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Security Token Offering in EU: applicable law

MASTER'S THESIS

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DECLARATION OF HONOUR:

I declare that this thesis is my own work, and that all references to, or quotations from, the work of others are fully and correctly cited.

(Signed)

RIGA, 2019

SUMMARY

The paper focuses on applicable law towards Security Token Offerings (STOs) in European Union. The goal of thesis is to analyse legal framework in EU with regards to STOs from the perspective of an organizer, an investor and a regulator. Blockchain technology has entered the field of regulated market activities and along with new opportunities for business, it has brought new challenges for regulators and risks for investors. The research will illustrate the legal framework which organizers have to follow in order to launch legally compliant STO.

This research is structured in four parts where the first two chapters provide analytical insights in blockchain technology and importance of legal framework by analysing academic literature and EU legislation. The third chapter analyses case studies and legal framework of 8 EU Member States and Switzerland and fourth chapter discusses the findings throughout the research.

The first chapter provides clarification on blockchain technology and gives brief insight in development of blockchain technology. The first chapter serves purpose to provide knowledge base about blockchain technology in order to continue analysis of legislation. Chapter will analyse technical perspective of Initial Coin Offerings (ICOs) and provide explanation on why there is a demand for Security Token Offerings. By using examples with the first ICOs launched, chapter illustrates the pace of development of blockchain technology where in 2013 total amount of funds raised in ICOs was measured in several thousand US Dollars while in 2019 the total raised amount through ICOs has exceeded the mark of USD 70 Billion.

The second part of the paper illustrates importance of legal framework with regards to investor protection and technological development. The chapter provides analysis of academic articles in order to create a context how legal framework affects Security Token Offering. It follows with analysis of case law from USA where consequences of Security Exchange Commission (SEC) penalties to three ICOs are illustrated. Due to the fact that USA and EU are regions with most organized ICOs, perspective of USA is important, because it is used further in the research as a comparison with legal framework in EU. The second chapter starts analysis of legislation with focus on EU Regulations and Directives by illustrating the most important legal rules from perspective of STOs.

The third part of the thesis consists of a case study of legislation from 8 Member States and Switzerland. During analysis of each jurisdiction, comprehensive research of legislation is conducted towards legal rules of public offerings and virtual assets. Legislation analysis is supplemented with examples of existing STOs where their offering documents and investment

agreements are analysed from the perspective of applicable law. Analysed countries were selected according to established statistics in a number of organized ICOs in the Member State. Another significant factor which determined selection of Member States was existing or planned STOs. Switzerland was selected due to its well-known developed legal framework towards blockchain industry and geographical location in the continent of Europe.

The fourth chapter is a discussion where analysis of case study, legislation review, and academic literature is combined. Along with analysis, discussion part provides suggestions on what should be improved towards creating a better legal environment for STOs in European Union. The last part of the paper concludes the research by listing the most important arguments which occurred during the research.

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INDEX OF ABBREVIATIONS

AMF	Autorité des Marchés Financiers (France)
AML	Anti-money laundering
AMLD	Anti-Money Laundering Directive
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht (Germany)
CEO	Chief Executive Officer
CSSF	Commission de Surveillance du Secteur Financier (<i>Luxembourg</i>)
DLT	Distributed Ledger Technology
EBA	European Banking Authority
ECB	European Central Bank
ECJ	European Court of Justice
EEA	European Economic Area
EFSA	Estonian Financial Supervisory Authority
ESMA	European Securities and Markets Authority
EU	European Union
EUR	Euro
FCA	Financial Conduct Authority (UK)
FCMC	Financial and Capital Market Commission (Latvia)
FINMA	Swiss Financial Market Supervisory Authority
FinSA	Financial Services Act (Switzerland)
FIT	Financial Instruments Test (Malta)
FIU	Financial Intelligence Unit (Estonia)
FSMA	Financial Services and Markets Act (UK)
ICO	Initial Coin Offering
IPO	Initial Public Offering
ISIN	International Securities Identification Number
KYC	Know your customer
MAR	Market Abuse Regulation

MFSA	Malta Financial Services Authority
MiFID	Markets in Financial Investments Directive
MLTFPA (Estonia)	Money Laundering and Terrorist Financing Prevention Act
MSE	Malta Stock Exchange
NCA	National Competent Authority
OECD	The Organisation for Economic Co-operation and Development
P2P	Peer-to-peer
PACTE	Action Plan for Business Growth and Transformation (France)
ROI	Return on Investment
SEC	Securities and Exchange Commission (USA)
SMA	Securities Market Act (Estonia)
STO	Security Token Offering
UK	United Kingdom
UN	United Nations
USA	United States of America
USD	United States Dollar
VFA	Virtual Financial Asset
VFAA	Virtual Financial Assets Act (Malta)

INTRODUCTION

Technological advancements are cornerstones of economic development in the world. Historically it has been proven over and over again that without new and at the time revolutionary methods, development would not be possible. Among the most revolutionary inventions that eventually changed the world, but initially were considered not necessary or against existing world order are such inventions as printing press, light bulb, airplane, telephone and even a clock. All new technological inventions, along with new possibilities for consumers and new opportunities for business, bring along challenges for authorities. When Gutenberg invented printing press in 15th century, it was initially considered too complicated technology which won't replace handwritten manuscripts carried out mainly by catholic monks. Printing press was strongly criticised and even limited by catholic church. Eventually, printing press developed and currently it is considered one of the main reasons which made Reformation in Europe possible¹.

One of the most revolutionary technological advancements of the last decade is blockchain technology. Created in order to facilitate decentralized and transparent transactions among two parties, it has caused a lot of opportunities for the business as well as a lot of challenges for the regulators. Since the creation of Bitcoin in 2009, when blockchain technology was known only to “crypto-enthusiasts” and “IT-geeks”, it has developed in widely known industry with aggregated market capitalization of over EUR 300 Billion². Development from 0 to EUR 300B in period of 10 years places blockchain technology at the top in one of the most important technological achievements in 21st century. The main source of the funds in blockchain industry comes from Initial Coin Offerings (ICOs) where investors purchase digital coins in return of certain rights on the platform of the issuer. Whenever there are involved investors, there is necessity of investor protection – this has been the approach in financial markets until now.

The most recent form of raising funds on blockchain is Security Token Offering – when organizer offers certain right to the asset which is coded in the digital token. The common understanding towards financial instruments is that they must be regulated and have certain legal framework in order to protect investors. In situations of ICOs investor protection was nearly impossible due to the nature of the offering, which this paper will illustrate in Chapter 1. However, when securities are offered, organizers are attached to certain jurisdiction where

¹ History.com. Printing Press. (21.08.2018). Available: <https://www.history.com/topics/inventions/printing-press>. Accessed May 9, 2019.

² Azgad-Tromer, Shlomit “Crypto securities: on the risks of investments in blockchain – based assets and the dilemmas of securities regulation” *American University Law Review*, 68 (2018): pp 69 – 137. Accessed April 2019 from ProQuest online, ID: 2135997984.

such securities are located and therefore, they are obliged to “play by the rules” of these jurisdictions.

The goal of this paper is to analyse the applicable law in the European Union towards Security Token Offerings. The scope of this research is focused on legislation analysis of EU legal framework, 8 EU Member States and Switzerland, and analysis of existing case law from USA. The research provides analysis of academic literature towards necessity of legal framework in the field of blockchain as well as analysis and description of blockchain technology and Security Token Offerings as such.

It is important to research legislation towards legal rules for Security Token Offerings, because at the moment there is legal uncertainty on how to organize such offerings within EU. Initial Coin Offerings developed in extreme pace – in 2013 when there were the first coin offerings, the total amount of raised funds was estimated around EUR 20,000. Only 6 years later, in the May of 2019, total raised amount through Initial Coin Offerings has reached EUR 60 Billion. With decrease in popularity of utility token offerings, it is common understanding that security token offerings will take the place. Hence, the research on legal framework towards Security Token Offering is important.

1. CONCEPT OF STO

1.1. Distributed ledger technology

This chapter will explain what is blockchain / Distributed Ledger Technology (DLT) and how it is used to raise capital for the business. With aggregated global crypto market capitalization of USD 300 billion (EUR 266,75), investments in offerings based on blockchain platforms are increasing in terms of popularity³. It is important to understand the concept of blockchain in order to provide an introduction into the subject of Security Token Offerings. According to Oxford dictionary blockchain is:

A system in which record of transactions made in bitcoin or another cryptocurrency are maintained across several computers that are linked in a peer-to-peer network⁴.

This research will focus on legal perspective of the blockchain. However, it is important to analyse practical side of technology to understand the main aspects on how and why there should be laws which regulate the use of the blockchain. Distributed ledgers are technical record-keeping devices which exist across a large, shared network⁵. Each network participant stores a copy of the ledger on computer or node and they are simultaneously updated every time when any change occurs⁶. In general, ledgers are an ancient method of recording transactions – for example – by using clay tablets or papyrus. DLT replaces clay tablets and papyruses with electronical network where updates occur automatically. One of the main ideas of DLT is that transaction won't happen if a person does not have the goods he is claiming to have. In real life scenario transaction carried out on blockchain would be:

Alice wants to purchase an item from Etsy.com online store. In order to carry out the transaction, Alice needs to have funds in her electronic wallet and store from Etsy.com must have the goods in question. The transaction begins with Alice's wallet generating request for changes on the blockchain so she could transfer funds to the merchant⁷. The next steps are happening on the network where various nodes check, by inspecting the ledger, whether Alice has the funds she is claiming to have⁸. If during the inspection existence of her funds is confirmed, then specialized nodes called miners will eventually create a new block for the

³ Azgad-Tromer, *supra* note 2.

⁴ Blockchain | Definition Of Blockchain In English By Oxford Dictionaries, *Oxford Dictionaries | English*, 2019, <https://en.oxforddictionaries.com/definition/blockchain>. Accessed April 19, 2019.

⁵ Rodrigues, Usha R. "Law and the Blockchain". *Iowa Law Review*, 104 (2019): pp 679 – 729. Accessed April 13, 2019 from ProQuest online, ID: 2188134453.

⁶ *Ibid.*

⁷ The Great Chain Of Being Sure About Things, *The Economist*, 2019, <https://www.economist.com/briefing/2015/10/31/the-great-chain-of-being-sure-about-things>. Accessed April 20, 2019.

⁸ *Ibid.*

blockchain⁹. The data further is processed by using cryptographic “hash” function which transforms the block into a string of digits of certain length. The “hash” is put into the header of the proposed block and the header becomes the basis for mathematical puzzle which involves the “hash” function. Mathematical puzzle can only be solved by trial and error and it is done by miners who operate across the network¹⁰. At the moment when miner has created solution for the puzzle, the other nodes check it and each node that confirms the solution updates the blockchain accordingly¹¹. “The hash of the header becomes the new block’s identifying string”¹². The result is that Alice’s payment is confirmed, and transaction is carried out.

Every transaction on blockchain is timestamped and it is not possible to amend previous blocks. According to Associate Professor from Concordia Institute, Jeremy Clark, “[t]he goal of timestamping is to give an approximate idea of when document came in to existence”¹³. Document’s timestamp can’t be changed after it is already created. Timestamping accurately conveys the order of creation of the documents on blockchain – if one document (transaction) came in to existence before the other, the timestamp will reflect that¹⁴. Timestamping and precision of documents created on blockchain is often mentioned as one of the main advantages of the DLT. Timestamping creates transparency and according to authors of “Law and Blockchain” transparency is one of 4 main advantages of blockchain technology, the other three being: 1) decentralization; 2) anonymity; 3) not possible to change after it is created¹⁵.

The main difference between cryptocurrency and fiat currency lies exactly in distribution, where with fiat currency it is authorized and further distributed by single trusted authority, like European Central Bank. In DLT, instead of a single central authority, each of the nodes independently verifies proposed additions to the ledger, or blockchain and if the majority of the nodes verify the transaction, then it is added to the blockchain¹⁶. Bitcoin was the first widely known virtual currency which was created on blockchain technology in January 9, 2009. It is a virtual currency with main goal to facilitate purchases between parties without going through centralized financial institution¹⁷. Document which was created as a Guidelines in to Bitcoin – also known as “White Paper” states that Bitcoin is “purely peer-to-peer electronic cash system¹⁸”. This illustrates that Bitcoin was created to be an alternative to regulated

⁹ The Economist, The Great Chain of being sure about things. *Supra* note 7.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*

¹³ Arvin Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder, *Bitcoin and cryptocurrency technologies. A Comprehensive Introduction*. (Princeton: Princeton University Press, 2016), XX.

¹⁴ *Ibid.*

¹⁵ Rodrigues, *supra* note 5.

¹⁶ *Ibid.*, p. 697.

¹⁷ *Ibid.*, p. 698.

¹⁸ *Bitcoin.Org*, White Paper. 2019, <https://bitcoin.org/bitcoin.pdf>. Accessed April 20, 2019.

currencies. However, the fact that Bitcoin was created on blockchain and is by far the most popular cryptocurrency does not mean that it is the only purpose of DLT. It is important to outline that Bitcoin is not a synonym to blockchain. Bitcoin is a cryptocurrency, which is used to facilitate purchases between parties, while blockchain is technological solution on how to document and process certain transactions. The next generation of blockchains which were created after Bitcoin developed by implementing “smart contract” layers on top of the virtual currencies they offered. The most popular example is Ethereum which uses their token “Ether” as a unit of currency¹⁹. The Ethereum blockchain permits the central recording not just of an exchange, but of contractual conditions and limits on the circumstances under which an exchange can occur. If compared with Bitcoin, which was created purely for transaction between parties, Ethereum was created specifically for users to develop new app designs to layer on top of its blockchain to facilitate the smart contracts²⁰. It is important to outline these specifics in order to move forward to STO process, because DLT is the basics on which STO can be created and smart contracts are crucial part of STO, because they hold information on how to transfer / exchange with tokens. For example, if company’s shares are tokenized, then information on how to transfer the shares (which are now in form of tokens) will be implemented in smart contract and attached to each token.

Smart contract is an agreement which is automatically executed when certain conditions are met²¹. Smart contracts are enforced by code implemented in them instead of judicial authority²². For example, shareholder of the company will automatically receive certain number of dividends when company will receive certain amount of profit. Another example which illustrates how smart contracts are able to execute themselves is that person X will have to pay person Y certain amount of ether (unit of cryptocurrency used on the Ethereum blockchain) if Dow Jones Industrial Average index reaches 30,000²³. It is necessary to outline the fact that just like standard contracts, also smart contracts can include several variables and legal principle of party autonomy is still in place, because parties can negotiate about the terms which will be implemented in smart contract. However, when compared with standard agreements, a court is not able to determine what legal rule will fill the gaps which parties have created by concluding the agreement²⁴. In situations of standard contracts, a court would be able to determine the law which will fill these gaps. However, in case of smart contracts, it is not

¹⁹ Rodrigues, *supra* note 5, p. 698.

²⁰ *Ibid.*

²¹ The Economist, The Great Chain of being sure about things. *Supra* note 7.

²² US Senate. Joint Economic Committee. “Building a Secure Future. One blockchain at a time”. March 2018. Available: https://www.jec.senate.gov/public/_cache/files/aaac3a69-e9fb-45b6-be9f-b1fd96dd738b/chapter-9-building-a-secure-future-one-blockchain-at-a-time.pdf Accessed April 20, 2019.

²³ Rodrigues, *supra* note 5, p. 681.

²⁴ *Ibid.*

possible, because the “smart contract” is a code alone where is no gap with regards of entry point²⁵. As it is explained above by explaining how DLT functions, it is not possible to alter the code once it is created on the blockchain. Due to decentralized, distributed nature of blockchain ledger, changes in the code will be rejected once it is already created²⁶. In context of this research, smart contracts are significant, because they are used for transfer of the securities in Security Token Offerings. Organizer of STO / ICO implements a smart contract in every offered token which regulates how token can be transferred to another person. Therefore, there is a question on what is applicable law in cases of tokenized security transfers if, as illustrated in this paragraph, there is no entry point for legal rule in code itself? When code is created, if programmers decide, they are able to program legal rules in specific code²⁷. However, the main question of this research is which legal rule should be incorporated in to the smart contract in situations of transfer of tokenized securities? The question shall be analysed throughout the following chapters of the research.

This chapter mentions that Bitcoin is the most popular project developed on blockchain. In many cases it is wrongly mixed with blockchain and even used as a synonym to the blockchain. The reason of it is the fact that all other projects which were developed by using DLT until Bitcoin did not become usable for common public due to their complexity and availability to limited amount of people²⁸. There exist solutions outside of payment system with regards to blockchain usability. The fact that transactions on blockchain are transparent and it is not possible to forge them, makes blockchain technologies popular among national governments²⁹. Blockchain can be used by creating a system for land-registries in countries where due to economic and social problems land-registries are not developed properly³⁰. Example is Honduras and Greece – both countries have requested to develop prototype land-registries on blockchain in order to solve the problems with their current land registries. Another example is NASDAQ exchange which will record trades in privately held companies on blockchain based system³¹. Since 2016 Estonia is recording patient health records using blockchain technology by archiving patient activity logs³². By using DLT’s unique feature of timestamping, a ledger built on blockchain technology is able to timestamp every individual access or change to a patient’s individual records. Cryptographic hash function creates an

²⁵ Rodrigues, *supra* note 5, p. 681.

²⁶ *Ibid.*

²⁷ *Ibid.*, 683.

²⁸ Narayanan, *supra* note 13, p. XI.

²⁹ The Economist, The Great Chain of being sure about things. *Supra* note 7.

³⁰ *Ibid.*

³¹ *Ibid.*

³² Blockchain And Healthcare: The Estonian Experience — E-Estonia, *E-Estonia*, 2019, <https://e-estonia.com/blockchain-healthcare-estonian-experience/>. Accessed April 20, 2019.

unchangeable audit trail that can be monitored due to transparent features of blockchain technology and it also guarantees that the most recent record of patient data is used³³.

1.2. Defining Security Token Offering

1.2.1. Initial Coin Offering

The following chapter will analyse Security Token Offering in order to answer the question on what is the applicable law during the transfer of tokenized securities. To define STO, it is important to illustrate Initial Coin Offering (ICO). The name “offering” within the headline of STO or ICO gives the meaning that company offers some goods to the public in order to receive financial support. From perspective of goal, both STO and ICO have the same goal – to raise funds for the organizer in order to develop a new product / solution.

Initial Coin Offering is a fundraiser for company to attract funds for development of certain product. For “crypto world” ICO is often considered to be equivalent of Initial Public Offering from capital markets. However, due to the lack of legal framework which would create certain responsibility for organizers of the offerings, ICOs are similar with IPOs only from perspective that both have the same goal – to raise the funds for the company. The way how it is achieved is significantly different and this chapter will illustrate why. In IPOs companies are selling their shares to the public in order to raise capital. In ICOs organizers are selling digital tokens to the public and as a payment they are receiving funds in cryptocurrency. In most cases digital tokens hold certain value and holder of the token is able to use it within platform which is developed. For purposes of illustration, practical example will be used.

One of the first ICOs was NXT ICO which was launched in September of 2013³⁴. The goal of the ICO was to raise certain amount of money in order to develop the product which was “[o]pen source blockchain platform that utilizes proof-of-stake consensus mechanism for its native digital currency³⁵”. It is important to outline that nature of the product varies between different ICOs. NXT raised USD 16,800 in bitcoin by issuing NXT coin with initial value of USD 0,0000168 per coin. People who purchased NXT coins during ICO were able either to sell coins on public exchanges or use coins within NXT platform in order to use their developed product. Issued coin value changes from launch of ICO. For example, NXT coin value in April

³³ Blockchain And Healthcare: The Estonian Experience — E-Estonia, *E-Estonia*, 2019, <https://e-estonia.com/blockchain-healthcare-estonian-experience/>. Accessed April 20, 2019.

³⁴ Top 10 Biggest Icos (By Return On Investment) - Bitcoin Market Journal, *Bitcoin Market Journal*, 2019, <https://www.bitcoinmarketjournal.com/biggest-icos-roi/>. Accessed April 21, 2019.

³⁵ *Ibid.*

2019 is USD 0,033311³⁶. NXT is considered the most successful ICO by return on investment (ROI)³⁷. NXT was one of the first ICO's which was launched in early stage in development of blockchain technologies. It was known mostly among "crypto-enthusiasts" and did not reach the general public at the moment of ICO.

Since launch of the first ICO's in 2013, blockchain technologies and cryptocurrencies have become more popular and audience who participates in ICOs are no longer limited to "crypto-enthusiasts". Until April 2019 there were more than 3000 ICOs launched with total raised value exceeding 70 billion USD³⁸. The key differences of ICO / IPO are: 1) ICOs does not offer equity during offerings of initial coins; 2) ICOs are less expensive than IPOs; 3) there are no intermediaries in ICOs; 4) ICO's has wider geographical scope while IPOs are limited to country where they are launched. PricewaterhouseCoopers estimated that cost of IPO varies between four to seven percent of the capital raised and additional USD 4,2 million in accounting fees³⁹. Additionally, in the same report, PricewaterhouseCoopers found that companies spend between USD 1 million and USD 2 million in annual costs just to maintain company's status as a listed company⁴⁰. Average costs of ICO are estimated at USD 60,000 and average timescale to launch an ICO is three months⁴¹. If compared with IPOs it is possible to conclude that for small and medium companies ICOs are more affordable than IPOs which are available only to large companies who have already developed their business and have access to capital. While with ICOs it is common that companies who are launching ICOs are in early stages of their development and they will use raised funds to develop their business model which they advertised during ICO.

The fact that companies who are launching ICOs are in early stages of their development creates high volatility for projects carried out with funds raised on ICOs. Study carried out by EY where company analysed 372 ICO projects from 2017 with total of 87% funds raised in 2017, shows data of success rate of ICOs. In January 2018, 86% of projects carried out with ICOs were below their initial listed price on exchange and 30% of the projects had lost all

³⁶ Nxt (NXT) Price, Charts, Market Cap, And Other Metrics | Coinmarketcap, *Coinmarketcap*, 2019, <https://coinmarketcap.com/currencies/nxt/>. Accessed April 21, 2019.

³⁷ Top 10 Biggest Icos (By Return On Investment). *Supra* note 34.

³⁸ Zetzsche, Dirk Andreas and Buckley, Ross P. and Arner, Douglas W. and Föhr, Linus, *The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators* (July 24, 2018). University of Luxembourg Law Working Paper No. 11/2017; UNSW Law Research Paper No. 17-83; University of Hong Kong Faculty of Law Research Paper No. 2017/035; European Banking Institute Working Paper Series 18/2018; Harvard International Law Journal, Vol. 63, No. 2, 2019. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3072298>. Accessed April 21, 2019.

³⁹ US Senate. Joint Economic Committee. *Supra* note, 22.

⁴⁰ *Ibid*, 221.

⁴¹ *Ibid*.

value⁴². Another problem with ICOs is large number of fraudulent projects. One of the most popular and recent ICO fraud is when two related ICO projects in Vietnam raised USD 660 million in 2018 and without developing promised product disappeared⁴³. There were more than 30,000 people who participated in these fraudulent ICOs and at the moment of this research (May, 2019) Vietnamese authorities are conducting criminal investigation. In example of Vietnamese fraudulent ICOs the criminal act is clear, and authorities are able to prosecute the organizers of ICOs when they will be located. However, more common cases are with projects where organizers promote that there will be developed a unique product, but eventually it is not done due to the lack of knowledge or due to the fact that it was never intended to be developed. According to data from EY study, it is possible to see that at least 30% of projects fail and are not developed at all⁴⁴. Large amount of non-realized ICOs and fraudulent projects are one of the reasons why ICOs have lost popularity. In the first quarter of 2019 ICOs have raised USD 118 million while in the first quarter of 2018 ICOs raised USD 6,9 billion (58 times more)⁴⁵.

The possibility of fraud in ICO projects is because of lack of legal framework and token characteristics. In situations of IPO, where exists certain regulations which determine the process of IPO, possibility of fraudulent cases is minimized and if it occurs, then it is clear which measures will be imposed on the organizers of IPO – it is clear what is the applicable law. The issued tokens exhibit characteristics of a voucher which grants the user certain rights⁴⁶. In each ICO the particular right which is programmed in to the token varies. The token may give access to a software; the token might permit the user to pay with it by using certain platform which was created by organizer of ICO; the token might grant a right to financial asset. In context of this research, the last type of tokens are significant, because in several jurisdictions legislators have determined that such tokens are qualified as securities and must be properly registered with responsible authorities. In November 2018 The Securities and Exchange Commission (SEC, USA) imposed the first civil charges against two companies that sold digital tokens in ICOs⁴⁷. Both penalized companies conducted ICOs in 2017 where Airfox raised USD 15 million worth of digital assets and Paragon raised approximately USD 12 million worth of

⁴² *Ey.Com*, 2019, [https://www.ey.com/Publication/vwLUAssets/ey-study-ico-research/\\$FILE/ey-study-ico-research.pdf](https://www.ey.com/Publication/vwLUAssets/ey-study-ico-research/$FILE/ey-study-ico-research.pdf). Accessed April 21, 2019.

⁴³ Benedetti, Hugo E and Kostovetsky, Leonard, Digital Tulips? Returns to Investors in Initial Coin Offerings (May 20, 2018). Available at SSRN: <http://dx.doi.org/10.2139/ssrn.3182169>. Accessed April 21, 2019.

⁴⁴ *Ey.Com*, 2019, *Supra* note, 42.

⁴⁵ Paul Vigna, "Raising Money In The Crypto World Has Gotten A Lot Harder", *WSJ*, 2019, <https://www.wsj.com/articles/raising-money-in-the-crypto-world-has-gotten-a-lot-harder-11554037201>. Accessed April 21, 2019.

⁴⁶ Benedetti, *Supra* note, 43.

⁴⁷ SEC.Gov | Two ICO Issuers Settle SEC Registration Charges, Agree To Register Tokens As Securities", *Sec.Gov*, 2019, <https://www.sec.gov/news/press-release/2018-264>. Accessed April 21, 2019.

digital assets to develop their product⁴⁸. Airfox goal was to develop token-denominated “ecosystem” that would permit users in emerging markets to earn tokens and exchange them for data by interacting with advertisements⁴⁹. Paragon goal was to add blockchain technology to the cannabis industry and work towards legalization of cannabis⁵⁰. Both companies received fine of USD 250,000 and SEC required companies to reimburse harmed investors who purchased tokens in “illegal offerings” if an investor will make a claim⁵¹. The SEC considered that in both ICOs their digital tokens qualified as a securities. According to US case law (SEC v. Howey Co.), investment contracts where person invests his money in a company and is led to expect profits solely from efforts of the promoter are considered securities⁵². The key element in definition is that person is led to expect to receive profits. In both above mentioned examples, people expected to receive profit from their initial coins which they obtained during ICO at the moment when demand for tokens will increase along with popularity of the companies. Tokens which are deemed as securities are called “security tokens”. While tokens which are meant solely for use within developer platforms and are not expected to increase their value are considered “utility tokens”.

1.2.2. Security tokens

This chapter will explain what is a security token and what are the methods of determining which tokens are utility tokens and which are security tokens. Chapter will analyse term “blockchain-based assets” and provide insights in to the “Howey test” in relation with digital assets. Security token is a token which contains right to a certain asset. In IPOs the asset which is offered to the public are shares of the company. In situations of token sale, the asset theoretically could be everything owned by the company – including, but not limited to shares of the company, promissory profit notes, loan agreements, real estate, etc. Everything what is owned by the company theoretically can be tokenized by creating a smart contract where would be programmed rights to the asset. According to SEC statements, there have been several warnings to ICOs who claimed to have utility tokens, when in fact, according to Securities Act, these tokens qualified as securities⁵³. Due to their nature, security tokens are often called investment tokens.

⁴⁸ SEC. *Supra* note, 47.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ *Ibid.*

⁵² SEC v. W. J. Howey Co., 328 U.S. 293, 298–99 (1946).

⁵³ SEC.Gov | Statement On Digital Asset Securities Issuance And Trading", *Sec.Gov*, 2019, <https://www.sec.gov/news/public-statement/digital-asset-securites-issuance-and-trading>. Accessed April 22, 2019.

From technical perspective blockchain-based assets are technologically embedded in a ledger where all transactions are maintained by a network of nodes⁵⁴. For virtual assets issuance and ownership are defined by blockchains – cryptocurrency coins and tokens⁵⁵. It is not possible to transfer digital asset without digital signature of the previous owner⁵⁶. It could be compared with transfer of shares in the company where it is necessary to submit a shareholder agreement or shareholders registry where previous shareholder must verify the transfer of shares with the signature. At the moment, most of EU Member States require that such documents are filed with Enterprise Registries where these changes are further confirmed or declined. In situation where company's shares would be virtually converted in to digital tokens (tokenized), it would be possible to transfer them only with the consent of the previous owner. Company's stock is one of the things which is possible to tokenize. From technical perspective it works in a way that company creates digital tokens and in smart contract codes the information with regards to share nominal value, date of issue and rules on how it can be transferred. Upon transfer of the tokens, company must notify responsible Enterprise Registry about the changes in shareholder registry. Since the shares of the companies in most of the world are no longer in paper format, tokenized shares do not disturb the *status quo* so far if the process of transfer is carried out according to applicable law of the jurisdiction.

USA and EU are regions where the most ICOs were launched until April 2019⁵⁷. Therefore, it is important to look how authorities are viewing the concept of security tokens in both of these regions. According to European Securities and Markets Authority (ESMA) security tokens fall in to a category of crypto-assets⁵⁸. ESMA defines that “(c)rypto-assets are a type of private asset that depends primarily on cryptography and DLT⁵⁹”. In USA in order to determine whether tokens qualify as “investment tokens” SEC uses “Howey test” which arises from case law SEC v. J. Howey co. – where Supreme Court ruled that “investment contracts where person invests his money in a company and is led to expect profits solely from efforts of the promoter are considered securities⁶⁰”.

Until April 2019, there are more than 3000 launched ICOs around the world⁶¹. Number of STOs is significantly smaller due to the complexity and unclear legislation across the world.

⁵⁴ Azgad-Tromer, *supra* note 3, p. 76.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*

⁵⁷ Zetzsche, *supra* note 38, p. 11.

⁵⁸ ESMA. Advice on Initial Coin Offerings and Crypto-Assets. 2019. p 4. Available: https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf Accessed April 22, 2019.

⁵⁹ *Ibid.*

⁶⁰ SEC v. W. J. Howey Co., 328 U.S. 293, 298–99 (1946).

⁶¹ Zetzsche, *supra* note 38, pp 11-13.

The exact amount of launched STOs is unclear because most of the STOs until April 2019 have been private offerings with “accredited investors” only. In Advice on Initial Coin Offerings ESMA admits that crypto-assets raise specific challenges for regulators and market participants. According to ESMA there are more than 2000 crypto-assets and large number of existing crypto-assets could be one of the reasons creating challenges to regulators. With SEC decision from November 16, 2018 USA has established case law that tokens which consist of expected future profits are deemed as securities and therefore must be registered with SEC. In USA there is established process how company who intends to offer securities through offering (STO) is able to register them with SEC. Company has to either register as a national securities exchange firm or file “Form D” which is used to file a notice of an exempt offering of securities⁶². With “Form D” company is able to offer security tokens to “accredited investors” only. There are several regulations in EU which determine what is security and further research in chapter 2. will analyse them in detail.

⁶² SEC.Gov | Form D", *Sec.Gov*, 2019, <https://www.sec.gov/info/smallbus/cfformd.htm>. Accessed April 22, 2019.

2. LEGAL FRAMEWORK

2.1. Importance of legal framework in public offerings

In 1988 Ronald Case wrote that in order for financial market to successfully exist, there must be intricate system of rules and regulations⁶³. Even if state's role in capital market is residual or indirect, it remains an integral feature of the market, not an impediment to it. Approach which was widely developed in 1990-ties supports the idea that state can influence capital markets behaviour in many ways over through than a "command and control" approach regulation⁶⁴. This statement is very important with development of new technologies. There are Member States of EU who have chosen to treat transactions based on blockchain with additional caution and "flag" them in order to limit them (for example, Latvia, Czech Republic, Poland). While at the same time there are Member States who have chosen to support blockchain solutions, by creating appropriate legislation where they define such subjects like tokens, ICO, cryptoassets. Example in this situation is Malta which was one of the first Member States to create legislation towards ICOs and Guidelines on how income from investments in cryptocurrencies should be taxed⁶⁵.

The importance of law for business development should not be underestimated. OECD in Regulatory Policy Outlook 2018 states that "[w]hile good regulation is conducive to economic growth and well-being, inadequate regulation endangers both⁶⁶". At the same time OECD emphasizes how complicated for law-makers it is to create new legislation with current pace of technological development and interconnectedness of economies⁶⁷. In order to adapt to technological development and new economic trends, public sector must be increasingly agile and recognize fields where new regulations must be implemented⁶⁸. In situations of public offerings, legal framework is important for all involved parties. From perspective of investors, it is important to create a clear mechanism how to protect them. From perspective of organizers of public offerings, it is important to have clear set of rules on how to properly organize the offering. Existence of legal framework towards investor protection is one of the reasons why

⁶³ Niamh Moloney, Eilis Ferran and Jennifer Payne, *The Oxford Handbook of Financial Regulation*, Oxford, 2015. Accessed April 13, 2019. <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199687206.001.0001/oxfordhb-9780199687206-miscMatter-3>

⁶⁴ *Ibid.*

⁶⁵ Bonnici, Rosanne "Malta: Malta's tax framework surrounding an individual's ownership of cryptoassets". *International Tax Review*, Jan 28 (2019). Accessed April 2019 from ProQuest online, ID: 2187363232.

⁶⁶ OECD Regulatory Policy Outlook 2018. OECD Publishing 2018. Accessed April 23, 2019. Available: <https://doi.org/10.1787/9789264303072-en>

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

companies choose to launch their IPOs in these jurisdictions⁶⁹. Condition of clear legal environment towards investor protection encourages companies to launch their IPOs in these jurisdictions due to the fact that it is easier to attract investors if there is legal protection for them. However, in ICOs and STOs legal framework is not so straight forward as it is for IPOs, therefore it is important to research existing legislation to find a way how to protect investors and create a way for organizers how to raise funds through these types of offerings.

When discussing investor protection in STOs, it is crucial to analyse investor protection in ICOs because of their similar nature and the fact that several ICOs have already offered security tokens in public offerings. Investor protection in ICOs differs between primary and secondary markets. Primary market in ICOs refers to a direct token purchase from ICO issuers during Initial Coin Offering which is held on issuer's blockchain platform⁷⁰. Every ICO before launch conducts marketing campaign during which potential investors are informed about details of ICO. In most cases, the document which contains certain specifics about ICO is "White Paper" where organizer of ICO voluntarily discloses information about the project. However, it is important to mention that there are no legal requirements on what kind of information should be disclosed in White Paper before launching ICO. Therefore, if compared with standards of securities offerings, information provided by ICOs is selective and relatively incomplete⁷¹. Main problems with regards to incomplete information are related with information about team of organizers, information about corporate structure which is legally responsible for ICO and financial background of the ICO issuer⁷². In September 2017 SEC intervened and stopped fraudulent ICO due to the misleading information provided in White Paper⁷³. According to SEC, issuers of ICO (Recoin Group Foundation LLC, DRC WORLD INC. a/k/a Diamond Reserve Club and owner Maksim Zaslavskiy) stated on White Paper that they have raised USD 2M – USD 4M from initial investors when in fact the amount was only USD 300,000; also, company stated that they have hired professional lawyers and consultants who will help to increase returns on investments to investors in ICO, when in fact they never made contact with mentioned lawyers and consultants⁷⁴. Besides that, company claimed to offer tokens which were backed by real estate and diamonds, which according to USA Securities Act

⁶⁹ La Porta Rafael, Florencio Lopez-de Silanes, Shleifer Andrei, Vishny Robert. "Investor Protection and corporate governance", *Journal of Financial Economics*, Volume 58 (2000): p. 5-7, accessed April 23, 2019, [https://doi.org/10.1016/S0304-405X\(00\)00065-9](https://doi.org/10.1016/S0304-405X(00)00065-9).

⁷⁰ Iris H-Y Chiu. "Decoupling tokens from trading: reaching beyond investment regulation for regulatory policy in initial coin offerings", *International Business Law Journal*, 3 (2018): p. 267, accessed April 23, 2019, from Westlaw International Data base.

⁷¹ *Ibid*, p. 2.

⁷² *Ibid*.

⁷³ SEC v. Recoin Group Foundation, LLC., 17 U.S. ECF Case (2017). Available on <https://www.sec.gov/litigation/complaints/2017/comp-pr2017-185.pdf> Accessed April 23.

⁷⁴ *Ibid*.

would classify as an investment contracts (securities) and would have to be properly registered with SEC. In fact, there were no real estates nor diamonds which could support the tokens. The SEC obtained emergency court order from United States District Court Eastern District of New York and froze the assets of Mr. Zaslavskiy and his companies. In situation where authorities are able to intervene and freeze the assets of the company, approach made by SEC could be one of the solutions on how to protect investors in primary markets in ICO. However, as mentioned above, in many cases corporate body behind ICO is unclear and is often incorporated in offshore jurisdictions where legal framework with regards to investor protection is not developed as well as in USA or EU.

One of the reasons why initial investors of ICOs are not afraid of the brief information provided by ICO issuers is that they expect to use tokens purchased in ICO on secondary markets⁷⁵. Due to the high price volatility, investors expect to receive untypically high returns on investments, if compared with classical capital markets. Very often there is applied principle of high risk – high reward. One of the risks for investors who plan to use tokens in secondary markets is risk of subsequent dilution in situations when ICO organizers decide to issue new tokens in the future to attract additional funding. As mentioned above, information provided in White Paper is solely up to organizers of ICO and often they choose not to include information that they will issue new tokens to attract additional funding⁷⁶. New token issuing could diminish the value of existing tokens because demand for the tokens decreases if supply increases⁷⁷. Since the issuing of new tokens is solely in promoters' control, there is no real investor protection from diminishing value of tokens by issuing new ones. One way how purchasers are protecting themselves is by selling their tokens immediately after acquiring them – this method is often used by venture capital funds that have received tokens in return of their pre-ICO investments⁷⁸. However, from perspective of legal framework, there is no real investor protection developed in cases of token devaluation. Another concern for investors with regards to ICOs is liquidity preference. In cases of bankruptcy or termination of the platform / product token holders do not have a liquidity preference⁷⁹. After the debt holders and outside creditors were satisfied with the liquidation value, token holders usually have no recourse at all⁸⁰.

⁷⁵ Iris H-Y Chiu. *Supra* note 70, p. 268.

⁷⁶ *Ibid.*, p. 269.

⁷⁷ Kaal, Wulf A. and Dell'Erba, Marco, Initial Coin Offerings: Emerging Practices, Risk Factors, and Red Flags (November 8, 2017). Forthcoming, *Fintech Handbook*, Florian Möslin & Sebastian Omlor eds., Verlag C.H. Beck (2018) ; U of St. Thomas (Minnesota) Legal Studies Research Paper No. 17-18. Available at <http://dx.doi.org/10.2139/ssrn.3067615> Accessed April 23, 2019.

⁷⁸ *Ibid.*, p. 16.

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

Secondary markets with regards to ICOs and cryptocurrencies are considered exchanges where token holders are able to trade with purchased tokens and exchange them against other tokens, state-backed currencies or cryptocurrency. It is believed that secondary markets are key to success of ICOs, because tokens which are traded are conferred as assets and purchasers are able to trade with them immediately after they acquire them⁸¹. Secondary markets were created in 2011 as markets for trade with cryptocurrencies – such as bitcoin and ether, but with time developed also as exchanges for tokens which are issued in ICOs⁸². Secondary markets use blockchain-enabled clearing and settlement, and therefore there is no need to rely on infrastructure developed by conventional financial markets⁸³. Trading markets are freely accessible by users and there is no need for intermediaries, such as investment brokers or dealers. There are many secondary markets for trading ICO tokens in different parts of the world. Secondary markets are completely self-regulatory, and it is up to the exchange what kind of technical solutions will it implement in order to protect customers data or improve usability of the exchange. However, it is important to outline that secondary markets in a way as they are functioning now are usable for trade with utility tokens which do not hold equity rights to the assets. With existing legislation, it is not possible to trade with security tokens on standard (unregulated) secondary markets, because trade with securities is regulated. As an example, from USA, can be used SEC penalties to Airfox and Paragon⁸⁴ after which companies have removed their tokens from secondary markets and it is not possible to trade with them at the moment (April 2019). Since secondary markets are not regulated by central authorities, investor protection depends solely on exchange itself.

Huge decrease in launched ICOs⁸⁵ can be explained by several factors. One of the factors is that it is related with global “crypto-bubble” tendency which illustrates that the highest raised amounts in ICOs were during the peak period in cryptocurrencies – December of 2017 and January of 2018⁸⁶. Another significant factor which is often mentioned is large amount of unrealized ICO projects, ICO fraud⁸⁷ and huge decrease in token value. In situations when project is not realized, and value of token has decreased there are not many options what one can do with such tokens. One of the options would be to realize them on secondary markets,

⁸¹ Chiu, *supra* note 70, p. 269.

⁸² *Ibid*, p. 271.

⁸³ *Ibid*.

⁸⁴ SEC.Gov | Two ICO Issuers Settle SEC Registration Charges, Agree To Register Tokens As Securities", *Sec. Gov*, 2019, <https://www.sec.gov/news/press-release/2018-264>. Accessed April 21, 2019.

⁸⁵ Paul Vigna, "Raising Money In The Crypto World Has Gotten A Lot Harder", *WSJ*, 2019, <https://www.wsj.com/articles/raising-money-in-the-crypto-world-has-gotten-a-lot-harder-11554037201>. Accessed April 21, 2019.

⁸⁶ Coin Market Capitalizations | Coinmarketcap", *Coinmarketcap*, 2019, <https://coinmarketcap.com/currencies>. Accessed April 24, 2019.

⁸⁷ Zetzsche, *supra* note 38, pp 20-21.

however, it is highly unlikely that market participants will be interested in such tokens. Hence, there is increase in demand for tokens which after unrealized projects will still have a value – security tokens. The idea behind is that in situations if project developers fail to develop the project, investors will have a certain asset which would still have a value on secondary markets. For example, in cases when token holds property rights to real estate; or rights to shares in the company who organizes the offering. As mentioned in chapter 1.2.2. there are various types of possible security tokens and several ways on how to technically make it possible to code the asset in the token. If theoretically all assets can be “coded” in to digital tokens, then practically it depends on existing legislation and integration with regulating authorities – for example, Enterprise Registries and Land Registries. The next chapter will analyse EU legislation towards ICO’s and STO’s in order to illustrate how it is possible to organize digital token offering in EU.

2.2. EU legislation in ICO / STO process

According to data from April 2019, EU is in the first place in category of launched ICOs until end of 2018 and with regards to amount of raised funds in 2018⁸⁸. With regards to individual countries, leader in ICOs launched until April 25, 2019 is USA (524 ICO’s) and it is followed by Singapore (409) and United Kingdom (347)⁸⁹. Among EU Member States, leader is United Kingdom and it is followed by Estonia (209 ICOs until April 25, 2019) and Germany (77)⁹⁰. With regards of total funds raised the leaders are United Kingdom (USD 938M), Estonia (USD 610M) and Lithuania (258M)⁹¹. It is important to mention that data in total raised funds is subject to change in term of days, however, this statistic provides overview to outline how important it is to have a straight-forward legislation in EU towards ICOs and STOs as well as on which are the top jurisdictions among EU Member States for ICOs and STOs.

2.2.1. Markets in financial Instruments Directive

Firstly, it is important to determine what is security token according to EU legislation. In order to determine what is a security token according to EU legislation, it is necessary to analyse Directive 2014/65/EU on Markets in financial Instruments (MiFID II). The key element to determine what is the security in EU lies in definition of “transferable securities” and

⁸⁸ Daniele Pozzi, "ICO Market 2018 Vs 2017: Trends, Capitalization, Localization, Industries, Success Rate", *Cointelegraph*, 2019, <https://cointelegraph.com/news/ico-market-2018-vs-2017-trends-capitalization-localization-industries-success-rate>. Accessed April 24, 2019.

⁸⁹ Track ICO – provider of information about the best ICOs and STOs. www.trackico.io Accessed April 24, 2019.

⁹⁰ *Ibid.*

⁹¹ Pozzi, *supra* note 88.

therefore, it is important to determine whether tokens can be classified as “transferable securities”. According to MiFID II Article 4 (1) (44):

‘transferable securities’ means those classes of securities which are negotiable on capital market, with the exception of instruments of payment, such as:

- a) shares in companies and other securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares;
- b) bonds or other forms of securitised debt, including depositary receipts in respect of securities;
- c) any other securities giving the right to acquire or sell any such securities or giving rise to cash settlement determined by reference to transferable securities, currencies interest rates or yields, commodities or other indices of measure.⁹²

It is important to outline that MiFID II does not provide definition on “securities”. For token to be negotiable on capital markets, it must be transferrable. As discussed in previous paragraphs, most tokens are transferable and ability to trade with tokens on secondary markets is one of the main reasons why investors choose to ignore lack of information in White Paper when it is compared with publicly accessible information during IPOs⁹³. Every token which is listed on any secondary market (exchange) is negotiable by default. In situations where tokens hold right to an asset and token holder is able to trade with token on secondary markets, according to MiFID II it would be considered as transferable security and therefore pursuant to securities regulations. From technical perspective, it is possible to create “locked tokens” which are non – transferable after sale on primary market and would not fall in to category of “transferable securities”⁹⁴. Such tokens would not qualify as securities because it would not be possible to transfer them. However, there are also ICOs where tokens are locked for some period of time and afterwards released⁹⁵. According to European Securities and Markets Authority (ESMA) these type of tokens should be determined on case by case basis.

In Statement published on 13 November 2017 ESMA warned ICO issuers that their [ICO] activities might constitute regulated activities⁹⁶. ESMA’s mission is to enhance investor protection and promote stable financial system in EU⁹⁷. ESMA outlines that in case if ICO activities should be regulated, firms have to comply with relevant legislation and failure to

⁹² Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU Text with EEA relevance. OJ L 173, 12.6.2014, p. 349–496. Available on: <http://data.europa.eu/eli/dir/2014/65/oj>. Accessed April 25, 2019.

⁹³ Chiu, *supra* note 70, p. 268.

⁹⁴ EOS ICO. Frequently Asked Questions. <https://eos.io/faq> Accessed April 26, 2019.

⁹⁵ ICO Rating. Telegram. White Paper. Available on: <https://icorating.com/upload/whitepaper/gNQ7e9z3lCGi519Wz8mmC0Kg8aA0goeZKAQ802vo.pdf> Accessed April 26, 2019.

⁹⁶ European Securities and Markets Authority. ESMA Alerts firms involved in Initial Coin Offerings (ICOs) to the need to meet relevant regulatory requirements (13.11.2017). Available on: https://www.esma.europa.eu/sites/default/files/library/esma50-157-828_ico_statement_firms.pdf Accessed April 26, 2019.

⁹⁷ ESMA. Who we are. Available on: <https://www.esma.europa.eu/about-esma/who-we-are>. Accessed April 26, 2019.

comply with the applicable rules would constitute a breach⁹⁸. Further ESMA lists several directives which are applicable in situations if company would trade with financial instruments (securities) – such as Prospectus Directive, MiFID II, Alternative Investment Fund Managers Directive, Fourth Anti-Money Laundering Directive⁹⁹. Additionally to listed directives, ESMA outlines that national rules may apply. In January 2019, ESMA released “Advice on Initial Coin Offerings and Crypto-Assets” where it stated that “crypto-assets sector remains modest in size and ESMA does not believe that it currently raises financial stability issues”¹⁰⁰. ESMA also stated that:

The actual classification of a crypto-asset as a financial instrument is the responsibility of an individual NCA and will depend on the specific national implementation of EU law and the information and evidence provided to that NCA¹⁰¹.

NCA stands for National Competent Authority of Member State. With such statement, ESMA leaves definition of utility / security tokens solely up to each Member State by creating complex legal environment for investors and ICO issuers. As it is confirmed in survey, which was conducted by ESMA in summer of 2018¹⁰², Member State NCAs during implementation of MiFID II in their national laws, have defined the term “financial instrument” differently – some Member States use restrictive list of examples while others use broader interpretations¹⁰³. Survey results show that while one Member State will define certain token as a security, it is possible that another Member State will consider it to be utility token. Another statement which ESMA made in “Advice on Initial Coin Offerings” was that each situation where type of token is determined, should be looked as an individual case¹⁰⁴. Such system of determination is more complicated compared with USA, where SEC implemented “Howey test” with relatively simple approach – investment contracts where person invests his money in a company and is led to expect profits solely from efforts of the promoter are considered securities¹⁰⁵. While in EU ESMA emphasizes that such determination is up to individual Member States and every case should be evaluated separately. According to such determination, companies who would be interested in issuing security / investment tokens via ICO (STO) would have to follow national rules of EU Member State of their registration and of the place where it wishes to offer security tokens as well as to EU laws. In the following sub-chapters will be analysis of

⁹⁸ ESMA Alerts firms involved in Initial Coin Offerings (ICOs), *supra* note 96.

⁹⁹ *Ibid.*

¹⁰⁰ European Securities and Markets Authority. Advice. Initial Coin Offerings and crypto-Assets (09.01.2019). Available on: https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf Accessed April 26, 2019.

¹⁰¹ *Ibid.*

¹⁰² ESMA. Legal Qualification of crypto-assets – survey to NCAs (January, 2019) Available on: https://www.esma.europa.eu/sites/default/files/library/esma50-157-1384_annex.pdf. Accessed April 27, 2019.

¹⁰³ European Securities and Markets Authority, *supra* note 100.

¹⁰⁴ *Ibid.*

¹⁰⁵ SEC v. W. J. Howey Co., 328 U.S. 293, 298–99 (1946).

directives and regulations which would be applicable if issued tokens would have to be registered as securities.

2.2.2. Prospectus Directive

In cases if token qualifies as a transferable security, organizer of STO would have to create a publication of prospectus before the offer of securities to the public, unless certain exclusions apply. Prospectus Directive regulates what kind of information should be included in the document. From July 21, Prospectus Directive shall be repealed by Regulation 2017/1129 (New Prospectus Regulation)¹⁰⁶. The main goal of prospectus is to enable investors to make an informed assessment of the assets, liabilities and the financial information of the issuer¹⁰⁷. Prospectus Directive and New Prospectus Regulation both provide information on what information must be included in to prospectus. Issuers must include following information in prospectus: information about their financial standing; information about their assets and liabilities; information about their profits and losses; the rights attached to securities and the reason for the issuance and its impact on the issuer¹⁰⁸. Information in a prospectus must be written and presented “... in an easily analysable, concise and comprehensible form...”¹⁰⁹. According to Chapter IV of New Prospectus Regulation, prospectus can’t be published without approval from relevant competent authority of the Member State¹¹⁰. Once the competent authority of the Member State has confirmed the prospectus, it shall notify ESMA of the approval. After approval of prospectus, the offeror or the issuer must make prospectus available to the public at a reasonable time in advance of, and at the latest at the beginning of the offer to the public by publishing prospectus in electronical format on one of the following websites: issuers website; financial intermediary placing or selling securities; the website of the regulated market where trading will take place¹¹¹. As discussed in chapter 1.2.1. there are no legal requirements on what type of information should be presented in White Papers before ICO. Since there are no legal requirements, White Papers differ from every ICO in terms of structure, information included, and information disclosed. For example, Telegram which has raised 1,7B USD in two rounds of private sale of tokens¹¹² and is considered to be the largest ICO with

¹⁰⁶ Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC Text with EEA relevance. OJ L 168 30.06.2017. p. 12-82. Available on: <http://data.europa.eu/eli/reg/2017/1129/oj>. Accessed April 25, 2019.

¹⁰⁷ *Ibid.*

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*

¹¹² EDGAR Search Results, *Sec. Gov*, 2019, <https://www.sec.gov/cgi-bin/browse-edgar?company=TON+Issuer+Inc&owner=exclude&action=getcompany>. Accessed April 27, 2019.

regards to raised funds, had a White Paper which consisted of 23 pages and had no mention of company's' financial standing nor information on what is the corporate body standing behind ICO¹¹³.

Prospectus Directive and New Prospectus Regulation both include certain exemptions with regards of scope. Article 1 (3.) stipulates that Regulation does not apply to offers of securities to the public where total raised amount during period of 12 months does not exceed EUR 1 000 000¹¹⁴. Article 3 (2) stipulates that Member States are able to apply national law for public offers of securities if the total raised amount is between EUR 1 000 000 and EUR 8 000 000 during period of 12 months¹¹⁵. Member States should still have a certain disclosure requirements implemented in their national law in cases of security offerings to public where total amount is below threshold. New Prospectus Regulations states that offers should be exempt from prospectus obligation if: the offer is addressed to qualified investors; the offer is addressed to non-qualified investors that commit to invest at least EUR 100 000; if the offer is addressed to fewer than 150 non-qualified investors per Member State¹¹⁶.

The average amount raised in ICOs in 2018 was USD 11,52 M (EUR 10,3M)¹¹⁷. In ICOs, where tokens qualify as "transferable securities", all ICOs launched in territory of EU with raised amount above EUR 8 000 000 would have to publish prospectus. However, until April 2019 there are 0 prospectuses registered with ESMA with regards to crypto-assets, ICOs, blockchain¹¹⁸. Such statistics could be explained with the argument that ICO issuers do not consider that tokens qualify as transferable securities pursuant to definition set out in MiFID II or with the fact that tokens during ICO are offered to qualified investors or to non-qualified investors in amount below 150 and with investments of at least EUR 100 000 per investor. However, it is important to mention that in industry which develops as fast as crypto-asset industry, it is possible that ESMA Prospectus search data base is not able to provide the latest information with regards to approved prospectuses from Member States. Therefore, it is important to research National Competent Authorities of Member States in order to obtain the "full picture" of STO activities in EU.

With regards to ICOs and STOs it is important to always consider the fact that all offerings are carried out online. Therefore, it is important to determine what national rules are

¹¹³ ICO Rating. Telegram. White Paper. *Supra* note, 95.

¹¹⁴ Regulation (EU) 2017/1129. OJ L 168 30.06.2017. Article 1 (3).

¹¹⁵ *Ibid.*

¹¹⁶ *Ibid.*

¹¹⁷ Cointelegraph.com. ICO Market 2018 Vs 2017: Trends, Capitalization, Localization, Industries, Success Rate", *Cointelegraph*, 2019, <https://cointelegraph.com/news/ico-market-2018-vs-2017-trends-capitalization-localization-industries-success-rate>. Accessed April 28, 2019.

¹¹⁸ ESMA. Search Prospectus. <https://registers.esma.europa.eu/publication/searchProspectus> Accessed April 28, 2019.

applicable to such offering in situation when it is offered in various Member States at the same time, but the amount of funds raised falls within the limit of exemption of New Prospectus Regulation (or Prospectus Directive). According to New Prospectus Regulation and Prospectus Directive, regulator of the Member State, where the offer is taking place, is competent for approval of such public offering in situations where tokens are transferable securities. Aspect which is often arising in ICOs is how to determine Member State where ICO is organized. The place where public offering is organized (offered to the general public) determines which Member State should evaluate it and determine whether tokens are considered as transferable securities and whether Prospectus Directive is applicable. The determination should be up to the competent authority of the Member State based on marketing activities in certain geographic location - marketing activities on TV in Member State, on radio, on online portals, etc. It is important to outline that several ICOs choose to restrict USA citizens participation in ICOs due to the fact that SEC in order to protect US citizens could apply penalties to organizers of ICO due to established regulations of security tokens in United States. Chapter 3 will analyse certain ICOs / STOs and illustrate how they have issued tokens and what are the risks of investors in these certain situations.

Applicable law with regards to prospectus liability in ICOs is determined by Rome II¹¹⁹. In the absence of specific choice-of-law, the general rule in Article 4 (1) in Rome II applies – law applicable to non-contractual obligations is of the country where the damage occurs¹²⁰. Since there have been 0 registered prospectuses in relation with ICO or STO, there is no case law with regards to prospectus liability in ICOs / STOs from European Court of Justice (ECJ). However, there is a case law with regards to prospectus liability in IPO and according to Lober EU:C:2018:701 the applicable law is from the country where prospectus is notified, where investor is domiciled and where payments are made¹²¹. Considering that there are several connecting factors to be combined, ECJ outlines that place of dissemination of the information prevails among them¹²².

¹¹⁹ Sanchez Fernandez Sara. “ICOs and investor protection: a cross-border perspective”, *Journal of International Banking Law and Regulation*. 34 (3) (2019): p. 104, accessed April 23, 2019, from Westlaw International Data base.

¹²⁰ *Ibid.*

¹²¹ *Ibid.*

¹²² *Ibid.*

2.2.3. Market Abuse Regulation

The Market Abuse Regulation (MAR) establishes common regulatory framework in insider trading, unlawful disclosure of information and market manipulation (market abuse)¹²³. MAR would be applicable to STOs if security tokens after their initial sale would be traded on regulated market. Provided that tokens issued within STO are traded on regulated markets, Article 17 provides legal framework on how to inform the public as soon as possible of inside information. The issuer has to ensure that inside information which might affect value of tokens is made public as soon as possible¹²⁴. According to Article 17 (1.) issuer must keep all relevant inside information on its website at least for a period of 5 years. Also, company within scope of MAR would have to keep updated list of insiders – persons who have access to inside information and who are working under the contract of employment. The issuer must be able to provide competent authority with updated insider list upon request.

With regards to Market Abuse Regulation and ICO / STO in European Union, it is possible to state that ICOs / STOs would have to implement significant changes within their internal policies in order to be able to comply with MAR requirements. In “Advice on Initial Coin Offerings and crypto-assets” ESMA states that in cases where crypto-assets do not qualify as financial instruments, trading with them is outside of the scope of MAR¹²⁵. According to information analysed in sub-chapter 2.2.1. it is National Competent Authority’s responsibility to determine whether certain tokens issued within ICO are “transferable securities”.

2.2.4. Anti-Money Laundering Directive

European Banking Authority (EBA) and ESMA both state that crypto-asset sector bears no threat to financial stability issues, because of its modest size¹²⁶. While both institutions do not see crypto-asset sector as a threat to financial stability, they both outline the importance of bringing several actors within crypto-asset field within scope of Anti-Money Laundering Directive (AMLD). The Fifth Anti-Money Laundering Directive (AMLD5) which is required to be implemented into national law by January 2020, amends existing AMLD in several aspects and one of them is inclusion of regulations towards activities related with virtual currency. AMLD5 defines providers engaged in exchange services between virtual currencies

¹²³ Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC Text with EEA relevance. *OJ L 173, 12.6.2014, p. 1–61*. Available on: <http://data.europa.eu/eli/reg/2014/596/oj>. Accessed April 25, 2019.

¹²⁴ *Ibid.*

¹²⁵ European Securities and Markets Authority, *supra* note 100.

¹²⁶ EBA. Report with Advice for the European Commission on crypto-assets. (09.01.2019). Available on: <https://eba.europa.eu/documents/10180/2545547/EBA+Report+on+crypto+assets.pdf>. Accessed April 28, 2019.

and fiat currencies and custodian wallet service providers as a subjects of AMLD5¹²⁷. According to AMLD5, "... competent authorities should be able, through obliged entities, to monitor the use of virtual currencies"¹²⁸. The main authority who will control information flowing through virtual currency exchanges will be Financial Intelligence Unit of the Member State. Such provision indirectly impacts ICO / STO process in EU, because it imposes additional regulations on secondary markets where investors usually trade with tokens against other tokens, virtual currency or state-backed (fiat) currency.

There are Member States in EU who have already implemented additional regulatory provisions on virtual currency exchanges and electronic wallet service providers. The first EU Member State who implemented such provisions in national Money Laundering and Terrorist Prevention Act was Estonia in October 2017¹²⁹. In order to provide virtual currency exchange or virtual currency e-wallet services, company must apply for appropriate license from Financial Intelligence Unit (FIU). Since January of 2018 when companies were able to apply for the licenses, FIU has issued in total 1502 licenses where 800 are issued for services of exchanging a virtual currency against fiat currency and 702 have been issued to virtual currency wallet service providers¹³⁰. Existence of such licensing provisions could be one of the reasons why Estonia with 209 ICOs until May 2019 ranks 2nd among EU Member States in number of ICOs launched¹³¹.

AMLD5 defines "virtual currencies" as a "... representation of value that is not issued or guaranteed by a central bank or a public authority ... and does not possess a legal status of currency or money..."¹³². AMLD5 does not define "token", "ICO / STO" nor "digital assets". In conclusion of 2nd chapter it is possible to state that legislation towards ICO / STO organization in EU lacks legal predictability because it relies on individual evaluation on case-by-case basis of National Competent Authorities.

¹²⁷ Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 201/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU (Text with EEA Relevance) OJ L 156, 19.6.2018, p. 43–74. Available on: <http://data.europa.eu/eli/dir/2018/843/oj>. Accessed April 25, 2019.

¹²⁸ *Ibid*, (8).

¹²⁹ Estonia. Money Laundering and Terrorist Financing Prevention Act (26 October 2017). Available on: <https://www.riigiteataja.ee/en/eli/ee/517112017003/consolide/current>. Accessed April 25, 2019.

¹³⁰ MEAC. Operating licenses. <https://mtr.mkm.ee/tegevusluba?m=97> Accessed April 28, 2019.

¹³¹ Track ICO – provider of information about the best ICOs and STOs. www.trackico.io Accessed April 24, 2019.

¹³² Directive (EU) 2018/843, *supra* note 127.

3. CASE STUDY

3.1. United Kingdom

According to ICO statistics, United Kingdom is the leader in EU in terms of organized ICOs with 384 public offerings until May, 2019¹³³. This chapter will analyse national law in UK with regards of ICOs and STOs and supplement analysis of legislation with real-life examples of launched ICOs. While UK is a Member State of European Union, EU law with regards to prospectus, market abuse, anti-money laundering, etc. is applicable in UK. National Competent Authority who is responsible for matters related with ICOs / STOs in UK is Financial Conduct Authority (FCA UK)¹³⁴. UK legislation towards STOs will be viewed in following categories: definition of ICO; threshold for prospectus publishing in public offerings; crowdfunding law.

In November of 2017 FCA UK released official statement on UK's official position towards ICOs. In statement, FCA UK defines ICOs as a digital way of raising funds from the public using virtual currency¹³⁵. In the statement FCA UK outlines that ICO projects often are in a very early stage of development and investors should treat them with caution due to the high volatility of crypto-assets¹³⁶. FCA UK states that evaluation of investment tokens within certain ICOs depends on a case-by-case basis. In Feedback Statement on Distributed Ledger Technology released on December 2017, FCA UK states that certain tokens could be defined as financial instruments and therefore they would have to be registered with regulatory authorities, otherwise according to Financial Services and Markets Act 2000 (FSMA), it is a criminal offence punishable by up to two years in prison, or fine, or both¹³⁷.

FCA UK outlines that tokens which constitute "transferable securities" as defined in MiFID2 may fall within the prospectus regime¹³⁸. According to Prospectus Directive and New Prospectus Regulation, certain exemptions apply and NCAs of Member States are able to specify threshold up to EUR 8M for public offerings without prospectus requirement. Threshold

¹³³ Track ICO. *Supra* note, 89.

¹³⁴ For purposes of clarity in the research, when National Competent Authorities will be mentioned in the form of abbreviation, country will follow the name of institution – for example – Financial Conduct Authority from United Kingdom (FCA UK); Financial Intelligence Unit from Estonia (FIU EE).

¹³⁵ Initial Coin Offerings", *FCA*, 2019, <https://www.fca.org.uk/news/statements/initial-coin-offerings>. Accessed April 29, 2019.

¹³⁶ *Ibid.*

¹³⁷ UK Financial Conduct Authority. Distributed Ledger Technology – Feedback Statement on Discussion Paper 17/03. (December 2017). Available on: <https://www.fca.org.uk/publication/feedback/fs17-04.pdf>. Accessed April 30, 2019.

¹³⁸ *Ibid.*

below which a prospectus is not required in UK is EUR 8M¹³⁹. Additionally, prospectus is not required in following situations: if the offer is made to “qualified investors” only; the offer is made to fewer than 150 persons, other than qualified investors, per EEA State; the minimum amount invested is EUR 100 000 per person; transferable securities being offered are denominated in amount of at least EUR 100 000¹⁴⁰. According to FSMA “qualified investor” is defined in Annex II of MiFID 2: “Entities which are required to be authorised or regulated to operate in the financial markets¹⁴¹”. Several examples of professional investors are credit institutions, investment firms, insurance companies, pension funds, collective investment schemes, commodity derivatives dealers¹⁴².

STO organization on basis of crowdfunding regulation is one of the options on how to offer tokenized assets to the public. Crowdfunding in UK is governed by FCA UK and financial regulator divides 4 types of crowdfunding: 1) loan-based crowdfunding; 2) investment-based crowdfunding; 3) donation-based crowdfunding; 4) pre-payment or rewards-based crowdfunding¹⁴³. Crowdfunding activities are regulated with FSMA. With regards to STOs, loan-based crowdfunding (also known as peer-to-peer crowdfunding) and investment-based crowdfunding is relevant and therefore will be analysed in this chapter. Loan-based crowdfunding (further – P2P) is a system where consumers lend money in return for interest payments and / or repayment of capital over time. According to FCA UK, P2P investors are lenders who have created bilateral loan agreements – each investor has an individual contract in order to grant money to each borrower¹⁴⁴. Investment-based crowdfunding is where consumers invest directly or indirectly in company by buying shares or debentures¹⁴⁵. Crowdfunding platforms are operating as intermediaries between lenders and borrowers in order to provide services to both parties. There are several crowdfunding platforms based in UK and among the most popular platforms are crowdcube.com and seedrs.com. It is important to outline that crowdfunding platforms and companies who are raising funds through crowdfunding platforms are still applicable to EU legal rules with regards to offers to the public

¹³⁹ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. (February 8, 2019). Available: <https://www.esma.europa.eu/press-news/esma-news/esma-publishes-list-thresholds-below-which-eu-prospectus-not-required>. Accessed May 1, 2019.

¹⁴⁰ United Kingdom. Financial Services and Markets Act 2000. (14 June 2000). Available on: <https://www.legislation.gov.uk/ukpga/2000/8/section/86#commentary-key-8c81d4b56fa2b775d99c5deb3dc9cee1>. Accessed April 30, 2019.

¹⁴¹ Track ICO. *Supra* note, 92.

¹⁴² *Ibid.*

¹⁴³ FCA. Crowdfunding and authorization. Available on: <https://www.fca.org.uk/firms/authorisation/when-required/crowdfunding>. Accessed May 1, 2019.

¹⁴⁴ FCA. Loan-based (peer-to-peer) and investment-based crowdfunding platforms: feedback on our post-implementation review and proposed changes to the regulatory framework. (July 2018). Available on: <https://www.fca.org.uk/publication/consultation/cp18-20.pdf>. Accessed May 1, 2019.

¹⁴⁵ ESMA. National Thresholds below which the obligation of prospectus does not apply. *Supra* note, 143.

and in the moment when funds raised within crowdfunding platform would reach the threshold for prospectus, company (borrower) would be pursuant to publish prospectus to the public according to Prospectus Directive. In UK threshold for publishing prospectus is EUR 8M. FCA UK states that companies who are raising funds through crowdfunding platforms are in early stage of development and investors should evaluate investments with additional caution. As FCA UK outlines, investors who participate in crowdfunding, don't have access to the Financial Services Compensation Scheme and in case if project will fail, they will lose all their investments¹⁴⁶.

In 2016, FCA UK developed Regulatory sandbox which is designed to allow businesses to test innovative proposition in the market¹⁴⁷. Regulatory sandbox permits close cooperation between innovators and regulators in order to test their newly developed product, create framework for consumer protection in new areas and reduce regulatory uncertainty by enabling access to the finance¹⁴⁸. Criteria to be accepted in Regulatory sandbox by FCA are: 1) carrying out or supporting financial services in UK; 2) genuinely innovative; 3) identifiable consumer benefit; 4) need for sandbox testing; 5) ready to test¹⁴⁹. By reviewing list of businesses accepted in to Regulatory sandbox since June 2016, it is possible to see that from total of 118 businesses 44 are developing products based on DLT¹⁵⁰. Such statistics illustrate that nearly 37% of companies accepted in to Regulatory sandbox are working in close cooperation with FCA UK in order to develop consumer-safe and tested products which are based on blockchain technology. Some of the projects include storage of companies' shares on the blockchain in order to manage shareholders registries (Otonomos); DLT-based cross-border money remittance system to tackle money laundering and terrorism financing (Chynge); development of platform that facilitates the issuance and manages the lifecycle of regulated bonds by use of DLT (Fineqia); and even a project which is developed by London Stock Exchange Group (LSEG) – DLT integration within LSEG to test market infrastructure for issuance, admission and trading of equity securities, evidencing the change of beneficial ownership¹⁵¹. Several companies which are accepted in to Regulatory sandbox by FCA UK are there in order to

¹⁴⁶ FCA. Crowdfunding. (02.02.2018). Available on: <https://www.fca.org.uk/consumers/crowdfunding>. Accessed May 1, 2019.

¹⁴⁷ FCA. Regulatory Sandbox. (29.04.2019). Available on: <https://www.fca.org.uk/firms/regulatory-sandbox>. Accessed May 1, 2019.

¹⁴⁸ FCA. Regulatory sandbox lessons learned report. (October 2017). Available on: <https://www.fca.org.uk/publication/research-and-data/regulatory-sandbox-lessons-learned-report.pdf>. Accessed May 1, 2019.

¹⁴⁹ *Ibid.*

¹⁵⁰ FCA. Loan-based and investment-based crowdfunding platforms. *Supra* note, 147.

¹⁵¹ *Ibid.*

develop their product towards launch of STO. As a case study, company TokenMarket Ltd. will be analysed.

TokenMarket Ltd. was accepted in to FCA UK Regulatory sandbox in July 2018 with a goal to develop “[f]unding platform that uses DLT to facilitate the issuance of shares in private companies more efficiently¹⁵²”. TokenMarket Ltd. is a strategic and technology advisory firm with offices in London, Dubai, Gibraltar and Helsinki. According to company’s size it should not be considered as a startup or in the early stage of the development. Company which is legally responsible for STO is registered in Gibraltar with registration number 115460¹⁵³. In February 2019 TokenMarket Ltd. announced that they will organize an STO in order to raise GBP 10M by attracting funds from accredited and self-certified investors¹⁵⁴. The launch of the STO will happen with overview from FCA in order to make sure that compliance procedure towards investors is carried out according to the regulatory framework. According to information provided in TokenMarket Ltd. official offering website, everyday investors (self-certified investors) will be able to participate in offering under UK Crowdfunding rules¹⁵⁵. In Terms of Service Agreement between private self-certified investors and TokenMarket, company outlines the possible risks of investment as well as it sets out strict Arbitration clause towards disputes arising from Service Agreement¹⁵⁶. Arbitration clause sets out following rules: place of arbitration will be Gibraltar; by agreeing to arbitration clause, investor declines his rights to sue in the Court; there will be one arbitrator and arbitration will remain confidential; applicable law will be law of Gibraltar and English common law¹⁵⁷. Since the sale of tokens for self-certified investors hasn’t started yet, it is not possible to deduct the full scope of available information. However, in 1st May 2019 there is no available information with regards to company’s financial standing in terms of profit and loss statement, equity, shareholder registry, etc. The goal for raised amount from self-certified investors via Crowdfunding platform is GBP 2M while the rest 8M will be raised through private offerings from accredited investors with minimum investment of GBP 100 000¹⁵⁸. One of the main reasons for such division is to avoid prospectus publishing, which requires much higher level of information disclosure than

¹⁵² FCA. Regulatory Sandbox – cohort 4. (03.07.2018). Available on: <https://www.fca.org.uk/firms/regulatory-sandbox/regulatory-sandbox-cohort-4-businesses>. Accessed May 1, 2019.

¹⁵³ TokenMarket. TokenMarket STO. Available on: <https://tokenmarket.net/security-token/tokenmarket-sto-retail/>. Accessed May 1, 2019.

¹⁵⁴ Securities.io. TokenMarket to host Security Token Offering. (16.02.2019). Available on: <https://www.securities.io/tokenmarket-to-host-security-token-offering/>. Accessed May 1, 2019.

¹⁵⁵ FCA Regulatory Sandbox. *Supra* note, 147.

¹⁵⁶ Terms of Service. TokenMarket. Available: <https://tokenmarket.net/identity/terms?next=https%3A%2F%2Ftokenmarket.net%2Fsecurity-token%2Ftokenmarket-sto-retail%2Ffollow#1.0>. Accessed May 1, 2019.

¹⁵⁷ *Ibid.*

¹⁵⁸ FCA Regulatory Sandbox. *Supra* note, 147.

crowdfunding campaign. In May 2019 there have been no other STOs with offers to everyday investors in United Kingdom, however, the number of UK companies who have publicly stated that they will launch an STO during 2019 are well above 10 and some of them have been accepted in FCA Regulatory sandbox.

In conclusion of this chapter, it is possible to state that regulating authority of UK (FCA) has listed investments based on crypto-assets as highly volatile and therefore dangerous where investors may fall outside of scope of FCA's legal protection. At the same time FCA has developed support mechanism in form of Regulatory sandbox which helps to facilitate business based on DLT, including businesses who have expressly stated that their goal is to convert shares of the company to tokens and offer them to the public – organize an STO. Under existing legislation, it is possible to create an STO based on Crowdfunding rules with pre-condition that such activity is registered with FCA UK. In future it is necessary to maintain close look on development of secondary market with regards to crypto-assets in UK. Also, in context of Brexit, it is necessary to follow development of current STO projects after UK leaves EU, provided that it will happen in foreseeable future.

3.2. Estonia

With 209 organized ICOs until May 2019, Estonia ranks second in EU in category of launched ICOs¹⁵⁹. UK is a leader in launched ICOs (384) due to several factors – one and possibly the most important of the factors is that UK and London in particular have historically developed reputation as a financial centre in Europe. Another reasons why people choose to organize ICOs in UK could be the fact that UK is a common law country with legal rules clearly available in English. However, with Estonia it is a different situation. Estonia, with population of 1,3M, has not established a reputation of financial centre and official language is Estonian. Therefore, it is important to research legislation of Estonia in order to find a reason why it attracts companies who wish to organize ICOs.

National Competent Authority with regards to supervision of capital market in Estonia is *Finansinspektion* (Estonian Financial Supervisory Authority - EFSA). The main supervisory activities for EFSA are divided between supervision of markets and services, and capital supervision¹⁶⁰. According to ESMA, NCAs of each Member State should determine on case-by-case basis which tokens qualify as a security tokens (financial instruments) and should be subject to regulations set out in MiFID II for “transferable securities”¹⁶¹. In statement about

¹⁵⁹ Track ICO. *Supra* note, 89.

¹⁶⁰ About Finansinspektion. (23.01.2019) Available: <https://www.fi.ee/en/finansinspektion/about-finansinspektion>. Accessed May 2, 2019.

¹⁶¹ ESMA. Advice on Initial Coin Offerings. *Supra* note, 58.

legal status of ICOs, EFSA outlines that when assessing whether or not securities laws apply, substance should be considered over form¹⁶². With such statement EFSA suggests that each case should be assessed on individual, isolated basis where is necessary to evaluate the rights which specific token grants to the holder. EFSA states that if token will permit certain rights in the issuer's company or its value will be tied with the success of the issuer, it will likely be considered as securities pursuant to Article 2 of Securities Market Act of Estonia (SMA)¹⁶³. Article 2 of SMA defines securities as:

Proprietary right or obligation or contract transferred on the basis of at least unilateral expression of will is a security, even without a document being issued¹⁶⁴.

Further SMA lists examples of securities: shares, bonds or other convertible securities, debt obligations, an investment fund unit or share, money market instrument, a derivative security, a tradable depository receipt¹⁶⁵. According to SMA, in order to qualify as a security, token must be tradable. Without exceptions set out in subsection (2) of Article 12 of SMA, offer of securities is public. These exceptions are: 1) an offer is addressed solely to qualified investors; 2) an offer is addressed to fewer than 150 persons other than qualified investors per Contracting State; 3) an offer of securities is addressed to investors who invest at least EUR 100 000; 4) nominal value is at least EUR 100 000 per security; 5) total consideration of less than EUR 2,5M per all Contracting States in total calculated in a one-year period¹⁶⁶. One of the most significant differences from rules set out in MiFID II is that offer of total consideration of less than EUR 2,5M is not considered a public offer and therefore it is not pursuant to requirements applicable for public offer – for example, does not have to draft prospectus.

National threshold below which the obligation to publish a prospectus does not apply in Estonia is EUR 5M¹⁶⁷. For public offers between EUR 2,5M and EUR 5M the issuer must publish a simplified prospectus in accordance with rules established by Minister of Finance¹⁶⁸. According to the rules established by Minister of Finance, with regards to information which is relevant to STO issuers, simplified prospectus must include following information: 1) information on responsible persons: names, contact details, positions in the company; 2) information about the auditors who audited the company; 3) names and addresses of persons who are providing legal aid to the issuer; 4) specific information about shares issued in public

¹⁶² EFSA. The legal framework of initial coin offering in Estonia. (10.09.2018). Available on: <https://www.fi.ee/en/investment/aktuaalsed-teemad-investeerimises/virtuaalraha-ico/legal-framework-initial-coin-offering-estonia>. Accessed May 2, 2019.

¹⁶³ EFSA. The legal framework of initial coin offering in Estonia. *Supra* note, 162.

¹⁶⁴ Estonia. Securities Market Act. (01.04.2019). Available: https://www.riigiteataja.ee/en/compare_original?id=522032019007. Accessed May 2, 2019.

¹⁶⁵ *Ibid.*

¹⁶⁶ *Ibid.*

¹⁶⁷ ESMA. National Thresholds below which the obligation of prospectus does not apply. *Supra* note, 143.

¹⁶⁸ *Ibid.*

offering – most importantly all rights arising from the shares; 5) the amount of income tax withheld in the country of registration of the issuer and in the country of residence of the issuer when the dividend is paid out; 6) information whether issuer retains income tax on dividend¹⁶⁹. When analysed White Papers of current ICOs launched under Estonian legislation, none of the companies have provided so significant amount of information as is required in “simplified prospectus” rules. According to publicly available information on registered and approved prospectuses in Estonia, it is possible to see that until May 2, 2019 there are 0 registered prospectuses with regards to issue of tokenized securities¹⁷⁰. Such statistics leads to conclusion that none of 384 ICOs consider their issued tokens as a securities or they have followed the exemption rules set out in SMA.

Article 149 (4) of Commercial Code of Estonia stipulates that to transfer the shares of the company, notarial authorization is required, and notary is responsible to inform commercial register about the changes in shareholder registry¹⁷¹. Provision 149 (4) is not applicable if shares are entered in to Estonian register of securities¹⁷². Since one of the ways on how to organize an STO is to digitalize shares of the company and issue them as tokens to investors, it is important to outline that every share transfer, outside of register of securities, would have to be notarized. Another option on how to launch STO is to digitalize future profit agreements or loan agreements. However, it is important to register such tokens as securities in regulated registry (Nasdaq Baltic) because without proper registration during sale of these type of tokens, it would be complicated to list such securities on regulated secondary markets (exchanges) due to the lack of International Securities Identification Number (ISIN). In order to successfully organize STO in Estonia, it would be necessary to establish an investment firm or create a cooperation with firm which holds such license in order to create securities account for the issuer’s company and for every investor during the period of the STO. According to Article 85 of SMA, investment firm would have to register securities on behalf of the investors who have opened securities account with investment firm¹⁷³.

With amendments in Money Laundering and Terrorist Financing Prevention Act (MLTFPA) in October 2017, Estonia prohibits to provide cryptocurrency exchange and virtual currency e-wallet services without appropriate licenses issued by Financial Intelligence Unit of

¹⁶⁹ Estonia. Nõuded väärtpaberite avaliku pakkumise, kauplemis- ja noteerimisprospektile. (21.07.2012). Available: <https://www.riigiteataja.ee/akt/118072012004?leiaKehtiv>. Accessed May 2, 2019.

¹⁷⁰ EFSA. Approved Prospectuses. Available on: <https://www.fi.ee/en/investment/registers/registered-public-offerings/approved-prospectuses#rahandusministri>. Accessed May 2, 2019.

¹⁷¹ Estonia. Commercial Code. (01.03.2019). Available on: <https://www.riigiteataja.ee/en/eli/ee/522062017003/consolide/current>. Accessed May 2, 2019.

¹⁷² *Ibid.*

¹⁷³ Estonia. Securities Market Act. *Supra* note,164.

Estonia (FIU)¹⁷⁴. FIU is independent structural unit of Estonian Police and Border Guard Board who is supervising authority for obligated persons who must comply with MLTFPA¹⁷⁵. Since FIU is responsible for supervision of obligated persons with regards to MLTFPA and EFSA is national competent authority with regards to supervision of markets and services, and capital supervision, it is necessary to outline that both institutions are independent governmental bodies with separate set of functions. Provisions in MLTFPA with regards to licenses to providers of cryptocurrency exchange platforms and virtual currency e-wallet services created large demand for such licenses and since January 2017 FIU has issued in total of 1502 licenses¹⁷⁶. In order to receive the licenses, company must submit application to FIU which is supplemented with detailed CV of all officials of the company; certificate of absence of criminal record; detailed business plan; AML / KYC rules, including with technical specification on how customers data shall be processed; internal policy documents¹⁷⁷. If company does not operate in the area of activity subject to the authorisation, FIU holds the right to renounce the license.

Since January 2014 Estonia is developing e-Residency program which provides government-issued digital identity to people who are not residents of Estonia¹⁷⁸. e-Residency grants foreigners Estonian national ID number which places them in to National Peoples Registry in Estonia by giving them access to e-governance and e-signature services. The system is designed for entrepreneurs who wish to incorporate a company in Estonia (and in EU) and control it remotely from abroad. Since launch of e-Residency program in 2014, 54,638 people from 169¹⁷⁹ countries have applied for e-Residency and established 6882 companies in Estonia¹⁸⁰. From January 2018, Commercial Code of Estonia has provision (subsection 2 of Article 631) which states that if management board of the company is located in a foreign state, then company must designate a local contact person who's registered address shall be deemed as the registered address of the company¹⁸¹. Such provision grants legal rights to management board of the company to control the business solely from abroad.

In conclusion of the chapter it is possible to state that existence of licensing regime for cryptocurrency exchanges and virtual currency e-wallet service providers along with e-

¹⁷⁴ Estonia. Money Laundering and Terrorist Financing Prevention Act. *Supra* note, 129.

¹⁷⁵ Politsei-ja Piirivalveamet. Functions of Financial Intelligence Unit. (05.02.2019). Available: <https://www2.politsei.ee/en/organisatsioon/rahapesu-andmeburoo/functions-of-fiu/>. Accessed May 2, 2019.

¹⁷⁶ MEAC. Operating licenses. *Supra* note, 130.

¹⁷⁷ FIU. Authorisation for economic activity. (05.02.2019). Available: <https://www2.politsei.ee/en/teenused/majandustegevuse-luba.dot>. Accessed May 2, 2019.

¹⁷⁸ Become an e-Resident. Available: <https://e-resident.gov.ee/become-an-e-resident/>. Accessed May 2, 2019.

¹⁷⁹ e-Residency. Statistics. (02.05.2019). Available: <https://app.cyfe.com/dashboards/195223/5587fe4e52036102283711615553>. Accessed May 2, 2019.

¹⁸⁰ e-Residency 2.0. White Paper. (18.12.2018). Available: <https://s3.eu-central-1.amazonaws.com/ereswhitepaper/e-Residency+2.0+white+paper+English.pdf>. Accessed May 2, 2019.

¹⁸¹ Estonia. Commercial Code. *Supra* note, 171.

Residency regime and local contact person provision in Commercial Code, is the main reason why Estonia ranks in the second place in launched ICOs in EU. Cryptocurrency exchange or virtual currency service provider license does not have a direct relation with launch of ICO *per se*, however, in the field, which is as volatile as cryptocurrency field, holding a license which is issued by EU Member State gives additional credibility to the company. However, situation with STOs is different because the fact that company holds either cryptocurrency exchange license or virtual currency e-wallet service provider license does not release it from regulations pursuant to offering securities. Therefore, it is important to follow how legislation in Estonia will develop, because of the high number of organized ICOs, Estonia has put itself on the map of blockchain technologies.

3.3. Germany

With 77 launched ICOs until May 3, 2019 Germany ranks 3rd in EU in category of launched ICOs¹⁸². National Competent Authority with regards to financial market supervisory in Germany is *Bundesanstalt für Finanzdienstleistungsaufsicht* (BaFin)¹⁸³. The first statement made by BaFin towards ICOs was in 15 November 2017¹⁸⁴. In report BaFin warns consumers about high risk of ICOs and outlines the fact that Stock Corporation Act is not applicable to tokens issued in ICOs and therefore tokens do not grant any legal protection or guaranties to investors. BaFin states:

Based on the specific formulation of the contract for each ICO, BaFin decides on case-by case basis whether the offeror is required to obtain authorisation pursuant to the German Banking Act, Investment Code, Payment Services Supervision Act or Insurance Supervision Act and whether they must fulfil prospectus requirements¹⁸⁵.

Germany is the first country in European Union where NCA has approved prospectus with regards to Security Token Offering¹⁸⁶ and the first STO was launched in March 11, 2019 and will last until July 8, 2019¹⁸⁷. The goal is to raise EUR 100,000,000 (hundred million EUR). During the first month of the STO, company has raised EUR 2M¹⁸⁸. This chapter will focus on Bitbond Finance GmbH (further – Bitbond) case study from perspective of legal analysis in

¹⁸² Track ICO. *Supra* note, 89.

¹⁸³ BaFin. Federal Financial Supervisory Authority. (02.05.2019). Available: https://www.bafin.de/EN/Homepage/homepage_node.html. Accessed May 3, 2019.

¹⁸⁴ BaFin. Initial Coin Offerings: High risks for consumers. (15.11.2017). Available: https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2017/fa_bj_1711_ICO_en.html?nn=8249098. Accessed May 3, 2019.

¹⁸⁵ *Ibid.*

¹⁸⁶ BaFin. Bitbond Finance GmbH Prospectus. Available: <https://portal.mvp.bafin.de/database/VPInfo/prospekt.do?details=true&id=25022001&typId=40&bereich=3&cmd=zeigeProspektEmittentenSuche>. Accessed May 3, 2019.

¹⁸⁷ Bitbond Finance GmbH Prospectus. (30.01.2019). p 42. Available: <https://www.bitbondsto.com/files/bitbondsto-prospectus.pdf>. Accessed May 3, 2019.

¹⁸⁸ Bitbond. About us. Available: https://www.bitbond.com/about_us. Accessed May 4, 2019.

order to illustrate what legal rules must be followed in order to organize legally compliant STO in Germany.

National threshold for publishing prospectus in Germany is EUR 5M for offers made by credit institutions and by issuers whose shares are admitted to trading on regulated market. Threshold for publishing prospectus is EUR 8M if securities are only provided in conjunction with investment advice and only if issuer is able to verify that securities that can be acquired by non-qualified investor do not exceed EUR 1,000 or amount is up to EUR 100,000 depending on monthly net income of the non-qualified investor¹⁸⁹. Issued amount of securities in Bitbond STO was EUR 100M, therefore prospectus had to be published and prospectus had to be drafted according to Prospectus Directive instead of national rules of Germany. Bitbond GmbH which is a 100% shareholder in Bitbond Finance GmbH is a company which operates in the field of business financing – company manages business lending platform for small business loans¹⁹⁰. Bitbond GmbH was registered in 2013 under name of CreditSix Management GmbH and since then company has issued loans in amount of EUR 13,8M. Approximate costs which shall arise during the process of an STO is estimated in amount of EUR 5,6M divided in following positions: 1) legal advice – EUR 120,000; 2) marketing and sale – EUR 400,000; 3) audits and acquisition costs – EUR 1,785; 4) software development – EUR 80,000; 5) maximum rewards for affiliate partners – EUR 5M¹⁹¹. Offered security is qualified as subordinated token-based bonds in Germany with total nominal amount of EUR 100,000M (hundred million euro) with minimum subscription amount of EUR 1,00¹⁹². Prospectus specifically outlines that investors subject to US and Canadian tax laws are not able to participate in the offering, because securities won't be registered under US Securities Act of 1933. It is necessary to mention that in order to participate in the offering, users have to register and conduct Know Your Customer (KYC) form within issuers platform, where it is not possible to register if the user is from US or Canada¹⁹³. Terms of service expressly states that people from countries where trade with tokens is not permitted or from countries which are listed on the Financial Action Task Force's (FATF) high-risk jurisdictions are excluded from participation in STO¹⁹⁴. During process of the registration, it is necessary to fill KYC form where future investors have to upload their personal identification document, list their address of residence (for tax residency purposes) and choose the most suitable way of transferring the funds – in cryptocurrencies or in EUR.

¹⁸⁹ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

¹⁹⁰ Bitbond. About us. Available: https://www.bitbond.com/about_us. Accessed May 4, 2019.

¹⁹¹ Bitbond Finance GmbH Prospectus. *Supra* note, 187.

¹⁹² *Ibid.*

¹⁹³ Bitbond. Terms of Service. Available: <https://www.bitbondsto.com/terms#affiliate>. Accessed May 4, 2019.

¹⁹⁴ *Ibid.*

Once the registration is complete, investors receive confirmation e-mail with all official documents with regards to the public offering – prospectus, service agreement, Bitbond consumers information and Bitbond Finance data policy. In “Terms & Conditions” as law applicable to the form and content of the Bonds and all rights and obligations of the Issuer and Creditors is stated law of Federal Republic of the Germany, excluding the application of the UN Convention on Contracts for the International Sale of Goods and conflict of laws provision¹⁹⁵. Person is not able to participate in the offering without providing consent to the Terms and Conditions. Consumer information document states that the registered office of the Issuer shall be the place of jurisdiction for legal disputes arising in relation with Bonds with The Local Court of Berlin having “non-exclusive” jurisdiction. It is important to outline the fact that in all official documents the Issuer is using term “bond” instead of token. Such approach is explained with the fact that according to New Prospectus Regulation Article 6 (2) information should be presented in an “easily analysable and comprehensible form”¹⁹⁶. Term token could create a confusion due to the fact that there are several possibilities on what type of securities can be coded in to the token.

Since Bitbond STO is an offering which occurs purely online, on issuers platform, it is necessary to analyse how investors from other EU countries are able to participate and how they receive information about the offering. According to Article 24 (1) of New Prospectus Regulation, the prospectus approved by the home Member State shall be valid to the public offer or admission to trading in any number of host Member States, provided that ESMA and competent authority of each host Member State is notified according to provisions set out in Article 25¹⁹⁷. Article 25 stipulates that competent authority of home Member State, after request from the issuer, shall notify competent authority of each host Member State with a certificate of approval attesting that prospectus has been drawn up in accordance with the Regulation and with an electronic copy of the prospectus¹⁹⁸. According to publicly available information obtained from competent authority of Latvia (FCMC), Bitbond hasn’t registered public offering in Latvia¹⁹⁹. However, investors from Latvia are able to receive all marketing information related with the public offering, because it is freely available online. Pursuant to Article 22 (6) of the New Prospectus Regulation, national competent authorities shall have the power to exercise control over the compliance of advertising activity, relating to an offer of securities to

¹⁹⁵ Bitbond STO. Terms and Conditions. Available: <https://www.bitbondsto.com/terms>. Accessed May 4, 2019.

¹⁹⁶ Regulation (EU) 2017/1129. *Supra* note, 106. 132

¹⁹⁷ *Ibid.*

¹⁹⁸ *Ibid.*

¹⁹⁹ FKTK. Reģistrētie Prospektus. (05.05.2019). Available: <http://www.fktk.lv/lv/tirgus-dalibnieki/finansu-instrumentu-tirgus/emitenti/prospekti/2018.html>. Accessed May 5, 2019.

the public²⁰⁰. Information about Bitbond STO can be accessed by investors from Latvia in several ways: 1) directly visiting www.bitbondsto.com in order to access the investment platform; 2) advertisement materials published by Bitbond affiliate partners; 3) through search engine consoles, by specifically searching for STO opportunities in EU. Even though, information is freely available, Bitbond hasn't carried out advertising campaigns in territory of Latvia and therefore it is not pursuant to register the prospectus with FCMC. Information with regards to prospectus and terms of service are sent to each investor by e-mail once investor has already agreed to applicable law and jurisdiction. However, at the moment when company would start to advertise their offering on Latvian TV, radio, online media, then FCMC would have to inspect the available information and request Bitbond to register the public offering in territory of Latvia.

In conclusion of sub-chapter where was analysed German law with regards to STO, it is possible to conduct several important findings. The finding with the most significance is that Bitbond was able to register prospectus and launch STO in the scope of existing legislation. In sub-chapter 2.2.1. where was analysis of MiFID 2, it was concluded that current legal framework in USA is more predictable from perspective of the issuer, because in every case *Howey test* is used, while in EU competent authorities of each Member State has to evaluate projects on case-by-case basis. Bitbond case study illustrates that with existing legal framework in EU it is possible to launch an STO. The success of STO should be evaluated after period of 12 months when company has to submit their first official publication on financial results. During the evaluation, it will be important to evaluate use and availability of Bitbond tokens on secondary markets, since this is one of the main reasons why investors participate in ICOs / STOs. Another important conclusion from Bitbond case study is that as long as issuer does not conduct direct marketing campaigns in other Member States, then it is not necessary to register prospectus with NCA of each Member State in order to permit investor participation from that country. Such conclusion is significant from perspective of STO due to its online nature. It is highly unlikely that in future it will be possible to see advertisements about STOs on TV, radio or printed media. In situations where issuer would have to register prospectus in other Member States than home Member State, due to New Prospectus Regulation, the process of registration is simplified and issuer is able to use the same, already approved prospectus, providing that it is translated after the request of host Member State.

²⁰⁰ Regulation (EU) 2017/1129. *Supra* note, 106. 132

3.4. Malta

With 68 launched ICOs until May 3, 2019 Malta ranks in Top 5 in EU²⁰¹. Due to recently published legislation which regulates DLT and ICOs / STOs, Malta has developed reputation as a crypto-hub of EU²⁰². National competent authority is Malta Financial Services Authority (MFSA) which regulates banking, financial institutions, insurance companies, investment companies, securities markets, recognized investment exchanges, company service providers and pension schemes²⁰³. In April 25, 2019 MFSA issued “Guidance note to the public regarding cryptocurrency scams” where regulator warns investors on how to detect and avoid cryptocurrency scams. In the Guidance note to the public, MFSA states that until April 25, 2019 there were no white papers registered with MFSA and no entities licensed by the Authority under the Virtual Financial Assets Act (VFSA) which regulates the offering of financial assets to the public and services related with virtual financial assets²⁰⁴. In statement made by MFSA, Malta has a goal to present the country as the “Blockchain island” and to become the first jurisdiction to regulate the crypto-asset sphere²⁰⁵. Statement of that kind is not common among regulating authorities of EU Member States; therefore, it is important to analyse Malta’s Virtual Financial Assets Act and research country’s approach towards issuance of security tokens.

VFSA is in force since 1st November 2018 and is considered to be the first legal rule among EU Member States which specifically regulates issuance of digital tokens²⁰⁶. VFSA has defined “DLT asset” as “a) virtual token; b) virtual financial asset; c) electronic money; d) a financial instrument²⁰⁷”. According VFSA “virtual financial asset (VFA)” means:

... any form of digital medium recordation that is used as a digital medium of exchange, unit of account, or store of value and that is not – a) electronic money; b) a financial instrument; c) a virtual token²⁰⁸.

In definition of “virtual token” VFSA excludes its possibility to be a security by stating that virtual token is a form of digital medium recordation whose utility, value or application is restricted solely to the acquisition of goods or services on issuer’s DLT platform or other related, but limited, DLT platforms. According to VFSA, Article 3 (1) it is not allowed to offer

²⁰¹ Track ICO. *Supra* note, 89.

²⁰² Bonninci, *Supra* note, 65.

²⁰³ MFSA. Welcome. (05.05.2019). Available: <https://www.mfsa.com.mt>. Accessed May 5, 2019.

²⁰⁴ MFSA. Guidance note to the public regarding cryptocurrency scams. (25.04.2019). Available: <https://www.mfsa.com.mt/wp-content/uploads/2019/04/Guidance-Note-English-FINAL.pdf>. Accessed May 4, 2019.

²⁰⁵ MFSA. Fintech and blockchain: MFSA trains teachers and job advisers to ensure local talent is future ready. (12.04.2019). Available: <https://www.mfsa.com.mt/news-item/fintech-and-blockchain-mfsa-trains-teachers-and-job-advisers-to-ensure-local-talent-is-future-ready/>. Accessed May 5, 2019.

²⁰⁶ MFSA. Guidance note to the public. *Supra* note, 204.

²⁰⁷ Malta. Virtual Financial Assets Act. 01.11.2019. Available: <https://www.mfsa.com.mt/wp-content/uploads/2018/12/fintech-main-legislation.pdf> Accessed May 5, 2019.

²⁰⁸ *Ibid.*

a virtual financial asset to the public in Malta or from Malta unless issuer has White Paper which is prepared according to VFAA and White Paper is registered with MFSA²⁰⁹. According to VFAA definition of “virtual financial asset”, such registration of White Paper is applied only in situations where pure utility tokens are issued which are not 1) electronic money; 2) financial instrument; 3) virtual token. According to such definition, ICOs which are issuing utility tokens, and which are available on secondary markets after the offer, should register their White Paper according to provisions set out in VFAA. Virtual Financial Asset (VFA) Service license shall be declined if the competent authority (MFSA) will determine that DLT asset qualifies as a financial instrument (Article 13 of VFAA) and if company who holds the license will trade with tokens which qualify as financial instruments, then MFSA shall hold the rights to annul the license and remove tokens from virtual exchange which is operating in Malta (Article 46 (5))²¹⁰. Article 50 of VFAA stipulates that every company which have a VFA license is obliged to appoint an auditor who shall report directly to MFSA on how license holders follows the VFAA.

In order to determine whether issued DLT asset is defined as a financial instrument according to MiFID II and should be registered accordingly, MFSA has developed Financial Instrument Test (FIT). FIT must be filled by every company who wishes to apply for VFA license, and it is publicly available on website of MFSA. FIT must be sent to MFSA where it shall further be determined whether DLT assets qualify as financial instruments, electronic money, virtual financial asset or virtual token. If DLT assets qualify as financial instruments pursuant to definition in MiFID 2 or as security tokens, then public offering rules apply. FIT is Excel document which consists of 11 spreadsheets where issuer has to provide various details with regards to intended business activities. Few examples are: 1) Does issuer intend to list DLT Asset to trading on an exchange; 2) can DLT Assets be used outside of the issuer’s platform; 3) can DLT Asset be converted; 4) Is there credit risk transfer in DLT Asset; 5) does DLT Asset give rise to an economic exposure²¹¹. FIT is a tool in order to double-check whether issuers planned ICO does not breach the legal rules and what type of DLT assets issuer is planning to offer. For determination purposes of transferable securities and payment instruments, FIT is using definitions set out in MiFID²¹². The test illustrates that Malta is using the approach set by ESMA and used by other Member States (Estonia, UK, Germany) – substance over form – every case must be individually determined. Even though VFAA is the

²⁰⁹ Malta. Virtual Financial Assets Act *Supra* note, 207.

²¹⁰ *Ibid.*

²¹¹ MFSA. Financial Instrument Test. (05.05.2019). Available: <https://www.mfsa.com.mt/fintech/virtual-financial-assets/guidance/financial-instrument-test/>. Accessed May 5, 2019.

²¹² MFSA. Guidance note to the financial instrument test. (05.04.2019). Available: https://www.mfsa.com.mt/wp-content/uploads/2019/04/20190405_GuidanceFITest.pdf. Accessed May 5, 2019.

first legal rule in EU with regards to regulation of ICOs, the fact that in 6 months since its existence there have been 0 White Papers sent to MFSA illustrates that ICO issuers often choose to launch their projects in non-regulated market places. Since VFAA applies to ICOs only, further in this chapter will follow analysis of Maltese legislation towards public offerings and more specifically – towards STO.

Threshold below which prospectus is not required, in Malta is EUR 5M²¹³. If offer is below EUR 5M, then issuer may seek an admission to trading Prospects MTF, operated by the Malta Stock Exchange (MSE)²¹⁴. Prospects MTF is a multilateral trading facility which is created for small and medium-sized companies to raise capital²¹⁵. Prospects MTF Rules determine the process on how to prepare documents in order to list their securities with MSE and what information should be included in them. One of the criteria which companies must prove is their financial soundness, which must be proved by submitting audited annual financial statements and interim financial statements of the applicant's company as well as of the Group companies, if applicant is part of the Group²¹⁶. Company who wishes to list shares on MSE must employ licensed corporate advisor who will serve as the primary contact person with MSE during process of application²¹⁷. In order to be admitted on Prospects MTF, company must submit "Admissions document" which is considered "simplified prospectus". After conducting research of 5 admission documents, it was concluded that average size of such document is 194 pages where the largest document with 322 pages was for company "Fes Finance PLC"²¹⁸. In period from January 2017 until May 2019 there are no admission documents or Prospects MTF notices with regards to companies carrying out business related with blockchain or cryptoasset activities. When compared offering prospectus of Bitbond which is approved by BaFin and goal is to raise EUR 100 million with admission documents of companies in Malta who wish to raise funds up to EUR 5M, it is possible to conclude that admission documents for Prospects MTF are more sophisticated and contains more specific information than prospectus for BaFin.

In conclusion of sub-chapter where legislation of Malta was analysed, it is possible to state that Malta is one of the first Member States in EU which has created several laws which define and regulate cryptoassets. At the moment there are no public STOs organized under legislation of Malta. VFAA is the first law in EU Member States regulating ICO organization,

²¹³ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

²¹⁴ *Ibid.*

²¹⁵ Malta Stock Exchange. Prospects MTF. (05.05.2019). Available: <https://www.borzamalta.com.mt/markets-prospectsmtf>. Accessed May 5, 2019.

²¹⁶ Malta Stock Exchange. Prospects MTF rules. (January 2019). Available: https://borzamalta.com.mt/ProspectsMTF/Documents/Prospects_rules.pdf. Accessed May 5, 2019.

²¹⁷ *Ibid.*

²¹⁸ *Supra* note, 215.

however, there are no licensed ICOs registered in Malta. Such situation might be explained by the fact that ICOs usually don't provide so sophisticated information as required by VFSA; as well as with the fact that in online environment it is possible to organize ICO in other EU Member States where are lower requirements and still be able to offer it to investors from Malta – in such situations regulator has problems to enforce certain penalties due to the fact that companies who are organizing ICOs are out of the scope of their jurisdiction. MFSA is able to issue a warning to investors where it warns against dangerous investments in ICOs and informs investors that their investments are out of scope of protection of MFSA, however, they are not able to prohibit participation in ICOs arising outside from Malta. National threshold for prospectus is EUR 5M, however, “simplified prospectus” which must be submitted with MSE in the form of admission document, is more sophisticated than prospectus according to Prospectus Directive. Strict regulatory measures could be the main reason why no public STOs are launched in Malta, because organizers of STO might choose other Member States where national rules towards accepting prospectus are not as strict as in Malta. However, it is important to outline that Malta is positioning the country as a “blockchain island” and therefore, further follow-up is necessary in order to see how local authorities will attract companies who will organize STOs in Malta. One of the ways on how to attract blockchain related businesses could be development of different national rules towards “simplified prospectus” as well as development of more advanced crowdfunding regulation. Crowdfunding regulation in Malta was not researched in this sub-chapter due to the reason that maximum raised limit in investment-based crowdfunding in Malta is EUR 1M at the moment²¹⁹.

3.5. Lithuania

Until May 5, 2019 there have been 30 organized ICOs in Lithuania²²⁰. The number of organized ICOs is not high and there are several countries who are ahead of Lithuania in this category – Spain (34), France (56), Netherlands (64)²²¹. However, Lithuania, similarly like Malta, with several statements made by national authorities has positioned itself to be country which welcomes business which is based on DLT. National competent authority in Lithuania who is responsible for regulating securities market is *Lietuvos Bankas* (Bank of Lithuania)²²².

²¹⁹ Times of Malta. Introducing investment-based crowdfunding in Malta. (31.07.2018). Available: <https://www.timesofmalta.com/articles/view/20180731/business-news/introducing-investment-based-crowdfunding-in-malta.685711>. Accessed May 5, 2019.

²²⁰ Track ICO. *Supra* note, 89.

²²¹ *Ibid.*

²²² ESMA. Board of Supervisors and NCAs. (05.05.2019). Available: <https://www.esma.europa.eu/about-esma/governance/board-supervisors-and-ncas>. Accessed May 5, 2019.

Threshold below which prospectus is not required in Lithuania is EUR 5M and for public offers in range of EUR 100,000 and EUR 5M, the issuer must publish an “information document”²²³.

On 21st January 2019 Bank of Lithuania issued Guidelines on “Position of the Bank of Lithuania on Virtual Assets and Initial Coin Offering”. Article 1. in Paragraph II outlines that in situations when issued tokens contain characteristics of securities and may be transferred to other persons and traded on secondary market or at regulated exchanges, the offering is subject to the provisions of the Republic of Lithuania Law on Securities²²⁴. Following article outlines that in situations where tokens have characteristics of crowdfunding, then ICO is a subject to requirements set out in Law on Crowdfunding²²⁵. As a crowdfunding characteristics, Bank of Lithuania states projects which are created with goal to reach certain goal for which owner of the project needs additional funding and in exchange of the funding owner of the project borrows funds from public by granting investors certain rights in the company which qualifies as transferable securities²²⁶. Law on Crowdfunding has been used by company “UAB Desico” (further in text – Desico) in order to organize the first public STO in EU in November 2018. Therefore, further in this sub-chapter will follow analysis on how Law on Crowdfunding was used in Desico case. Before analysis of Desico, it is important to illustrate the main difference with German company Bitbond Finance GmbH. Bitbond was the first STO in EU launched under Prospectus Directive by registration of prospectus with BaFin; while Desico used national law of Lithuania – Law on Crowdfunding, because the raised amount in STO was within national threshold for publishing prospectus – EUR 5M.

Article 4 of Law on Crowdfunding stipulates that the project which is organized on crowdfunding platform may be in range of EUR 100,000 up to EUR 5M in 12 months²²⁷. If the project owner wishes to enter in to one or more funding transactions for the total amount of EUR 5M or more in 12 months, then it must be done according to process established by the Law of Securities²²⁸. With regards to the amount above EUR 5M where Law of Securities is applied, it is explained by the fact that EUR 5M is national threshold for publishing prospectus in Lithuania and every offering which is above EUR 5M, is pursuant to follow Prospectus Directive and register prospectus with Bank of Lithuania. The main business activity of Desico is to provide platform for companies who wish to raise funds through issuance of security

²²³ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

²²⁴ Bank of Lithuania. Position of the Bank of Lithuania on Virtual Assets and Initial Coin Offering. (21.01.2019). Available: <https://www.lb.lt/en/bank-of-lithuania-positions-and-guidelines>. Accessed May 5, 2019.

²²⁵ *Ibid.*

²²⁶ *Ibid.*

²²⁷ Lithuania. Law of Crowdfunding. (03.11.2016). Available: <https://www.lb.lt/en/operators-of-crowdfunding-platform#ex-1-5>. Accessed May 5, 2019.

²²⁸ *Ibid.*

tokens. Currently Desico is registered as a crowdfunding platform under Law on Crowdfunding in Lithuania under their business name “Finansu Bite verslui”. However, in time of the STO of Descio, it was still operating as an independent private limited company, according to information in “Information document”. Article 7 of Law on Crowdfunding sets out requirements for companies who wish to become licensed Crowdfunding operators in Lithuania. The requirements state that platform operator shall be legal person (private or public limited liability company) registered in Lithuania with equity capital not lower than EUR 40,000 or it must possess a surety bond which is issued by financial institution for the minimum amount of EUR 100,000 per one founder’s claim and EUR 500,000 for all founder’s claims for compensations of losses per year²²⁹. Platform Operator is responsible to disclose all relevant tax information to companies who wish to raise funds through the platform. Also, platform operator is responsible to manage conflicts between funders and project owners raising funds through the platform²³⁰.

In order to make it possible to trade with issued tokens on secondary market, Desico has concluded partnership agreement with financial brokerage firm CJC FBF “DV Invest” which is licensed financial brokerage firm in Lithuania and operates with category B financial brokerage license issued by Bank of Lithuania in July, 2009²³¹. The raised amount in Desico STO was USD 1M (EUR 893,413) which company raised in period from November 8th – November 30th, 2018²³². Desico offered tokenized future revenue notes which grants token holders 12,5% from all revenue generated by Desico group companies²³³. According to Article 4 of Law on Crowdfunding, if company wishes to raise funds in amount between EUR 100,000 and EUR 5M, it has to prepare information document where is indicated information about the project owner and proposed transaction, and information document must be approved by Platform Operator²³⁴. Specific information which must be included in information document is specified in Resolution 03-45 of Bank of Lithuania. It is important to outline that Bank of Lithuania does not confirm or approve the information document – this is the sole responsibility of the Platform Operator. In situation of Desico, information document was approved by Mr. Audrius Griskevicius – the CEO of “Finansu Bite verslui” from the Platform Operator side; and approved by CEO / Co-Founder of Desico Mr. Laimonas Noreika²³⁵. There is a company “UAB

²²⁹ Lithuania. Law of Crowdfunding. *Supra* note, 227.

²³⁰ *Ibid.*

²³¹ Bank of Lithuania. Supervision of financial market participants. Financial market participants. (06.05.2019). Available: <https://www.lb.lt/en/sfi-financial-market-participants/uab-fimi-dv-invest>. Accessed May 6, 2019.

²³² Desico. News. (06.12.2019). Available: <https://www.desico.io/en/news>. Accessed May 6, 2019.

²³³ Desico. White Paper. (21.11.2018). Available: https://www.desico.io/docs/Offering-document_211118.pdf. Accessed May 6, 2019.

²³⁴ Lithuania. Law of Crowdfunding. *Supra* note, 227.

²³⁵ Desico. White Paper. *Supra* note, 233.

Desico” registered in Centre of Registries of Lithuania with first registration date of April 13, 2018²³⁶. The same company is an issuer of Desico tokenized securities, according to information available in Descio Information Document²³⁷. On May 6, 2019, Desico on company’s website states that Desico is a brand name for publicly listed securities which is operated by company “Finansu Bite verslui” which is licensed Crowdfunding Platform Operator by Bank of Lithuania. In Desico’s Information Document, company discloses that it is related with UAB “Finansu Bite verslui” and UAB FMI “Direct Invest” through their management and upcoming acquisition²³⁸. According to Resolution 03-45 of Bank of Lithuania, information document must disclose the following: company name, legal form, code, date of registration; information about officers of the company and shareholders of the company; amount of authorized capital; organizational structure to illustrate the group where company belongs and its specific position in the group; profit forecast; securities distributed; and other information related with warnings to potential investors²³⁹. In Desico case, it is important to illustrate group structure and company’s place in it. According to the Information Document, Desico will distribute 12,5% of group revenues among token holders²⁴⁰. When such securities are issued, it is vital for investor to understand what is meant by “group revenue” and what type of returns investor is able to expect. On page 7 Desico illustrates group structure where it is possible to see that at the moment of publishing information document, company was planning to add licensed crowdfunding platform and brokerage company to their group of companies²⁴¹. In May 2019, Desico is operating under licensed crowdfunding platform UAB “Finansu Bite verslui”, which has become part of the Desico Group of companies. Therefore, revenue generated by crowdfunding platform shall apply to Desico investors when company will distribute 12,5% of future revenue. It is important to point out the fact that Desico outlined their relationship with UAB “Finansu Bite verslui” in the moment when their “Information document” was published, however, it caused no legal problems for UAB “Finansu Bite verslui” to approve Desico’s “Information document”. Such system illustrates that supervisory measures towards information approval in crowdfunding offerings up to EUR 5M, rely solely on Platform Operator. In situations when company wishing to raise the funds is related with Platform Operator, the latter is still permitted to approve the document.

²³⁶ Centre of Registries of Lithuania. Legal entities. (06.05.2019). Available: http://www.registrucentras.lt/jar/p_en/dok.php?kod=304827865. Accessed May 6, 2019.

²³⁷ Desico. White Paper. *Supra* note, 233.

²³⁸ *Ibid*, p. 39.

²³⁹ Lithuania. Resolution 03-45 of Bank of Lithuania. (28.06.2013). Available: <http://www.infolex.lt/ta/212047>. Accessed May 6, 2019.

²⁴⁰ Desico. White Paper. *Supra* note, 233.

²⁴¹ *Ibid*, p. 7.

From May 7, 2019 Desico will host STO for UAB “Paysera Investments” which is a subsidiary of licensed electronic money institution UAB “Paysera LT” (further Paysera). Goal of Paysera is to raise EUR 2,5M in order to use the funds for service development and entering new markets. Offered securities are future revenue notes without voting and management rights; with annual return on investment: per one unit of security issued – 0,0004 per cent of gross operating profit of Licensed Paysera companies from customers who will start to use Paysera services from February 2019 or 5 % of fixed annual interest²⁴². UAB “Paysera LT” is a company which operates since 2004²⁴³. However, it is important to point out that public offer is carried out by company UAB “Paysera Investments” which was registered in 16 April 2019²⁴⁴. As pointed out by bank of Lithuania in “warning to investors”, financial information indicated in “Information document” which is published by Paysera and Desico, illustrates financial standing of UAB “Paysera LT”, instead of UAB “Paysera Investments” which might cause confusion among potential investors. However, it necessary to mention that throughout the “Information document”, organizers of the project indicated that UAB “Paysera Investments” is a new company and securities shall be connected with operating profit of Licensed Paysera companies; which in May 2019 is only UAB “Paysera LT”. Also, it is important to outline that while illustrating financial information of “Paysera LT”, organizer has indicated that this is financial information of Licensed company.

In conclusion of this chapter, it is possible to state that Lithuania has developed legal framework with Law on Crowdfunding which attracts companies who wish to organize STOs. Also, Bank of Lithuania has created “regulatory sandbox” to test genuine innovations for financial service companies, including blockchain companies. The first round of companies who were accepted in regulatory sandbox was in October 2018. National Competent Authority (Bank of Lithuania) is monitoring the market, and warning to investors about misleading information in Paysera’s STO Information Document serves as an example. It is necessary to follow-up on development of legal framework in Lithuania from perspective of blockchain regulations and development of Law on Crowdfunding. With higher demand for companies interested in STO under Law on Crowdfunding, it is important to update legislation from perspective of required information in Information Document as well as create a supervisory body who reviews Information Document. In situation where the document is reviewed by

²⁴² Paysera. Offering document. (30.04.2019). p 3. Available: <https://www.desico.io/docs/paysera-securities-offering.pdf?t=1557148012>. Accessed May 6, 2019.

²⁴³ *Ibid*, p. 10.

²⁴⁴ *Ibid*, p. 7.

crowdfunding Platform Operator, information might be misleading as it was defined in situation of Paysera.

3.6. Other countries

Due to the limits on the length of the research, it is not possible to conduct thorough analysis of all Member States, therefore this chapter will analyse several jurisdictions which have developed legal framework for cryptoassets, as well as jurisdictions where legal framework is not established in order to compare them and illustrate the potential challenges for investors.

3.6.1. Latvia

Since thesis is submitted in Riga Graduate School of Law, which is based in Latvia, it is necessary to briefly illustrate legal framework towards cryptoassets and blockchain in Latvia. Until May 6, 2019 there have been 21 ICOs in Latvia²⁴⁵. National Competent Authority in Latvia is *Finanšu un Kapitāla Tirgus Komisija* (Financial and Capital Market Commission - FCMC) which carries out supervision of Latvian banks, credit unions, insurance companies and insurance brokerage companies, participants of financial market, payment institutions and electronic money institutions²⁴⁶. On 23rd January 2019, FCMC published a statement about ICOs and legal framework if tokens issued in ICO are defined as securities. FCMC states that every ICO should be evaluated on individual basis, since the nature of issued tokens might be different²⁴⁷. It should be mentioned that document, along with the publication, is available in Latvian only. In situations where issued tokens qualify as securities, FCMC defines the procedure what organizers of STO should follow. If organizer of STO wishes to attract funds publicly from investors and total amount is below EUR 100,000, then no additional registration with FCMC is required²⁴⁸. If raised amount is in between of EUR 100,000 and EUR 1M, then organizer has to submit “Offering document” to FCMC; in situations when raised amount is above EUR 1M, prospectus is required²⁴⁹. Threshold below which a prospectus is not required in Latvia is EUR 1M²⁵⁰. When compared with other EU Member States, it is possible to

²⁴⁵ Track ICO. *Supra* note, 89.

²⁴⁶ FCMC. About us. (08.01.2014). Available: <http://www.fktk.lv/en/commission/about-us.html>. Accessed May 6, 2019.

²⁴⁷ FKTK. Skaidrojums par virtuālo aktīvu un ICO izmantošanas iespējām un piemērojamo regulējumu. (23.01.2019). p – 3. Available: http://www.fktk.lv/attachments/article/7435/ICO_skaidrojums_23012019.pdf. Accessed May 6, 2019.

²⁴⁸ *Ibid*, p. 8.

²⁴⁹ *Ibid*, p. 8.

²⁵⁰ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

conclude that EUR 1M as a threshold for prospectus is also in Bulgaria, Cyprus, Czech Republic, Hungary, Romania and Slovakia – in other EU Member States threshold for prospectus is higher where in Sweden it is EUR 2,5M and in Slovenia EUR 3M, and in other Member States EUR 5M or EUR 8M²⁵¹.

Low level of threshold for prospectus in Latvia was one of the main reasons why there wasn't thorough research on legal framework in Latvia towards STO. With the online nature of STO, it is possible to organize it in other Member State by using the national rule, or by registering prospectus and still be able to offer it to investors from Latvia. Examples are STO of Desico and Paysera in Lithuania and Bitbond in Germany. As it was illustrated in chapter 1.2.1. the average cost to launch an ICO is USD 60,000 (EUR 53,540)²⁵². The costs for STO are expected to be higher, as the fee for legal advice and preparation of legally binding agreements would increase. Therefore, it is highly unlikely that companies will be interested to organize STO in Latvia under current legal framework. Increasing threshold of prospectus would increase investors interest in Latvia as a jurisdiction where to organize an STO. As an illustration to problems in current legislation in Latvia towards STO / ICO could serve detailed research on how many ICOs who are registered in Estonia and Lithuania are originating from Latvia – in terms of where is the actual place of business of team which is developing the product.

3.6.2. Luxembourg

Until May 6, 2019 there have been launched 12 ICOs registered in Luxembourg²⁵³. National Competent Authority in Luxembourg is *Commission de Surveillance du Secteur Financier* (CSSF). In statement to public which was published March 14, 2018 CSSF states that ICOs might be subject to regulatory requirements if issued tokens will qualify as securities²⁵⁴. In the same statement, CSSF states that it considers that organisers of ICOs originating from Luxembourg are required to establish anti-money laundering and terrorist financing procedures²⁵⁵. National threshold for publishing prospectus in Luxembourg is EUR 5M and for public offers in range of 1,5M up to EUR 5M, issuer is required to publish a simplified prospectus²⁵⁶. It is important to review Luxembourg due to the “Blockchain law”

²⁵¹ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

²⁵² US Senate. Joint Economic Committee. *Supra* note, 22.

²⁵³ Track ICO. *Supra* note, 89.

²⁵⁴ CSSF. Warning on Initial Coin Offerings and tokens. (14.03.2019). Available: <https://chd.lu/wps/portal/public/Accueil/TravailALaChambre/Recherche/RoleDesAffaires?action=doDocpaDetails&backto=/wps/portal/public/Accueil/Actualite/ALaUne/&id=7363>. Accessed May 6, 2019.

²⁵⁵ *Ibid.*

²⁵⁶ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

which country adopted on 14 February 2019. The main goal of the Bill 7363 is to provide financial market participants with legal certainty for the circulation of securities via blockchain technology²⁵⁷. Under Bill 7363 tokenized securities will have the same status as “traditional” securities²⁵⁸. The Bill 7363 should make transfer of tokenized securities more efficient by reducing the number of intermediaries²⁵⁹. Until May 6, 2019 there have been no public STOs which are registered under Bill 7363, however, it is important to follow how Bill 7363 shall impact development of STO organization in Luxembourg. When compared Bill 7363 with existing legislation towards blockchain in other Member States (for example Malta and VFAA), then the main difference is that VFAA in Malta regulates organization of ICOs, while Bill 7363 specifically defines tokenized securities. Luxembourg has been popular among private STOs due to the high amount of hedge fund concentration in country. Hedge funds and other financial organizations qualify as professional investors pursuant to definition set out in Prospectus Directive. Information about private STOs is limited and mostly it is possible to access information from marketing stage of STO which does not illustrate the full scope of the STO. Another way how to determine results of private STOs could be to review annual reports of companies who have claimed to have launched STOs, however, it is not possible at this stage, because STOs are relatively new and available annual reports does not illustrate information with regards to private offerings.

3.6.3. France

There have been 56 organized ICOs in France until May 6, 2019²⁶⁰. National Competent Authority responsible for capital markets supervision in France is *Autorité des Marchés Financiers* (AMF). National threshold for publishing prospectus in France is EUR 8M²⁶¹. For offers below EUR 8M where issued securities will be tradable on regulated exchanges, an information document may be required by the Market Rules of the exchange operator²⁶². The content of information document is defined by specific exchange operator and average size of such document is 100 pages; document does not have to approved by AMF.

In April 11, 2019 French National Assembly adopted the PACTE Bill (Action Plan for Business Growth and Transformation) which, once enacted, will establish legal framework for

²⁵⁷ Chambre Des Deputes Du Grand-Duche De Luxembourg. (14.02.2019). Available: <https://chd.lu/wps/portal/public/Accueil/TravailALaChambre/Recherche/RoleDesAffaires?action=doDocpaDetails&backto=/wps/portal/public/Accueil/Actualite/ALaUne/&id=7363>. Accessed May 6, 2019.

²⁵⁸ *Ibid.*

²⁵⁹ *Ibid.*

²⁶⁰ Track ICO. *Supra* note, 89.

²⁶¹ ESMA. National Thresholds below which the obligation to publish a prospectus does not apply. *Supra* note, 139.

²⁶² *Ibid.*

fundraising via the issuance of virtual tokens and digital assets service providers²⁶³. The new Law, if it shall be enacted will allow organizers of ICOs who are issuing tokens which are not classified as financial instruments, to apply for visa issued by AMF by submitting offering's information document to AMF. Such visa will give more credibility to ICOs and grant additional protection to investors, because AMF will approve ICOs who correspond to certain criteria. It is important to outline that PACTE Bill does not regulate issuance of digitalized securities (STOs), therefore in order to launch STO, companies will have to follow existing legal framework of public offerings.

In 23rd April 2019 French financial services company *Societe Generale* in statement to public announced that company has issued the first covered bond as a security token on a public blockchain²⁶⁴. *Societe Generale SFH*, a subsidiary of *Societe Generale* issued EUR 100M of covered bonds as a security token, directly registered on Ethereum blockchain²⁶⁵. It is important to mention that company issued bonds to itself and no outside investors were involved. Since bonds were issued for company itself, it can't be considered as a public STO. However, such a step, made by one of the leading financial service providers in France, illustrates that further development in the field is expected.

3.6.4. Switzerland

Even though Switzerland is not EU Member State and it is not within EEA, it is important to research the jurisdiction due to the fact that it has developed itself as a “crypto-hub” in Europe. Until May 7, 2019 there have been organized 204 ICOs in Switzerland²⁶⁶. Financial market supervisory authority in Switzerland is FINMA and one of the main reasons why Switzerland has developed its reputation as a “crypto-hub” of Europe is FINMA's decentralised approach to regulation of blockchain technology enterprises.

In January 2017, with support of FINMA and Swiss Federal Government, “Crypto Valley” was established in Zug, Switzerland²⁶⁷. The main goal of Crypto Valley is to support the growth of the ecosystem and attract blockchain companies to Switzerland. In February 2018, FINMA published “ICO Guidelines” where Regulator classified tokens in three categories: 1) payment tokens; 2) utility tokens; 3) asset tokens²⁶⁸. In ICO Guidelines FINMA

²⁶³ AMF. Towards a new regime for crypt-assets in France. (15.04.2019). Available: https://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Fintech/Vers-un-nouveau-regime-pour-les-crypto-actifs-en-France. Accessed May 6, 2019.

²⁶⁴ Societe Generale. Newsroom. (23.04.2019). Available: <https://www.societegenerale.com/en/newsroom/first-covered-bond-as-a-security-token-on-a-public-blockchain>. Accessed May 6, 2019.

²⁶⁵ *Ibid.*

²⁶⁶ Track ICO. *Supra* note, 89.

²⁶⁷ Crypto Valley. About us. Available: <https://cryptovalley.swiss/about-the-association/>. Accessed May 7, 2019.

²⁶⁸ FINMA. Guidelines for enquires regarding the regulatory framework for Initial Coin Offerings. (16.02.2018). Available: <https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/>. Accessed May 7, 2019.

states that it is not possible to generalize ICOs and every case should be evaluated on individual basis. Also, FINMA outlines that there is no current case law where tokens are defined. With regards to the qualification of asset tokens (security tokens), FINMA defines them as tokens which represent assets in real physical underlyings, companies or an entitlement to dividends or interest payments; the asset tokens are analogous to equities, bonds or derivatives²⁶⁹. Guidelines state that if digitalized securities are offered to the public on primary market, then they are subject to the same legal requirements as traditional securities and have to follow Stock Exchange Regulation Act, the Anti-Money Laundering Regulations, Banking Regulations, Financial Market Infrastructure Act and Collective Investment Scheme Regulations²⁷⁰. For public offerings, it is required to prepare prospectus according to requirements set out in Swiss Code of Obligations. There are certain exemptions when prospectus doesn't have to be prepared and exemptions are implemented from Prospectus Directive. However, the new Financial Services Act (FinSA) which will be in force from January 2020, shall amend several provisions towards prospectus requirements and exemptions.

One of the most significant projects in blockchain industry which is carried out in 2019 and should be followed from perspective of development of legal framework is STO of SIX Digital Exchange which is organized by Swiss stock exchange operator²⁷¹. The goal of STO is to develop a fully integrated trading, settlement and custody platform for digital assets where transactions will happen on distributed ledger technology. In future SIX is planning to host STOs on newly developed platform and trade with tokenized securities on it. Such a step by official operator of Swiss stock exchange will create environment where it is possible to list tokenized securities without any intermediaries. The project is developed in cooperation with FINMA in order to find a common ground on how tokens could be listed on regulated market. With developed ecosystem and supportive Regulator, it is important to follow developments in the field of STO in Switzerland as it is creating legislation towards attraction of companies which are operating in the field of DLT.

²⁶⁹ FINMA. Guidelines for enquires regarding the regulatory framework for Initial Coin Offerings. *Supra* note 268.

²⁷⁰ *Ibid.*

²⁷¹ SIX Group. Six Digital Exchange. (12.08.2018). Available: <https://www.six-group.com/en/home/blog/six-digital-exchange-future.html>. Accessed May 7, 2019.

4. DISCUSSION

4.1. Unified legislation in EU towards STO

In chapter 1.1. where was analysis on how smart contracts are functioning, there was raised a question: *on what is the applicable law in cases of tokenized security transfers if there is no entry point for legal rule in code itself?* Analysis of legal framework, with regards to tokenized securities in EU and its Member States, provided an answer to the question. The answer consists of several parts, because, as established in research of EU legislation, it is not possible to generalize all organized ICOs. The applicable law with regards to organizing STO depends on the amount raised in the offering as well as on the type of the offering (public or private). If amount raised in the public offering is above EUR 8M, then it will always be necessary to follow EU Rules with regards to Prospectus Directive, Listing Directive, AML Directive. However, in situations where the amount of the offer is below EUR 8M, it is possible to organize STO on basis of national laws in Member States. From terms of applicable law for investor protection during STO, then in all reviewed cases, it has been the law of the country where offering is organized which is specifically regulated by investment agreements. Examples provided by STOs of Bitbond, Desico and Paysera illustrated that in all three STOs, investor agreements outlined that applicable law and jurisdiction of the court is the domicile of the issuer of digitalized tokens.

With current amount of STOs in EU, risk towards investor protection is low. However, when STOs will become more popular, then it is expected that risks will increase. The problems could occur in relation with applicable law and jurisdiction, because when disputes will arise, investors will have to settle them in the court where organizer of STO is domiciled. With online nature of STOs, it is possible that investors do not realize this aspect during their initial investments. Information about applicable law and place of court is provided within “Terms of service” which can be missed if investor chooses to “tick” the box without reading the agreement. In most of the cases, it will result in additional costs for legal advice because investors do not have a unified legal framework across EU. In situations where investor from Latvia will participate in STO which is organized in Germany, disputes arising from investment agreement shall be settled in Germany and person from Latvia will be pursuant to consult with German attorneys in order to receive legal advice on national applicable rules towards investor protection in Germany. It should be outlined that STOs are arising from ICOs where investor protection is non-existent, therefore there should be direct legal rules on how to organize STOs in order to protect investors.

Each analysed Member State had published warning statements towards ICOs where National Competent Authorities outlined that every ICO should be evaluated on individual basis in order to determine whether it is issuing security or utility tokens. Such approach is different from US where SEC has defined that in order to determine which token has characteristics of securities, *Howey test* should be used²⁷². The position of Member States is explained by the fact that ESMA in a statement to public outlined that each case should be reviewed on individual basis²⁷³. Example from USA illustrates that it is possible to generalize when issued tokens qualify as securities which must be registered with SEC and when tokens are solely utility tokens. System where every ICO must be evaluated on individual basis creates legal uncertainty which is problematic for organizers of STOs as well as for investors who are forced to evaluate each case individually.

The importance of good and transparent legislation was analysed in chapter 2.1. where it was stated that inadequate regulation endangers economic growth and well-being²⁷⁴. It is suggested that ESMA as a supervisory authority of National Competent Authorities would clearly define security / investment / asset tokens and NCAs could further implement definition in their national rules. As it was illustrated in chapter 2.2.1. NCAs are using different definitions of terms related with ICOs which might cause confusion among investors and organizers²⁷⁵.

In its Advice on Initial Coin Offerings and crypto-assets ESMA admits that due to the significant number of crypto-assets, regulators face challenges with creating appropriate legislation which would cover all crypto-assets²⁷⁶. This statement is confirmed in case study where legislation of Member States was analysed. Financial Regulator of Malta, which positions itself as a “blockchain island”, in a statement to public on April 25, 2019 stated that until the publishing of the statement, there are no companies who have registered their ICO offering documents (White Papers) with MFSA according to provisions set out in Virtual Financial Assets Act. The reasons why companies do not register their offering documents with Financial Regulator of Malta are various. One of the main reasons is that VFAA is in force since 1st November 2018 and it is relatively short time to evaluate such statistics. However, the more important reason could be the fact that VFAA regulates ICOs and by the time the law was accepted and in force, popularity of ICOs had shifted to STOs. Chapter 2.1. illustrated that the “peak” of ICOs was in the end of 2017, beginning of 2018, and afterwards the amount of

²⁷² SEC v. W. J. Howey Co., 328 U.S. 293, 298–99 (1946), *supra* note 52.

²⁷³ ESMA Alerts firms involved in Initial Coin Offerings (ICOs), *supra* note 96.

²⁷⁴ OECD Regulatory Policy Outlook 2018, *supra* note 66.

²⁷⁵ ESMA. Legal Qualification of crypto-assets – survey to NCAs (January, 2019) Available on: https://www.esma.europa.eu/sites/default/files/library/esma50-157-1384_annex.pdf. Accessed April 27, 2019.

(4)

²⁷⁶ European Securities and Markets Authority, *supra* note 98.

launched ICOs decreased due to decrease of value of cryptocurrencies as well as due to the high number of fraudulent ICOs²⁷⁷. This illustrates the importance of regulators to adapt to changes in the market and realize that legislation which they will create might lose its usability very quickly. Another reason why ICOs choose not to register their offering document with MFSA could be the fact that requirements set out in the law are too strict when compared with other Member States. In order to receive the license for ICO, company is obliged to create sophisticated offering document, appoint auditor who will report to MFSA and file Financial Instrument Test where company must determine that their issued tokens are not securities. As illustrated in chapter 2.1. there have been several situations where information provided on White Paper is misleading²⁷⁸ or even criminally punishable²⁷⁹, however, overregulation will not solve these problems. With online nature of ICOs, it is still possible to organize an ICO and offer digital tokens to investors from Malta. As it was illustrated in chapter 3.4., the only preventive measure against such ICOs, which Financial Regulator of Malta is able to carry out, is warning to investors about possible scams in ICOs and the fact that investors are not protected under Maltese regulations when they participate in ICOs which are not licensed and verified by MFSA. However, there are no mechanisms to MFSA to prohibit investors to participate in ICOs organized outside of Malta. If France will adopt PACTE Bill, it will face similar challenges; moreover because of the fact that in France, registration for ICO under PACTE Bill will be voluntarily. As illustrated in chapter 3.6.3. PACTE Bill does not regulate issuance of digitalized securities, therefore in situation where organizer is interested to issue security tokens, it will still have to follow current legal framework towards issuance of securities. It is important that regulators realize that focus has shifted from ICOs to STOs and therefore create appropriate legislation.

At the moment, for offers of tokenized securities above EUR 8M, it is necessary to follow the same regulations which are applied to IPOs. However, it should be outlined that such approach is not appropriate, due to several differences in IPOs and STOs. The most significant difference lies in the type of securities offered and in the nature of the offerings. STOs are coming from unregulated and decentralized area of cryptoassets where no legal rules towards investor protection exist. While IPOs are existing since the existence of financial markets and are highly regulated. If the same legal rules will be applied, it will cause significant risks towards business development and investor protection. When organizers of STOs will be forced to adapt the same legal rules which are applicable to IPOs, then it is probable that they will look

²⁷⁷ Vigna, *supra* note 45.

²⁷⁸ Chiu, *supra* note 70.

²⁷⁹ SEC v. Recoin Group Foundation, LLC., 17 U.S. ECF Case (2017). Available on <https://www.sec.gov/litigation/complaints/2017/comp-pr2017-185.pdf> Accessed April 23. (71)

for jurisdictions where rules towards public offerings are “lighter” which will eventually lead to risks for investors. Such approach will be possible because of the online nature of STOs and information distribution through online forums which are not jurisdiction related. Legal form of STO is more complicated than of IPO due to the fact that publicly offered item is a token which contains rights to a certain asset. The certain asset can vary among every STO – it can be shares of the company, future revenue note, loan agreement, real estate, movable property and any other possession of the company. Variety of offered items creates complicated legal environment for investors. For example, in situation when shares are offered to the public, investor should receive the information on where the shares are listed and how to trade them on secondary markets. However, in situation where real estate is tokenized and offered to the public, investor should be informed on national legal rules towards real estate which are closely related to certain jurisdiction, because real estate law is country-specific.

EU has illustrated lack of legal clarity towards regulations of public issuance of digitalized securities which has created competition among EU Member States and at the same time unclear rules for investors and companies who wish to raise capital through STOs. The main instrument to achieve legal clarity is cooperation with private organisations from the field and case studies from jurisdictions which have established clear legal rules towards STOs. Example to regulators from analysed EU Member States could be Switzerland where National Competent Authority (FINMA) closely cooperates with “Crypto Valley” in development of new legal framework which will support the growth of blockchain related business. Market participants have clearly illustrated that when one Member State has more attractive legislation towards ICOs, then the project will be launched from that Member State.

4.2. Jurisdiction shopping in the field of STO

In general, competition is considered as a good element in the market, because businesses are entitled to work harder and create better products in order to attract customers. The question in this chapter of discussion is: *Should there be competition among EU Member States in the field of STO?* Analysis of case studies and national rules towards STOs illustrated that there are jurisdictions where it is possible to organize STO in more effective way than in other Member States (faster, with less required documentation).

Each analysed Member State has a different national requirements with regards to documents required and procedure on how to register documents for public offerings with National Competent Authorities. This paper analysed legislation towards public security offerings in 8 Member States and Switzerland. There are similar requirements towards exceptions for private offerings (which are implemented from Prospectus Directive). However, none of the analysed Member States had the same national rules with regards to public offerings below threshold where organizer must publish prospectus. In situations when threshold is the same – UK, Germany, France with EUR 8M; Estonia, Lithuania, Luxembourg, Malta with EUR 5M – there are still different national rules towards information required and thresholds within the national threshold when offering is considered a public offering. Such system illustrates individual character of each Member State towards public offerings as well as Member State's position with regards to investor attraction in the field of blockchain technologies. Example for jurisdiction shopping in situation of ICOs could serve data of Estonia, which has statistically the largest number of ICOs in EU per capita and one of the main reasons is that Estonian legislation permits remote company management along with licenses for cryptocurrency exchanges and e-wallet service providers.

At this point, it is not possible to statistically prove that there exists jurisdiction shopping in the field of STOs in EU, because it is relatively new type of public offering. However, it is possible to see that countries with more favourable rules for public offerings attract existing STOs – Lithuania, UK and examples of current STOs in these jurisdictions. Choice of jurisdiction where to organize an STO will be affected by the type of information required within national thresholds. Analysis of Malta and Lithuania are examples on how different required information can be within national thresholds of public offerings. In Malta, in public offerings up to EUR 5M, it is necessary to submit and verify sophisticated offering document under Prospects MTF which on average consists of 194 pages and additionally, organizer of the offering must employ licensed corporate advisor who will act as the primary contact person with Malta Stock Exchange during the public offering. Analysis of Lithuania and current STOs illustrates that it is possible to organize public STO with raised amount up to EUR 5M under

Law on Crowdfunding. Organizer has to prepare information document which is approved solely by operator of the Crowdfunding platform. The goals and outcome of STOs in both above mentioned Member States are the same – raise funds by issuing security tokens which are tradable on regulated market. When company wishing to organize an STO would evaluate both jurisdictions, without any prior connections to them, it would be most probable that company would choose Lithuania due to simplified process and less information required – which will result in less expenses in legal fees and additional employees hired. As proved by analysis of current STOs in UK, Germany and Lithuania, due to the online nature of the offering it is possible to participate in it from all over the world, unless certain exclusions are provided. In example of Bitbond STO, persons from US and Canada were excluded, because company did not intend to register securities with SEC.

Online nature of STOs creates possibilities to launch STO from Member State where are more suitable national laws in situations where amount of the raised offer is within the national threshold. In the future it is expected that more STOs will be launched in countries where national thresholds are higher – such as France, UK, Germany. According to the case law established by ECJ with regards to IPOs, the place where the offering is organized and where the organizer is liable must be considered based on the dissemination of the information about the offering²⁸⁰. The main sources of information with regards to launched STOs are not fixed by geographical location as the information is distributed within online forums, articles in online journals and shared by affiliate partners of the organizers (Bitbond example). There are no geographical restrictions on individual from one Member State (Latvia) to participate in STOs in Germany, Lithuania, UK and obtain digitalized securities which further will be stored on individuals e-wallet. In order to make such transactions possible, an individual has to conduct investment agreement with organizers of the STO. In situations where organizer of STO would conduct large scale online ad campaign which targets specifically one certain location, then NCA of the Member State would be responsible to evaluate the type of information provided and securities issued and determine whether organizer of STO has to register the offering with the NCA.

In situations when public offering is in the amount above EUR 8M and organizer has registered prospectus with NCA (like in case of Bitbond), it is entitled to register prospectus in any other Member State by submitting Prospectus Certificate and translated prospectus, if it is required by host Member State. Bitbond did not register prospectus in any other country than Germany, because the fact that company's STO is the first public STO in EU provided them

²⁸⁰ Fernandez, *supra* note 119.

significant coverage in online media across the world and company did not have to carry out extensive marketing campaign in specific Member States.

From perspective of business development different legal regimes among EU Member States with regards to STOs are beneficial. Companies are able to choose the most attractive jurisdiction for specific type of offering and organize it from there. However, from perspective of investor protection and legal clarity it is not beneficial and not recommended. At the moment, when recognition of STOs is not significant and existence of STOs is known only to informed investors who are following the field of crypto-assets, there are no risks with regards to investor protection. Chapter 1.2.1 illustrated development of ICOs and time span it took until ICOs became known to the public (3-4 years). Time span with regards to STOs introduction to public will be shorter due to development of blockchain technologies and examples of organized ICOs. With higher investor involvement in STOs, the risks related with investor protection with regards to legal clarity will significantly increase. Therefore, it is important to create a legal framework where jurisdiction shopping is limited and investors are clearly informed that when there will arise disputes in their investment contracts, they will have to go to court in the Member State where organizer of the offering is domiciled.

Important argument towards competition among EU Member States is that certain jurisdictions has excluded themselves from competition with regards to STO attraction. Analysis of Latvia illustrates that it is highly unlikely that companies will be interested in STO organization in Latvia if the amount is below national threshold (EUR 1M), because costs which will arise to organizers of STO will be too high in comparison with potential amount raised. Legislation and statements to the public with regards to virtual assets and token definitions in website of FCMC is mostly in Latvian language, which makes it harder for investors from abroad to access it. In comparison with analysis of Estonia and Lithuania where legislation and official statements were available in English, Latvian NCA did not provide such option. Analysis of websites of NCAs in Estonia and Lithuania discovered that NCAs have issued several warnings with regards to specific ICOs, while website of FCMC did not provide such information. Such approach illustrates the level of involvement of FCMC in development of blockchain industry and could bring harm for investors from Latvia due to the lack of official opinion and warnings. Position of national government towards technological innovations is one of the most important factors in investor attraction – as it is shown in example of Switzerland and development of Crypto Valley. Such cooperation is crucial for all involved parties – government, investors and business. Government will have access to technological advancements like it is in example with Swiss Stock Exchange and digitalized assets; investors will have a clear legal rules which will help them to understand when risks are higher / lower;

business will have developed ecosystem where cooperation with other companies will facilitate economic development. It is recommended to Latvian authorities to improve level of investor attraction towards blockchain technologies and increase competitiveness among EU Member States. The first steps to achieve it could be: 1) by releasing public statements on FCMC website also in English; 2) increase national threshold towards prospectus publication; 3) improve cooperation with private companies who are working in the field of crypto-assets by taking example from analysed Member States.

At the moment when STOs are not well known for a common population in EU, competition among Member States in the field of STO does not bring significant risks to financial stability and investor protection. In the process of competition to attract companies who are interested to organize STOs, EU Member States will facilitate development of appropriate legal framework. Such competition will outline the most appropriate legal framework by statistically illustrating in which Member State companies choose to organize STOs. When such statistic will be available, it should be possible to analyse the legal framework of specific Member State and implement similar rules in other Member States in order to increase legal clarity in EU as a whole. For EU to function as a unified force and compete with USA and Asia for attraction of tokenized public offerings, the precondition is to develop direct legal framework. It is important to follow development of STOs and evaluate investor protection once tokens are available on secondary markets because it will illustrate the main gaps towards investor protection in STOs. Blockchain technology and STOs offers significant possibilities to raise funds for small and medium sized companies, however, it creates legal challenges and risks of investor protection. In order to facilitate the opportunities of STOs, it is important to create unique legal framework for STOs which will protect investors and assist companies to raise funding for their development.

CONCLUSION / SUGGESTIONS

1. The research illustrated that blockchain technologies are developing in a very fast pace. To cope with the fast development, regulators must create advanced work groups with professionals who understand how blockchain works and are able to follow market tendencies. It is suggested to stop creating legislation towards ICOs and shift the legislation creating process to STOs.
2. Security Token Offerings with raised amount above EUR 8M are regulated by national rules and EU Regulations. At the moment there are no direct harms of legal uncertainty towards STOs. However, if EU wishes to be important actor in the blockchain field and compete with USA and Asia, it must present itself (EU) as a unified region by establishing legal rules for STOs.
3. To facilitate the use of blockchain technologies, it is recommended to integrate blockchain solutions in governmental processes. Storage of share registries on blockchain would facilitate development of STOs and provide companies with instant access to public funding through STOs.
4. There are significant differences in legal requirements among Member States for public offerings within national threshold for publishing prospectus. Online nature of STOs creates additional challenges for NCAs. At the moment these challenges do not possess significant risk to investors, but risk will increase with increase of popularity. It is strongly recommended that national authorities follow information distribution and are more active with warnings to investors.
5. Differences in legal framework among Member States have created jurisdiction shopping where organizers of STOs are able to choose the jurisdiction which is more suitable for the company.
6. Further research should evaluate and compare prospectuses among IPOs / STOs between different Member States. Research leads to suggestion that there will be differences in length and information provided among Member States, which will lead to jurisdiction shopping.

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