different types of sandboxes and innovation hubs at the national level. Nevertheless the SMSG believes that some coordination by ESMA is necessary in order to ensure sufficient quality, transparency and legal security of national initiatives. The SMSG does not believe it necessary at this stage for all Member States to create such a sandbox or innovation hub.

55. The SMSG advice to ESMA in this respect is to set minimum criteria for national authorities which operate or want to operate a sandbox or innovation hub, by way of guidelines. Those minimum criteria should relate to (i) information to ESMA on the exact scope, operating conditions of the sandbox or innovation hub, as well as on the measures taken to ensure investor protection; (ii) transparency to the public in respect of the same; (iii) regular reporting to ESMA and to the public on the experiences with the use of the sandbox or innovation hub and with the FinTech initiatives tested in the sandbox or innovation hub.

Annex 1 - Mapping of securities authorities' positions and initiatives on ICOs and digital currencies in the EU, EEA and other European jurisdictions

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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European Union							
1. Austria	Austrian Financial Market Authority (FMA)	Not specific. However, FMA states that as the design of ICOs varies in terms of technical, functional and economic terms, an assessment would need to be done in accordance with prevailing supervisory rules on a case-by-case basis. Coins or tokens may constitute financial instruments if their respective underlying rights are comparable to	The FMA claims that as there is no issuer behind "bitcoin", it is not the subject to supervision. However, the operation of various business models based on bitcoin would require an FMA licence ²⁴ .	Current rules apply.	FinTech – Point of Contact ²⁵	Information/ Warning: Focus on Initial Coin Offerings ²⁶ (November 2017) and bitcoins ²⁷ and Virtual Currencies ²⁸ (2016)	

²⁴ <https://www.fma.gv.at/en/cross-sectoral-topics/fintech/fintech-navigator/>

²⁵ <https://www.fma.gv.at/en/cross-sectoral-topics/fintech/>

²⁶ <https://www.fma.gv.at/en/fma-thematic-focuses/fma-focus-on-initial-coin-offerings/#footer>

²⁷ <https://www.fma.gv.at/en/fma-thematic-focuses/bitcoins/>

²⁸ <https://www.fma.gv.at/en/fma-thematic-focuses/fma-focus-on-virtual-currencies/>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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		mainstream categories of investments.					
2. Belgium	Financial Services and Markets Authority (FSMA)	Not specific. The FSMA identified a number of national laws which, in addition to European laws, apply depending on how ICOs are structured (November 2017). ²⁹ Each case is examined on a case-by-case basis.		Current rules apply.	FinTech Contact Point ³⁰	Warning: ICOs ³¹ (November 2017) ³² and Cryptocurrency trading platforms: Beware of fraud (February 2018) ³³	
3. Bulgaria	Financial Services Commission (FSC)	The FSC will monitor the market for cryptocurrencies and ICOs on the Bulgarian market with a view to undertaking specific measures related to money laundering and abuse stemming from their trade (July 2018) ³⁴	<i>See Regulation of ICOs</i>		Creation of a Financial Technology Monitoring Strategy (FinTech) in the non-banking financial sector for the period 2018 to 2020 (July 2018) ³⁵	Relay of ESMA's warning (November 2017) ³⁶	
4. Croatia	Croatian Financial Services	No information appears to be available	No information appears to be available			Information on virtual currency and risk of investing in virtual	

²⁹ https://www.fsma.be/sites/default/files/public/content/EN/Circ/fsma_2017_20_en.pdf (Document on ICOs addresses both operators and consumers)

³⁰ <https://www.fsma.be/en/fintech>

³¹ https://www.fsma.be/sites/default/files/public/content/EN/Circ/fsma_2017_20_en.pdf

³² <https://www.fsma.be/en/news/be-wary-initial-coin-offerings-icos>

³³ <https://www.fsma.be/en/warnings/cryptocurrency-trading-platforms-beware-fraud>

³⁴ <http://www.fsc.bg/bg/polezna-informatsiya/strategiya-za-nablyudenie/>

³⁵ <http://www.fsc.bg/bg/novini/komisiyata-za-finansov-nadzor-shte-nablyudava-razvitiето-na-inovatsionnite-tehnologii-pri-predostavjaneto-na-finansovi-produkti-i-uslugi-8996.html>

³⁶ <http://www.fsc.bg/bg/novini/eotskp-preduprezhdava-firmite-koito-sa-svarzani-s-parvichni-predlaganiya-na-virtualna-valuta-ppv-che-e-neobhodimo-da-otgovaryat-na-opredeleni-regulatorni-iziskvaniya-8704.html>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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	Supervisory Agency (HANFA)					currency (February 2018) ³⁷ and Information on investment risks in crypto and ICO (December 2017) ³⁸	
5. Czech Republic	Czech National Bank (CNB)	No information appears to be available	No information appears to be available				According to a news report ³⁹ , there is prolific use of crypto currency in the country. A January 2017 anti-money laundering law requires virtual currency exchanges to determine the identity of customers. The law appears also to restrict Bitcoin use.
6. Denmark	Danish Financial Supervisory Authority (Finanstilsynet)	No specific rules but current laws remain applicable subject to design of ICO. Tokens that resemble financial instruments could potentially fall under one or more EU laws, and therefore within scope of relevant	Cryptocurrencies remain unregulated in terms of Danish financial legislation (November 2017) ⁴¹		Fintech lab (February 2018) ⁴²	Risks when investing in ICOs (November 2017) and EU authorities warn consumers about cryptocurrency (February 2018) ⁴³	

³⁷ <https://www.hanfa.hr/vijesti/informacija-o-virtualnim-valutama-i-rizicima-ulaganja-u-virtualne-valute/>

³⁸ <https://www.hanfa.hr/vijesti/informacija-o-rizicima-ulaganja-u-kriptovalute-i-ico/>

³⁹ <https://prague.bc.events/en/news/chehiya-i-bitkoin-kak-respublika-stala-krupneyshim-kriptoalyutnim-habom-evropi-85399>

⁴¹ <https://www.finanstilsynet.dk/Nyheder-og-Presse/Sektornyt/2017/Orientering-om-ICO>

⁴² <https://www.finanstilsynet.dk/Tilsyn/Information-om-udvalgte-tilsynsomraader/Fintech/FT-Lab>

⁴³ <https://www.finanstilsynet.dk/en/Nyheder-og-Presse/Pressemeddelelser/2018/EU-authorities-warn-consumers-about-cryptocurrency>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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		regulations (November 2017) ⁴⁰					
7. Estonia	Estonian Financial Supervision Authority (Finantsinspektsioon)	Tokens might be considered securities, depending on their design and scope of issue ⁴⁴ . ICO may also be governed by the Credit Institutions Act if they are akin to loans.	Mining cryptocurrencies falls outside scope of EFSA but AML and other legislative requirements apply ⁴⁵	Current national laws apply.	Trading cryptocurrencies as a business activity corresponds to services of alternative means of payment following a judgement of the Estonian Supreme Court. Authorisation is required ⁴⁶ .	Virtual money providers are not subject to supervision (June 2015) ⁴⁷	
8. Finland	Financial Supervisory Authority (Finanssivalvonta)	Different current national rules may apply depending on the ICO design (November 2017) ⁴⁸		Current national laws apply.	Innovation Helpdesk ⁴⁹	Warning: cryptocurrencies and ICOs (Initial Coin Offering) are high-risk investments (November 2017) ⁵⁰	

⁴⁰ <https://www.finanstilsynet.dk/Nyheder-og-Presse/Sektornyt/2017/Orientering-om-ICO>

⁴⁴ <https://www.fi.ee/index.php?id=22713>

⁴⁵ <https://www.fi.ee/index.php?id=22715>

⁴⁶ <https://hshaus.com/dealing-cryptocurrencies-estonia-regulations-authorisation/>

⁴⁷ <https://www.minuraha.ee/virtuaalraha-pakkujad-jarelevalve-alla-ei-kuulu-2/>

⁴⁸ http://www.finanssivalvonta.fi/en/Publications/Press_releases/Pages/17_2017.aspx

⁴⁹ <http://www.fin-fsa.fi/en/Authorisations/Innovation/Pages/Default.aspx>

⁵⁰ http://www.finanssivalvonta.fi/en/Publications/Press_releases/Pages/17_2017.aspx

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
9. France	Autorité des Marchés Financiers (AMF)	Following a public consultation on ICOs ⁵¹ , the AMF took on board respondents' suggestions that a specific legal framework for ICOs should be developed ⁵²		According to press reports ⁵³ and an opinion piece penned by the French Finance Minister ⁵⁴ , a licence may be issued to companies applying for an ICO as long as consumer protection criteria are adhered to. Licensing would not be mandatory. AMF launches UNICORN (Universal Node to ICO's Research & Network) (October 2017) ⁵⁵	Analysis of the legal qualification of cryptocurrency derivatives (March 2018) ⁵⁶ . AMF determined that if such products are classified as financial instruments, relevant legal and conduct rules in France become applicable.	Warning: Buying bitcoin (December 2017) ⁵⁷	
10. Germany	Federal Financial Supervisory Authority (BaFin)	Not specific. The regulator issued an Advisory Letter ⁵⁸ (March 2018) on the classification of tokens	Passive/Active usage of virtual currencies in exchange transactions would not require	Current rules apply.	Fintech Node	Warning for consumers on ICOs (November 2017) ⁶²	

⁵¹ https://www.amf-france.org/en_US/Actualites/Communiqués-de-presse/AMF/annee-2017?docId=workspace%3A%2F%2FSpacesStore%2F5097c770-e3f7-40bb-81ce-db2c95e7bdae

⁵² https://www.amf-france.org/en_US/Actualites/Communiqués-de-presse/AMF/annee-2018?docId=workspace%3A%2F%2FSpacesStore%2F57711a6c-4494-4215-993b-716870ffb182

⁵³ <https://www.ft.com/content/2e7b2778-2d22-11e8-9b4b-bc4b9f08f381>

⁵⁴ <https://www.numerama.com/politique/336943-tribune-cryptoactifs-blockchain-ico-comment-la-france-veut-rester-a-la-pointe-par-bruno-le-maire.html>

⁵⁵ https://www.amf-france.org/en_US/Actualites/Communiqués-de-presse/AMF/annee-2017?docId=workspace%3A%2F%2FSpacesStore%2F5097c770-e3f7-40bb-81ce-db2c95e7bdae

⁵⁶ https://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Marchés/Produits-derives/Analyse-sur-la-qualification-juridique-des-produits-d-riv-s-sur-crypto-monnaies?xtcr=6&isSearch=true&lastSearchPage=https%3A%2F%2Fwww.amf-france.org%2FmagnoliaPublic%2Ffamf%2Fen_US%2FResultat-de-recherche%3FTEXT%3Dbitcoin%26LANGUAGE%3Den%26isSearch%3Dtrue%26simpleSearch%3Dtrue%26valid_recherche%3DOK&xtmc=bitcoin

⁵⁷ https://www.amf-france.org/en_US/Actualites/Communiqués-de-presse/AMF/annee-2017?xtcr=1&isSearch=true&docId=workspace%3A%2F%2FSpacesStore%2Fc2dfeaab-35c0-4fdf-9a1b-d4601eff2097&lastSearchPage=https%3A%2F%2Fwww.amf-france.org%2FmagnoliaPublic%2Ffamf%2Fen_US%2FResultat-de-recherche%3FTEXT%3Dbitcoin%26LANGUAGE%3Den%26isSearch%3Dtrue%26simpleSearch%3Dtrue%26valid_recherche%3DOK&xtmc=bitcoin&docVersion=1.0

⁵⁸ https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/WA/dl_hinweisschreiben_einordnung_ICOs_en.html

⁶² https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2017/fa_bj_1711_ICO_en.html

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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		or cryptocurrencies underlying “initial coin offerings” (ICOs) as financial instruments in the field of securities supervision. Potential market participants are to give careful consideration as to whether tokens constitute a regulated instrument in terms of applicable rules ⁵⁹ . Case-by-case determination is required to determine a token’s legal classification within German and EU law.	authorisation ⁶⁰ . Commercial handling of such currencies would trigger an authorisation requirement. Other requirements may apply. ⁶¹				
11. Greece	Hellenic Capital Markets Commission (HCMC)	No information appears to be available	No information appears to be available	No information appears to be available		Relay of ESMA’s warning on ICO investing (November 2017) ⁶³	
12. Hungary	National Bank of Hungary (MNB)	No information appears to be available	No information appears to be available	No information appears to be available		Caution on the use of Bitcoin (September 2014) ⁶⁴ and (December 2016) ⁶⁵ and relay of	

⁵⁹ https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2018/meldung_180213_ICOs_Hinweisschreiben_en.html

⁶⁰ See *Authorisation Requirement*, https://www.bafin.de/EN/Aufsicht/FinTech/VirtualCurrency/virtual_currency_node_en.html

⁶¹ https://www.bafin.de/EN/Aufsicht/FinTech/VirtualCurrency/virtual_currency_node_en.html

⁶³ <http://www.hcmc.gr/vdrv/elib/a8aa61f80-6c52-4864-b022-7454ec380fb2-92668751-0>

⁶⁴ <https://www.mnb.hu/fogyasztovedelem/sajtoszoba/figyelemfelhivas-rendkivul-kockazatos-a-fogyasztoknak-a-bitcoin>

⁶⁵ <https://www.mnb.hu/sajtoszoba/sajtokozlemenyek/2016-evi-sajtokozlemenyek/fokozott-kockazatot-hordoznak-a-vilaghalon-elerheto-virtualis-fizetoeszkozok>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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						ESAs warnings (February 2018) ⁶⁶ Relay of ESMA's warning on ICO investing (November 2017) ⁶⁷	
13. Ireland	Central Bank of Ireland (CBI)	No official position but in a recent policy speech, CBI has asked about the difference between an unregulated ICO and the issuance of a financial instrument and when that difference may not be there (January 2018) ⁶⁸		None appears to have been issued so far but in a policy speech, CBI expected to pronounce itself in 2018 ⁶⁹	Discussion paper on virtual currencies and blockchain technology issued by the Department of Finance (March 2018) ⁷⁰	Alert on use of virtual currencies (2013/2014) ⁷¹ and Initial Coin Offerings (December 2017) ⁷²	
14. Italy	Banca d'Italia Commissione Nazionale per le Società e la Borsa (CONSOB)	No definite statement appears to have been made so far.	Banca d'Italia discourages the purchase, retention and sale of cryptocurrencies by banks and financial		"Canale FinTech" is a point of contact though which operators can put forward financial services projects linked to innovative characteristics both in	Warning on use of virtual currencies (January 2015) ⁷⁵ and ICOs (December 2017) ⁷⁶ relaying ESMA's	

⁶⁶ <https://www.mnb.hu/felugyelet/felugyeleti-keretrendszer/felugyeleti-hirek/hirek-ujdontasagok/az-europai-felugyeleti-hatosagok-a-virtualis-valutak-vetelevel-jaro-kockazatokra-figyelmeztetik-a-fogvasztokat>

⁶⁷ <https://www.mnb.hu/en/pressroom/press-releases/press-releases-2017/esma-highlights-ico-risks-for-investors-and-firms>

⁶⁸ <https://www.centralbank.ie/news/article/financial-regulation-technological-innovation-and-change-gerry-cross>

⁶⁹ <https://www.centralbank.ie/news/article/financial-regulation-technological-innovation-and-change-gerry-cross>

⁷⁰ <https://www.finance.gov.ie/wp-content/uploads/2018/03/Virtual-Currencies-and-Blockchain-Technology-March-2018.pdf>

⁷¹ <https://www.centralbank.ie/consumer-hub/consumer-notice/eba-opinion-on-virtual-currencies>

⁷² <https://www.centralbank.ie/consumer-hub/consumer-notice/alert-on-initial-coin-offerings>

⁷⁵ <http://www.bancaditalia.it/compiti/vigilanza/avvisi-pub/avvertenza-valute-virtuali/index.html>

⁷⁶ http://www.consob.it/web/consob-and-its-activities/warnings/documenti/english/entutela/esma/enct20171204_esma.htm

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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			intermediaries (January 2015) ⁷³		the typology of the service or the type of channel in which the service will be offered (November 2017) ⁷⁴		
15. Latvia	Financial Stability and Capital Market Commission (FKTK)	No definite statement has been made so far.	Virtual currency providers, including conversion of fiat currency to crypto, will be registered and supervised by the State Revenue Service. ⁷⁷		Innovation Sandbox established in 2017 ⁷⁸	Investor alert on bitcoin (February 2014) ⁷⁹ and ICOs (November 2017) ⁸⁰	
16. Lithuania	Bank of Lithuania	The national regulatory and legal regime may apply to specific ICO models. Entities are required to observe parameters and restrictions outlined in such position (October 2017) ⁸¹	Banks, payment institutions and other financial market participants specifically prohibited from providing services to virtual currencies or participate in them (November 2017) ⁸³		Blockchain sandbox platform service, LBChain (January 2018) ⁸⁴	Warnings may have been issued but links appear to be unavailable	

⁷³ http://www.bancaditalia.it/pubblicazioni/bollettino-vigilanza/2015-01/20150130_II15.pdf

⁷⁴ <http://www.bancaditalia.it/compiti/sispaga-mercati/fintech/index.html>

⁷⁷ <http://www.fktk.lv/en/commission/innovation-sandbox/innovation-sandbox-opinions-and-definitions.html>

⁷⁸ <http://www.fktk.lv/lv/mediju-telpa/pazinojumi-masu-informacijas-l/2017/6740-fktk-izveidojusi-virtualo-vidi-inovaciju-smilskaste.html>

⁷⁹ <http://www.fktk.lv/en/media-room/press-releases/4013-2014-02-18-fcmc-opinion-on-the-legal-framework-for-bitcoin-and-similar-instruments.html?highlight=WyJiaXRib2lulIQ=>

⁸⁰ <http://www.fktk.lv/en/media-room/other-publications/6655-fcmc-alerts-investors-about-a-new-financial-investment-service-initial-coin-offering-ico-and-associated-risks.html?highlight=WyJpY29zIlQ=>

⁸¹ <https://www.lb.lt/uploads/documents/files/Pozicijos%20del%20virtualiu%20valiutu%20ir%20VV%20zetonu%20platinimo%20EN.pdf>

⁸³ <https://www.lb.lt/lt/nauienos/lietuvos-bankas-skelbia-pozicija-del-virtualiuju-valiutu>

⁸⁴ <https://www.lb.lt/en/news/the-bank-of-lithuania-to-launch-blockchain-sandbox-platform-service>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
		Ministry of Finance – ICO Guidelines aimed towards providing certainty and transparency in the regulatory, taxation, accounting and other requirements (June 2018) ⁸²					
17. Luxembourg	Financial Sector Supervisory Commission (CSSF)	Despite the lack of specific regulations that applies to ICOs, the activities related thereto or implied through the creation of tokens, the collection and raising of funds may, depending on their characteristics, be subject to certain legal provisions in Luxembourg and thus to certain supervisory requirements (March 2018) ⁸⁵	No specific regulation. CSSF encourages a European/International approach especially as regards the legal qualification of virtual currency (March 2018) ⁸⁶		FinTech – number of positions issued by the regulator including robo-advice, Cloud Computing, and customer on-board ⁸⁷	Warning on Initial Coin Offerings (“ICOs”) and tokens (March 2018) ⁸⁸	
18. Malta	Malta Financial Services	Initial Virtual Financial Asset Offerings (e.g. ICO) are regulated by	See <i>Regulation of ICOs</i>	Guidance Note on the Financial Instrument Test (July 2018) ⁹⁰ The test is of	New regulatory authority tasked with promoting and	Warning addressed to the general public	

⁸² <http://finmin.lrv.lt/uploads/finmin/documents/files/ICO%20Guidelines%20Lithuania.pdf>

⁸⁵ http://www.cssf.lu/fileadmin/files/Protection_consommateurs/Avertissements/W_ICOS_140318_eng.pdf

⁸⁶ http://www.cssf.lu/fileadmin/files/Protection_consommateurs/Avertissements/W_virtual_currencies_140318_eng.pdf

⁸⁷ <http://www.cssf.lu/en/supervision/fintech/>

⁸⁸ http://www.cssf.lu/fileadmin/files/Protection_consommateurs/Avertissements/W_ICOS_140318_eng.pdf

⁹⁰ <https://www.mfsa.com.mt/pages/viewcontent.aspx?id=674>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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	Authority (MFSA)	virtue of a new law – Virtual Financial Assets Act, ACT No. XXX of 2018 – which is expected to come into force in October 2018 (July 2018) ⁸⁹ . The law regulates the field of Initial Virtual Financial Asset Offerings (VFAA) and Virtual Financial Assets and makes provision for matters ancillary or incidental thereto. IVFAO means a DLT-enabled method of raising funds whereby an issuer is issuing virtual financial assets and is offering them to the public in exchange for funds.		particular importance as it determines which legislative instrument is relevant to that particular digital asset. The first stage of the test focuses on virtual tokens under the VFAA while the second stage focuses on the various financial instruments under MiFID.	regulating distributed or decentralised technology (among other aspects) (July 2018) ⁹¹ Regulation of designated innovative technology arrangements (July 2018) ⁹²	regarding virtual currencies (July 2017) ⁹³	
19. Netherlands	Dutch Authority for the Financial Markets (AFM)	Potential issuers need to properly analyse the extent of any overlap with financial regulation	No specific information but appear to be unregulated.		InnovationHub, a joint initiative of the AFM and the DNB (Dutch Central Bank). ⁹⁵	AFM warns investors on risks associated with ICOs ⁹⁷	In a recent judgement ⁹⁸ , a Dutch District Court declared that bitcoins are

⁸⁹ <https://www.mfsa.com.mt/pages/viewcontent.aspx?id=674>

⁹¹ <http://justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=29202&l=1>

⁹² <http://justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=29204&l=1>

⁹³ <https://www.mfsa.com.mt/pages/announcement.aspx?id=9527>

⁹⁵ <https://www.afm.nl/en/professionals/onderwerpen/innovation-hub>

⁹⁷ <https://www.afm.nl/en/nieuws/2017/nov/risico-ico>

⁹⁸ <https://linkeddata.overheid.nl/front/portal/document-viewer?ext-id=ECLI:NL:RBAMS:2018:869>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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		and supervision before launching their ICO ⁹⁴ If a token qualifies as a security, a prospectus is compulsory.			Warnings for professionals on ICO risks ⁹⁶		stand-alone value files, which are delivered directly to the payee by the payer in the event of a payment. It said that a bitcoin represents a value and is transferable. In the court's view, this bears characteristics of a property right.
20. Poland	Polish Financial Supervisory Authority (KNF)	Does not seem to be regulated			FinTech Hub ⁹⁹	Statement by Narodowy Bank Polski (NBP) and the Polish Financial Supervision Authority (KNF) on "virtual currencies"(July 2017) ¹⁰⁰ KNF's statement on selling so-called coins or tokens (Initial Token Offerings – ITOs or Initial Coin Offerings – ICOs) (November 2017) ¹⁰¹	The Polish Financial Ombudsman, Aleksandra Viktorow, appealed to the government to regulate the activities of financial companies, such as online exchange offices or virtual currency exchanges (February 2017) ¹⁰² Issue of tender by KNF on the Planning and conducting of a social campaign promoting the KNF Alert application and building awareness of the risks associated with investing in

⁹⁴ <https://www.afm.nl/en/professionals/onderwerpen/ico>

⁹⁶ <https://www.afm.nl/en/professionals/onderwerpen/ico>

⁹⁹ <https://www.knf.gov.pl/en/MARKET/Fintech>

¹⁰⁰ https://www.knf.gov.pl/en/news?articleId=57368&p_id=19

¹⁰¹ https://www.knf.gov.pl/en/news?articleId=60239&p_id=19

¹⁰² <https://www.money.pl/gospodarka/wiadomosci/artykul/rzecznik-finansowy-wiktorow-firmy-finansowe,189,0,2262717.html>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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							cryptocurrencies among other areas (May 2018) ¹⁰³
21. Portugal	Portuguese Securities Market Commission (CMVM)	FinTech business models (which include ICOs) are varied and may be subject to legislation and CMVM's supervision ¹⁰⁴				Alerts consumers to the risks of using "virtual currencies" (October 2014) ¹⁰⁵ CMVM warns investors on Initial Coin Offerings (ICOs) (November 2017) ¹⁰⁶	
22. Republic of Cyprus	Cyprus Securities and Exchange Commission (CySEC)	No information appears to be available	No information appears to be available	No information appears to be available	Internal initiatives within CySec on FinTech and RegTech (November 2017) ¹⁰⁷	Warning to investors on trading In Virtual Currencies (March 2014 ¹⁰⁸ and October 2017 ¹⁰⁹); Risks Emanating from Initial Coin Offerings for Investors and Firms (November 2017) ¹¹⁰	

¹⁰³ https://www.knf.gov.pl/o_nas/urzed_komisji/zamowienia_publiczne/zam_pub_pow?articleId=61704&p_id=18

¹⁰⁴ http://www.cmvm.pt/en/Investor_area/fintech/Pages/atividades-fintech.aspx

¹⁰⁵ <https://www.bportugal.pt/comunicado/alerta-aos-consumidores-para-os-riscos-de-utilizacao-de-moedas-virtuais>

¹⁰⁶ <http://www.cmvm.pt/en/Comunicados/Comunicados/Pages/20180119.aspx>

¹⁰⁷ <https://www.cysec.gov.cy/CMSPages/GetFile.aspx?guid=da4539ed-bc6b-4170-914b-dd7e24edbb08>

¹⁰⁸ <https://www.cysec.gov.cy/CMSPages/GetFile.aspx?guid=82c87ef0-dc3d-471a-9491-39495ec37c4d>

¹⁰⁹ <https://www.cysec.gov.cy/CMSPages/GetFile.aspx?guid=4436a24d-05f5-4290-9008-e17d345b99f6>

¹¹⁰ <https://www.cysec.gov.cy/CMSPages/GetFile.aspx?guid=d8d643c1-74f9-4723-98b6-e5e8c79be7fa>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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23. Romania	Financial Supervision Authority (ASF)	No information appears to be available	No information appears to be available			No warnings have been	
24. Slovakia	National Bank of Slovakia	No information appears to be available	No information appears to be available			Warning to the public on Bitcoin (November 2013) ¹¹¹	
25. Slovenia	Securities Market Agency (ATVP)	No information appears to be available	No information appears to be available			Warning regarding buying, storage and investment in virtual currency ¹¹²	
26. Spain	Banco de España National Securities Market Commission (CNMV)	Not specific. CNMV considers that a good number of operations structured as ICOs should be treated as issues or public offerings of transferable securities in terms of Spanish law ¹¹³ .		Current rules apply. This was also confirmed (May 2018) by a high CNMV official who stated that existing securities rules will continue to apply until international/European reference standards are made applicable ¹¹⁴ .	CNMV considerations on crypto currencies and ICOs addressed to market professionals (February 2018) ¹¹⁵	Joint press statement by the CNMV and the Banco de España on “cryptocurrencies” and “initial coin offerings” (ICOs) (BDE/CNMV) ¹¹⁶	
27. Sweden	Financial Supervisory Authority (FI)	No specific guidelines/rules		Report: “FI’s role regarding innovation” (December 2017) ¹¹⁷	Innovation Centre (March 2018) ¹¹⁸	Warning: Risks connected with Initial Coin Offerings (ICO) (November 2017) ¹¹⁹ and	

¹¹¹ https://www.nbs.sk/en/press/all-press-releases/press-release/_narodna-banka-slovenska-s-warning-to-the-public-on-bitcoin

¹¹² https://www.a-tvp.si/Documents/Naslovnica/Opozorila_ICO/OFS_izjava_za_javnost_glede_virtualnih_valut.docx

¹¹³ <http://www.cnmv.es/Portal/verDoc.axd?t=%7b62395018-40eb-49bb-a71c-4afb5c966374%7d>

¹¹⁴ <https://www.lavanguardia.com/vida/20180510/443474927625/economiafinanzas--la-cnmv-aplicara-la-normativa-de-valores-a-las-criptomonedas-hasta-que-haya-regulacion-europea.html>

¹¹⁵ <http://www.cnmv.es/Portal/verDoc.axd?t=%7b62395018-40eb-49bb-a71c-4afb5c966374%7d>

¹¹⁶ https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/18/presbe2018_07en.pdf

¹¹⁷ https://www.fi.se/contentassets/d3cd30fe473d4a7995f0c38209ddb7f1/fintech_report_engny.pdf

¹¹⁸ <https://www.fi.se/sv/fi-innovationscenter/>

¹¹⁹ <https://www.fi.se/sv/publicerat/nyheter/2017/varning-for-risker-med-initial-coin-offerings/>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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						cryptocurrencies (February 2018) ¹²⁰	
28. United Kingdom	Financial Conduct Authority (FCA)	Not specific. Determined on a case by case basis, depending on ICO design. Regulatory considerations as applicable under Financial Services and Markets Act 2000 (FSMA) ¹²¹	Not currently regulated	Current regulatory requirements appropriately reflect strategic objectives of consumer protection, competition and market integrity in the context of expected uses of DLT	Regulatory sandbox for controlled testing that meets FCA's consumer benefit criterion ¹²²	Warning: risks relating to ICOs (September 2017) ¹²³ Warning: risks of investing in cryptocurrency CFDs (November 2017) ¹²⁴	FS17/4: Distributed Ledger Technology <i>Feedback Statement</i> (December 2017) ¹²⁵

EUROPEAN ECONOMIC AREA

29. Norway	Financial Supervisory Authority of Norway (Finanstilsynet)	No specific guidelines/rules		Finanstilsynet's supervisory activities will be based on ESMA's assessments (November 2017) ¹²⁶	FinTech initiative ¹²⁷	Warning to consumers on ICOs (November 2017) ¹²⁸ and cryptocurrency (February 2018) ¹²⁹	
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¹²⁰ <https://www.fi.se/sv/publicerat/nyheter/2018/olampligt-for-konsumenter-att-investera-i-virtuella-valutor/>

¹²¹ See Annex 1, FS17/4 (<https://www.fca.org.uk/publication/feedback/fs17-04.pdf>)

¹²² <https://www.fca.org.uk/firms/project-innovate-innovation-hub/eligibility>

¹²³ <https://www.fca.org.uk/news/statements/initial-coin-offerings>

¹²⁴ <https://www.fca.org.uk/news/news-stories/consumer-warning-about-risks-investing-cryptocurrency-cfds>

¹²⁵ <https://www.fca.org.uk/publication/feedback/fs17-04.pdf>

¹²⁶ <https://www.finanstilsynet.no/markedsadvarsler/2017/initial-coin-offerings-icoer---advarsel-til-investorer-og-foretak/?id=>

¹²⁷ <https://www.finanstilsynet.no/tema/fintech/>

¹²⁸ <https://www.finanstilsynet.no/markedsadvarsler/2017/initial-coin-offerings-icoer---advarsel-til-investorer-og-foretak/?id=>

¹²⁹ <https://www.finanstilsynet.no/markedsadvarsler/2018/finanstilsynet-advarer-forbrukere-om-kryptovaluta/>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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30. Iceland	Financial Supervisory Authority	No specific guidelines/rules			FinTech Initiative		
31. Liechtenstein	Financial Market Authority	Depending on their specification, tokens may constitute financial instruments subject to financial market Law (September 2017) ¹³⁰	Not subject to licensing requirements but a requirement may arise depending on business model ¹³¹		FinTech initiative ¹³²		

OTHER EUROPEAN JURISDICTIONS

32. Gibraltar	Gibraltar Financial Services Commission (GFSC)	As of 1 January 2018, any firm carrying out by way of business, in or from Gibraltar, the use of distributed ledger technology (DLT) for storing or transmitting value belonging to others (DLT activities), needs to be authorised by the GFSC as a DLT Provider. ^{133 134}		Nine principles are applied to DLT Providers so as ensure that the GFSC's regulatory outcomes are achieved ¹³⁵	Innovate and Create Team ¹³⁶	Statement on Initial Coin Offerings (September 2017) ¹³⁷	
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¹³⁰ <https://www.fma-li.li/files/fma/fma-factsheet-ico.pdf>

¹³¹ <https://www.fma-li.li/files/fma/fma-fact-sheet-virtual-currencies.pdf>

¹³² <https://www.fma-li.li/en/regulation/fintech-in-liechtenstein.html>

¹³³ <http://www.gfsc.gi/dlt>

¹³⁴ <http://www.gibraltarlaws.gov.gi/articles/2017s204.pdf>

¹³⁵ <http://www.gfsc.gi/dlt>

¹³⁶ <http://www.gfsc.gi/FSC/innovate>

¹³⁷ <http://www.gfsc.gi/news/statement-on-initial-coin-offerings-250>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
33. Switzerland	Swiss Financial Market Supervisory Authority (FINMA)	Publication of ICO Guidelines which define the information FINMA requires to deal with ICO enquiries and the principles upon which it will base its responses (February 2018) ¹³⁸				FINMA closes down coin providers and issues warning about fake cryptocurrencies (September 2017) ¹³⁹	
34. Jersey	Jersey Financial Services Commission (JFSC)	Publication of ICO Guidelines (July 2018) ¹⁴⁰ . The JSFC does not regulate ICOs and will impose minimum standards. ICO issuers will be required to be administered by a trust and company service provider licensed by the JFSC ¹⁴¹ .	No conduct rules for virtual currencies but still subject to AML and counterterrorism financing legislation in Jersey (September 2016). ^{142 143}		FinTech Sandbox ¹⁴⁴	Warning on ICOs (November 2017) ¹⁴⁵	
35. Guernsey	Guernsey Financial Services	Cautious approach if approached with applications involving	Cautious approach if approached in regard to setting up of a digital		Innovation Soundbox ¹⁴⁸	Advisory notice concerning ICOs (September 2017) ¹⁴⁹	

¹³⁸ <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/>

¹³⁹ <https://www.finma.ch/en/news/2017/09/20170919-mm-coin-anbieter/>

¹⁴⁰ https://www.jerseyfsc.org/media/2003/2018-07-12_jfsc-issues-ico-guidance-note.pdf

¹⁴¹ <https://www.jerseyfsc.org/media/1999/gn-ico-july-2018.pdf>

¹⁴² <https://www.jerseylaw.je/laws/enacted/PDFs/RO-063-2016.pdf>

¹⁴³ <https://www.jerseylaw.je/laws/revised/PDFs/08.785.80.pdf>

¹⁴⁴ <https://www.digital.je/choose-jersey/sandbox-jersey/fintech-sandbox/>

¹⁴⁵ <https://www.jerseyfsc.org/media/1612/jfsc-warning-initial-coin-offerings.pdf>

¹⁴⁸ <https://www.gfsc.gg/commission/innovations/innovation-soundbox>

¹⁴⁹ <https://www.gfsc.gg/news/article/advisory-notice-regarding-initial-coin-offerings>

	Regulatory Authority	Regulation of ICOs	Regulation of digital currencies	Extent of regulation	Any market-oriented initiatives	Consumer-related initiatives	Other relevant / general remarks
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	Commission (GFSC)	ICOs that could be traded on secondary market (February 2018) ¹⁴⁶	currency exchange (February 2018) ¹⁴⁷				
Isle of 36. Man	Isle of Man Financial Services Authority (FSA)	The tokens issued through an ICO do not fall within the definition of “investments”, and therefore the tokens are not regulated investments and the protections afforded to investors of traditional investment products regulated under the Financial Services Act 2008 do not apply ¹⁵⁰ .	In April 2015 the Proceeds of Crime (Business in the Regulated Sector) Order 2015 amended the law to bring certain businesses involved in virtual currencies under the oversight of, but not regulation by, the FSA ¹⁵¹ .	Virtual Currency Business ¹⁵² is defined as the business of issuing, transmitting, transferring, providing safe custody or storage of, administering, managing, lending, buying, selling, exchanging or otherwise trading or intermediating convertible virtual currencies, including crypto-currencies or similar concepts where the concept is accepted by persons as a means of payment for goods or services, a unit of account, a store of value or a commodity.		Q&As on ICOs ¹⁵³	

¹⁴⁶ <https://www.gfsc.gg/news/article/virtual-currencies-crypto-currencies-and-initial-coin-offerings-ico>

¹⁴⁷ <https://www.gfsc.gg/news/article/virtual-currencies-crypto-currencies-and-initial-coin-offerings-ico>

¹⁵⁰ <https://www.iomfsa.im/consumer-material/initial-coin-offerings-questions-and-answers/>

¹⁵¹ <https://www.iomfsa.im/consumer-material/initial-coin-offerings-questions-and-answers/>

¹⁵² See <https://www.iomfsa.im/media/1606/virtualcurrencyguidance.pdf>

¹⁵³ <https://www.iomfsa.im/consumer-material/initial-coin-offerings-questions-and-answers/>

Annex 2 – Regulatory Sandboxes and Innovation hubs

Whereas in the past, law makers and regulators alike were criticised for not keeping up with industry practices and initiatives, today many supervisory authorities are keeping an open door for innovation but also police it as tightly as they can for attempts which may thwart their, and the financial system's reputation.

New delivery and manufacture models of assets, which at times can seem to mimic mainstream investment instruments such as bonds or shares, are surrounded by an aura of technological wizardry which, admittedly, only techies may be likely to comprehend. This explains why many authorities emphasise, and rightly so, the consumer protection element in the whole frame of things.

During the MSG's research, we came across several instances in which supervisory authorities announced the creation of *regulatory sandboxes* or *innovation hubs* enabling potential providers to develop their business models whilst testing the boundaries of the law and inherent financial services rules. Annex 1 contains a column, under "Market-oriented initiatives", that indicates the existence of such non-legislative initiatives for each jurisdiction covered in our research.

Although the two terms may be used interchangeably, the scope for which such "incubation units" are setup is essentially different.

Whereas an *innovation hub* is likely to be setup as a department or unit housed within the supervisory authority to respond to enquiries (at various stages) made by potential operators to assess if and to what extent a potential new product or service which could potentially be regarded as disruptive in the way it is delivered or offered meets regulatory requirements and consumer protection expectations of the relevant authority, a *regulatory sandbox* is more likely to evolve into a hands-on approach allowing an operator to actually offer a product or service (in a manner which could potentially be deemed to be disruptive or strategically atypical of how similar products or services in the same market are offered) to actual consumers whilst ensuring that consumer protection rules and expectations are met in full.

In the former scenario, the expertise of the supervisory authority is imparted on to the potential operator by way of information but professional advice would always be required to be obtained by the said operator. In other words, the supervisory authority would not provide legal advice, or be seen to provide such advice.

In the latter scenario, the operator would still be required to abide by the same rules that apply to other market operators (therefore legislative and regulatory boundaries would not be expected to be diluted to allow for any special economic benefit to accrue).

National financial authorities in these jurisdictions have announced such initiatives, many of which provide descriptive guidelines or specific rules as to how such incubation units operate: **Austria, Belgium, Bulgaria, Denmark, Finland, France, Germany, Gibraltar, Iceland, Italy, Latvia, Lichtenstein,**

Luxembourg, Netherlands, Norway, Poland, Spain, Sweden, and the United Kingdom.

Such incubation units are not specifically setup for DLT-enabled assets only. Rather, quite a few authorities have widened the scope of such setups to also include new areas where technology is already present or expected to disrupt mainstream delivery methods of a number of products and services, such as payments and investment advice.

Such incubation units seem to have sparked interest among a few international regulators following a UK FCA-led initiative to create a 'global sandbox'. In August 2018, 12 financial regulators (of which only two EU supervisory authorities are participating, the UK FCA and France's AMF) announced the creation of the Global Financial Innovation Network (GFIN) which is meant "*to provide a more efficient way for innovative firms to interact with regulators, helping them navigate between countries as they look to scale new ideas. It will also create a new framework for co-operation between financial services regulators on innovation related topics, sharing different experiences and approaches*". GFIN is consulting interested parties on this global initiative¹⁵⁴.

¹⁵⁴ The consultation document is available at: <https://www.fca.org.uk/publication/consultation/gfin-consultation-document.pdf>

It is early to comment on the success or otherwise of the various legislative/regulatory/supervisory and non-legislative initiatives discussed above. Unlike some non-European jurisdictions¹⁵⁵, where the world of virtual assets is strictly a “no-go area”, no European jurisdiction seems to have bolted its doors closed for such a volatile yet evolving world of crypto asset technology. There’s evidence to suggest that a handful of European countries may have found niches of opportunities in this area and have legislated for it. Some prospective players may be critical at approaches or policies which could *prima facie* appear to intrude on their spirit of technological innovation. The creation of sandboxes might possibly be just about the right opportunity for such innovators to germinate their ideas under the watchful glare of the supervisory authorities.

However, it is evident that such crypto enthusiasm is not equally shared throughout the supervisory network. True, scepticism may have crept in (especially following the dampening of the euphoric surge of crypto currencies since December 2017). But that is not to suggest that supervisory authorities should not – at this evolving stage – share their experiences of their efforts with such incubation initiatives.

Most certainly, it may be wise for supervisory authorities to make public and share how their sandbox experiments are being governed and how concerns, of whatever degree, to minimise the potential of regulatory capture are being addressed.

¹⁵⁵ See https://en.wikipedia.org/wiki/Legality_of_bitcoin_by_country_or_territory