



Israel Securities Authority

**The Committee to Examine the Regulation of Decentralized
Cryptographic Currency Issuance to the Public**

Final Report

March 2019

The following translation is intended solely for the convenience of the reader. This translation has no legal status and although every effort has been made to ensure its accuracy, the ISA does not assume any responsibility whatsoever as to its accuracy and is not bound by its contents. Only the original Hebrew text is binding and reader is advised to consult the authoritative Hebrew text in all matters which may affect them.

March 5, 2019

Ms. Anat Guetta

Chair, Securities Authority

Re: Submission of Final Report of the Committee to Examine the Regulation of the Issuance of Decentralized Cryptographic Currency to the Public

We hereby respectfully submit to you the final report of the Committee to Examine the Regulation of the Issuance of Decentralized Cryptographic Currency to the Public (hereinafter, the “Committee”).

The Committee’s primary function was to examine the application of the Securities Law to public offerings and issues in Israel based on distributed ledger technology (DLT). The Committee was assigned to study and identify the features of these ventures, prepare a comparative review of the relevant laws in developed countries, and outline a recommended regulatory policy on such offerings in areas related to the ISA, with the overarching aim of striking a balance between encouraging technological innovation and protecting the investor public.

In March 2018, the Committee’s interim report was published for public comments¹. As of the publication, the Committee conducted an additional round of meetings, many of them with industry participants and academic scholars, to deliberate the issues and the comments it received. The Committee has continued to monitor new trends and developments in this field and examine how regulators in other countries are addressing these issues.

Indeed, since the publication of the interim report, numerous changes have occurred in this field — in its regulatory environment in Israel and worldwide, and in its business and technological environment. In terms of the Committee’s work, the most significant development in this context was the considerable decline in ICOs (following a notable rise in early 2018). Today, in effect, fund raising through ICOs in western countries is mostly restricted to accredited investors and issued as STOs (Security Token Offerings). These trends reinforce the position that the industry’s success depends, among other things, on its attitude toward regulation, and illustrates that supervision is not incompatible with the industry but, on the contrary, can contribute to its development.

¹ [Interim report](#)

The development of innovative technologies makes a highly significant contribution to the growth and enhanced efficiencies of the financial market and to the reinforcement of the Israeli economy. This contribution may be manifest in, among other things, the role of these technologies in developing new means of financing available to Israeli firms and increasing the Israel public's access to a diverse range of investment vehicles. The Committee therefore believes that it is important for the ISA to play an active role in creating a regulatory infrastructure and take proactive steps to instill technological progress in the financial market. At the same time, the ISA's primary duty is investor protection, and therefore the ISA must guarantee that innovative technologies are used fairly, in a manner that ensures protection of the investor public's interests and its confidence in the capital market.

Among the issues the Committee dealt with was whether, and in what manner, the crypto-asset industry should be subject to unique regulation in view of its features. On this issue, the interim report presented several principled questions for public comments and suggested several regulatory options.

The Committee recommends that the following options should be promoted at this stage:

1. Tailor made disclosure regime: We recommend to adapt the disclosure requirements to the unique features of the activity of these companies, based, among other things, on the experience that the ISA will accumulate as entrepreneurs considering an issuance of crypto-assets would approach the ISA, and learn from the experience of other regulators in the world.
2. Easing of restrictions through a regulatory sandbox: The ISA is a member of an inter-ministerial committee that recently recommended the establishment of a customized regulatory environment for firms that employ new technologies to offer financial products and services. We recommend allowing the use of this framework, when established, to experiment with the issuance of crypto-assets and to provide guidance to entrepreneurs in this field.
3. Regulatory infrastructure for security token trading platform: Adjustments to existing regulation should be considered, in order to create a regulatory infrastructure that is more suitable for the activity of this industry and optimally addresses the specific risks that the industry represents.

The Committee also recommends to consider applying a model similar to the one adopted for crowdfunding regulation for projects involving crypto-assets that are deemed securities.

Given the innovative, complex, and dynamic nature of the industry, and the early stages of regulatory treatment (in Israel and around the world), the Committee's work must be viewed through the perspective of time. The Committee also believes that dialogue and cooperation between all the regulatory bodies is essential for the development of regulation in this evolving sector. Continuous and ongoing contact and cooperation between the ISA and industry participants is critical in

allowing the ISA staff to specialize in the field, become familiar with its unique features and concerns, and provide appropriate regulatory solutions.

Furthermore, the Committee believes that insofar as ventures apply to the ISA with crypto-asset related projects, the ISA should examine their activity with an open mind, respond quickly, and adopt a flexible interpretation that recognizes the importance of promoting technological innovativeness in the capital market while protecting capital market investors.

I would like to thank the Committee members, ISA staff and directors who invested their efforts and experience to complete this report in a professional, and comprehensive manner. I would also like to thank all those who submitted materials to the Committee, appeared before it, and commented on the interim report.

Respectfully yours,

Dr. Gitit Gur-Gershoren

Committee Co-Chair

Committee members (in alphabetical order)

Dr. Gitit Gur-Gershoren, Chief Economist – Committee Chair

Adv. Motti Yamin, former Director of Corporate Finance Department – Committee Chair

Adv. Eden Lang – Department of International Affairs, Committee Coordinator

Mr. Guy Sabbah – Economics Department, Committee Coordinator

Mr. Uri Ezreihen – formerly of the Corporate Finance Department

Adv. Hillel Ben David – Investment Department

Adv. Shoham Ben Rubi – Department of International Affairs

Adv. Guy Dvir – Stock Exchange and Trading Platforms Supervision Department

Adv. Amir Helmer – Corporate Finance Department

Mr. Erel Mazuz – formerly of the Economics Department

Adv. Maya Marinov Schiffer – formerly of the Department of International Affairs

Mr. Matan Omer – formerly of the Department of International Affairs

Adv. Orit Schreiber – Legal Counsel

Contents

1. Background	6
2. Developments in the field of crypto-assets	9
2.1 Developments in the crypto-asset market	9
2.1.1 Main developments	9
2.1.2 Main factors	18
2.1.3 Market trends	21
2.1.4 Trends in the features of assets and ventures	29
2.2 International Regulatory Developments	31
2.3 Regulatory developments in Israel	36
3. Public comments to the Interim Report	37
3.1 Defining crypto-assets as securities	38
3.2 Crypto-asset trading platforms	40
3.3 Responses to principled issues raised for discussion	42
4. The vision – Balancing technological innovation and investor protection	45
5. Future regulation of the crypto-asset industry	45

1. Background

Against the emerging phenomenon of ICOs — capital raising from the public through issuance of crypto-assets based on distributed ledger technology (hereinafter, “coins” “cryptocurrencies” “crypto-assets” or “tokens”)² — on August 10, 2017 then-Chair of the ISA Professor Shmuel Hauser appointed an inter-departmental committee to examine the regulation of cryptocurrency issuances to the public (hereinafter, “the Committee”). The Committee’s primary function was to examine the application of the Securities Law to offerings and issuances based on distributed ledger technology to the public in Israel. The Committee was asked to study and identify the features of these projects, prepare a comparative review of the relevant laws in developed countries, and outline a recommended regulatory policy in areas related to the Israel Securities Authority (hereinafter, “the ISA”). The overarching goal was to strike a balance between encouraging technological innovation and protecting the investor public.

The Committee aimed to increase certainty concerning the application of the Securities Law to the industry, which is vital both to the industry’s development in Israel and to investors’ continued confidence in the capital market. Another goal that the Committee set was to examine future recommendations related to the application of the Securities Law to this industry, recognizing that existing regulation is being challenged by this new industry and may require future adjustments. The Committee specifically addressed crypto-asset issuances as well as the other legal frameworks in the field of securities that apply to crypto-assets.

On March 19, 2018, the Committee submitted its interim report to ISA Chair Anat Guetta (hereinafter, “the Interim Report”) and concurrently published it for public comments.³ The ISA received public comments that referred to the questions raised for discussion and the recommendations noted in the Interim Report, and to the following issues in particular: application of securities laws (Securities Law, Joint Investment Trust Law, and Investment Advice Law), the tests for deeming a token as a security, licensing requirement of trading platforms, and the definition of a financial asset in the Consultancy Law..

Since the publication of the Interim Report, the Committee discussed the comments it received and conducted an additional round of meetings with industry participants and academic scholars to deliberate the issues that emerged. The Committee also continued to monitor new trends and

² To maintain consistency with the conventional definitions of terms, this Report uses the term “crypto-assets” (rather than the term “cryptocurrencies,” which was used in the Interim Report). Any occurrence of the term crypto-asset or cryptocurrency implies the broad meaning of these terms, unless one of secondary definitions stated in the definition of terms in the Interim Report of this Report are used.

³ See the Interim Report.

developments in this field and examine how regulators in other countries are addressing these issues.

Numerous changes have occurred in the field of ICOs in Israel and worldwide since the Interim Report, both in the regulatory environments and in the business and technological environments. The most significant development from the perspective of this Report is the considerable decline in ICOs (following a notable rise in early 2018). Today, fund raising through ICOs in western countries are limited to accredited investors and issued as STOs (Security Token Offerings) according to Securities laws.

From the perspective of regulation, this is an extremely important trend as it reinforces the position that the field's future lies in projects' ability to comply with regulatory requirements and in the regulator's ability to successfully address the field's innovative features.

The decline in ICO fund raising follows a significant 70% drop in the market value of crypto-assets, and a significant cooling of the hype, and the media coverage that characterized the industry in the previous year. These trends were mainly affected by the changing regulatory environment and the struggles of technologies and projects in this industry to realize their promise in line with market expectations.

A uniform regulatory approach to ICOs across countries has not yet evolved, although time has clarified positions and sharpened the differences and commonalities between regulatory approaches. Last year, several countries, led by the US (the SEC), expressed a relatively aggressive position on the crypto-asset industry and ICOs, which is reflected in various statements of senior officials and increased enforcement efforts in the field. In contrast, other countries have continued their efforts to attract entrepreneurs and incentivize them to perform ICOs and set up trading platforms, using various means including ongoing dialogue with entrepreneurs and tax relief, and by expanding the group of crypto-assets that are exempt from regulatory requirements.

Alongside these trends, additional developments have affected many aspects of the field including technological advances, new products, efforts to bring adoption of additional participants including institutional investors, structural changes in fund raising methods, and adoption of standards of self-regulation. For a review of these trends and developments, see Section 2 to this Report.

The picture that emerges from the Committee's work is that the rapid and dynamic growth of this industry, both in terms of business developments and in terms of regulatory development, require cooperation between the industry and its regulators. Furthermore, addressing the challenges that the industry poses illustrates the high degree of flexibility required of regulation and an ability to adapt to changes quickly, with the aim of promoting innovation while protecting investors. It is therefore extremely important for regulators to have access to capabilities and tools that enable such

flexibility without resorting to a lengthy process of legislative change that is conditional on other parties. A regulatory sandbox makes such flexibility possible, but it is limited to those companies that are accepted into the program.

The application of securities laws is not a function of technology: The use of a new technology does not, in itself, affect the test used to determine whether a specific activity is subject to regulation under securities laws. At the same time, technology may change the manner in which securities laws are implemented,⁴ and the Committee recognizes the need to review whether adjustments in the laws are warranted, either within existing regulation or through new regulation.

Such reviews should be based on market developments, the growing experience of the ISA and other regulators, and regulatory changes introduced in other countries, if any, with regard to the markets properties and risks.

Such reviews should also address whether the ISA's mandate should be expanded to include crypto-assets that are not currently subject to securities laws. Various developments may create circumstances in which the aims of the Securities Law, and specifically safeguarding the interests of the investor public, require legislative action that expands the ISA's mandate to cover such assets as well. This mandate may be expanded by amendments or adjustment to existing legislation or by creating a specific regulatory framework for assets of this type.

The recommendations presented in this Final Report were developed after a review of the public comments, on the basis of a comprehensive review of the relevant regulations around the world and the means used by other regulators to address this phenomenon, and an analysis of the specific features of the activities of entrepreneurs and investors in the field of crypto-assets in Israel.

⁴ See, for comparison: The ISA's order to licensees related to services rendered using technological means (June 23, 2016).

2. Developments in the field of crypto-assets

Significant developments in the field of cryptocurrencies have occurred in the period that elapsed since the publication of the Interim Report. These developments concern the state of the crypto-asset market and the state of regulation in Israel and worldwide. These developments are reviewed in this section.⁵

2.1 Developments in the crypto-asset market

The Interim Report published in March 2018 reviewed the developments in the crypto-asset industry up to end 2017. As expected for a new emerging field based on new technology, this market has undergone various developments and changes since the Interim Report was published, ranging from developments in the technologies themselves, through the nature and range of service offerings, the composition of participants and parties operating in this field, the characteristic patterns of activity and funding, to the satellite industries that have developed around them. In this section we review what we believe to be the main trends and the developments stemming from them.

The main trend that has significance from the perspective of this Report is the fact that a considerable decline in ICO fund raising is evident, and that ICO fund raising in the western world is mostly intended for accredited investors only and issued as STOs (Security Token Offerings) according to Securities laws. This trend was also accompanied by sharp declines in the market value of crypto-assets, and other trends.

Next we identify the main developments of the past year in this market, followed by the main factors that are responsible for these developments and additional market trends.

2.1.1 Main developments

- **Drop in market value and trading volumes of crypto-assets** – At end 2017, total market capitalization of the crypto market climbed beyond USD 800 billion (Bitcoin constituted 30%-40% of the market at the time). Today, the market cap is at much lower levels, around USD 100 billion (with Bitcoin accounting for 55% of its value).⁶ One of the features of this development is a series of sweeping declines that affected most crypto-assets, with high correlations between them. This trend has been seen by many as a burst of a "market bubble", reflecting the market's understanding that crypto-assets has been highly overpriced.

⁵ Numerous reports and data have been published in the past year, which provide information on this field. Nonetheless, it is difficult to evaluate the quality of these data, and the sources may be inconsistent. This section is based on information collected from various sources.

⁶ According to CoinMarketCap.

Trade volumes also show a considerable decline, dropping from several tens of billions of dollars a day to the current daily volume of between 10 and 20 billions of dollars. Price volatility also increased and is significantly higher compared to most traditional financial assets. For example, the standard deviation of the daily change in Bitcoin prices (in annual terms) rose from 75% in 2017 to 85% in 2018 (although prices were relatively stable during a specific part of this period).⁷

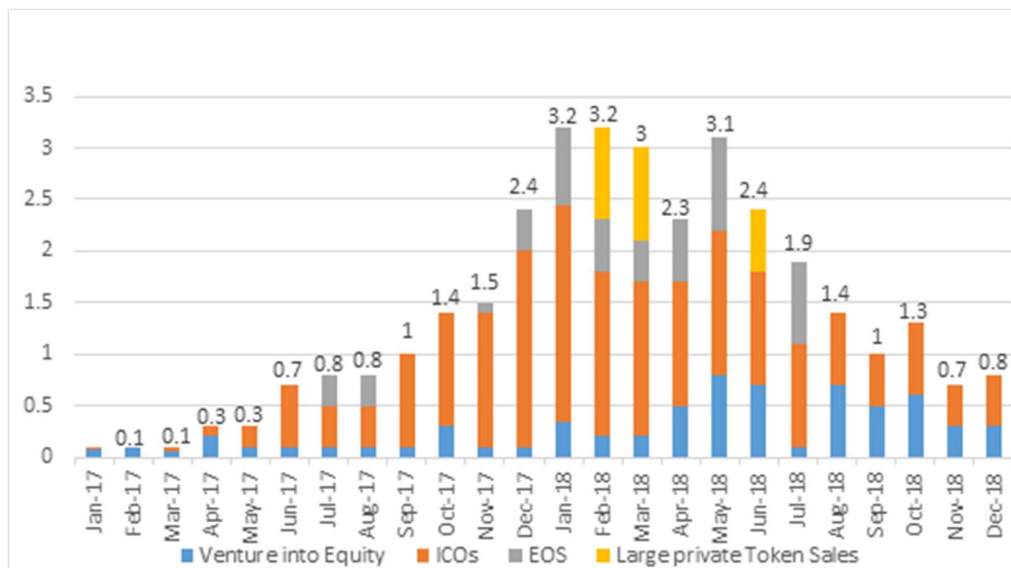
- **Drop in fund raising volumes** – The upward trend initiated in the second half of 2017 continued in early 2018. Total fund raising concluded in 2018 was USD 20 billion in over 1,000 ICOs (various sources report different amounts, based on their calculation methodology), most of which were concluded in the first half of 2018 (several were initiated in 2017).⁸ This figure includes private sales and pre-ICOs, which account for a considerable share of the funds raised. Furthermore, this figure includes several especially large ICOs such as EOS (USD 4.2 billion raised over the year) and Telegram (USD 1.7 billion in a private sale). In the second half of 2018, reports indicate a significant drop in raised funds, although offerings still accounted for several hundreds of millions of dollars each month (evidence indicates that most of the funds were raised in Asia). It also appears that recently, the number of ICOs in western countries considerably diminished, and most ICOs are blocked to US investors or are restricted to accredited investors. At the same time, there has been an increase in fundraising based on STOs, on which we elaborate below.

Furthermore, in the past year, there have been reports of an increase in the volume of equity capital raising from venture capital funds, which have captured a significant share in blockchain firms' offerings. According to Autonomous Next, Venture capital investment into Blockchain firms was over USD 5 billion in 2018, compared to USD 2 billion in 2017.

⁷ Compared with the average standard deviation of 25% in common commodities (highest standard deviation was in natural gas – 48%), in NASDAQ (maximum SD – 59%), and 11% in the average exchange rates of all currencies (Venezuelan currency is an outlier with SD of 528%, with the next currency with 64%), according to Bloomberg reports.

⁸ According to Coinschedule figures.

Figure 1: Blockchain Firms fundraising 2017-2018

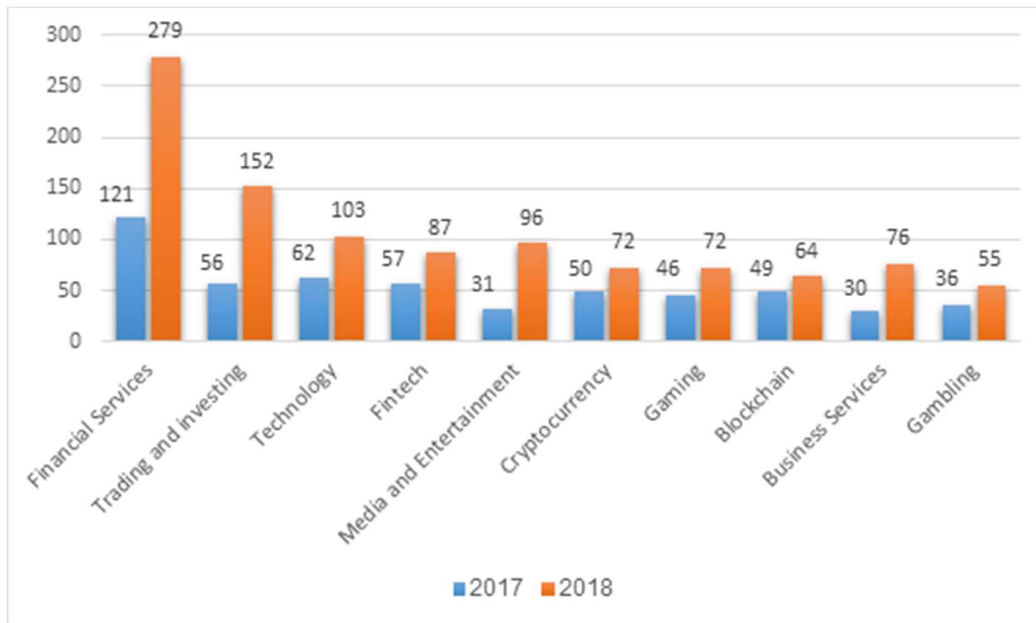


Source: Anonymous Next

The types of firms involved in fundraising also changed. According to data from InWara, presented in Figure 2,⁹ although the number of ICOs rose in all sectors between 2017 and 2018, a more significant increase is evident in media, financial services, and trading, with a more moderate rise in ICOs involving blockchain infrastructure and cryptocurrencies.

⁹ Figures 2-4 are taken from InWara’s annual report and are not necessarily consistent with the figures presented above. As noted, there are no official records or data providers of information on the industry, and various reports and figures published by different sources are inconsistent.

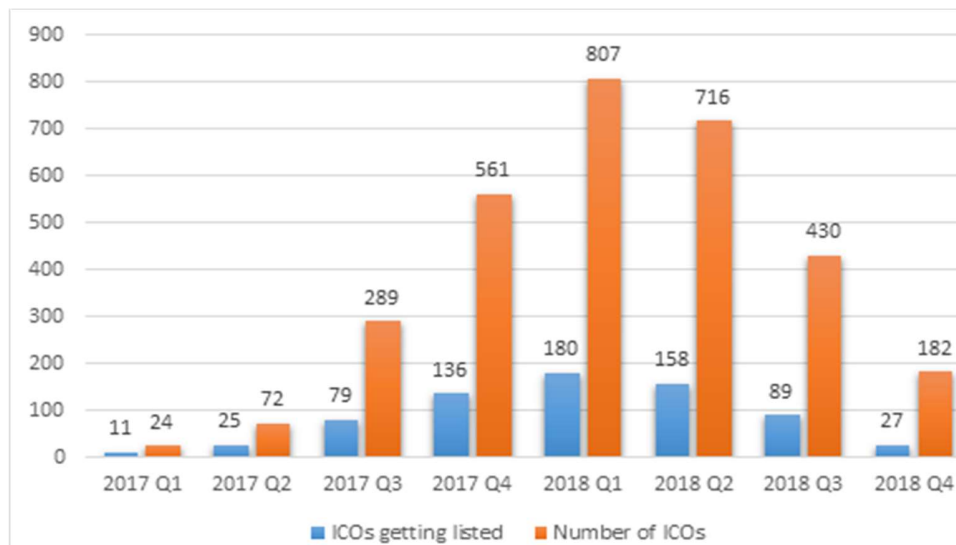
Figure 2. ICOs by sector, 2017-2018



Source: InWara

The number of ICOs show an even clearer picture of the rising trend up to the first quarter of 2018, with more than 800 ICOs according to Inwara, followed by a declining trend by the end of 2018, with 182 ICOs. Alongside this there is a similar trend in ICOs getting listed on trading platforms, with an even more significant drop in the last quarter (only 27 assets getting listed).

Figure 3. No. of ICOs getting listed on trading platforms, by quarter, 2017-2018

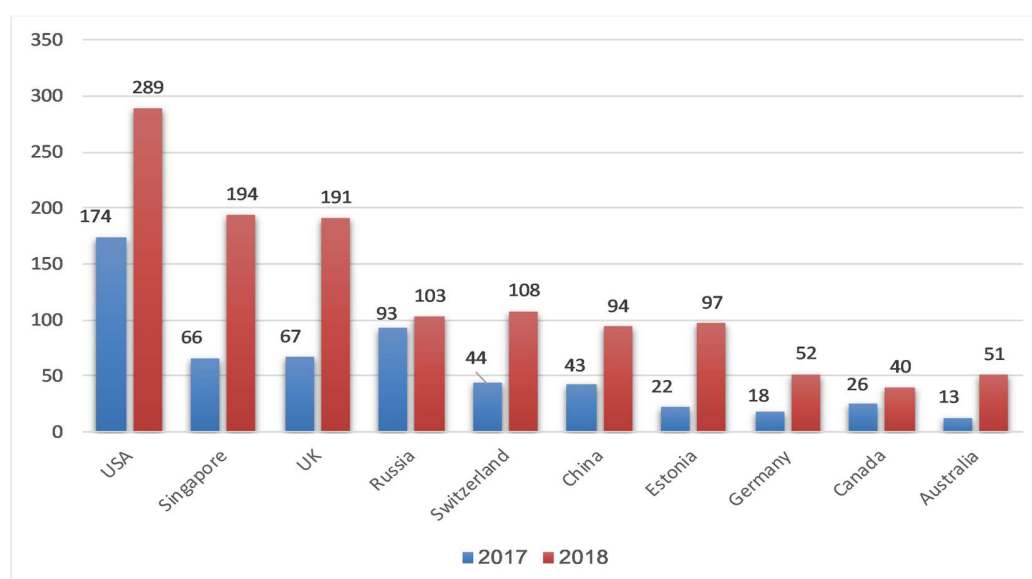


Source: InWara

Braking down the ICOs by country shows that the US holds the top position in the number of ICOs, with the UK and Singapore following by a large gap.¹⁰

¹⁰ This source does not provide details of the methodology of the breakdown by country. Different methodologies might have significant implications (for example, location may refer to the location of the development center, the, headquarters, or the legal entity).

Figure 4. No. of ICOs, by country, 2017-2018



Source: InWara

- Trading platforms (Exchanges)** – Despite the drop in trading volumes, new trading platforms for crypto-assets continued to open in the past year. While most trade volume is conducted on several major platforms, hundreds of crypto-asset platforms exist worldwide (most are not for trading in security tokens; we elaborate on this point below). According to TokenInsights,¹¹ which examined over 400 trading platforms, there was a steady increase in the global growth of platforms (although at a slightly lower rate compared to 2017), most of which were in Asia and Europe. The report also indicates that 50% of the global trading volume is conducted on only six platforms, 75% of the global trading volume is conducted on platforms registered in Europe or Asia, and only 10% in the USA.

The year 2018 also stood out in the volume of theft from cryptocurrency trading platforms. According to CipherTrace,¹² close to USD 1 billion in crypto-assets was stolen by hackers in the first three quarters of 2018, 3.5 times the sum stolen in 2017.

This year, longstanding and new exchanges introduced innovations in an effort to address these developments. The longstanding exchanges began to create various incentives to retain their customers, such as the issue of tokens that grant a discount on fees or tokens that entitle their holders to a share of revenues, and also began to issue stablecoins (see more information on

¹¹ 2018 Cryptocurrency Exchange Annual Report.

¹² Cryptocurrency Anti-Money Laundering Report.

stablecoins below) that can be used in some cases as an alternative to fiat conversion. Development of decentralized (DEX)¹³ or hybrid¹⁴ exchanges continued, as well as platforms that allow leveraged trading in crypto-assets and platforms designed for trading in security tokens (see more information on security tokens below).

Based on data from TokenInsights, the number of decentralized exchanges¹⁵ increased significantly in the past year, and account for 20% of all existing crypto platforms. However, trading volumes on these exchanges remain low and account for a mere 1% of the total trading volume in crypto-assets, after having dropped considerably relative to other trading platforms in the past year.

Also notable is crypto projects' growing use of smart contracts that include reserve mechanisms. These contracts allow users to sell or buy crypto-assets, including ones with low-liquidity, directly from a smart contract that contains reserves of the assets and uses an algorithm to calculate the price. This mechanism can be built within the project or by the use of an external platform (sometimes referred to as a DEX).

- **Crypto funds** –Evidence regarding the funds market is contradictory. On the one hand, new funds are apparently being established at a rapid rate despite the falling market, while older funds are closing (or are expected to close). According to Crypto Fund Research, close to 200 new crypto funds were established in 2017¹⁶ (three times the number of funds established in 2016), and according to their estimates based on Q3/2018 figures, over 200 crypto funds were established in 2018. Based on these figures over 600 crypto funds are currently active, most are defined as crypto hedge funds or crypto VC funds; One half were launched in the USA, and most are relatively small, with less than USD 10 million in assets under management (AUM).

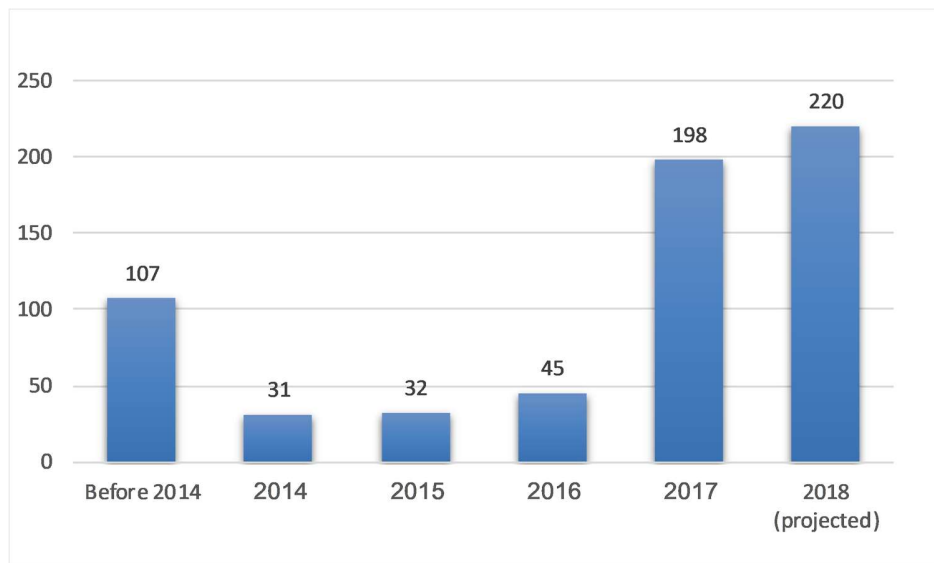
¹³ Platforms without a centralized authority or intermediary, which use smart contracts and allow trading between private wallets.

¹⁴ Platforms that combine elements of centralized and decentralized exchanges.

¹⁵ These figures apparently also include hybrid exchanges and platforms that use reserve mechanisms, as described below.

¹⁶ Cryptocurrency funds, blockchain funds, or digital asset funds

Figure 5. New crypto-asset funds, by year



Source: Crypto Fund Research

According to Crypto Fund Research data, total AUM also showed a significant increase: In 2019, fund-managed assets grew from USD 700 million to almost USD 6 billion (a large portion of the growth stems from the rise in crypto-asset prices), and to more than USD 8 billion in 2018 (despite the fall in crypto-asset prices).

Figure 6. Crypto-asset funds AUM in USD million



Source: Crypto Fund Research

These data do not include the investment of traditional funds that are not dedicated to crypto-assets but invest in the industry. According to a report published by Crypto funds list in October 2018,¹⁷ there are 550 dedicated crypto funds and 380 established funds that invest in crypto-assets, 70% of which are VC funds. According to this report, there are 38 index funds and 34 tokenized funds.

Alongside these figures, it should be noted that funds had also been closed. One of the most well-known is the index fund established by Coinbase in March 2018, launched in June, and closed in October after a mere four months of operations (with negative returns of 26%, compared with Bitcoin's decline of only 1.2% in the same period). Market sources claim that a large portion of all funds are expected to close by the end of 2018 due to meager earnings, for managers that will not earn a performance fee, which accounts for a considerable part of their income.

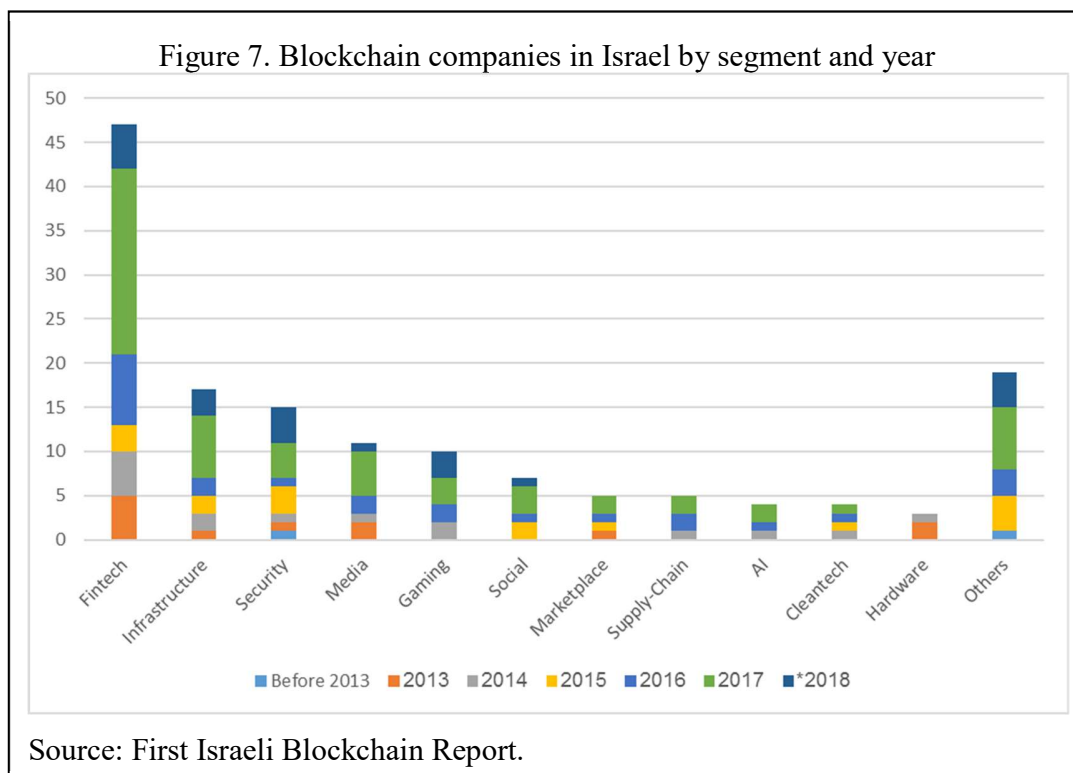
- **The crypto industry in Israel** – Figures published on Israel by One Alpha in October¹⁸ indicate that Israeli projects raised USD 1.2 billion in the past two years in 70 ICOs, which constitute a significant share of all funds raised, controlling for country size. Of this sum, USD 586 million were raised in 2017 and USD 606 million were raised in the first three quarters of 2018. One Alpha also reported that Israeli projects raised USD 163 million in 43 equity financing rounds.¹⁹ The report also stated that, as of its publication date, 4 crypto funds have been established in Israel: one was established in 2017 and three were established prior to 2013 (according to testimonies of market sources, many foreign funds also operate in Israel), and as of the publication date, 147 blockchain companies operated in Israel,²⁰ most of which offer solutions to the Fintech, infrastructure, and security sectors. The following figure presents the number of companies by year of establishment and sector.

¹⁷ The State of Crypto Funds.

¹⁸ First Israeli Blockchain Report, Alpha One.

¹⁹ For the sake of comparison, a similar amount was raised by IPOs on the TASE in the past two years.

²⁰ According to the Blockchain Association, over 200 Blockchain projects have been established in Israel.



An earlier report by EY published in December 2017 indicated that Israel is in fifth place in the volume of ICO fund raising.²¹

2.1.2 Main factors

Two main factors have influenced the developments and trends in the past year.

- The gap between expectations and realized promise** – The crypto-asset industry, similar to other emerging industries, grew mainly on the promise it represented: The promise of improving and creating genuine value, either through a true revolution (that would disrupt and fundamentally transform the way the financial system operates) or by enhancing efficiencies, quality and access to existing products and services. The speed and extent by which these promises are fulfilled have a significant impact on how the industry develops. As a pioneer in the field of cryptocurrency, Bitcoin carried the promise of a decentralized currency that could be used as a medium of payment. Bitcoin and its main competitors have thus far failed to establish their status as such, both due to the high volatility in their values and due to various technological limitations, including lack of scalability, high fees during periods of extensive

²¹ EY Research: Initial Coin Offerings (ICOs).

activity, significant electricity consumption required for mining, and the traceability of holders' identities. These limitations also apply to many other crypto-assets that were not designed to function as means of payment. Various solutions to these concerns have been proposed in recent years, either in the form of substitute assets that use alternative methods or in the form of external solutions. The first group of solutions includes assets that use alternative consent mechanisms such as Proof of Stake (a consensus mechanism that determines the settlement order based on the size of the stake in the asset, eliminating the wasteful competition over computation power, and facilitating more rapid and less expensive settlement),²² privacy coins (cryptocurrencies that provide users with a higher degree of anonymity using methods such as zero-knowledge protocol), and stablecoins (cryptocurrencies that maintain stability because they are linked to a currency or commodity; explained further below). The second group of solutions includes decentralized "layer 2" payment and settlement protocols such as the Lightning Network, which facilitates rapid off-chain transactions as a preliminary stage before broadcasting them to a blockchain.

Another limitation is the connection to the real world, both in terms of conversions between fiat currency and cryptocurrencies and the use of the traditional financial system; and, for specific assets, in terms of the use of smart contracts outside the crypto world, and their triggering by real-world events (Such situations requires a trusted intermediary known as an oracle; Efforts are underway to develop reliable mechanisms that will allow the process to be handled automatically).

Furthermore, many of the projects that raised funds in 2017 failed to fulfill their promises or timetables, and many disappeared, either because they failed to develop the promised service, or because the product or service they developed failed to attract a sufficient level of adoption or actual use; a large number were also declared scams.

Figures on the scope of these failures vary by source. A report published by Satis Group in June 2018²³ states that 78% of all ICOs were identified as scams (other sources²⁴ report a much lower share of 20%), an additional 7% were identified as failures (some refunded investors), and only 15% successfully listed on an exchange of which one half were identified as successful. according to other sources, 50% of ICOs failed to raise funding or abandoned their operations²⁵.

²² Although Ethereum has not yet implemented this solution (the solution is still under development and its Fork date was recently postponed), competitor chains such as the recently launched EOS, which uses a delegation proof of stake, have begun to gain momentum. Notably, additional consent mechanisms exist and the POS mechanism has been criticized.

²³ Cryptoasset Market Coverage Initiation: Network Creation, Satis Group

²⁴ Crypto Utopia, Autonomous Next; First Israeli Blockchain Report, One Alpha, First.

²⁵ Crypto Utopia, Autonomous Next.

In contrast, the figures are different from a standpoint of funds raised: Only 11% of all funds raised in ICOs were identified scams, while 70% of funds were raised for assets that were listed.

An analysis of 141 ICOs in 2017 published by EY in October 2018 shows that 86% of these ICOs are traded below their listing price and 30% have lost all their value. This report also states that 13% of the 86 of the firms that performed an ICO in 2017 have progressed to working products and an additional 16% have a prototype (which is allegedly a low percentage relative to VC-funded startups in the year after raising money according to the report).²⁶

A study conducted at the University of Pennsylvania²⁷ found that in most of the ICOs that were studied, the promises listed in their whitepapers were not reflected in their smart contract codes (such as the issuer's ability to change the code, control the supply of token, or the enforcement of the vesting period).

Alongside these figures, one should keep in mind that this is a highly innovative and partially unregulated industry, in which a large part of the fund raising is based on an idea alone, and the fail rates are close to the figures of technology firms at similar stages of development.²⁸

- **Regulation** - The regulatory environment is a significant factor in the development of any industry, and especially the financial industry. The weight of this factor increases as the scale of activity in an industry grows and captures the interest of widening circles of the public. Regulatory approaches to this sector are not uniform across countries, although positions — and their differences and commonalities — have become clearer over time. As described in detail in the section on regulatory trends, a number of countries led by the SEC in the US expressed a relatively aggressive position on crypto-assets and ICOs last year. This position was expressed in numerous statements and speeches by senior SEC officials, who stated that the majority of ICOs, if not all, constitute offerings of securities and therefore are subject to securities regulations.²⁹ The SEC also intensified its enforcement efforts in this area and established a cyber-unit whose main goal is enforcing this field.³⁰ In the past year, hundreds of

²⁶ EY study: Initial Coin Offerings (ICOs) The Class of 2017 – One Year Later.

²⁷ Cohney, Shaanan and Hoffman, David A. and Sklaroff, Jeremy and Wishnick, David, Coin-Operated Capitalism (July 17, 2018). Columbia Law Review, Forthcoming; U of Penn, Inst for Law & Econ

²⁸ Notably, some projects appear to be meeting investors' expectations, including projects that have launched active products and platforms and projects that are working hard to complete the development and bring value to their users.

²⁹ In one of these speeches, the head of the SEC's Corporate Department stated that Ethereum does not constitute a security because it is currently sufficiently decentralized.

³⁰ The SEC reported 19 enforcement actions in this industry in 2018 (compared to 5 in 2017).

<https://www.sec.gov/spotlight/cybersecurity-enforcement-actions>

requests and inquiries were sent to various projects and a large number of enforcement actions were initiated (also by the CFTC) against issuers and trading platforms.³¹

At the opposite end are countries that continued their efforts to attract entrepreneurs to perform ICOs and establish trading platforms, among other things by maintaining continuous dialogue with entrepreneurs, offering tax relief, and defining a broad range of crypto-assets that are not required to meet Securities laws.³² These developments and regulatory positions also led to changes in how the industry operates — from operating in specific countries and within the borders that regulation permits (such as issuing in Switzerland, Singapore, and Gibraltar) to limiting the offers to accredited investors, and offering of products with an effort to avoid the definition of securities (see more information below).

2.1.3 Market trends

We believe that the factors described above have considerable weight in shaping additional developments and trends that emerged in the past year. Although developments and trends clearly feed into and affect each other, they are presented separately for the sake of clarity of description and discussion.

- **Hype cools down** – In 2017, alongside the significantly rising prices of crypto-assets, the industry was the target of extensive media coverage and statements by many public figures, and became the topic of conversation around the world. Many industry participants dreamed of becoming rich quickly, either in return for their investment or by promoting ideas and initiatives based on innovative technologies and the ability to raise funds quickly with relative ease. These dreams were fanned, among other things, by get-rich-quick narratives, and expectations that the industry would quickly fulfill its great promise and that widespread adoption was around the corner. As a result, the number of ICOs increased significantly in 2017 and early 2018. In 2018, the hype that characterized the market in 2017 cooled as prices fell across the board, as participants understood that it was not possible to ignore regulation, and as they realized that it would take more time for crypto-assets to realize their potential. Media headlines began to eulogize ICOs and Bitcoin, and stories of quick wealth gave way to accounts of losses. The dampened hype was also accompanied by a decline in the number of ICOs and in structural changes in the market, described below.

³¹ It is also notable that the SEC has continued to refuse requests to issue ETFs on crypto-assets.

³² See more information in the Section on trends in the international arena.

Some participants are not deterred by falling prices and cooling hype, and even welcomed them. Among these some believe that similar to the dot com bubble period: While 2017 was a year in which many participants focused on getting quick gains and spreading catchwords and slogans, the past year and the years to come will focus on developing and setting up decentralized services that create genuine value for end users. Although current figures on such developments are lacking, it is argued that there is a constant increase in the number and quality of developers and developments in the industry, and in the industry's contribution to open-source projects on Github, a popular code repository (Github activity ranking is used by some investors to assess crypto-projects using monitoring platforms).

- **Companies that raised funds in the past are encountering difficulties** – As described in the Interim Report, companies that raised funds through ICOs mainly did so in exchange for crypto-assets (mainly Bitcoin and Ether). These assets suffered a significant decline in value, and companies that failed to convert a considerable portion of their ICO proceeds into fiat currency soon after the issuance found that the resources at their disposal had dwindled compared with the initial issue amount. Testimonies from the market indicate that these companies are encountering problems in completing their development process and paying salaries to their employees.
- **Access to institutional investors** – One of the most talked-about topics in 2018 was the expected adoption of traditional institutional investors of crypto-asset investments. So far, it appears that the major share of large scale investments is coming from VC and hedge funds, and the major institutions that manage other people's money have still not made a significant incursion into this field. The expectation that the Bitcoin contracts launched in late 2017 would prompt adoption by institutional investors has similarly not materialized (although the turnover in these contracts increased last year, it is still smaller relative to the turnover in the underlying assets), and in any case such activity does not constitute direct investments in crypto-assets. This is also the case for efforts to launch Bitcoin ETFs, which have been repeatedly rejected by the SEC (although several traditional investment vehicles track crypto-assets, mainly in Europe, and the Swiss stock exchange recently announced that it would launch the first ETP of its kind tracking several crypto-assets).³³

One of the challenges to widespread institutional adoption is the industry's lack of regulation and best practices. In view of the regulatory rules applying to institutional investors, one issue is crypto-assets' custody arrangements and purchase procedures (such as the use of digital wallets and transfers to and from stock exchanges). In the past year, there is evidence that several

³³ <https://cointelegraph.com/news/europe-leads-the-way-with-crypto-exchange-traded-products>

bodies are working to develop such services. The most notable of these is the well-established Fidelity Fund, with over USD 7 trillion AUM, which announced the establishment of a subsidiary to provide transaction and custody management to large-scale investors.³⁴

Another prominent project in this context is the Bakkt initiative by ICE (which controls the NYSE), which is designed to enhance access to crypto-assets for institutional investors, merchants, and the general public, in a regulated framework. Within this project, a physically delivered Bitcoin daily futures contract and warehousing of the underlying asset is expected, although it has not yet received regulatory approval (these contracts differ from currently existing contracts).³⁵

Another issue that challenges adoption by investors in general, and by institutional investors in particular, is crypto-assets' liquidity and volatility. As described above, volatility of these assets is still higher compared to traditional assets. Trading volumes, which also declined in the past year, are distributed across numerous platforms, and the majority of trading involves the cryptocurrencies with the highest market cap, led by Bitcoin. Such a situation may also make it hard to facilitate block-trades usually used by institutional investors.

- **Self-regulation** — The Interim Report described in detail various mechanisms through which the industry performs self-regulation, such as the use of audit services and maintaining ongoing contact with the investor community. In view of the developments in the past year, evidence indicates that investors have become more cautious, are studying the industry more thoroughly, and perform more thorough due diligence. Indications of this change are the many campuses that now offer courses in this field, academic engagement with this topic has expanded, with an increasing number of research studies underway; offerings of consulting and oversight services for investors, and entities whose goal is to increase the quality of information and transparency in this field.³⁶ Evidence also shows that crypto ventures seeking to raise funds operate in a more orderly manner and with greater transparency,³⁷ emphasize investor relations, and grant a wider range of rights to token holders (see more information below). These ventures place stronger emphasis than before on KYC and AML procedures. The industry is working on sophisticated solutions for these procedures include tokens that allow secure sharing of a user's identifying details (identity token) or verification of accredited investors (to ensure compliance with securities

³⁴ An investment house in Israel issued a similar declaration. <https://www.themarket.com/markets/1.5624976>

³⁵ <https://www.bakkt.com/index>

³⁶ For example, Blockchain Transparency Institute.

³⁷ Among other things it is argued that projects that do not share their code, typically on Github, will find it more difficult to succeed in fund raising.

regulations), as well as tools for analyzing, identifying, and tracking asset movements on DLT networks.

In secondary markets, there are indications that western trading platforms have refused to accept and even have removed tokens suspected of being securities, and firms that retracted their planned ICOs (and refunded investors) noting regulatory risk as the major reason for their decision.

It should also be noted that many industry participants are speaking of the need for regulation (including in the public comments made in response to the Interim Report), and view regulation as a critical factor in the industry's success and for preventing the industry's being labeled as a scam-ridden "Wild West". While many projects perform their ICOs in countries with a lenient regulatory regime, they also express their concerns of being labeled as unregulated.

- **Structural changes in fund raising methods** — Several market participants argue that the trends described above, including the decline in market capitalization and ICO volumes and the desire for self- or mandatory regulation, are both the causes and the outcomes of the industry's natural maturation. These developments have prompted several structural changes in how funds are raised. The most prominent of these include:³⁸
 - As described above, ventures appear to be operating with greater transparency and allowing investors greater involvement (like in the process of releasing the tokens distributed to developers, or by using smart contracts to manage the fund raising process, among other things).
 - There is greater stress on regulatory issues, such as choosing the appropriate country for the legal entity, setting up mechanisms of corporate governance and customer identification procedures (including accreditation, AML, KYC).
 - In many cases, tokens offer additional rights beyond right of use, such as voting rights and ownership rights (for more information, see section on STOs below).
 - Ventures are soliciting accredited investors and funds to raise funds, whether exclusively or as a preliminary phase in a public ICO process, and also use equity financing (that is, funds raised in exchange for shares in the company) before selling tokens (for more information, see below).
 - Increased investments in cyber-protection, beginning from the ICO stage.
 - Reduction in aggressive ICO marketing efforts.
 - Increased focus on creating a user community.

³⁸ Based on testimonies and reports including Initial Coin Offering – A Strategic Perspective, PWC.

- Changes in the structure of the bonuses: Bonuses to first investors are reduced and include vesting mechanisms, as ventures recognize that such bonuses trigger token sales soon after an issue.
- Increased free distribution of crypto-assets using of Airdrops and forks. These tools facilitate rapid, focused distribution; help attract potential users and retain existing users (if tokens are distributed to existing holders). These tools are sometimes used as part of a reward program, and are allocated to users in exchange for joining the venture’s social media channel or distributing its marketing materials, for example.
- **Increased reliance on investment funds and accredited investors** — As noted in the Interim Report, a considerable portion of funds are raised in the ventures’ pre-ICO period, when VC funds and accredited investors are solicited to invest most of the funds. In many cases, the ventures even stop at this stage without performing an ICO. This trend strengthened in 2018 and many industry sources believe that it will continue to gain strength due to the regulatory risks that ICOs face in the USA, and the advantages of raising funds from VC funds and accredited investors (these sources are more professional, more knowledgeable about the field, and require less attention than a large group of individual investors). Various sources report that almost 60% of the funds raised in 2018, including a considerable portion of the major issuances, were private placements, and that most if not all recent ICOs in the USA were private placements (evidence shows that this is also true for Israeli crypto ventures).³⁹

Data collected by Marketwatch⁴⁰ from EDGAR, the SEC’s report database, indicates that the number of crypto-asset-related private placements increased significantly in 2018: 41 287 companies filed with the SEC for an exemption granted when limiting the fund raising to accredited investors (Reg D), and declared a funding of USD 8.7 billion, compared with 44 such issuances in 2017 with a declared value of USD 2.1 billion.

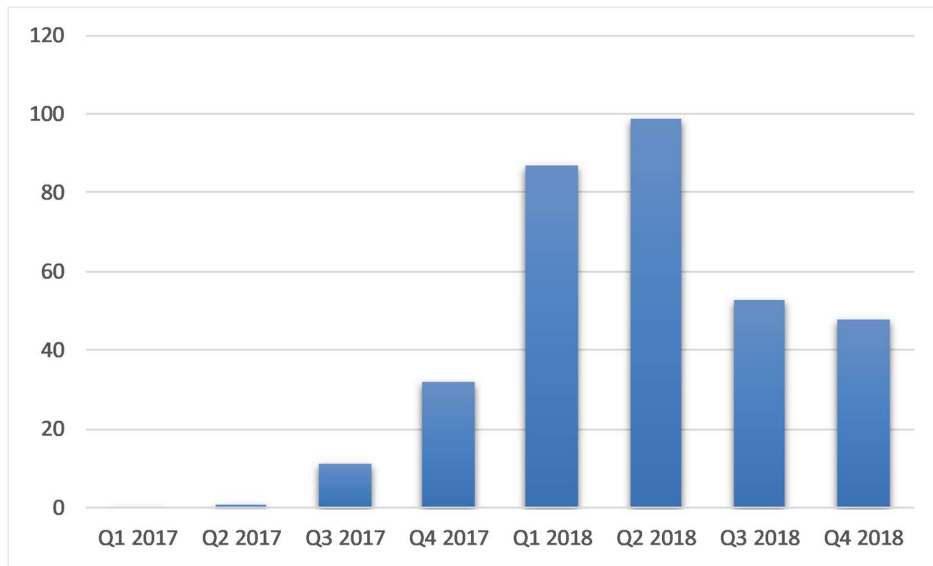
Figure 8 shows that Reg D filings also peaked in the second quarter of 2018, and declined thereafter, although the number of filings remained above end-2017 figures.

³⁹ According to sources including Tokendata.io and coiinschedule.com.

⁴⁰ <https://www.marketwatch.com/story/icos-continue-to-raise-money-via-sec-back-door-2019-01-11>

⁴¹ Including terms such as “coin,” “ICO,” “token,” “initial coin offering” and “SAFT.”

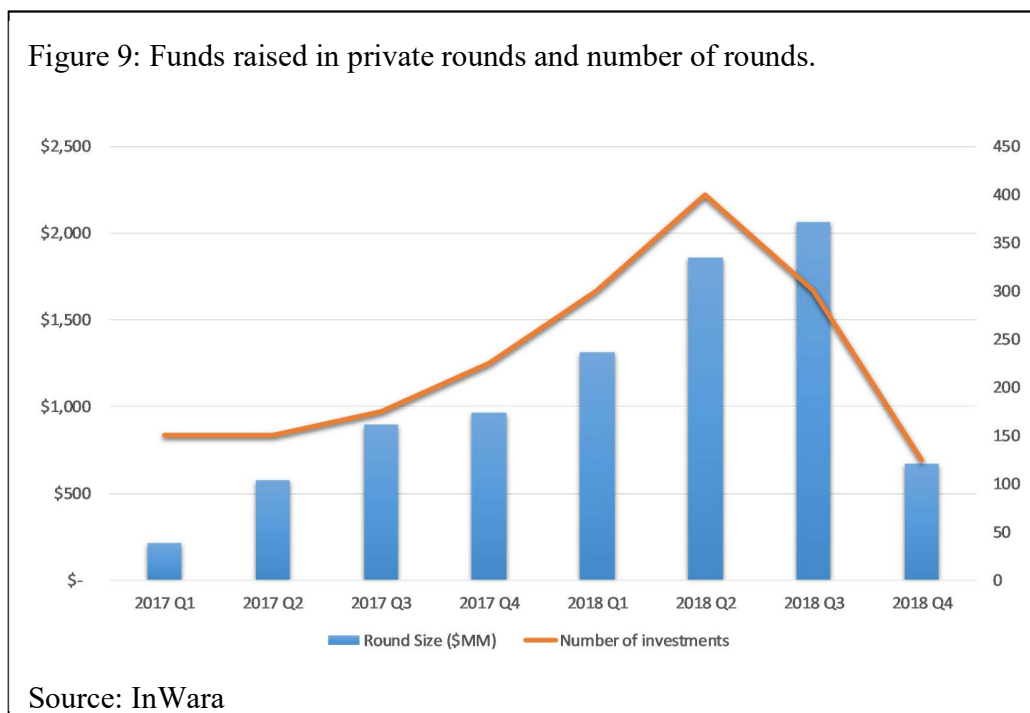
Figure 8: No. of cryptocurrency related firms that filed Form D



Source: Marketwatch

According to various sources, VC funds raising also increased in 2018 (see data in the section on developments in the funds market). According to Autonomous Next data, over USD 5 billion were raised from venture capital funds through equity offerings in 2018, compared with USD 2 billion in 2018.

Data published by InWara also point to a significant rise in private funding last year, but in the final quarter of the year a significant 65% drop in private placement investments was evident, alongside the decline in ICO funds raised.



- Security Token Offerings (STOs)** – The term Security token largely refers to crypto-assets that fall under the definition of securities. Several regulators worldwide, and especially in the USA, have assumed positions and implemented enforcement measures that indicate that most tokens, including tokens that only confer rights of use, are considered securities and required to comply with the relevant regulatory rules. Consequently, many recent offerings and many offerings that are anticipated in the near future are structured in advance as securities offerings and rely on exemptions by soliciting accredited investors only (Reg D, in the USA), by raising a limited amount of capital and limiting tradability (Reg A+), by issuing under a crowdfunding model (Reg CF), or by soliciting investors in foreign countries (Reg S). To date there are no records of ventures that filed a complete prospectus before making an offering to the public.⁴² Notably, in many cases, the term STO refers to tokens that confer similar rights to traditional securities (such as voting rights, ownership of assets, profits, and rights to cash flows).

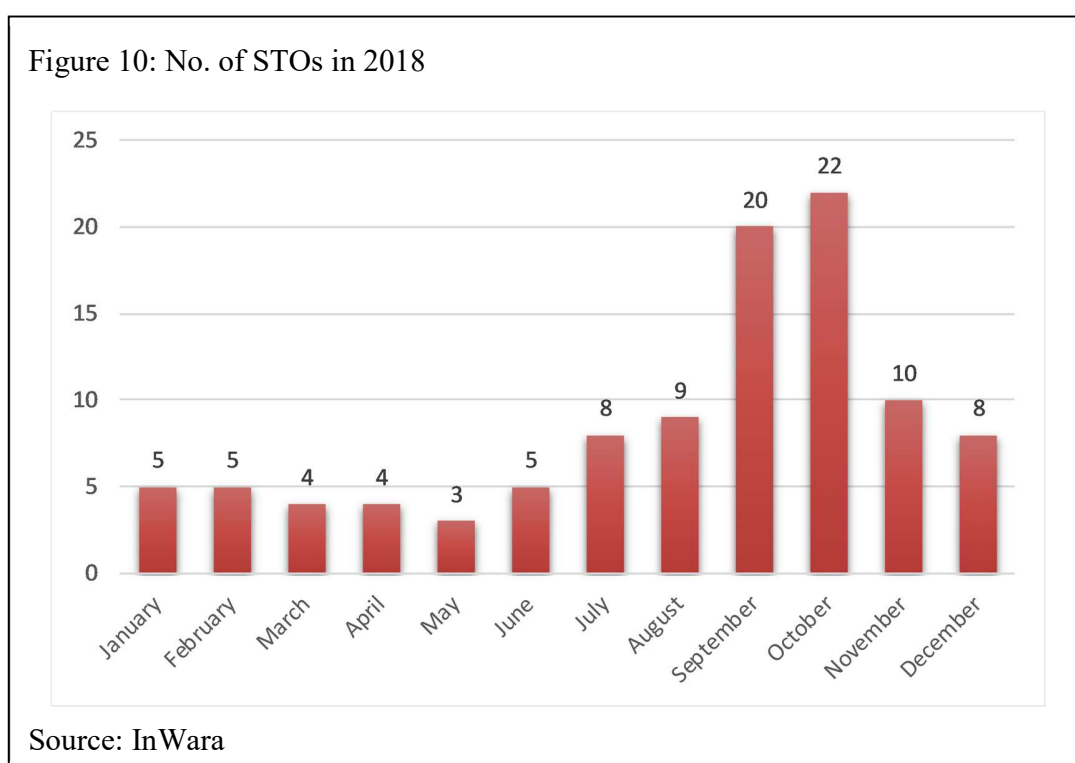
The category of STOs also includes equity tokens (equity token offerings are known as ETOs). Equity tokens are designed to represent shares of the issuing company. Tokenization may be used by a private company to distribute its shares for the first time, or by a public company for which tokens represent outstanding listed shares. In these cases, blockchain

⁴² A planned public ETO in Germany was eventually limited by BaFin to large-scale purchases only and consequently the ETO was exempt from the requirement to issue a prospectus.

<https://blog.neufund.org/the-neufund-fifth-force-gmbh-eto-details-68cb877e91f4>

technology arguably provides significant advantages, due to increased liquidity and accessibility by companies that would otherwise remain private, greater efficiency and lower settlement costs, and international distribution, among other advantages. On the other hand, it is argued that the use of a blockchain does not by itself increase liquidity, and that extensive adoption of STOs is far in the future, mainly in view of the regulatory challenges which requires time to overcome.

As a result of the development of STOs, and the decline in funds raised in ICOs, it is now more widely believed that many future offerings will be in the form of an STO. Figure 10 illustrates that while the number of STOs is much smaller than the number of ICOs performed in the past two years, the number of STOs rose in the second half of 2018, coinciding with the drop in the number of ICOs.



Data from other sources show that dozens of projects, valued at several hundreds of millions of dollars, are already planning STOs for 2019.

- **Exchange platforms for security tokens** – In 2018, in response to the development of STOs, many entities announced that they plan to establish or have already established platforms for trading in these assets. In contrast to traditional cryptocurrency exchanges for crypto-assets that are not deemed securities, STO exchanges must comply with the regulatory requirements for securities trading platforms if they wish to approach the general public. No Security token

trading platform has reported obtaining regulatory approval to operate a trading platform that is open to the general public to date, and the platforms currently in operation solicit only accredited investors (some of whom have performed STOs themselves). However, several established crypto-asset trading platforms in the US market, such as Coinbase, also develop a service in this field (through the acquisition of licensed broker-dealers, approved by the SEC), and some traditional regulated exchanges have announced their intention to permit trading in security tokens in the next few years. The latter group includes the Gibraltar Stock Exchange (which is currently awaiting regulatory approval), Malta, Switzerland (Six Swiss), Australia (ASX), and the LSE, which is working on the development of an STO exchange platform jointly with other companies, in coordination with the FCA.

2.1.4 Trends in the features of assets and ventures

In addition to the growing trend of STOs, described above, the following types of crypto-assets also showed growth in the past year:

- **Stablecoins** – Stablecoins are assets whose value is pegged to the price of a currency or commodity (e.g., gold) and are usually collateralized by real-world holdings in their underlying asset. More innovative models offer an algorithm-based price-linkage mechanism and maintain stability through a series of incentives designed to increase or reduce the number of outstanding tokens based on supply and demand, or use other crypto-assets to manage the token reserve. Most stablecoins are linked to the US dollar. Tether, the most popular stablecoin is traded at a market cap of close to USD 2 billion (the seventh largest cryptocurrency) and its, daily trading volumes are almost USD 4 billion, second only to Bitcoin.⁴³ The use of stablecoins is growing primarily due to their ability to maintain relative stability in the highly volatile crypto market, without moving capital back into fiat. Today it appears that stablecoins are being used mainly to convert other cryptocurrencies into a coin pegged to the local fiat currency, which makes the future use of these funds for trading easy, does not require conversion into fiat, and does not involve operating with banks that typically complicate such conversions, charge high fees, and impose additional KYC/AML requirements. Stablecoins can also be used to make speculative investments in the pegged assets, or as a stabilized medium of digital payment (in contrast to Bitcoin). Facebook recently reported that it is developing a stablecoin for payment transfers on WhatsApp.

⁴³ Many rumors surround this stablecoin, among other things due to its ties to a known trading platform, its effect on the price of Bitcoin, and the uncertainty regarding the value of dollars that backs it. Its value is typically very close to one dollar, but it has experienced short periods in which volatility reached several dozen percentage points (either due to a decline in confidence in its backings or selling pressure).

- **Digital fiat currency (DFC)** – These are coins issued and controlled by a central bank and may be used as a substitute for state currency. Many countries including Israel,⁴⁴ have announced that they are studying this option. Although no developed country has issued digital fiat currency for widespread use to date, the Venezuelan government has made an effort to issue a cryptocurrency (petro), allegedly collateralized by the country’s oil reserves. According to numerous sources, the petro is intended to be used as a replacement of the local currency (bolivar) in order to circumvent US sanctions and facilitate international trade. There is conflicting information on the success of the issuance, and the currency has not yet been listed on an exchange.⁴⁵
- **Asset-backed tokens** – These crypto-assets represent and are backed by a holding in specific assets (or groups of assets) in the real world. Assets may be real-estate, diamonds, commodities, or even collectables such as fine arts (or shares; see equity tokens above). Assets may be managed by the issuer, such as in the case of Rental real-estate projects, or maintained in trust on behalf of token holders. Each token represents a small share in the holding of the real assets. The Interim Report described the advantages and challenges of asset tokenization, and this trend appears to be acquiring momentum: Several platforms enable this, and several real-estate management firms have embarked on asset tokenization.⁴⁶ These token issues are typically performed in the format of an STO, as described above.
- **Reverse ICOs** – This term is used to describe the situation in which an established company that already has a product or service and a customer base issues tokens designed to be used by its customers to consume the existing service or services that will be developed in the future. One of the most prominent sales in the past year was Telegram’s private sale (other examples from 2017 are Kodak and KIK). Telegram raised USD 1.7 billion in a sale of tokens designed for various uses including transactions between the company’s messenger app users. This type of offering attracts investors because the issuing companies are well established, have solid financial backing, an existing product, and an existing community of users.
- **Non-fungible tokens (NFTs)** – These are crypto-assets in which each token is unique and tokens are not interchangeable. The most well-known use case of this type of tokens emerged in late 2017, when Cryptokitties were developed on the Ethereum blockchain. In this game, each

⁴⁴ A team established by the Central Bank of Israel advised to avoid issuing a digital shekel in the near future. See <https://www.boi.org.il/he/NewsAndPublications/PressReleases/Pages/6-11-18.aspx>

⁴⁵ [https://en.wikipedia.org/wiki/Petro_\(cryptocurrency\)](https://en.wikipedia.org/wiki/Petro_(cryptocurrency))

⁴⁶ One example is the issue of the real-estate portfolio of an investment management company in the US on the Indiegogo crowdfunding platform (for qualified investors). <https://www.ccn.com/indiegogos-first-security-token-ico-raised-18-million/>. A venture in Israel also announced plans to issue tokens that represents units in real estate investment. <https://www.globes.co.il/news/article.aspx?did=1001259417>

token has specific features represented by a digital image of a cat (which can be bred), and is traded as collectibles. The game became very popular and at some point transaction volumes even overloaded the Ethereum network. The most expensive Cryptokitty token was sold for USD 120 thousand. Beyond their use as collectibles, NFTs potentially have much broader uses, and several projects began to experiment with their applications in the past year. Each NFT can store unique information that can be distributed in a decentralized manner on a blockchain, can be monitored, and is immutable. By virtue of these features, these tokens can be used to store and transfer information such as identities, ownership, or details about products like cars (allowing one to track the entire manufacturing process), land registration, collectibles, etc.

- **Decentralized credit networks** — These are applications that facilitate P2P loans in a decentralized manner using blockchain technology. Loans of this type exist in the traditional world as well, but the use of blockchain technology and crypto-assets can allow more effective exploitation of the technology's benefits such as reduced mediation and international transaction costs, increased settlement efficiency, enforcement based on smart contracts, etc. Evidence shows that significant improvements were made in the infrastructure for these applications in the past year. Many projects presented developments including platforms for fiat-currency loans collateralized by crypto-assets, platforms for crypto loans enforced by smart contracts, international loans in local currencies (converted into tokens for transfer), and creating leveraged positions in cryptocurrencies by borrowing based on a margin in stablecoins

2.2 International Regulatory Developments

The field of crypto-assets and ICOs is still in its early stages and rapidly evolving, both in Israel and worldwide. Below is a brief review of the main trends in how various countries and regulators around the world have addressed this area of activity in the past two years.

Several countries, including Brazil, Russia, Poland, Malaysia, Nigeria, and Dubai, have issued **general warning statements** to the public regarding the risks of crypto-assets. European Securities and Markets Authority (ESMA) also published public warnings — one to investors and the second to companies involved in ICOs, regarding the need to meet regulatory requirements. Other countries such as Gibraltar and Thailand also published circulars and instructions about the application of securities laws to ICOs, in addition to published warnings.

Yet other countries (China and South Korea) have **completely prohibited all activity in this field**, and in early 2018 South Korea banned all anonymous trading or trading through intermediaries.

Many other countries such as Australia, USA, Germany, Hong Kong, New Zealand, Singapore, Spain, Canada, and Switzerland, published **guidelines and criteria used to determine the**

applicability of existing securities regulation over ICOs on a case by case basis. Several authorities (in Canada and Singapore) published their position on the application of securities laws to several hypothetical examples and cases.

The US SEC declared on several occasions that most crypto-assets or tokens (with the exception of Bitcoin and Ethereum) appear to be securities and therefore fund raising through an ICO is subject to securities laws. Accordingly, the SEC commenced enforcement proceedings against issuers of crypto-assets for securities violations. These enforcement actions concern various securities offenses related to ICOs, such as unregistered operations of broker-dealers, trading platforms and others. For example, in August 2018, the SEC denied applications to launch Bitcoin-tracking ETFs due to the risk and volatility that characterizes the underlying asset. Civil suits have also been filed with respect to ICO proceedings, on the grounds that issuers allegedly violated securities laws.

In Australia, Australian Securities and Investments Commission (ASIC) acted to stop five ICOs from raising capital since April 2018, and also acted to prevent the issue of participation units in a mutual investment scheme in crypto-assets.

Several countries announced that they were **examining specific regulation in the field of digital assets**, while others have already implemented such regulation. For example, in 2017, the FCA in the UK issued a Discussion Paper and Feedback Statement on DLT, which set out that the FCA does not find it warranted to amend existing frameworks but will re-examine its position on the basis of future developments. Two reports published in September and October 2018 apparently reflect a change in that approach. The report of the Treasury Committee of the House of Commons states that most ICO projects fall beyond the regulatory perimeter of the FCA and therefore the Committee recommends to urgently update the Regulated Activities Order in order to protect investors in this field by subjecting ICOs to the regulatory remit of the FCA, which will develop specific regulation for this industry. A second report issued by the UK Cryptoassets Taskforce of representatives of the Treasury, FCA, and the Bank of England, stated that while security tokens are subject to existing regulation, there's a need to examine whether the regulatory perimeter needs to be extended to cover crypto-assets that currently fall outside the FCA's perimeter. The report also stated that the government intends to issue a consultation paper on this topic in early 2019.

The French AMF issued a consultation paper in October 2017 on three potential approaches to regulation of the ICO industry. The proposed approaches were: (a) maintain a regulatory status quo and establish best practices for ICOs; (b) regulate ICOs using the existing legal framework for prospectuses, that is, ICOs should be subject to the existing rules that apply to IPOs; and (c) develop a specific ICO regime, based on various intermediaries for various assets, or in a way that allows issuers a choice between obtaining a pre-ruling or issuing an obligatory disclaimer regarding the absence of AMF approval. In February 2018, the AMF published a summary of the replies to its

public consultation and its comments on the replies. This document indicates that most respondents prefer an optional advance approval regime (3rd approach). In June 2018, an amendment to the France's Monetary and Financial Code was proposed (aka PACTE bill), according to which a chapter on ICOs would be added, granting issuers an option to choose between obtaining preliminary approval (visa) for an ICO in advance or making a statement during the ICO that no such approval was granted.

In November 2018, the Hong Kong Securities and Futures Commission (SFC) issued a proposal for a regulatory framework for virtual asset trading platforms. Digital asset exchanges must satisfy the general principles listed in the proposal and undergo an examination before a license is issued to allow them to operate in Hong Kong. According to the proposal, the SFC intends to examine, within a regulatory sandbox, whether licenses should be issued to such platforms under its current powers. The option to join the regulatory sandbox is given to companies based on whether platforms are willing to meet the SFC's high expected standards. The principles refer to a platform's financial strength, insurance requirements, disclosure requirements, among others.

In Thailand, a royal decree on digital assets came into effect in May 2018. The decree applies to cryptocurrencies and provides that only companies incorporated in Thailand may issue digital assets. Issuance documents and draft prospectuses must be approved by the Thai Securities and Exchange Commission. Digital asset offerings may only solicit investors of the type determined by the Commission, through an ICO portal approved by the Commission. Violation of the royal decree is subject to criminal and civil sanctions, similarly to securities offenses in Thailand.

In the Netherlands, the Netherlands authority for the Financial Markets (AFM) and the Dutch National Bank (DNB) issued a comprehensive report on cryptocurrencies in January 2019, including two main recommendations to the Dutch Minister of Finance. One is to develop a specific licensing regime for platforms that allow crypto-fiat currency exchanges and support suppliers of digital crypto-wallets, in order to ensure effective implementation of the European Anti-Money Laundering Directive. The second is to amend the EU's regulatory framework in order to facilitate development of blockchain-based means of financing for SMEs, and to consider amending the definition of securities in national and European legislation such that it addresses substance rather than form, which will allow the AFM to regulate certain types of crypto-assets.

Switzerland and Gibraltar are two countries that have specifically chosen to encourage crypto-asset activities. The Swiss Financial Market Supervisory Authority (FINMA) addressed various aspects of these assets and determined, among other things, that utility tokens will not be defined as securities if their goal is to grant right of digital access to applications or services and can be used on the issue date, in view of the absence of their access to the capital market. However, if such a token is purchased on the issue date for investment purposes, it is a security. In February 2018,

FINMA issued guidelines for filing applications for preliminary approval and assistance to projects that seek to raise funds from the public on ICOs, on the topics related to licensing. The Swiss Banking Association (SBA) also issued guidelines for its members on opening bank accounts for blockchain companies. The guidelines list the risks and challenges related to opening new accounts for companies in this field that raise funds through various means including through ICOs, and are incorporated in Switzerland. In Gibraltar, specific regulation came into effect in early 2018, regulating the operations of companies such as virtual currency exchanges that offer services related to storing and transmitting value belong to others based on decentralized ledger technology, from and in Gibraltar. The subsidiary formed by the Gibraltar Stock Exchange based on this legislation received a full license from the Gibraltar Financial Services Commission (GFSC) and operates under its supervision. Several approvals in principle were issued to companies that use DLT for storing or transmitting value belonging to others, which is the first step in obtaining a license. Gibraltar announced that it is committed to serve as a safe and stable haven for doing business, and is examining options to promote a specific regulatory framework for token marketing and distribution that will be in line with the regulatory framework for DLT activities.

Crypto-asset exchanges operate in many countries. According to the report of the UK Cryptoassets Taskforce, which includes representatives of the Ministry of Treasury, the FCA, and the Bank of England, there were 206 crypto-asset exchanges in operation worldwide in October 2018. The US Commodities Futures Trading Commission (CFTC) recognized virtual currencies as commodities as early as in 2014, and trading in derivatives whose value is a function of a virtual currency is subject to its regulation. Accordingly, the CFTC supervises derivatives whose base asset is Bitcoin, and it has the authority to take action in the event of manipulation or fraud involving the base asset — the virtual currency. In December 2017, two commodity futures exchanges began to offer Bitcoin futures in the USA. Many of the cryptocurrency exchanges in the USA operate as “money transmitting services” and are not subject to the direct supervision by the SEC or by the CFTC, and receive their license to operate based on the laws of the state in which they operate. Nonetheless, both legislation and regulatory directives were not formulated to address the types of crypto-assets known today. Apparently the position of the SEC and the CFTC is to study whether federal legislation concerning these platforms is warranted. In March 2018, the SEC issued a statement on potentially unlawful online platforms for trading digital assets. The statement includes examples of questions that investors should consider before trading in digital assets on online trading platforms, and considerations that platform operators should take into account before commencing operations. The statement notes that online trading platforms have become popular for investors who buy and sell digital assets including coins and tokens offered for sale in ICOs. Platforms that offer investors to trade in digital assets that operate as an “exchange” and meet the

definition of a “security” under the federal securities laws, must obtain a license (by registering with the SEC) or an exemption from registration from the SEC.

In Canada, several platforms for trading in digital assets exist, but as of the most recent publication on this topic dated August 2017, none have received the mandatory recognition or exemption from the recognition requirement. In contrast, in Japan, several legislative amendments were made after the collapse of the Mt. Gox platform, and the Financial Services Agency (FSA) issued licenses to 16 platforms trading in virtual currencies. According to various publications, 160 applications for a license for digital currency trading platforms were pending as of September 2018. In October 2018, the FSA granted self-regulatory status to the Japan Virtual Currency Exchange Association (JVCEA), allowing it to regulate the cryptocurrency industry and trading platforms.

In Gibraltar, specific regulation came into effect in early 2018 (as described above), regulating the activities of companies that offer services for storing or transmitting value belonging to others based on DLT, such as virtual currency exchanges, from or in Gibraltar. In Spain, while there is no specific regulation that applies to platforms for trading in cryptocurrencies or crypt-assets, it is the position of Spain’s National Securities Market Commission (CNMV) that platforms should, at least, be subject to rules of custodianship, registration, controlling conflicts of interest between clients, and transparency of fees (and AML regulations). The CNMV therefore advised these platforms to voluntarily implement the securities market’s rules on these issues in order to ensure their proper operations.

In April 2018, the Australian Securities and Investments Commission (ASIC) uniquely was granted consumer protection powers to oversee and regulate the activities of crypto-assets. These powers, delegated to the ASIC by the Australian Competition and Consumer Commission (ACCC), allows the ASIC to take action against deceptive practices in the marketing or sale of ICOs, even if the ICO does not include a financial product.

A **regulatory sandbox** is another significant means for learning about the crypto-asset industry and ICOs. Regulators worldwide (for example in the UK, Singapore and several Canadian provinces) that seek to study this topic and promote the technology sector in their jurisdiction operate a regulatory sandbox, and invite entrepreneurs to register and use the sandbox to launch innovative products and services without the full regulatory requirements that typically apply to such products or services. Their operations are conducted for a trial period in which the regulatory authority carefully studies their activities and outcomes. The benefits of a regulatory sandbox are the reduced time required to launch operations, reduced ancillary costs, and more convenient access to financing. Among the diverse tools available to entrepreneurs who use a sandbox are assistance in understanding existing laws, and exemptions from various requirements when launching and testing the project. In England, in cases in which the law makes it impossible to grant relief or an

exemption, a no enforcement action letter may be issued by the FCA if it believes that it is justified to permit the project to operate in the sandbox.

Several countries including Australia, New Zealand, and France, have studied whether to permit the **issue of digital tokens on crowdfunding platforms**; that is, whether ICOs should be considered crowdfunding mechanisms. These countries found that the common ICOs do not have the same features as crowdfunding regulated under their securities laws and therefore, legislative adjustment may be necessary before this mechanism can be used.

2.3 Regulatory developments in Israel

In February 2019, the inter-ministerial taskforce led by the Ministry of Finance, the Ministry of Justice, and the relevant regulators, issued a recommendation to establish a regulatory sandbox. The aim of the sandbox is to create a regulatory environment adjusted to Fintech companies, allowing the benefits that the hi-tech world offers while reducing the level of risk to which the public is exposed. The companies in this program will operate under adjusted regulation for a limited period, with the regulator's close oversight and control. Another aim is to facilitate learning by government officials so that they are able, at the end of the program, to determine whether adjustments to regulation are required to allow Fintech companies to operate in the market on a permanent basis. The program also includes an accompanying track that companies may join. In this track, companies can assume the obligations of adjusted regulation even before any determination is made whether or not the law applies to them (for example, in the case of crypto-asset companies, whether or not the crypto-assets are deemed securities or not). Notably, companies today may also elect to come under the existing regulatory regime and satisfy its requirements, but the sandbox's accompanying track will also facilitate the adjustment of regulation to its operations.⁴⁷

Several changes in securities laws that occurred after publication of the Interim Report may be relevant in the future for the crypto-asset industry. One development is that amendment 28 to the Funds Law came into effect. This amendment brought ETFs (that were previously ETNs) under the supervisory regime of mutual funds, and also subsumed arrangements involving joint investments in currencies or commodities under the ambit of the law. A draft bill for the regulation of broker-dealer activities was also published, proposing that broker-dealer operations would require a license with respect to their operations involving securities, as defined in Section 1 of the Securities Law,

⁴⁷ Report of the Inter-Ministerial Team.

and with respect to financial instruments, similarly to the licensing requirement that currently applies to trading and settlement platforms.

3. Public comments to the Interim Report

The Interim Report included an extensive description of crypto-asset industry, a financial analysis of the phenomenon and its opportunities, challenges and risks; a description of the various laws in the area of securities that might be relevant for activities involving crypto-assets; and an international review of developments up to that date.

In its work, the Committee met with many parties, including other regulators from Israel and abroad, key industry participants, developers and entrepreneurs who performed or are expected to perform ICOs, investment entities active in the industry, professional associations, and professional consulting entities including law firms and accounting firms. After publication of the Interim Report, many industry participants submitted their comments in the public comments procedure. The public comments and the numerous discussions held with industry participants made a considerable contribution to the Committee's work. They contributed greatly to our research of the industry, to understanding its unique features, and to the extent to which current laws match these features, both in terms of meeting the need for regulatory certainty and clarifications that the industry requires for its future development in Israel, and in terms of how the industry should be addressed in the future, and the needed adjustments to the law.

Several public comments requested additional clarifications on existing laws or argued that current laws should not be applied to operations involving crypto-assets, and included proposals for specific regulation on crypto-assets. Public comments also addressed specific questions the committee raised for discussion on the laws applicable to intermediaries, including trading platforms, funds, advisers, and portfolio managers. In this respect, the comments represented a wide range of diverse opinions, some of which advocated extending securities laws regulation to all crypto-assets and allowing existing license holders to operate in crypto-assets, while other respondents objected to such extension. The public comments largely expressed support for the Committee's recommendations to integrate ICOs in special fund raising tracks by, for example, defining regulatory relief for limited-scope fund raising, adjusting the crowdfunding track, the use of a regulatory sandbox, adopting a mechanism of reliance on foreign law, and the establishment of a tailor made disclosure regime.

In general, the position presented in the Interim Report reflects a general approach that advocates that securities laws should not be addressed differently when a new financial service or asset is offered; Rather, securities laws are designed to encompass various types of financial services and assets offered to the public. This position is the basis for many securities laws worldwide, and it has

had numerous manifestations in the past year with respect to crypto-assets. On the specific question of whether crypto-assets constitute securities, securities commissions worldwide, led by the SEC, reiterated the position that ordinary tests for securities also apply to crypto-assets. The Interim Report described the distinction between the category of crypto-assets known as security tokens, which are similar to securities in the rights they confer, and utility tokens, which confer functional rights and require more in-depth study. The position presented by the SEC, which also appears to be the position of the industry itself, is that ICOs should be generally considered securities offerings. This is also the Committee's opinion. To date, the Committee has not been presented with any case of an ICO involving utility tokens that, if offered to the public in Israel, would not be considered a securities offering, but this does not rule out that such offerings may be developed in the future.

Comments on establishing a specific regulatory framework for crypto-assets addressed the position that future regulation should also address the technological, business, and consumer protection features of crypto-assets, and the fact that they have hybrid features that combine the features of consumer products and investment products, including the unique risks of such products, such as cyber risks. In general, the Committee agreed with these comments, as detailed below.

Below is a summary of the main comments and the Committee's response to them.

3.1 Defining crypto-assets as securities

Several public comments contained requests for additional clarifications on the current law. Commentators stressed the need for more detailed tests to distinguish between crypto-assets that constitute securities under Israeli law, and other cases, and specifically clarifications regarding cases in which utility tokens are considered securities, and the legal status of payment coins, in cases where it is not clear whether they are decentralized or controlled by a centralized authority. Commentators also stated that securities laws should not apply to crypto-assets that are not similar to traditional securities (i.e., shares, bonds, or participation units), such as assets that confer a right for use of a product or service on a digital platform.

The Committee's position on these issues is that the test of whether an offering and sale of crypto-assets constitutes an offering and sale of securities to the public in Israel, and is consequently subject to the provisions of the Securities Law and supervision of the ISA, requires a review of the letter of the law and its purpose, and of the generally accepted tests for this matter determined by case law and ISA positions. The Interim Report presented an analysis of the legal framework and guidelines for its applicability to crypto-assets.

The basic distinction made in the Interim Report is between three types of crypto-assets: (1) currency – crypto-assets designed to be used as means of payment, exchange, or settlement; (2) investment or security— assets designed to confer rights of ownership, membership, or participation in a specific project or rights to future cash flows of said project; (3) utility - assets designed to confer rights for access to or use of a service or product that a specific project offers. The Interim Report also explained that the determination of a crypto-asset as a security depends on the circumstances of the case and the true nature of the transaction, and is not based on the label of the crypto-asset. In general, assets in the first group (currency), designed to be used exclusively as a means of payment, settlement, or exchange, and confer no additional rights other than ownership to them, and are not controlled by a centralized authority, will not be deemed securities.

In contrast, assets in the second and third groups confer additional rights and are not designed to be used solely as mediums of exchange. These additional rights are typically broader than the right to own the coin, and include rights related to a specific project. Another substantive difference between crypto-assets first group and crypto-assets in the second and third groups is the human factor behind the assets: In contrast to decentralized assets, tokens and their underlying projects are typically developed by a centralized issuer, sometimes in the preliminary phase before the product’s design or development has been completed.

The Interim Report further explained that while there is general agreement about defining assets in the security category as securities, utility tokens require an examination of their features. The Interim Report specifically stated that the features that should be taken into consideration include, but are not limited to: (1) the aim of the investment from the token buyers’ perspective; (2) the tokens’ functionality at the time of the issue, that is to say, the extent to which token buyers can use the tokens for their intended purpose; (3) the entrepreneur’s representations and commitments, including promises for future returns and for the creation of a secondary market, and any significant efforts to create a secondary market after the issue. For more information on this topic, refer to the Interim Report.

As noted earlier, the position that is advocated by several regulators and which reflects in industry trends, and is supported by the members of the Committee, is that ICOs will generally be deemed securities offerings.

At the same time, we cannot rule out the possibility that a utility token would not be deemed security. To illustrate this point, see the following example taken from the British FCA’s consultation paper: a well-known luxury car manufacturer, issues a token that allows the token holder the right to test drive a new limited-edition car for an hour. The token will be tradable on secondary markets where the price can

increase or decrease depending on the demand for the limited-edition car, but will not confer any additional rights on the token-holder like payments, ownership or control etc. Ostensibly, and subject to the totality of the circumstances of the case, these tokens are issued for the purpose of promoting the company's sales and do not constitute securities based on the accepted tests. Commentators also stated that the territorial tests for offering and sale to the public in Israel are not compatible with the international character of crypto-asset issuances.

Considering that it is currently possible to offer and sell securities across international borders using a diverse range of technological means, including the Internet, Committee members believe that crypto-assets do not constitute a special case and see no justification in this matter to deviate from the accepted tests on the territorial applicability of securities laws. As stated in the Interim Report, similarly to offerings of other securities, offerings of crypto-assets that constitute securities will not be considered offerings to the public in Israel if their overall features indicate that they are not intended for the public in Israel. The main features that might be indicative that this is the case include, but are not limited to, whether the language of the offering and its marketing means is not Hebrew; the language of the offering documents and actual sales is not Hebrew; no marketing efforts were made to market the offering to investors in Israel (on the Internet, by telephone, or any other means); the offering's organizers are not soliciting the public in Israel, including by holding investor conferences or private meetings intended for Israeli investors.

3.2 Crypto-asset trading platforms

Several commentators requested to increase regulatory certainty concerning the ability of regulated trading platforms to trade in crypto-assets that are deemed securities, and concerning license requirements for trading platforms of crypto-assets that are not deemed securities. Commentators also requested clarifications on whether SPOT trading in crypto-asset falls under the fourth category of financial instruments defined in Section 44L of the Securities Law.

It is the Committee's position that the same licensing and oversight arrangements that apply to trading and settlement platforms under securities laws also apply to crypto-assets that constitute financial instruments as defined by law. In the case of crypto-assets that do not constitute financial instruments, a trading and settlement platform is not subject to a licensing requirement. The definition of a financial instrument includes securities, among other things.

As noted in the Interim Report, it is the Committee's opinion, by the letter and purpose, agreements whose value is derived from the value of crypto-assets, including tokens that are not classified as securities, should generally be included in the fourth category of financial instruments, either because such crypto-assets are considered currencies or commodities, or because their nominal value is derived from the value of an exchange rate.

The fourth category of financial instruments is designed to apply to trading that involves agreements and arrangements whose value is derived from the value of currencies, commodities and other underlying assets, and not to trading involving the underlying assets themselves. On the conditions in which spot trading in currencies is not considered financial instruments of the type included in the fourth definition of financial instruments, see the ISA's response to the preliminary inquiry in the matter of M.F.X.⁴⁸ Also, primarily on the matter of the conditions for a “in kind delivery” see the ruling in the Administrative Petition 19803/08/17.⁴⁹

In general, these conditions will also apply to spot transactions involving crypto-assets. There may be, however, cases in which the crypto-assets themselves contain a contract or arrangement whose value is derived from the value of other underlying assets or other crypto-assets, like in the case of a smart contract that guarantees that their value derives from the value of another underlying asset. In such a case, it is no longer relevant whether the transactions involving crypto-assets that contain derivative agreements or arrangements are spot transactions, because they may be deemed financial instruments of the fourth category.

As noted in the Interim Report, the classification of a product as a security or a financial instrument does not imply that it will necessarily be approved for trading on various trading platforms including the TASE. Such approval will be examined according to the circumstances of each product and the developments in this dynamic field in and outside Israel, taking into account the specific risks of each product and the implications of such approval on the trading platform and on the public.

Additional public comments concerned more specific questions such as: Is a platform that enables transactions by e matching between buyers and sellers but does not include settlement of money or crypto-assets, required to obtain an exchange license? Is an issuer who offers a liquidity pool that allows people to sell or buy assets in the project against the pool subject to the licensing requirements of trading platforms?

As noted in the Interim Report, the fact that a platform does not perform settlement does not prevent it from being defined as a securities trading system that is subject to a requirement to obtain an exchange license. Furthermore, as noted above, in general, the employment of a different technology does not exempt an activity from the law. Therefore, in the case that crypto-assets fall under the definition of a security or a financial instrument according to law, the question may arise of whether the requirement to obtain an exchange license or a trading platform license applies,

⁴⁸ Response to preliminary inquiry in the matter of M.F.X.

⁴⁹ Administrative Petition 19803/08/17 (Tel Aviv Dpt) Interactive Brokers vs. ISA.

depending on whether the elements of the respective definitions exist. This question should be examined according to the purposes of the regulation and the circumstances of each case.

For additional information on current law on all the topics noted above, see the relevant chapters in the Interim Report.

Entities who wish to receive a response that goes beyond the explanations offered in the Interim Report on whether a specific activity falls under the securities laws may send an inquiry to the ISA using the conventional track for preliminary inquiries, and such inquiries will be examined according to all the relevant circumstances.

3.3 Responses to principled issues raised for discussion

In the Interim Report, the Committee raised several issues for discussion related to trading platforms and the application of the Joint Investment Trust Law, and Investment Advice Law.

Application of several arrangements in the Securities Law to trading and settlement platforms that offer services involving crypto-assets that fall outside the definition of a security or a financial instrument — Several commentators supported the idea of restricting trading in such crypto-assets that are not deemed securities, while other commentators opposed.

It is the Committee's position, in view of the fact that reality shows that even crypto-assets that are not deemed securities are generally traded for investment purposes, there are benefits to imposing ISA oversight to crypto-asset trading platforms, even when these assets are not deemed securities or financial instruments, especially when such systems allow for multi-lateral trading. The test of whether the licensing requirement should be extended should be based on the circumstances of each product and the developments in this dynamic industry, both in and outside Israel. Furthermore, consideration should also be given to the adjustments that may be required in existing regulation in order to optimally address the various features of these platforms.

Creating a regulatory infrastructure for trading platforms dedicated for crypto-assets that are deemed securities - Several commentators suggested that the ISA should encourage regulation of trading platforms that involve crypto-assets that are deemed securities.

The Committee believes that adjustments to existing regulation should be considered with the aim of creating regulation that is more closely suited to trading platforms for crypto-assets that are deemed securities.

Application of the Joint Investment Trust Law on arrangements of joint investments in crypto-assets – Several commentators expressed the position that the law should not be applied to

crypto-assets, but most commentators believe that application of the Trusts Law to such arrangements is warranted.

Permitting mutual funds to invest in crypto-assets – Commentators who believed that the Trusts Law should be applied to joint investment arrangements in crypto-assets in the same breath expressed the position that mutual funds should be permitted to invest in such assets; and for this purpose, crypto-assets that are deemed securities should be treated as securities, and crypto-assets that are not deemed securities should be treated as currencies or commodities. It was also stated that the imposition of quantitative exposure restrictions should also follow such distinctions, and some commentators believe that more stringent quantitative restrictions should be imposed (limiting funds' exposure to 5% of their assets).

It is the Committee's position that, at this point in time, it would be incorrect to apply the Trusts Law to joint investment arrangements in crypto-assets that are not regulated or traded as securities offered to the public. Because this field is in its infancy, and is characterized by significant volatility and randomness, the Committee does not believe that the time has come to extend the rules and permit mutual funds to directly invest in crypto-assets, or to remove the quantitative restrictions on mutual funds' exposure to derivatives. Furthermore, consideration should also be given to whether quantitative or other restrictions should be imposed on mutual funds' exposure to crypto-assets through instruments that make such investments possible without directly investing in crypto-assets.

It was also noted that action should be taken to permit funds to hold its assets in digital wallets held by a trustee.

It is the Committee's position that once the option of permitting mutual funds to purchase and hold crypto-assets directly will be considered, attention will also be given to any needed amendments to the law in order to allow the holding of these assets.

Defining crypto-assets as assets that only licensed investment advisers, marketers, or portfolio managers may provide advice on — Commentators were divided on whether crypto-assets should be defined as assets that only entities licensed under the Investment Advice Law may provide advice on.

In the Committee's opinion, an amendment to the Investment Advice Law should be considered, such that services under the provision of this law with respect to crypto-assets of any type (whether deemed as a security or not, including cryptocurrencies like Bitcoin, that are intended for use as means of payment) should be subject to the law and its licensing requirements.

Permitting investment portfolio managers to directly manage and hold crypto-assets in their managed portfolios – Commentators were divided on whether such permission is beneficial.

In view of the operational risks entailed in holding crypto-assets, at this stage the Committee does not believe that portfolio managers should be permitted to manage portfolios that include crypto-assets, either as a result of purchasing them directly or by proxy, especially in view of the high market risks, volatility, and randomness that characterize this industry. Even if this option is not permitted, individual investors who wish to invest in crypto-assets will not be prevented from seeking the assistance of investment advice services, offered either by an investment adviser or by a portfolio manager. Like investment advisors, portfolio managers, when offering services to clients on assets subject to the Investment Advice Law, are not prohibited from advising clients on the purchase of crypto-assets, taking into account the investment's volatility, risks, and match to the client's needs.

4. The vision – Balancing technological innovation and investor protection

The Committee believes that the industry based on decentralized ledger technology (DLT) is an innovative industry that has the potential to transform the world of finance and increase efficiencies. In view of Israel's unique features and the global status in this industry, the industry can make a significant contribution to Israel's economic growth. Public offerings of crypto-assets allow innovative technological projects in the start-up stage to raise funds in a relatively short time, and reduce their reliance on traditional financing entities such as venture capital funds. Another benefit of these offerings is that they allow investors to participate in the development of a product or service and contribute to its success by participating in writing the technical code or effectively using the platform through the use of the crypto-assets. Several ICOs, however, have been discovered to involve scams and trading manipulations or had security weaknesses that caused investors and entrepreneurs to lose their money.

The development of innovative technologies makes an extremely important contribution to developing and enhancing the efficiencies of the financial market and strengthening Israel's economy. This contribution may be manifest in many ways, including the roles these technologies play in the development of new means of financing for Israeli companies and increasing the Israeli public's access to diverse investment vehicles. Consequently, the Committee recognizes the importance of having the ISA assume an active role in creating an appropriate regulatory infrastructure and actively work to assimilate technological progress into the capital market.

At the same time, the main role of the ISA is to protect investors, and therefore the ISA must ensure that innovative technologies are used fairly, in a manner that guarantees protection of the interests of the investor public and the public's trust in the capital market.

The trends and developments of the past year, led by the transition to issuance of crypto-assets as securities, according to regulatory rules, reinforce the notion that the industry's success depends, among other things, on its approach toward regulation, and illustrate that regulation of the industry does not undermine it but instead can contribute to its advancement. Many voices within the industry welcome the transition towards regulation, especially in view of the benefits of regulation for protecting fairness and reputation, establishing standards and barriers to entry that requires seriousness of intent and deter entrants who intend to ride on the back of other participants' success.

5. Future regulation of the crypto-asset industry

The Interim Report focused mainly on the applicability of existing laws, raised topics for discussion, and proposed recommendations related to future treatment of crypto-assets. One

question addressed by the Committee was whether and in which unique manner the crypto-asset industry should be regulated in the future in view of its features. Public comments were requested on several principled issues related to this question, including several regulatory alternatives such as exemptions for fund raising of a limited scope, adjustments to crowdfunding tracks, the use of a regulatory sandbox, a mechanism for reliance on foreign laws, and a tailor made disclosure regime.

Against the backdrop of the trends described above, and the market's transition to issuance of crypto-assets that come under the definition of securities, the regulatory response to this innovative industry and its unique features is extremely important.

The challenge in proposing a concrete regulatory framework stems from the fact that the industry is new and dynamic, and designing detailed, rigid regulation at this point, which ostensibly requires new legislation, is expected to be ineffective, both in terms of the industry's development and in terms of protecting the investor public. Taking this into account, the Committee believes that efforts should focus on the following options, which benefit from structural flexibility:

1. Tailor made disclosure regime – Offering and selling securities to the public requires publication of a prospectus and compliance with the reporting requirements under the Securities Law. The requirements of this regulatory regime focus on disclosure designed to make available all information that might be important to the reasonable investor. Existing disclosure requirements are suited for various types of business activities, and indeed companies from diverse sectors including real-estate, retail, manufacturing, hi-tech, oil and gas, and others, have issued securities to the investor public in Israel. There is no impediment to prevent companies that wish to raise funds by issuing crypto-assets from operating under the said regulatory regime, and disclosure requirements for such companies would be adjusted to the unique features of their operations, based on the experience that the ISA will gain from ventures considering an issuance of crypto-assets and would apply to the ISA, and on the experience of other regulators in the world. It appears that such disclosures should include information presented in accessible language that is comprehensible to the general public, with emphasis on, among other things, information on the rights embedded in the assets, the entrepreneurs' experience, the aims of the development, estimated timetables and costs, and security and cyber risks.

2. Easing of restrictions through a regulatory sandbox – The ISA is a member of the inter-ministerial taskforce that recently recommended the establishment of a customized regulatory framework for companies that use new technology to provide financial products and services. This regulatory framework is proposed as a platform for experimentation in addressing the regulatory challenges typical for Fintech companies, and learning by companies and regulators both. This is done by creating a “safe haven” in which companies who are exploring the development or implementation of a new financial product or service can operate with exemptions from certain

regulatory requirements, provided that the companies are subject to certain restrictions that limit the risks that stem from the waiver of full compliance with the law (for example, a restriction on the number of clients served or the scope of their operations). When this framework is established, it could be used to experiment with the issuance of crypto-assets and to provide guidance to entrepreneurs in this field.

3. Regulatory infrastructure for security token trading platform – One of the challenges of the crypto-asset industry is providing the option to trade on a safe and reliable trading platform. These challenges also exist on the regulatory side which faces challenges in providing basic protection to investors who invests in these assets. The existing regulation on trading and settlement platforms was not designed for the unique features of crypto-asset operations, and therefore the possibility of adjusting existing regulation should be examined in order to create a more suitable regulatory framework for such trading activity that will optimally address the risks that this industry entails.

The Committee also recommends the application of a model similar to crowdfunding regulation – In 2015, the Securities Law was amended to regulate a crowdfunding model and allow small and medium-sized companies and R&D companies to raise funds from the public at a limited scope using dedicated online platforms. The Committee recommends to examine the establishment of a financing model based on similar regulatory principles to the crowdfunding model, for crypto-assets that are deemed securities.

The design of these or any other regulatory frameworks that would be developed in the future should be based on ongoing collaboration with the industry. Continuous direct contact and cooperation between the ISA and industry participants is necessary for the continued learning and professionalization of ISA staff, and its understanding of the industry and its unique attributes, in order to develop appropriate regulatory solutions. The more real life examples and use cases we will encounter — the better suited, more effective, and more rapid the development of these regulatory frameworks will be.

We therefore invite interested entrepreneurs to contact the ISA. The ISA undertakes to examine all inquiries with an open mind, respond quickly, and adopt a flexible regulatory approach that recognizes the importance of incorporating new technologies into the capital market while safeguarding the investor public.