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Review and analysis of the application of financial regulations to security tokens

Summary

In a context of growing interest shown for Security Token Offerings (STOs), the Autorité des Marchés Financiers (AMF) has produced an inventory of projects initiated or completed. Several STOs have already been carried out in Europe (France, Germany, United Kingdom) and the United States, and several other issuance projects are underway. As regards the secondary market, very few security token trading platforms are already operational, but there are numerous plans, sometimes led by large institutional players. New so-called tokenisation platforms have appeared, with a view to assisting market participants in the tokenisation of financial instruments.

Despite this growing interest from market participants, few public authorities have taken a position to clarify the applicable legal framework. In Europe, only Lithuania has done so recently. Switzerland and certain American states are examining the possibility of adapting the financial instrument regulatory framework for security tokens.

In France, a legal analysis was conducted by the AMF to verify the conditions under which financial regulation, which is largely European today, is intended to apply to security tokens that are legally financial instruments. The analysis revealed the following findings.

Regarding issuance (STOs properly speaking), the Prospectus Regulation appears compatible with security tokens. Apart from a few practical problems, the legal framework does not prevent the issue of security tokens. However, the information contained in the prospectus will have to be adapted to the specific features of security tokens.

Regarding asset management, it appears that European and national regulations do not prevent the development of security tokens, except for a few identified limits (cross-border marketing of collective investment undertakings (CIUs) is uncertain). If investment management companies wanted to develop this activity, they would have to apply to the AMF for an authorisation or update their activity program if applicable. Some funds will have a limited capacity for investing in security tokens given their investment rules (UCITS, investment funds), while others can do so more extensively (private equity funds, funds intended for professional clients, real estate funds structured for this purpose). The lead mentioned by certain actors to reinforce the protection of investors who invested in security tokens and to allow financial instrument to be registered in a blockchain to take the bearer form would require further analysis in order to determine its compatibility with the CSDR regulation

In the secondary market area, the analysis is most difficult.

The trading of security tokens apparently does not face any significant regulatory obstacles. Either it amounts to ensuring the provision of certain investment services (reception and transmission of orders, third-party order execution) and requires merely an investment services provider (ISP) authorisation for the provision of those services – this would be the case for platforms organising

security token trading in the form of mere bulletin boards. Or it involves operating a trading venue within the meaning of MiFID and requires an authorisation as a multilateral trading facility (MTF) or organised trading facility (OTF). These authorisations could only be accessible to the platforms for which a fund manager can be identified, which excludes *de facto* platforms of a decentralised nature. Moreover, the OTF authorisation cannot be obtained for the trading of shares or units in tokenised CIUs and would therefore concern only bond security tokens. While the obligations laid down by the MiFID regulations for MTFs and OTFs seem compatible with security token platforms, an adaptation of these regulations would be required for the development of decentralised platforms.

However, <u>the settlement and delivery</u> of certain security tokens poses greater problems.

<u>For security tokens not listed</u> on a trading venue within the meaning of MiFID, the Blockchain Order of 2017[1] already allows them to be issued and transmitted on the blockchain. However, the scope of the securities in question is limited to units and shares in CIU not admitted to the operations of a central depository, and negotiable debt instruments and shares and bonds not traded on a platform within the meaning of MiFID.

<u>For security tokens listed</u> on a trading venue within the meaning of MiFID, the current regulations (CSDR, Settlement Finality Directive, obligations relating to custody account-keeping) cannot ensure delivery versus payment entirely on the blockchain. Several legal difficulties can be identified: (i) the need to identify a blockchain manager acting as a securities settlement system, which *de facto* excludes decentralised security token platforms and, more generally, the use of public blockchains which are based on a decentralized consensus not allowing to identify any operations manager; (ii) the obligation of intermediation by a credit institution or an investment firm so that individuals may obtain access to the settlement and delivery system, which does not seem compatible with the current functioning of crypto-asset platforms by direct access; (iii) recognition of the right of ownership at the level of the custody account keepers and not on recording of the security tokens in the blockchain; and (iv) the obligation of settlement of securities in cash, in central bank or commercial currency.

As a conclusion, the propositions are :

- to create a digital laboratory at European level allowing the national competent authorities to remove, in return for appropriate guaranties, certain requirements imposed by European regulations and identified as incompatible with the blockchain environment, provided that the entity benefiting from this exemption respects the key principles of the regulations and that it is subject to increased surveillance by the national competent authority of the reference Member State. This system would require the establishment of a review mechanism on the European level (ESMA) so that the national competent authorities could harmonise their practices. Such a system would have the advantage of suspending the regulatory obstacles to the emergence of security token market infrastructure projects which could take shape in a secure environment, so as to have a better view of the necessary changes to the European financial regulations. The modification of European regulation could take place at a later stage, at the end of a 3 years review clause, once the ecosystem is more mature, and backed up by the expertise that the national competent authorities and the ESMA would have derived from the support of companies;

- to specify in an AMF position the perimeter of the concepts of trading venues and bulletin board, which is a strong demand from short-term players in order to allow them to develop security token exchange interfaces in compliance with existing regulations ;

[1] Order n° 2017-1674 of 8 December 2017

- to clarify the fact that, as a matter of constant law, the financial securities registered in a Blockchain take nominative form under French law and that the liability of CIU depositaries is limited to record keeping, and to think in the medium term of the possibility for financial securities registered in a DEEP to take the bearer form, in particular with regard to what the CSDR regulations allow.

In the past several months, the momentum surrounding Initial Coin Offerings (ICOs) would seem to slowed down, and although the number of these ICOs has not really declined in France, the amounts raised are nevertheless smaller than a year earlier. A growing interest is being shown for the phenomenon of Security Token Offerings (STOs). An STO designates the issue of financial instruments via a blockchain. In practice, an STO takes place in the same way as an ICO. Only the rights attached to the tokens issued differ between the two types of operation: if the tokens can be termed a financial instrument, the operation is an STO; otherwise it is an ICO (token issuance within the meaning of the PACTE national law).

This enthusiasm is apparently confirmed by several factors:
- the numerous events organised on this subject;
- the strong appetite shown by blockchain professionals;
- some French members of parliament want to legislate to facilitate STOs; and
- several STO projects have been presented to the AMF's Fintech, Innovation and Competitiveness team.

The project promoters that we have met can be divided into two categories:
- players in the crypto-asset universe who plan to perform an STO instead of or in addition to their ICO: either because they were disappointed by their ICO and are planning an STO to raise additional funds, or because they want to tokenise their shares to give them greater liquidity and thus attract conventional investors (venture capital funds, business angels, family offices); and
- conventional players who are exploring STOs in order to assess the feasibility of this type of operation and the related benefits, such as the Société Générale Forge operation for example.

It should be noted that new players are emerging in this environment of "tokenised" financial instruments. These are the "tokenisation" platforms aiming to provide a whole range of services relating to legal compliance, technical security and establishing relations between project owners and potential investors (e.g. Polymath, Harbor).

This phenomenon seems to be influenced, to some extent, by the debate in the United States regarding the classification of crypto-assets. For example, an increasing proportion of the tokens issued in recent months tended to be termed "securities" by their issuers, both in anticipation of the Securities and Exchange Commission's interpretation and to counter the decline in the popularity of ICOs, since by using an issue of financial instruments the fundraising operation is lent a presumption of credibility.

Although, in the short term and at first sight, the STO phenomenon could apparently be explained by a fashion effect following that which surrounded ICOs from 2017 to early 2018, the "tokenisation"[2] of financial assets and other assets could nevertheless be a long-term trend due to the gains that it promises via the automation of certain stages of the transaction process.

[2] Tokenisation can be defined as a digital representation process permitting the recording, storage and transmission of an asset by means of a distributed ledger technology.

From a legal viewpoint, according to the PACTE Law published in the Official Journal of 23 May 2019, there are two separate environments in French law:

- that of digital assets, which cover "tokens" and virtual currencies within the meaning of Articles L. 552-2 and L. 54-10-1, 2° respectively of the Monetary and Financial Code.[3] These new definitions are constructed by exclusion from the field of financial instruments;
- that of financial instruments, by nature subject to the various European and French financial regulations according to the conditions of their issuance and trading.

Moreover, the Blockchain Order[4] established in French law a regulatory framework governing the representation and transmission of unlisted financial securities via a "Distributed Ledger Technology" (DLT), commonly called a "blockchain".

The fact of applying financial regulations to security tokens raises several legal issues. Does the current regulatory framework allow the issuance of financial instruments in tokenised form? Is it appropriate for the characteristics and business model of STOs? In what aspects does it hinder their development? Should equivalent conditions of competition be created between security tokens and conventional financial instruments?

The objective of this analysis is to determine to what extent it is possible to perform STOs under established law and, failing that, to identify the legal limitations to such operations.

In the short term, given the enthusiasm aroused by STOs, it seemed to the AMF a good idea to publish an analysis on STOs which clarifies the AMF's viewpoint under established law and which indicates to the project promoters planning to use an STO in what conditions they may do so.

Longer-term, it would be advisable to investigate the benefits and risks involved in the phenomenon of tokenisation of financial instruments and consider to what extent it could be desirable to change the European regulatory framework.

This memo outlines the main characteristics of known STO projects, both in France and abroad (1), identifies the positions adopted by foreign authorities on this subject (2), and analyses the legal issues relating to security tokens from both the issuance, trading and asset management viewpoints (3).

1. SECURITY TOKEN PROJECTS KNOWN TO THE AMF

1.1. THE FIRST SECURITY TOKEN OFFERINGS (STOS)

There are still relatively few STO projects and, for European projects, they share the common characteristic of being issued by a public offer below certain thresholds which exempt them from the obligation of producing a prospectus, probably because of the legal uncertainty surrounding security tokens.

[3] Introduced by Articles 85, I and 86, I respectively of Act No. 2019-486 of 22 May 2019 on business growth and transformation, the so-called PACTE Law.

[4] Order 2017-1674 of 8 December 2017 (the "Blockchain Order"), adopted under Article 120 of Act No. 2016-1691 of 9 December 2016 on transparency, anti-corruption and economic modernisation (the "Sapin II Law"), supplemented by Decree No. 2018-1226 of 24 December 2018 (the "Blockchain Decree").

In France, the following STO operations could be identified:

- **Société Générale (Forge project)**: the Société Générale group issued a first STO for an amount of at least €100m finalised on 18 April 2019 concerning housing financing bonds (refinancing vehicle for group housing mortgage loans), subscribed to entirely within the group. It can therefore not be classified as a public offer and is not covered by a prospectus;
- **Nebulous (Sia Funds)**: STO issuance finalised in April 2018 concerning financial instruments giving entitlement to a stake in the company and in the revenue generated by its business (decentralised storage platform based on the blockchain technology). The operation took place in the form of a private placement open only to qualified investors;
- **Carthagea**: STO issuance made in March 2019 concerning shares designed to finance nursing homes for the elderly in Tunisia. It is made by a French project promoter to French investors subscribing for at least €100,000. Under current law it is therefore not considered as a public offer and is not covered by a prospectus;
- **Monali**: STO issuance carried out on September 5, 2019, with the objective of raising € 2 million. As its amount is less than € 8 million, it is not subject to the obligation to submit a prospectus to the AMF. Furthermore, the offer was open only to qualified investors;
- **Authenticao**: STO issuance carried out on October 10, 2019, with the objective of raising € 7.9 million, open only to qualified investors;
- **Kay Flô**: STO issuance carried out on October 15, 2019, with the objective of raising € 2.1 million, open only to qualified investors;
- **Sky Spring**: STO issuance carried out on November 12, 2019, with the objective of raising € 8.8 million, open only to qualified investors.

In France also, the following STO operations could be identified:

- **project A**[5]: STO project for a maximum amount of $100m concerning an equity security in the US-registered company. It is planned to carry out a private placement of tokens, exempted from a prospectus, open to French investors in particular;
- **project B**: French STO project concerning units in a fund classified as an alternative investment fund (AIF), a fund capable of replicating the performance of a basket of crypto-assets;
- **project C**: STO project concerning shares of a non-listed French company. The objective of the STO is to gradually replace the shares of the company without a capital increase[6]. Acquisition of the security tokens is apparently open solely to the company's shareholders, and this is considered in existing law as not being a public offer and is exempted from a prospectus;
- **project D:** support for a French STO project concerning perpetual subordinated debt ("TSDI"). The instruments would first be offered by a private placement and then the offer would be open to the public;
- **project E**: STO project to finance an interactive digital health passport, reserved only for qualified investors, with a fundraising objective of € 15 million
- **Projects with tokens for which the legal classification remains to be established:** project F (hybrid tokens giving both rights of use and entitlement to a dividend), project G (commodity derivatives), project H (representation of the value of a work of art and right to receive one-third of the revenues generated by it).

[5] The company name has been anonymised in order to preserve confidentiality of informations declared by the said company to the AMF.

[6] The creation of each security token is compensated by the destruction of one share, under the parity 1 to 1.

Outside France, the most striking example of an STO is that for **Bitbond** in **Germany**. After raising more than $10m in equity capital from investors to create a financing platform for SMEs using the blockchain technology, the company now wants to raise €100m via the issue of bonds on the Stellar blockchain. This fundraising campaign is designed to finance the development of an online lending platform for SMEs. The bonds are issued in exchange for euros or in exchange for crypto-assets (Stellar Lumens, Bitcoins or Ethers). In April 2019 the company published a prospectus which received the approval of BaFin. The prospectus specifies that the issuer has no plans for a secondary market for its securities, but that it cannot be ruled out that these securities could be listed on a platform at the initiative of one of the holders of said securities.

It is also worth mentioning the **Fundament** STO, which received authorization from the Bafin to offer the public €250 million of tokenised bonds at a variable annual interest rate depending on the issuing company's net income. The aim of this fundraising is to finance the acquisition of a portfolio of residential and commercial real estate in Germany (investment strategy focused on hotels, students, kindergartens and offices). Tokens can be subscribed in euros or ethers. The company received the Bafin's visa on its prospectus on 11 July 2019. This visa was required in accordance with the Prospectus Directive, as the offer was open to all natural and legal persons.

The **London Stock Exchange (LSE**) also made a first STO issue reserved for institutional investors, last April, with the Fintech 20|30 company.[7] The equivalent of 3 million pounds sterling in tokenised shares was thus issued and delivered using the Ethereum[8] blockchain technology on the British platform. That would represent six million tokens issued at a unit price of £0.50 within the framework of a "test environment" incorporated in the Turquoise trading platform. A second series of STOs is expected to take place in 2019. This time 13 million tokens, having a unit price of £1, are expected to be issued and available on the London Stock Exchange.

Other STO projects outside France can be mentioned:
- **Spice Venture Capital (Spain)**: STO issue finalised on 3 March 2018 for an amount of $15m, concerning fund units recorded on the blockchain. The fund plans to invest in both crypto-assets and conventional assets (new technology firms);
- **TZero (United States)**: STO issue finalised in August 2018 for an amount of $134m concerning equity securities designed to finance the company's operations (integration of the distributed ledger technology into traditional markets for financial instruments);
- **VRBex (United States)**: STO project concerning preference shares with a view to the creation of a crypto-asset trading platform.

1.2. THE DEVELOPMENT OF SECURITY TOKEN TRADING PLATFORM AND TOKENISATION PROJECTS

[7] The 20|30 company is developing a platform based on the DLT technology called TokenFactory, which enables companies to raise capital simply (see https://2030.io/tokenfactory/). The STO that took place on the LSE in April 2019 was made in partnership with digital investment bank Nivaura (see https://www.nivaura.com/). According to information from the Crowdfund Insider media, the TokenFactory platform has an application undergoing processing by the Securities and Exchange Commission, which could mean that it is looking to become an alternative trading system (see https://www.crowdfundinsider.com/2019/04/146429-first-london-stock-exchange-issues-shares-in-20-30-as-blockchain-based-security-tokens/).

[8] For more information see, in particular, https://www.coindesk.com/startup-raises-3-9-million-in-tokenized-equity-on-london-stock-exchange-platform and https://thetokenist.io/london-stock-exchange-completes-first-test-of-security-token-issuance/

In France and abroad, several projects for the creation of security token trading platforms have been identified, but few are already in operation, for both operational and legal reasons.

In France, several STO issuance mentioned above aim to finance the development of crypto-asset trading platforms (security tokens or crypto-assets derivatives). **Utocat**, for its part, develops a platform for trading unlisted securities on a blockchain[9].

Outside France, several security token platform projects are known:
- **Open Finance Network (United States)**: system capable of handling post-trade transactions with the blockchain technology replacing the traditional trusted third party (central depository). The company was granted broker-dealer authorisation by the US FINRA in 2014;
- **LSE (United Kingdom**): tests are due to be conducted in 2019 to experiment with blockchain technology on the secondary market for equities;
- **Blocktrade (Liechtenstein)**: trading platform project for crypto-assets, including security tokens. It apparently wants to apply for authorisation as a multilateral trading facility;
- **Currency.com (Belarus)**: trading platform created in 2018 permitting the purchase and sale of tokens replicating the performance of certain equities, commodities, indices and crypto-assets;
- **ISOX (Singapore)**: platform project under development in the sandbox of the Singapore authority, to assist with security token issues and exchange tokenised financial assets;
- **LCX – The Liechtenstein Cryptoassets Exchange (Liechtenstein)**: trading platform for crypto-assets including security tokens intended for professional investors, currently being developed. It is also planned to provide custody, portfolio management and analysis services targeting all types of crypto-assets.

Alongside these trading and post-trade infrastructures, it should be noted that new players are emerging in this environment of "tokenised" financial instruments. These are the "tokenisation" platforms aiming to provide a whole range of services relating to legal compliance, technical security and establishing relations between project promoters and potential investors:
- **Polymath (Barbados)**: This is a protocol developed on the Ethereum blockchain designed to facilitate the creation of security tokens. Third-party security token issues on the platform entail the use of a token called "Poly". By using these tokens the issuer is able to produce a white list of investors authorised to buy the security tokens that it issues. The issuer can thus stipulate preliminary requirements that must be met by the buyer (KYC, anti-money laundering, financial regulations applicable in each jurisdiction of issue);
- **Swarm (United States)**: similar project to the previous one;
- **Harbor (United States)**: This is a platform capable of tokenising financial instruments, checking the project's compliance with the applicable legislation (financial and tax legislation, AML/CFT), testing the robustness of KYC and linking project promoters with investors.

1.3. THE GROWING INTEREST OF INSTITUTIONAL PLAYERS

Several institutional players have taken initiatives regarding integration of the blockchain technology into their infrastructures, and regarding the tokenisation of their financial instruments.

[9] For more information see, in particular, https://www.frenchweb.fr/blockchain-utocat-leve-16-million-deuros-pour-prendre-son-envol-en-europe/337618

We may mention the most important of these projects[10]:

- **Société Générale Forge Forges project** which aims to develop new disruptive activities on blockchain-based capital markets. This entity, created in 2017, works in three areas. It is exploring blockchain solutions for primary and secondary markets, as well as custody services;
- **The strategic partnership between Deutsche Börse, Swisscom** (Swiss leader in information and communication technologies) **and Sygnum** (a financial technology firm) designed to create a new market infrastructure for crypto-assets in the broadest sense, including the tokenisation of transferable securities;
- The UBIN project of the **Singapore Exchange** creating a securities clearing and settlement/delivery system using the blockchain technology[11];
- The French financial centre project called **Liquidshare** aimed at establishing a blockchain architecture that can be used to perform settlement and delivery of financial instruments[12];
- The **Bakkt** project of the Intercontinental Exchange (NYSE ICE, a New York market specialised in derivative products) aiming to create a platform for trading and custody of tokenised financial assets. The platform is undergoing construction and is expected to come into operation in 2019.

The announcement or production start-up of trading or settlement and delivery platforms by these conventional financial players illustrates the interest aroused by security tokens and makes it necessary to provide a clarification of the legal rules applicable to the various players in the value chain.

2. POSITIONS ADOPTED BY THE PUBLIC AUTHORITIES REGARDING SECURITY TOKENS

Most foreign public authorities have already adopted a position to indicate that crypto-assets that can be assimilated to financial instruments are subject to the existing legal framework. However, to our knowledge, none has already published a detailed analysis of the legal problems raised by this approach and the regulatory adaptations required. The public authorities have at this stage merely called, in a general manner, for an adaptation of their financial regulations in order to receive in positive law tokens that can be assimilated to financial instruments.

In Europe, it should be remembered that on 9 January 2019, **ESMA** published an opinion which identifies a number of regulatory obstacles and legal gaps in the application of the current framework to security tokens. It calls on European co-legislators to work immediately on possible adaptations of European law applicable to these tokens.

In **Germany**, the Federal Ministry of Justice and Consumer Protection and the Federal Ministry of Finance have spoken in favour of legislative amendments making it possible to recognise transferable securities registered on a blockchain as a "legitimate" form of financial instrument in order to facilitate the emergence of a regulated market for tokenised securities.

In the **Netherlands**, the AFM and the DNB stressed in a joint consultation published in December 2018 the inappropriateness of the European regulatory framework for services related to tokenised financial instruments, and expressed some recommendations for adaptation.

[10] The Stuttgart Stock Exchange and the London Stock Exchange have already announced projects with a view to establishing platforms allowing the trading of crypto-assets that cannot be assimilated to financial instruments.

[11] The UBIN project consists of several experimental phases, the second of which was completed in August 2018 (experimenting with a DvP system for tokenised assets). The project is not yet operational.

[12] Start-up scheduled for September 2019

In February 2019, **Luxembourg** enacted a law similar to the Blockchain Order in France, recognising that token transfers via the blockchain were equivalent to transfers between securities accounts.

The European country which has advanced most on the subject seems to be **Lithuania**. On 7 May 2019, within the framework of a consultation, the Bank of Lithuania published guidelines intended for the issuers of security tokens and service providers whose activity is related to "tokenised" financial instruments.[13]

On the one hand, the guidelines define STOs and describe the rules applicable, under national law and European law, to STOs and to the trading of "tokenised" financial instruments. The publication notably describes in detail the special features to be taken into account when drawing up a prospectus for a security token offering. The document stresses the description of the characteristics of tokens and the risks inherent in the blockchain technology, and requires that issuers transmit to the regulatory authority contracts signed with service providers in charge of distribution of the "tokenised" assets.

The published document also examines the question of the secondary market for security tokens, specifying that the security tokens could only be traded in multilateral systems within the meaning of MiFID. It indicates that the activity carried out by the security token exchange platforms could be classified as proprietary trading, third-party order execution, and that it could also come under the exemption applicable to bulletin boards[14].

In **Switzerland**, the Federal Council published a report in December 2018, recommending a relaxation of the regulations applicable to market infrastructures, and the creation of a "specific new legal definition for transferable securities conceived as tokens".

In the **United States**, some states have in a disorganised fashion adopted regulatory amendments to facilitate use of the blockchain for financial instruments. Delaware, for example, has enabled firms to use the blockchain technology to store and transfer financial securities. In February 2019, Wyoming likewise introduced a definition relating to tokenised financial instruments in its legislative framework. **Some other states such as Rhode Island and Colorado are examining the possibility of revising their financial regulations in order to make a distinction between utility tokens and those resembling financial instruments**.

In **Asia**, some regulators have spoken in favour of adapting the financial regulations for security tokens (Hong Kong, Taiwan, Singapore, Thailand).

[13] Bank of Lithuania asks market participants' opinion on Guidelines on Securities Token Offerings, 07.05.2019, available via: https://www.lb.lt/en/news/bank-of-lithuania-asks-market-participants-opinion-on-guidelines-on-securities-token-offerings

[14] Bank of Lithuania asks market participants' opinion on Guidelines on Securities Token Offerings, 07.05.2019, page 31

3. LEGAL ANALYSIS

3.1. SECURITY TOKEN ISSUANCE: NO MAJOR OBSTACLE, SECTIONS OF THE PROSPECTUS TO BE REVISED IN DETAIL TO TAKE INTO ACCOUNT THE RISKS SPECIFIC TO THE BLOCKCHAIN

3.1.1. The applicability of the Prospectus Regulation with regard to the legal classification of security tokens

The first challenge concerning security tokens is to determine whether the token in question has the specific characteristics of transferable securities within the meaning of MiFID, in which case its issue is subject to compliance with the Prospectus Regulation. This classification of security tokens as transferable securities depends on the rights attached to the token (financial rights and political rights). Since most of the tokens examined so far have hybrid characteristics, this stage of legal classification of the token is not without difficulty.

Regulation (EU) 2017/1129 of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market (hereinafter, "Prospectus 3") applies to "offers of securities to the public". This concept is defined as:

> "*a communication to persons in any form and by any means, presenting sufficient information on the terms of the offer and the securities to be offered, so as to enable an investor to decide to purchase or subscribe for those* ***securities****. This definition also applies to the placing of securities through financial intermediaries*".

Directive 2014/65/EU of 15 May 2014 on markets in financial instruments, better known as MiFID II, defines "securities" as follows:

> "***those classes of securities which are negotiable on the capital market****, with the exception of instruments of payment, such as:*
> *a) shares in companies and other securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares;*
> *b) bonds or other forms of securitised debt, including depositary receipts in respect of such securities;*
> *c) any other securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement determined by reference to transferable securities, currencies, interest rates or yields, commodities or other indices or measures*".

In practice, as recalled by the French Treasury Department's consultation on the reform of the system of public offers of securities, "the definition of securities within the meaning of MiFID generally comprises financial securities except for those which do not constitute a fungible "security class" (e.g. negotiable debt securities)."

In practice, the Prospectus Regulation will cover STOs consisting of public offers of equity securities or debt securities. These two concepts, which conventionally include equities on one hand and bonds on the other hand, allowing to analyse hybrid securities, stripped securities and foreign securities. And yet, the STOs that we have been able to examine so far frequently use complex or hybrid securities (preferred shares governed by foreign law, securities without voting rights and with limited capital rights, for example). The question of the classification of securities issued via STOs, in relation to the concepts of

equity securities and debt securities couldin some cases, to prove complex and lead the AMF to give a completely novel decision on the legal meanders of these concepts, which are sometimes imprecise.

3.1.2. Practical problems resulting from application of the Prospectus Regulation to STOs

Whenever securities offered to the public via an STO are covered by the concept of a security within the meaning of European law, the Prospectus Regulation shall be applicable, which implies, barring exemptions, the obligation for the issuer to establish a prospectus approved by the AMF.

In practice, the question is whether the prospectus schedules defined by the Prospectus Regulation are appropriate for STOs.

Given the lack of historical data concerning some security token issuers (newly registered), it should be noted that some prospectuses could contain succinct or cursory information, from an accounting and financial viewpoint in particular, which – without being disqualifying – could raise questions regarding market information and protection of savings.

It should be noted that, on 30 January 2019, the BaFin stamped its approval on a prospectus produced for an STO. This prospectus, prepared by Bitbond Finance GmbH, concerned a non-convertible bond issue offered to the public. The schedules in Annexes IV and V to European Regulation No. 809/2004 were applied by the issuer.

The analysis of this prospectus highlights certain problems resulting from this type of offer. And yet, these difficulties are not specific to security tokens and these questions are generally posed in the same way for conventional financial instruments.

☐ Definition of the territory in which the offer is made

As part of the information which should appear in the prospectus concerning the conditions of the offer, the countries in which the public offer is made are specified. Just like for ICOs, **the question of the territory in which the offer is made can be posed for STOs to the extent that the public offer is made to all net surfers once it is accessible on a website**. It therefore seems difficult in practice to limit the potential recipients of the offer.

The AMF notes that the issuer Bitbond Finance considered that the public offer concerned Germany only. Moreover, the prospectus states that "any country in which the offer is illegal" is excluded from the scope of the prospectus. Likewise, investors who are US or Canadian residents for tax purposes have been excluded from the offer.

However, the AMF notes that insofar as it is possible for anyone to obtain access to the website, it could be appropriate to consider that the public offer extends beyond the national borders. **If it were to be considered that an offer on the internet entailed making a public offer beyond France, then the AMF would have to require a passported prospectus of the issuer and, on behalf of the issuer, send a summary of the prospectus to the authorities of the other relevant Member States**. The countries to which the offer is directed should be identified on a case-by-case basis. This problem is not specific to security tokens but to marketing on the internet, and it is posed in the same way for conventional financial instruments.

☐ Information concerning token listing

The Prospectus Regulation requires the issuer to provide information regarding the markets on which the securities will be listed or admitted to trading.[15]

As part of an STO, token listing is problematic. In this respect, the lesson of the prospectus prepared by Bitbond Finance is interesting. This issuer stated that this factor was "not applicable", specifying that the token would not be admitted to trading on a regulated market within the meaning of Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 or on any other equivalent market. The issuer also specified that on the date of the prospectus, it did not intend to carry out such an admission of tokens to trading on a regulated market or on any other market, and had no intention of doing so in the future. However, the issuer specifies that it cannot be ruled out that token holders may exchange their tokens directly with other people or that the tokens could be listed at the request of investors or any other person on an unregulated online crypto-asset platform.

In any case, the issuer should provide information on the token's listing, in accordance with the legal framework applicable to this listing.

☐ The absence of an investment service provider as intermediary

At present, investment service providers operate as intermediaries when making an offer of securities to the public. It is they who are responsible for verifying compliance with the obligations regarding anti-money laundering and combating the financing of terrorism on behalf of the issuer at the time of subscribing to the securities.

Within the framework of STOs, if they are organised on the same model as ICOs, it is unlikely that the issuer will use an ISP as intermediary for the subscription. Therefore, **the issuer is not obliged to comply with the same AML/CFT obligations as ISPs.** It should be noted that this fact is already applicable to issuers who decide to keep the issued securities ledger themselves. In the case of ICOs, on the contrary, it was chosen under French law to make verification of the AML/CFT requirements by the issuer compulsory.

However, Article R. 225-129 of the Commercial Code provides that funds from cash subscriptions during capital increases are deposited on behalf of the company with the Caisse des Dépôts et Consignations, a notary public, a credit institution or an intermediary mentioned in paragraphs 2° to 7° of Article L. 542-1 of the Monetary and Financial Code, which are subject to AML-CFT requirements. These provisions apply only to capital increases and not the issue of bond securities.

3.1.3. Practical questions linked to the application of company law to security token issues

Participants in the first security token issues reported several problems related to the application of company law to security tokens.

[15] In particular, the Prospectus Regulation invites the issuer to provide "an indication as to whether the securities offered are or will be the object of an application for admission to trading, with a view to their distribution in a regulated market or other equivalent markets with indication of the markets in question" and the New Prospectus Regulation invites the issuer to provide, under the "details of the offer" (point VI of Annex III), information on the "markets".

- **The recording in the distributed ledger must be in the name of an account holder** (Article. L. 211-4, paragraph 1) whereas, by nature, addresses in a blockchain are pseudonyms and not by name. The company must therefore choose between (i) keeping a record of the match between the addresses in the distributed ledger and the identities and (ii) using a software "overlay" that makes it possible to verify the identity of the owners of the addresses. Several start-ups are developing products aimed at resolving the issue of identity and KYC on public blockchains, for the case of security tokens. The effective identification of owners of securities is essential, in particular for sending the information required by company law (for example, notice to attend general meetings).

- Companies whose securities are registered in a distributed ledger may have included **clauses restricting the assignability of securities** in their articles of association. However, on a public blockchain, a transaction only requires the possession of the private key corresponding to the address. It is therefore also necessary to integrate a software overlay or to establish smart contracts to prevent the conduct of transactions involving securities registered in the distributed ledger in breach of the articles of association.

- In parallel with the development of regulated security tokens (for example, the issue of Bitbonds in Germany), **hybrid crypto-assets** with characteristics similar to those of financial instruments are sometimes issued outside all legal frameworks, by taking advantage of the rigidity of the legal categories. Each token must be analysed on a case-by-case basis to determine its legal qualification. The AMF's services consider that once the token grants financial rights, the corresponding financial flows of which are paid to the holder of the security by the issuer or a related entity, it can be qualified as a security within the meaning of MiFID. The fact that the token adds a right of a non-financial nature to a financial right does not remove the qualification that applies to the financial right. In any event, a case-by-case analysis of the rights granted by the token in question must be performed to enable the qualification of the token.

- The prohibition on French simplified joint-stock companies (SAS) carrying out a public offering: security token offerings (STO) commonly corresponds to a public offering of financial securities made by an issuer without an intermediary. **An STO is usually carried out by a young company (start-up) to finance its growth** on the model of initial coin offerings. It communicates its needs to the public, which decides whether or not to contribute to the funding campaign. The company that wishes to carry out an STO is sometimes not very structured and often has limited resources.

  However, according to Article L. 227-2 of the Commercial Code, **a SAS may not offer financial securities to the public.** Some market players consider that this article could be a constraint for start-ups that wish to carry out a security token offering. Indeed, this means either (i) remaining as an SAS, but proceeding by way of private placement, or (ii) transforming the company into a public limited company (*société anonyme*) and launching a public offering. These players highlight the fact that transforming a joint-stock company into a public limited company is cumbersome and costly. It requires the unanimous agreement of all shareholders, a minimum capital of €37,000, the drawing up of a report by the company's statutory auditors certifying that the shareholder's equity is at least equal to share capital or, failing that, a report by the conversion appraiser that must, in any event, be approved by the shareholders, and the strengthening of governance with the creation of a board or directors or a management board.

Even in the current legal framework, it is however possible for a joint-stock company to make a crowdfunding offering provided that the total amount of the offering is less than €8 million, that the offering is aimed at more than 149 people and the amount per security is less than €100,000. This means going through a crowdfunding website.

- **The obligation to reach at least 75% of the amount announced in the rights issue**: during a security token offering, as with an Initial Coin Offering or crowdfunding operation, issuers do not know the volume of funds they will collect at the end of the fund-raising campaign. However, according to Article L. 225-134, I, 1° *in fine* and II of the Commercial Code, subscriptions must reach at least 75% of the amount announced for the capital increase. Some market players believe that this article is a constraint for start-ups that wish to carry out a security token offering. It means either (i) carrying out an STO by taking the risk that it may lapse in the event of subscriptions being below the above-mentioned 75% threshold, or (ii) exploring alternative solutions such as setting up an escrow account. However, the 75% rule does not apply if the company is an open-ended investment company. It is therefore easy, in practice, for an issuer incorporated as a public limited company to dispense with this rule if the shareholders accept at the shareholders general meeting that the company becomes an open-ended investment company.

To conclude, the Prospectus Regulation appears compatible with security tokens. Apart from a few practical problems, related in particular to the application of company law, the legal framework does not prevent the issue of security tokens. However, the information contained in the prospectus will have to be adapted to the specific features of security tokens.

3.2 SECURITY TOKEN EXCHANGE: MAJOR LEGAL OBSTACLES IN ESTABLISHED LAW, AND REGULATORY CHANGES TO BE FORESEEN ON THE EUROPEAN AND NATIONAL LEVELS

In the discussion below, the term platform refers to the online security token exchange services proposed by project promoters. It should be distinguished from the concept of trading venue within the meaning of MiFID, which designates the regulated entity, whether it be a regulated market, a multilateral trading facility (MTF) or an organised trading facility (OTF).

3.2.1Trading

So far, to AMF's knowledge, there exists no trading platform listing security tokens in Europe. In the United States, the Open Finance Network platform apparently lists security tokens on the basis of its authorisation as a broker-dealer. It is therefore hard to imagine what would be the form taken by security token trading in a secondary market. This could be based on the various ICO token trading procedures for which numerous models of trading platform already exist. Accordingly, if security tokens were to be traded on a platform like these tokens, a distinction could be made between three types of platforms:

- **Peer-to-peer or OTC exchange platforms**: these exchange venues allow two parties having opposite interests to enter into a relationship, bilaterally agree on a price, and use the blockchain to conclude their transaction;

- Platforms built on a **brokerage model** implying own-account intermediation like in the Anglo-Saxon broker-dealer model;

- Platforms whose operation is **similar to that of a multilateral system** within the meaning of MiFID II (order book, absence of discretion, execution of transactions). These platforms can themselves be classified in three categories:

  - ⇨ **Centralised**: The entire transaction process takes place outside the blockchain (off-chain): trading (establishing a relationship between buying and selling interests), execution of transactions and custody of security tokens, only settlement and delivery being performed on the blockchain which acts as a security recording ledger. This recording on the blockchain takes place when the investor leaves the platform, and not at each transaction;

  - ⇨ **Decentralised**: The entire transaction process takes place on the blockchain (trading, execution and settlement/delivery) via the use of smart contracts. There is no custody of security tokens by the platform. Unlike the centralised platforms, transaction management is not entrusted to a central operator but to the members of the blockchain network called "nodes";

  - ⇨ **Hybrid or semi-centralised**: These are all the platforms having a mixed model borrowing from the previous two models depending on the various procedures for trading, transaction execution, security token custody and settlement/delivery. Some platforms have a centralised manager and others not. This is a hotchpotch category, and the application of the Regulation to these platforms requires analysis on a case-by-case basis.

The issue is therefore whether, when security tokens are listed on a platform, that platform is subject to specific regulations. If, finally, the platform's activity can be likened to a trading facility within the meaning of MiFID, then, depending on the case, it will have to comply with the MiFID rules applicable to these trading facilities.

☐ Requirements applicable to platforms of the OTC or brokerage type

For OTC or brokerage platforms, it is likely that the services provided will be governed by the MiFID regulations as investment services. It could be the third-party order receipt and transmission service or third-party order execution service (for OTC platforms) or the proprietary trading service (for brokerage platforms).

This type of platform, although not, in the legal sense, exploiting a trading facility within the meaning of MiFID, will undoubtedly have to apply for an authorisation as investment service provider (ISP) or financial investment adviser[16] depending on the investment service that they provide. The regulatory constraints applicable to the services of reception and transmission of orders, third-party order execution and proprietary trading are relatively light and would allow security token platforms to develop in the current legislative framework.

The main obligations of the MiFID regulations for these services concern order execution in clients' best interests (best execution). It should be noted that the MiFID regulations also provide for a trading

[16] The status of financial investment adviser is a national regulated status. FIAs can provide the reception and transmission of orders service on CIU units or share that they have recommended (
article 325-32 of the AMF GR).

obligation for equities and transparency obligations beyond certain liquidity thresholds. For example, an OTC or brokerage platform could not propose the trading of equities considered as liquid, since these must be traded on a trading venue within the meaning of MiFID. However, the liquidity thresholds foreseen by MiFID will probably be hard to calculate because they imply referring to the most relevant market in terms of liquidity, which is difficult to establish in the absence of transaction reporting.

On the other hand, it is likely that crypto-asset exchange platforms will want to go beyond mere RTO and proprietary trading services, and propose a real secondary market for security tokens, like the conventional finance sector, in order to provide more liquidity in exchanges.

The difficulty therefore is to determine in what conditions security token trading platforms could be classified as trading venues within the meaning of MiFID, and to try to determine whether or not the MiFID regulatory requirements are appropriate for security token platforms.

☐ Classification of token platforms and trading venues within the meaning of MiFID

MiFID II defines trading venues as "[…] a system or facility in which multiple third-party buying and selling interests in financial instruments are able to interact". The directive adds that these "systems" or "facilities" should be organised "in a way that results in a contract".[17]

↗ Two concepts can give rise to interpretation in this definition: the concept **of interaction between multiple buying and selling interests** and the concept of resulting in a contract.

It could be considered, as the FCA did in a consultation of December 2015 on the implementation of MiFID II, confirmed in guidance in its handbook, that "Any system that only receives, pools, aggregates and broadcasts indications of interest, bids and offers or prices shall not be considered a multilateral system for the purpose of MiFID II. This is because there is no reaction of one trading interest to another within these systems - they do not act reciprocally"[18].

To illustrate its analysis, the FCA refers to the bulletin boards mentioned in Recital 8 of MiFIR[19] which specifies that a platform should not be termed a "multilateral system" when there is no genuine "trade execution or arranging taking place in the system". According to this Recital, this is the case of "bulletin boards used for advertising buying and selling interests, other entities aggregating or pooling potential buying or selling interests, electronic post-trade confirmation services, or portfolio compression".

It would appear that the FCA recognises the qualification of bulletin board to certain crowdfunding platforms that develop their own secondary market, offering their clients, in addition to a bulletin board stricto sensu, a number of other services enabling them to facilitate the execution of a transaction following the meeting via the bulletin board: notably a price valuation (with the help of an audit firm) and a model contract.
In the same way, it could be considered that platforms for security tokens (or conventional financial instruments) which merely show buying and selling interests without any interaction could not be

[17] Articles 4.1. 19) 21) 22) and 23) of MiFID 2 (transposed in Articles L. 420.1 I paragraph 5, L. 421-1 I, L. 424-1 and L. 425-1 of the Monetary and Financial Code).
[18] The FCA confirmed this position in guidance in its handbook (MAR 5AA.1.2 https://www.handbook.fca.org.uk/handbook/MAR/5AA/1.html#D102).
[19] Recital 8 of Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments.

considered as trading venues within the meaning of MiFID and could therefore be exempted from the regulatory obligations relating to such venues. However, they could still not be exempted from all the provisions of MiFID, because their business of establishing relations between investors[20] could oblige them to apply for an authorisation for the supply of another investment service (RTO, third-party order execution), although admittedly less constraining. Only a case-by-case analysis can determine the need to seek for a license.

This legal interpretation could be supported by Recital 8 of MiFIR, and the FCA does so. This interpretation of the existing legal framework could constitute a useful clarification of the regulations to enable certain security token trading platforms to develop. The AMF received expressions of interest from French project leaders. Such a legal solution would allow the emergence of initial initiatives by project owners but would not allow the development of real trading platforms, which remain subject to the requirements of MiFID.

- Second, the **concept of resulting in a contract** could also be subject to interpretation. In particular, it could be considered that, in the case of hybrid platforms, they are not organised "in a way that results in a contract" to the extent that transactions are executed outside the facility on which trading took place. However, a Q&A from ESMA on MiFID II, updated on 2 April 2019,[21] suggests that whenever the trading venue provides for and describes in its rules in a sufficiently detailed manner procedures for the execution of transactions, the platform should be considered a trading venue within the meaning of MiFID.

This interpretation leaves little room for the development of hybrid security token trading platforms outside of the MiFID regulations.

To conclude, only security token platforms organised in the form of a bulletin board can be considered as not being trading venues within the meaning of MiFID and therefore not be subject to the MiFID requirements regarding venues. As a consequence, this model would be already applicable without any other legal problem. On the other hand, these platforms would undoubtedly be subject to the ISP authorisation for RTO or third-party order execution. A publication of this interpretation of the legislation, like that of the FCA, could provide legal security for the operators.

☐ Legal difficulties relating to the trading of security tokens on a trading venue within the meaning of MiFID

For platforms which are considered as trading venues within the meaning of MiFID, the present requirements of MiFID do not seem incompatible with the trading of security tokens on certain conditions.

[20] Annex I section A 1) of MiFID 2 (transposed to Article L. 321-1 1) of the Monetary and Financial Code); it should be noted that this investment service is only appropriate for this type of platform if it is interpreted in accordance with the terms of Recital (44) of MiFID II: "*[…] the business of reception and transmission of orders should also include bringing together two or more investors, thereby bringing about a transaction between those investors*".

[21] ESMA Q&A on MiFID II and MiFIR market structures topics, Multilateral and bilateral systems, Q&A No. 7, latest update on 2 April 2019 (see Annex 4): "the fundamental characteristic of a trading venue is to execute transactions […]. A trading venue should not be allowed to arrange transactions without formalising the execution of those transactions under its rules and systems […]". We stress that the question posed (Can a trading venue use its trading systems and platforms to arrange transactions that are then reported and ultimately executed on another trading venue?) is not directly related to the classification of hybrid platforms but nevertheless provides useful information.

A service provider that wants to manage a trading platform must be (i) either a market operator managing a regulated market,[22] an MTF or OTF, (ii) or an investment service provider authorised to manage an MTF or OTF.[23] This memo only discusses the cases of MTFs and OTFs, since the regulated market status, which is far more constraining, appears inappropriate and disproportionate in the context of secondary markets for security tokens[24] (ministerial order, capital requirements, organisation rules, etc.).[25]

Identification of a platform manager: The manager must be an entity which has a legal personality. **While it is possible to identify a manager for centralised platforms, that is impossible for hybrid and decentralised platforms** which rely on a blockchain for the execution of transactions. There is no blockchain manager because of the decentralised nature of the blockchain, which inherently implies no legal link or shared responsibility between participants. The absence of a manager also makes it difficult to apply the European Regulation on market abuse.[26]

However, if a public blockchain does not have a manager identifiable by its decentralized nature, this does not mean that the trading platform that uses this blockchain has not either. In addition, while the most widespread and widely used token standards to date, such as the ERC20 standard, do not allow a defined manager to exercise control over transactions, many teams are working on suitable token standards to those needs. Thanks to these new standards, it would be possible in particular to prevent an address from sending tokens over a given period, to put on a white list the Ethereum addresses that can receive the token (after KYC), to prevent addresses at expired KYC to make transactions, to define sending and receiving limits or to give control rights to third parties.

Intermediation conditions for MTFs: A transaction on an MTF implies the presence of at least three members having either ISP status or having sufficient respectability and competence, and having reached an admission agreement with the platform. The requirement of intermediation by an ISP would be particularly inappropriate for the crypto-asset universe insofar as clients have access to the platform directly, without going through intermediaries. It could be envisaged for professional users but apparently does not correspond to the current conditions of organisation of the platforms, which write directly to physical persons

However, MiFID allows platforms to admit individuals trading on their own account provided that they comply with the conditions of respectability, competence and experience, and provided that they meet sufficient resource conditions.[27] These conditions could be met either by an audit of the

[22] The management of a regulated market by a market operator does not constitute an investment service.

[23] Article L. 321-1 of the Monetary and Financial Code.

[24] This memo also does not mention the case of MTFs or OTFs managed by a market operator, which is an unlikely situation as yet.

[25] Theoretically, however, there is nothing to prevent an existing French regulated market from requesting an extension of its authorisation to create a security token platform.

[26] By virtue of Article 16 of MAR,[26] **trading platform managers** must establish and maintain effective measures, systems and procedures to prevent and detect market abuse notably by immediately reporting to the competent authority orders and transactions, including any cancellation or change concerning them, which might constitute a market abuse

[27] Article L. 424-5 of the Monetary and Financial Code: "The rules of the multilateral trading facility shall determine in a transparent and non-discriminatory manner the conditions of admission of members to the system, on the basis of objective criteria.
Without prejudice to the provisions of Article L. 531-10, multilateral trading facilities can admit as members, in addition to investment firms and credit institutions, persons who:
a) Have the requisite respectability;

member's financial capacity, or by requiring a proportional security deposit depending on the financial instruments exchanged.

Limited scope for OTFs: A security token platform could decide to apply for OTF status. OTF clients can access the platform directly, on the sole condition that there be at least three active clients. The disadvantage of this status is that it does not allow trading of equities and units or shares in CIUs on the platform, which is probably a major obstacle to the organisation of a security token secondary market. This status would be useful only for trading bond security tokens.

Other rules laid down by MiFID II (best execution, transparency, tick size, etc.): the other conditions laid down by MiFID seem at first sight applicable by security token platforms. The best execution requirements should not pose any problems different from those encountered by conventional financial instruments, except for obtaining data to determine in what way the offer proposed by the platform is better than that of the competition with regard to clients' interests. The transparency requirements should not pose problems either, since French platforms are likely to be below the transparency thresholds. However, it will not be easy to calculate these thresholds due to the lack of data to calculate the benchmark market in terms of liquidity. The supervision of tick sizes should not apply to security token platforms either if they are below the liquidity thresholds.

Anti-money laundering and anti-terrorist financing obligations (AML-CFT): security token trading platforms would be subject to AML-CFT regulation due to their legal status. The approval of MTFs or OTFs is only granted to investment firms other than portfolio asset management companies and credit institutions. These investment service providers are subject to AML/CFT obligations as provided for in Article L. 561-2 of the French Monetary and Financial Code.

To conclude, the only security token platforms within the meaning of MiFID which could develop without major constraints under the present regulation are centralised platforms based on a public or private blockchain which would adopt MTF status (existence of a manager). Clients would obtain access either in an intermediated manner via an ISP or directly provided that they are trading on their own account and that they meet conditions of respectability, competence and sufficient financial resources. The latter possibility would deserve to be brought to the attention of the market participants concerned who are not necessarily aware of it, for example in the form of a publication (Article L. 424-5 of the Monetary and Financial Code).

Centralised platforms in the form of an OTF with direct access for clients could develop legally, but with significant constraints which could call into question their business model. In particular, these platforms could not propose trading in equities (or units or shares in CIUs). They could only allow the trading of bond security tokens, requiring another type of authorisation to be able to trade equities.

b) Have a sufficient level of ability, competence and experience for trading;
c) Have, where applicable, an appropriate organisation; and
d) Have sufficient resources to meet their obligations, taking into account, where applicable, the financial mechanisms put in place by the manager of the multilateral trading facility to guarantee the settlement and delivery of transactions.
The manager of the multilateral trading facility can have its members disclose the list of users to whom they have given direct electronic access to the facility.
The members benefiting from the provisions of a, b, j and o of 2° of Article L. 531-2 are subject to the provisions of Articles L. 533-10-4 to L. 533-10-8.
The manager of the multilateral trading facility shall clearly inform the members of their respective responsibilities regarding the settlement of transactions executed on the facility."

At the other end of the chain, on the other hand, the development of security token trading platforms of the hybrid or decentralised type seems impossible in the current state of the law if they are not operated by an identified manager. An adaptation of the financial regulations in the medium term to address the specific requirements of security token trading platforms would be a necessary condition for the development of platforms of the hybrid or decentralised type.

3.2.2. Clearing

The impact of the central clearing obligation of EMIR on security tokens has not been examined in this memo because the obligation concerns only certain interest rate derivatives and certain credit risk derivatives (CDS). Only security tokens that can be considered as interest rate derivatives or CDS coming within the scope of the central clearing obligation would therefore be concerned. To the AMF's knowledge, there exists no token project in this form at present.

3.2.3 Settlement and delivery

☐ The Blockchain Order for <u>unlisted</u> securities on a trading venue within the meaning of MiFID

The scope of the Blockchain Order has been intentionally limited to financial securities which are not subject to the European legislation (CSDR). This scope is limited to financial securities which are not admitted to the operations of a central securities depository, i.e.[28] mainly securities which are in registered form. In practice, this means:

- equity securities and debt securities issued by joint-stock companies not traded on a trading venue within the meaning of MiFID II;[29]
- units or shares in CIUs not admitted to the operations of a central depository;
- negotiable debt securities.

The ledger of holders of these securities can be kept in a distributed ledger technology (subject to the constraints described in detail below) and the securities do not have to be recorded on an account with the central depository.

The Blockchain Order already makes it possible to issue and transfer security tokens in the form of units or shares in CIUs not admitted to the operations of a central depository, negotiable debt securities, and equities and bonds not traded on a trading venue within the meaning of MiFID (in practice OTC and brokerage platforms). For unlisted securities within the scope of the Blockchain Order, settlement and delivery can already be performed on the blockchain without any legal problem.

[28] Articles L. 211-7 para. 1 and R. 211-2 of the Monetary and Financial Code.

[29] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments, amending Directive 2002/92/EC and Directive 2011/61/EU (revision).

☐ The CSDR settlement obligations for securities listed on a trading venue within the meaning of MiFID

The settlement of some securities is governed by the CSDR at European level. Article 3(2) of the Regulation requires that securities traded on a trading venue within the meaning of MiFID II be "recorded in book-entry form in a [central depository] ".[30] The objective sought by the European legislator is "[…] to ensure that all such securities] can be settled in a securities settlement system."[31]

The issue is whether security token trading platforms could be authorised as a central securities depository, managing a securities settlement system. The securities settlement systems covered by the CSDR[32] are those described by the Settlement Finality Directive,[33] i.e. systems which have been reported to the European Commission[34] and which, accordingly, can benefit from rules derogating from insolvency regulations in the event of the default of a participant in the system.

The main requirements laid down by the CSDR and the Settlement Finality Directive are as follows.

Identification of a system manager: A securities settlement system must have a manager who is the person who applies for the central depository authorisation.[35] However, as mentioned earlier, platforms of a hybrid or decentralised nature (transaction execution on the blockchain) which are based on public blockchains do not have a manager (analysis on a case-by-case basis for hybrid platforms). **Only some of the centralised security token platforms could develop within the current legal framework**. **In practice, the obligation of having a manager excludes the use of public blockchains insofar as no manager can take responsibility for the completely orderly functioning of the blockchain**. An analysis ought to be made to see how to classify the use of a permitted public blockchain (use of the underlying blockchain technology but enacting of specific operating rules by a service provider).

Obligation of intermediation: The list of persons authorised to take part in a securities settlement system[36] does not include natural persons. But, as mentioned earlier, these facilities are characterised by direct access of clients including private individuals. **This obligation of intermediation is an impediment to the development of all security token platforms insofar as it would require that clients go through an intermediary** (probably credit or investment institutions). In the Settlement Finality Directive, it could be considered extending the list of persons authorised to take part in the securities settlement system to include natural persons subject to certain conditions.

Recording in book-entry form with the central depository: Article 3(2) of the CSDR requires that securities traded on a venue within the meaning of MiFID be recorded on an account with the central depository,[37] the securities account being defined as being an "account on which securities may be

[30] Article 3(2) of the CSDR: "Where a transaction in transferable securities takes place on a trading venue the relevant securities shall be recorded in book-entry form in a CSD […]".

[31] Recital 11 of the CSDR.

[32] Article 2.1 10) of the CSDR.

[33] Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems, as amended by Directive 2009/44/EC of the European Parliament and of the Council of 6 May 2009.

[34] In accordance with Article 330-1 of the Monetary and Financial Code which transposes the Settlement Finality Directive, reporting is done to ESMA.

[35] Article L. 330-1 II 5° of the Monetary and Financial Code taken from the Settlement Finality Directive.

[36] Article L. 330-1 II 1° to 9° of the Monetary and Financial Code taken from the Settlement Finality Directive.

[37] Article 3 (2) of the CSDR: "Where a transaction in transferable securities takes place on a trading venue the relevant securities shall be recorded in book-entry form in a CSD on or before the intended settlement date, unless they have already been so recorded."

credited or debited".[38] In its January 2019 opinion on ICOs and crypto-assets, ESMA considers that the CSDR is not prescriptive regarding the nature of the recording on an account with the central depository. In light of Recital 11 according to which the Regulation does not intend to "impose one particular method for the initial book-entry recording, which should be able to take the form of immobilisation or of immediate dematerialisation", ESMA considers that it is incumbent on national law to indicate the form that could be taken by recording on an account, including on a blockchain. The only constraint imposed by the regulation is that this recording on an account should take place via an authorised central depository.[39]

The CSDR therefore does not oppose the recording of security tokens in the central depository taking place via a blockchain and not via an account as understood from an accounting viewpoint. However, routing via the intermediary represented by the central securities depository remains an obligation. As things stand at present, a platform listing security tokens should therefore perform settlement and delivery either via another market participant authorised as central securities depository or by being itself authorised as central securities depository.

Central Securities Depository operating rules: The CSDR imposes numerous operating rules on central securities depositories (requirements which should be complied with by the managers of blockchains performing the settlement and delivery system function), which would **not be unfeasible for security token platforms but which could be disproportionate** due to the costs they entail: organisational requirements (rules of good conduct, robust governance, provisions relating to managers and personnel, conflicts of interests, reporting of offences, independent audit), settlement discipline (rules applicable in the case of default by a participant),[40] supervision, issuance integrity, and protection of securities (asset segregation).[41] It is **likely that these obligations will have to be adapted to allow for the specific characteristics of the blockchain** for which technology is likely to ensure greater security in transactions than routing via a regulated intermediary (the settlement discipline and issuance integrity rules could, for example, prove superfluous). Apart from the costs, these requirements appear inappropriate for the way in which the blockchain operates (unfalsifiable distributed ledger, smart contracts).

Classification of a blockchain as a securities settlement system: The CSDR entrusts to the central securities depository a role in operating a system for settlement of the securities recorded on an account in it. If security tokens could be recorded in an account on a blockchain via a central depository, the blockchain in question would also have to be able to be considered as a securities settlement system within the meaning of the Settlement Finality Directive.

[38] Article 2.1 (28) of the CSDR.

[39] ESMA opinion of 9 January 2019 on ICOs and crypto-assets: Paragraph 159: "Based on the above, where crypto-assets qualify as transferable securities and are traded on trading venues, their issuer, provided it is established in the Union, shall arrange for such securities to be represented in book-entry form with an authorised CSD as defined under Article 2(1) of the CSDR. Other than the reference to the use of 'securities accounts'53, the CSDR does not prescribe any particular method for the initial book-entry form recording, meaning that any technology, including DLT, could virtually be used, provided that the book-entry form is with an authorised CSD. However, there may be national rules that could pose restrictions to the use of DLT for that purpose. The legal nature of a securities account (i.e. statutory record, contractual construct or accounting device) and the legal nature and effects of book entries are still embedded in national law."

[40] Article 41 of the CSDR.

[41] Article 38 of the CSDR.

The definition of a securities settlement system has been transposed to Article L. 330-1 of the Monetary and Financial Code.[42] This definition does not seem incompatible with settlement on a blockchain. The French law provides that a settlement and delivery system is either instituted by a public authority, or "governed by a framework agreement that respects the general principles of a market framework agreement or a model agreement". **At first sight there is apparently nothing to prevent the settlement and delivery of security tokens from taking place on a blockchain recognised as a securities settlement system** and reported as such to ESMA. However, it should be examined to what extent a public blockchain could be recognised as a securities settlement system.

Cash settlement: Article 40 of the CSDR provides that "For transactions denominated in the currency of the country where the settlement takes place, a CSD shall settle the cash payments of its securities settlement system through accounts opened with a central bank of issue of the relevant currency where practical and available." The second paragraph specifies that "Where it is not practical and available to settle in central bank accounts as provided in paragraph 1, a CSD may offer to settle the cash payments for all or part of its securities settlement systems through accounts opened with a credit institution or through its own accounts."

If cash is defined as scriptural money, there are three possibilities for settlement of the security tokens delivered on a blockchain operated by a central securities depository:

- Settlement is performed in fiduciary money via accounts opened with a central bank (paragraph 1 of Article 40). In this case, if delivery of the security tokens takes place on the blockchain, settlement, for its part, takes place in the conventional banking circuit, directly in central bank money;
- Settlement is performed in commercial money via the accounts of the central securities depository or via accounts opened with a credit institution (paragraph 2 of Article 40). In the same way, as things stand at present, the settlement of securities could not be performed directly on the blockchain but through the conventional banking system;
- It could be considered that when transactions are denominated in cryptocurrency, they evade the scope of application of Article 40 and are therefore exempted from cash settlement. Indeed, the first phrase of paragraph 1 of Article 40 refers only to "transactions denominated in the currency of the country where the settlement takes place". This innovative interpretation of the text could produce real effects only if it were endorsed by the European Commission, insofar as it has a monopoly on the interpretation of European legislation. However it does not seem to be in conformity with the spirit of the regulation.

In the current state of the legislation, it would seem that the complete tokenisation of the settlement and delivery of security tokens is impossible. **Although the delivery of security tokens could be performed on a blockchain operated by a central securities depository authorised for this purpose,**

[42] Article L. 330-1 of the Monetary and Financial Code: "I. – An interbank settlement system or system used for settlement and delivery of financial instruments consists of a national or international procedure which organises relations between at least three parties, not counting the system manager, defined in 5° of II of this article, nor any indirect participants, defined in the last paragraph of said II, permitting, in accordance with common rules and standardised procedures within the meaning of Directive 98/26/ EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems, the regular execution of payments, through clearing or otherwise, and, for systems used for settlement and delivery of financial instruments, the delivery of securities between said participants.
The system must either have been instituted by a public authority or be governed by a framework agreement that respects the general principles of a market framework agreement or a model agreement. The Minister for the Economy sends the European Securities and Markets Authority a list of the systems having the benefit of Articles L. 330-1 and L. 330-2 governed by French law and their respective managers."

settlement, meanwhile, would in theory have to take place in fiduciary money and not in cryptocurrency. This would therefore require the central securities depository to effect movements in its cash accounts at the same time as the blockchain, which to some extent limits the productivity gains that can be expected from the tokenisation of post-trade infrastructures. **A legislative adaptation of the CSDR seems necessary to allow settlement in cryptocurrency**. Conversely, this legislative adaptation would not be necessary if the European Central Bank decided to issue central bank money on a blockchain.

Safekeeping of assets : in the current state of the law, only financial securities which are not admitted to the operations of a central depository can be registered in a Blockchain and benefit from the same level of protection in matters of property right as when the security is registered in the securities account[43]. For securities registered in a securities account, registration in an account with the central depository does not constitute title to ownership. Only registration in an account with a custodian account keeper is. **For securities admitted to the operations of a central depositary, i.e. securities, on a compulsory basis, and other financial securities such as CIU units or shares which would be registered voluntarily with a central depositary, the passage through a securities account with a custodian account keeper is essential** to ensure the holder's property right over the security. The possibility of registering Blockchain securities should be **extended to financial securities admitted to the operations of a central depository** to allow the development of trading and settlement of security tokens. This would require an amendment to Article L. 211-7 of the Monetary and Financial Code.

To conclude, in the current state of the legislation, the development of security token platforms (the listed securities within the meaning of MiFID) providing settlement and delivery entirely on the blockchain does not seem possible.

Several legal difficulties can be identified: (i) the need to identify a blockchain manager acting as a securities settlement system, which *de facto* excludes decentralised security token platforms and, more generally, the use of public blockchains which are based on a decentralized consensus not allowing to identify any operations manager; (ii) the obligation of intermediation by a credit institution or an investment firm for individuals to obtain access to the settlement and delivery system, which does not seem compatible with the current functioning of crypto-asset platforms by direct access; (iii) recognition of the right of ownership at the level of the custody account keepers and not because of recording of the security tokens in the blockchain (as has already been done for unlisted securities by the Blockchain Order); and (iv) the obligation of settlement of securities in cash, in central bank or commercial money.

In the current state of the legislation, security token platforms would have to go through the conventional banking system for the settlement of securities and through the various conventional post-trade intermediaries for their delivery (custody account keepers, central securities depository authorisation). The current regulations therefore seem inappropriate for settlement and delivery on the blockchain insofar as they do not make it possible to profit fully from the productivity gains possible through disintermediation. They also seem disproportionate compared with the size of the market participants and the as-yet non-systemic nature of the assets exchanged.

[43] Article L. 211-7 of the Monetary and Financial Code: "Financial securities which are not admitted to the operations of a central depository must be entered, in the name of the owner of the securities, in a securities account kept by the issuer or, by decision of the issuer, in a shared electronic recording device mentioned in article L. 211-3 ".

If changes were considered, they should be undertaken both on the European level (CSDR for the obligation of going through a central securities depository, Settlement Finality Directive for derogations from bankruptcy law in the case of settlement and delivery in a system) and on the national level (recognition of the ownership of security tokens in the blockchain) (see table in conclusion). Only such amendments could permit tokenisation of the cash part of settlement and delivery of security tokens and adapt the regulatory requirements to this new technology.

3.3 SECURITY TOKENS AND ASSET MANAGEMENT: REGULATORY CHOICES TO BE MADE, OPERATIONAL ISSUES

The following analysis is made in the current state of the legislation and is limited to security tokens that could be recorded on the blockchain by virtue of the Blockchain Order. As mentioned above, this concerns only the following securities: units and shares in CIUs and negotiable debt securities not admitted to the transactions of a central depository, and equity securities and debt securities not traded on a trading venue within the meaning of MiFID. **For these unlisted securities, the Blockchain Order opens up numerous possibilities for recording security tokens in the assets or liabilities of funds.**

In contrast,
listed securities are outside the scope of the blockchain order and do not constitute security tokens for the purposes of the analysis below, which cannot be registered on a Blockchain in accordance with French law. The CSDR interpretation choices which might be made on the European level will have an impact on the potential for recording security tokens in the assets or liabilities of funds. To avoid coming up against the constraints of the CSDR, it is possible that investment management companies may increasingly choose to record CIU units or shares on the blockchain rather than have them admitted to the transactions of a central securities depository, insofar as routing through a central securities depository is not required by the CSDR but is at present the result of a widespread voluntary practice.

3.3.1 Recording of security tokens in CIU assets

Certain funds intended for the general public (UCITS) will have a limited capacity for investing in security tokens given their investment rules. In practice, the only funds could be:

- For UCITS, "eligible financial securities" (equity securities issued by joint-stock companies[44] and unlisted debt securities[45]) and unlisted money market instruments, within the framework of the trash ratio. These securities may therefore not represent more than **10%** of the assets of the UCITS.
- They can only be entered in the assets of these funds if they are not admitted to the transactions of a central securities depository, as provided for in the blockchain order;
- For UCITS, units and shares in CIUs or investment funds of the open- or closed-end type, on condition that they are not admitted to the transactions of a central securities depository. But, in practice,

[44] This includes shares and other securities that give or may give access to the capital or voting rights, in accordance with the provisions of Article L. 212-1-A of the Monetary and Financial Code.
[45] Excluding commercial paper and interest-bearing notes.

French CIUs or their investment management company usually choose to admit their units or shares to the transactions of a central securities depository, even when they are not listed.[46]

On the other hand, private equity funds and funds intended for professional clients could invest more extensively in security tokens, given their investment rules and insofar as the AIFM directive lays down no harmonized rules at European level on the composition of AIFs' assets. The same could hold for certain real estate funds which would be structured for this purpose.

The AIFs whose assets could mostly consist of security tokens are those designed to invest in units or shares of collective investments[47] or in unlisted securities (employee savings schemes, private equity funds), or having the capacity for investing mainly in these asset classes. The registration of unlisted security tokens in the asset of AIFs is not framed by ratios.

In the case of real estate funds, most of the eligible assets are not tokenisable (pure real estate, units of partnerships complying with strict conditions, listed shares). However, it would be possible, in theory, for a real estate fund to be structured with a view to holding tokenised assets for up to 100% of its assets by targeting its investments solely on the tokenisable assets eligible for this fund

3.3.2 Exercise of the function of CIU depository

In any case, conducting the activity of depositary of a CIU with security tokens among its assets should give rise to an updating of the specifications to clarify the conditions in which it plans to accomplish in particular its tasks of custody of the assets (i.e. safekeeping of financial securities and ledger keeping for other assets) and inspection. If the depositary is the operator of the distributed ledger, it will have to update its specifications. If the depositary delegates custody to a third-party distributed ledger operator, it should be able to verify that the operator is performing the tasks. This will also require an update of its specifications (see Articles 323-14 and 323-32 of the AMF General Regulation).

For asset management, the UCITS or AIF depositary must act as the custodian of the assets. In this respect, the depositary must keep the financial instruments registered on a financial instruments account opened in its books and financial instruments that are physically delivered to it. Furthermore, for the other assets, the depositary verifies that they are the property of the UCITS or AIF and keeps the register. Direct registered securities and securities under administered management are subject to record-keeping and not custody account-keeping. In the event of the loss of registered securities (apparently due to the issuer), the depositary has no obligation of restitution, unlike the financial securities under its custody.[48] However, Article R. 211-2 of the Monetary and Financial Code explicitly states that financial securities registered in a distributed ledger are in registered form.[49]

[46] Being specified that a fund may decide to have part of its units or shares admitted to the transactions of a depository and keep the other part not registered by a depository, which allows them to be recorded on a distributed ledger.

[47] Provided that these CIU units or shares are not admitted to the transactions of a central securities depository.

[48] Article L214-11 of the Monetary and Financial Code: "(…) In the event of the loss of financial instruments held in custody, the depositary shall return the financial instruments to the UCITS, including money market instruments, of similar or equivalent type in monetary value without undue delay. The depositary shall not be held liable if it can prove that the loss is the result of an external event beyond its control that would have had inevitable consequences despite all reasonable efforts employed to avoid them. (…)".

[49] Article R. 211-2 of the Monetary and Financial Code: "When the securities account is held by the issuer or when the financial securities are registered by the issuer in a shared electronic registration system, the financial securities are in registered form."

This means that when an AIF or UCITS invests in financial instruments governed by French law and registered in a distributed ledger, i.e. in registered form, the AIF or UCITS depositary's remit consists only in keeping the register. It therefore has no obligation of restitution whatsoever. It shall remain liable to the UCITS or AIF or to unitholders or shareholders of the UCITS or AIF, for all losses resulting from its negligence or the intentional failure to perform its obligations.[50] This regime is not specific to financial securities registered in the distributed register, but generally applies to registered securities, which are not registered in a securities account opened in the books of the depositary (but are registered with the issuer).[51]

It should be noted that the record-keeping regime applicable to depositaries of CIUs that contain security tokens would be different from the regime of authorised digital asset service providers that act as custodians of digital assets (as defined by the PACTE law) since they are subject to the obligation to return means of access to digital assets (private keys or control over the digital assets).

Since the holding by a CIU of security tokens that remove these assets, under existing laws, from the scope of the obligation of restitution on the CIU depositary, there is a general risk that this obligation that protects the rights of CIU holders is weakened should this type of instrument become successful. An amendment to national legislation on this issue would involve the over-transposition of the AIFM and UCITS directives. It would therefore be advisable to address the issue of the depositary's liability for security tokens in the European context, taking into account the specific characteristics of this holding mode.

3.3.3 Fund administration for CIUs issuing security tokens

As a reminder, fund administration of the CIU comprises, on the one hand, centralising subscription and redemption orders for units or shares in the CIU and, on the other hand, managing the CIU unit or share registry[52].

Indeed, when a portfolio management company keeps the issuing account of the fund it manages, it carries out an activity of account keeping issuing of the CIU which is similar to a custodian account keeping activity but which obeys to a particular regime[53].

Regarding the tasks relating to fund administration, **no legal obstacle has been noted at this stage** with regard to the performance of these tasks on security tokens, subject to operational problems that have not yet been identified.

[50] Record-keeping is regulated at European level by the amended Delegated Regulation 2016/438 of the Commission of 17 December 2015 (UCITS) and amended Delegated Regulation 231/2013 of the Commission of 19 December 2012 (AIF).

[51] Financial and Monetary Code, Articles L. 214-10-5, II, 2° (UCITS) and L. 214-24-8, II, 2° (AIF); AMF GR, Articles 323-17 (UCITS) and 323-37 (retail investment funds).

[52] Articles 411-64 of the AMF GR for UCITS and Article 422-42 of the AMF GR for investment funds.

[53] "Unlike joint stock companies, undertakings for collective investment are not considered to be custodian account-keepers. Indeed, undertakings for collective investment are not subject to the provisions relating to offers to the public (C. fin. Mon., Art. L. 411-3, 4 °), and cannot therefore be qualified as account-keeper- custodian within the meaning of article L. 542-1, 1 °, of the Monetary and Financial Code. The account keeping regime for registered securities issued by collective investment undertakings - called "issuing account keeping" - is described in articles 411-70 (for UCITS) and 422-48 (for AIFs) of the general regulations of the AMF. " (D. Poirier, Lextenso, Keeping of conservation accounts, §113).

However, the entity to which responsibility is assigned for this function (the CIU, portfolio asset management company, depository or ISP[54]) must have appropriate and sufficient means,[55] which requires that it adapts its programme of activity or its specifications, as the case may be.

Finally, the AMF should, in particular, be able to effectively obtain access to data relating to the centralisation of subscription and redemption orders for units or shares in the CIU recorded in a distributed ledger.[56]

There is already a French operator for fund administration on the blockchain for unlisted security tokens called IZNES[57]. IZNES acts as a technical provider of funds for which the portfolio management companies maintain issue account.

3.3.4 Impact of the issue of security tokens on the organisation of investment management companies

The Blockchain Decree requires that the recording of security tokens in a distributed ledger be covered by an up-to-date business continuity plan including, in particular, external arrangements for periodic safekeeping of data.[58] **This obligation is not inhibiting** insofar as portfolio asset management companies already have an obligation stipulated in the AMF GR to prepare a business continuity plan.

Moreover, the regulations (instruction and where applicable AMF GR) will also have to be adapted so that the AMF may ensure that the portfolio asset management company masters and controls the blockchain technology and the management of its liabilities, a function which is now largely delegated.

3.3.5 Cross-border CIU marketing

Outgoing passport for CIU units or shares. – **Given that, so far, it has been the subject of no harmonisation on the European level, the possibility of recording CIU units or shares in a distributed ledger could be problematic with regard to the outgoing passport** allowing CIU marketing in another European Union Member State or a State that is party to the EEA.

This is because if a CIU wanted to market its units or shares recorded in a distributed ledger via an outgoing passport, the competent authority of the host State would be liable to challenge such marketing, especially if the blockchain technology had no legal existence in said host State, In law, however, the establishment of the right of ownership of a financial security depends on the law of its issuer (lex societatis).

Incoming passport for CIU units or shares. – Accor even though in law it is normally the right of the issuer of the financial security that determines the establishment of the right of ownership of the securityding to the same logic as that for the outgoing passport, **the use of the European passport in France by a foreign CIU wanting to market its units or shares in France could pose problems** whenever the securities in question are recorded in a blockchain, even though in law it is normally the right of the

[54] Articles 411-71 (UCITS) and 422-29 (FIVG) of the AMF GR.
[55] Article L. 214-13 of the Monetary and Financial Code for UCITS and Article L. 214-24-46 for investment funds.
[56] Article 411-67, II, 4° of the AMF GR for UCITS and Article 422-45, II, 4° of the AMF GR for investment funds.
[57] For more information see, in particular, https://www.iznes.io/
[58] Monetary and Financial Code, Article R. 211-9-7.

issuer of the financial security that determines the establishment of the right of ownership of the security

This is because such a transaction could imply that the AMF determines whether the blockchain or the distributed ledger (or DLT) in which units or shares to be marketed in France are recorded, offers equivalent guarantees regarding identification of the owners, type and quantity of securities recorded, and registration and integrity of recordings, as those required by the Blockchain Order and the Blockchain Decree.

To conclude, the marketing of CIU units or shares in the form of security tokens will probably stay on the national level at this stage given the lack of European harmonisation relating to recognition of the ownership of financial securities on the blockchain.

All in all, it appears that European and national regulations do not prevent the development of unlisted security tokens in the asset management area, within the identified limits. If investment management companies want to develop an investment activity in security tokens, they will have to contact the AMF to ascertain whether they need to apply for an authorisation or an extension of authorisation and to update their programme of activity. A clarification of the legal framework applicable to the custody of security tokens by CIU depositories would probably be necessary in order to provide sufficient legal security for this activity.

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To conclude, the main identified legal obstacles to the development of security tokens concern secondary markets and can be listed as follows:

Identified obstacle	European regulations	National regulations
Identification of a trading platform manager, incompatible with decentralised or hybrid platforms	**MiFID 2** Article 5 (conditions of authorisation) Article 4.1.1 (definition of investment firm)	Articles L. 531-1 and L. 531-4 of the Monetary and Financial Code (transposition)
Identification of a securities settlement system manager for the purpose of authorisation by the central securities depository, incompatible with decentralised platforms or platforms operating on a public blockchain	**Settlement Finality Directive** Article 2 1. 1) of the CSDR (definition of CSD)	Article L. 330-1 II 5° of the Monetary and Financial Code (transposition)
Obligation of intermediation to take part in a securities settlement system	**Settlement Finality Directive** Article 2 f) (definition of participant in an SSS)	Article L. 330-1 II 1° to 9° of the Monetary and Financial Code (transposition)

Custody account-keeping of financial instruments		**Article L. 211-7 of the Monetary and Financial Code**
Cash settlement in a securities settlement system	**CSDR Article 40**	

4 AMF PROPOSALS

4.1. CREATION OF A EUROPEAN DIGITAL LAB

Regulatory changes would be necessary at the European and national levels to enable the development of token security platforms without the use of the traditional banking system for the settlement of securities nor the various current post-trade intermediaries for their delivery (custody account keepers, central depository). These developments became necessary since traditional financial regulation is designed to require the use of intermediaries who provide a guarantee to investors as financial market professionals, whereas blockchain is designed to offer this security precisely through its decentralised mode of operation. Only these changes, combined with guarantees adapted to this new technology, would ultimately make it possible to take full advantage of the benefits resulting from the possible disintermediation offered by the blockchain.

However, the market for intermediation services on digital assets is growing very fast as there are many participants organizing the relationship between the different blockchains, trading platforms and investors. Therefore, it is possible that the market will organise itself in a similar way as for all types of financial instruments, with the rise of actors offering a full range of services to investors.

If it were considered to suggest regulatory changes at the European level, two avenues could be put forward : (i) the amendment of European texts in which obstacles to the development of security tokens were identified, the difficulty here is that the security token environment is still not very mature (ii) the creation of an ad hoc regulation for security tokens in order to take into account the specificities of the blockchain and its decentralised nature, given the lack of maturity of the market, such a regulation is difficult to create.

An alternative approach could consist in suggesting the implementation of a mechanism at the European level allowing the national competent authorities to waive certain requirements imposed by European regulations and identified as incompatible with the blockchain environment, as long as the entity benefiting from this exemption complies with the key principles of the regulations and is subject to increased supervision by the national competent authority of the reference Member State.

Such a mechanism would require the implementation of a governance process at the European level to ensure that the national competent authorities can discuss and harmonize their practices.

Such a mechanism would suspend, with appropriate guaranties, the regulatory obstacles to the emergence of token security market infrastructure projects that would be able to be developed in a secure environment, without modifying all European regulations, which could take place at a later stage, once the ecosystem has matured and by relying on the expertise that the national competent authorities would have gained from the guidance of companies.

The foreseeable impact of the exemptions granted on the current organisation of the financial markets should be assessed. Indeed, it is highly conceivable that market participants transfer their activities to a blockchain in order to get rid of the existing regulatory rules. In this respect, it will be necessary to define precisely what a blockchain is in order to avoid a "blockchain-washing" phenomenon, with some participants pretending to operate on blockchains that in reality are not.

This European exemption mechanism, which could be qualified as a digital laboratory, would be implemented by a level 1 European text (regulation or directive) that would provide possible derogations, criteria, compensatory measures for regulatory exemptions and their duration. This mechanism could have the following characteristics.

4.1.1 Texts subject to the exemption

Certain financial instruments traded on a platform would be exempted from CSDR regulation and even from certain provisions of MIFID 2 identified as unsuitable for the blockchain environment. This would make it possible, for small-scale projects, to test the possibility of creating token security trading platforms without the need to go through a central depository whose authorisation seems (i) cumbersome, (ii) unsuitable for blockchain technology and smart contracts which allow, to a certain extent, the automatisation of operations classically carried out by a central depository while maintaining a high level of security, (iii) impossible to implement at this stage given the absence of available tokenised central bank money. The development of small-scale projects will allow regulators to have a better vision of the desirable changes in financial regulation to adapt it to the specific risks of blockchain technology.

4.1.2 Scope of the financial instruments covered by the exemption

All the financial instruments defined by MIF directive would be eligible as long as they are listed on the blockchain. This would take the following form:

- **Financial instruments listed in Section C of Annex 1 of MIFID II that are issued, registered, recorded, stored or transferred in digital form by using distributed registry technology would be eligible for the experimentation;**
- **Distributed registry technology should be conceived as a way to ensure the registration, integrity and permanence of registrations and to enable, directly or indirectly, the identification of the owners of securities and the nature and number of securities held[59].**

The implementation of the European experimentation should obviously not lead to the emergence of systemic or important risks, therefore limits in terms of emission and trading volumes must be introduced. **It is suggested that the liquidity thresholds defined in MIFIR be used as a basis. Thus, only financial instruments not considered liquid within the meaning of MiFID would be eligible for the exemption. Article 4.17 b) of MIFIR sets three criteria to define the liquidity of a financial instrument: (i) the free float for shares and the issue volume for bonds, (ii) the average daily number of transactions, (iii) the average daily trading volume**. These criteria are quantified for each financial instrument in delegated regulations. For example, a share is considered illiquid if its free float is less than

[59] The ESMA opinion on ICOs and cryptoactives of 9 January 2019, defined the blockchain as follows: "Distributed Ledger Technology (DLT) is a means of saving information through a distributed ledger, i.e. a repeated digital copy of data available at multiple locations".

€200 million, if the average daily number of transactions is less than 250 and if the average daily trading volume is less than €1 million.
This approach has several benefits:

- It is based on a European text in force;
- It is exhaustive as it concerns all financial instruments;
- The thresholds concern both the issue volumes that limit the primary market and the trading volumes that limit secondary market activity;
- These thresholds are both non-systemic and, simultaneously, important enough to ensure that the experimentation is not just a simple "proof of concept" area (POC) but allows for the development of real European offers.

4.1.3 Authorisation of the competent authorities

Project developers wishing to benefit from all or part of the exemptions should request authorisation from a national competent authority.
This authorisation would be conditioned to the communication to the regulator of (i) a business plan, (ii) a request for exemption on EU regulations explicitly specified in the authorisation request and (iii) a description of the technical and contractual arrangements implemented to ensure that the parties involved in the project comply with the key principles of the provisions from which they derogate, in particular with regard to customer protection. For example, regarding settlement, stipulating an "atomic swap" system through a smart contract, which only allows securities to be exchanged for settlement when it is certain that both counterparties possess both, is likely to reduce counterparty risk and justify the granting of an exemption to CSDR regulation.
Could be involved in a project and apply for an authorisation under the conditions set out above:

- **Entities that are already regulated and authorised** to provide investment and payment services, and, where applicable, those authorised under specific national authorisation such as the PSANs in France;
- **Non-regulated entities that present guarantees in terms of good repute and organisation equivalent** to those required for regulated entities.

As the goal is to test specific projects, the authorisation request should be sought at the project level, with the relevant stakeholders. Thus, a stakeholder who has joined the experimentation wishing to carry out a second project should apply for an additional authorisation.

In addition, **a continuous dialogue between the project leader and the competent authority should be set up throughout the duration of the experimentation**. Supervision by the competent authority could take the form of notifications of operations, ad hoc or regular reporting, as necessary depending on the activity carried out by the project leader. If necessary, actors running private blockchains could join the supervisor via the transmission of an auditor node.

4.1.4 Coordination at the European level

In order to avoid regulatory arbitrage and to promote convergence between Member States, a coordination process should be set up at European level, which could be implemented by ESMA. **A supervision of the experiments should be carried out by ESMA, in a format to be defined,** in order to gather sufficient data to feed a review report of the system for the European Commission after 3 years and a comprehensive reporting of the experiments.

4.1.5 AML-CTF rules and market abuse

It should be specified that **the experimentation will, under no circumstances, exempt actors from complying with the AML-CTF regulation**. In the same way, the Market Abuse Regulation is applicable under its ordinary legal conditions.

4.1.6 The experimental framework in time

A 3-year review clause could be introduced in the regulation in order to determine, at the end of this period, whether the experimentation should be continued or whether sufficient information has been gathered to allow the amendment of the existing texts in order to adapt them to the blockchain technology.

It should be noted that **the United States has adopted an similar approach to the proposed experimentation. A "no action letter" was published by the SEC on 28 October 2019 concerning Paxos,** authorising it not to be registered as a clearing agency for its securities settlement activities on a private blockchain under certain conditions, including the volume of transactions settled, the formalisation of procedures to govern the experiment, regular reporting to the SEC and a maximum duration of the experiment limited to two years.

4.2 CLARIFY THE RULES THAT APPLY TO SECURITY TOKEN TRADING INTERFACES

Several market participants have informed the AMF that they would like further information about the conditions under which it is possible, under existing laws, to offer security token trading interfaces.

Security token trading is regulated by several European texts that restrict the development of secondary markets. The Central Securities Depositaries Regulation (CSDR) states that the securities defined in Article 4.44 of MiFID and traded on trading venues must be represented in book-entry form with a central securities depositary. The delivery-versus-payment of these securities must be conducted in securities settlement system operated by the central depositary, in most cases. The CSDR also states that securities must be settled in cash, central bank money or commercial money. These provisions are a major obstacle to the development of security token secondary markets to the extent that the manager of the blockchain where the security tokens are registered must be authorised as a central depositary and where the entire settlement-delivery chain cannot be tokenised in the absence of fiduciary money registered on the blockchain. In the medium term, only legislative changes at European level would be able to remove these obstacles to enable real security token trading venues.

In the short term, European regulations offer opportunities to develop interfaces that are not trading venues within the meaning of MiFID.

We propose a clarification, in an AMF position, of the outlines of the concepts of trading venue and bulletin board that apply to all financial instruments, including financial securities recorded in the distributed ledger. This position will address the concerns of market participants all the while providing legal security to security token trading interfaces that can be developed with existing laws.

4.3 FIND SOLUTIONS TO PROTECT INVESTORS WHO HOLD SECURITY TOKENS

4.3.1 Clarifications on current applicable law

Financial securities registered on a distributed ledger are in registered form (Article R. 211-2 of the Monetary and Financial Code).

However, the obligation of restitution of financial securities by the custodian account-keeper (and the CIU depositary) only concerns financial securities that are registered in securities accounts in its books.[60] The custodian account-keeper has no obligation of restitution of the financial securities recorded in a distributed ledger.

The CIU depositary complies with the obligations of a custodian account-keeper, including the obligation of restitution of the CIU's assets.[61] Only a "reinforced" force majeure event may exempt the CIU depositary of its liability (it may be blamed for unjustifiable non-performance or poor performance of its obligations).[62] It has no obligation of restitution of the assets of the CIU recorded in registered form. European law expressly provides that financial instruments that are only recorded directly on behalf of the CIU with the issuer or its agent (i.e. financial securities in registered form) may not be kept in custody.[63]

The only financial securities that can be registered in a distributed ledger are securities not admitted to the operations of a central depositary,[64] i.e. CIU units or shares not admitted to the operations of a central depositary, negotiable debt securities and shares or bonds that are not admitted to the operations of a central depositary.

In short, security tokens issued under French law are securities in registered form. In general, if the security tokens take the form of registered securities, no custodian account-keeper other than the issuer is involved and there no obligation of restitution of these securities. Only the issuer is responsible and liable for recording in the distributed ledger.

With respect to collective management, if a CIU invests in security tokens, their custody must be entrusted to a depositary. If these security tokens are in the form of registered securities and are therefore not recorded in a financial instruments account opened in the depositary's financial instruments books and are not physically delivered to the depositary, the depositary will not be a custodian. **The depositary is therefore not bound by an obligation of restitution of these security tokens. The CIU depositary must however check that the security tokens are the property of the CIU and keep their records**. Furthermore, the issuer of security tokens subscribed by the CIU effectively has a record-keeping obligation.

As the law currently stands, a CIU depositary which undertakes to ensure a form of "custody" of the means of access (private cryptographic keys) or security tokens would assume the related responsibilities on a purely contractual basis (by entering into an agreement with the client defining its duties and liabilities) and outside the liability regime applicable to CIU depositaries.

[60] 5° of Article 322-7 of the AMF GR (completed by Article 322-35 of the AMF GR)
[61] Article L. 214-10-1 of the Monetary and Financial Code and Article 323-3 of the AMF GR
[62] Article 24.1 of the UCITS Directive and 21.12 of the AIFM Directive
[63] Article 12.2 of the UCITS Directive and Article 88.2 of the AIFM Directive
[64] Article L. 211-7 of the Monetary and Financial Code

4.3.2 Specific challenges of security tokens

There are not many financial securities in registered form, especially among investment funds, which therefore are not included in the obligation of restitution by the custodian account-keeper or the CIU depositary. Most financial securities registered in investment funds are qualified as bearer securities which means that holders benefit from the obligation of restitution.

Even though it is the issuer that decides to issue a financial security on the blockchain, the act of buying or selling this **security may be done through an intermediary who will be temporarily in charge of its "custody", without being subject to any obligation of restitution**. This could happen if a holder of a security token had a private key to transfer the security and entrusted his key to an intermediary who would have the ability to transfer it on his behalf.

The tokenisation of unlisted financial securities is going to develop, as evidenced by the initial projects of trading interfaces for security tokens and security token investment funds. In the future, simple record-keeping for CIU depositaries will take on a more important role than is currently the case under French law.

4.3.3 Possible solutions

a) In the short term: maintain the current regime that provides that securities recorded in a distributed ledger are in registered form and that there is no obligation of restitution of the financial securities recorded in a distributed ledger on CIU depositaries or intermediaries transferring the tokens for third parties

This solution has the advantage of being simple and compliant with applicable law. It is in line with the technical reality that the issuer has control over the security token. The issuer could establish a smart contract to enable the token to be reissued in case of loss). Because of its simplicity, it is probably the most appropriate solution initially to enable the development of security tokens. It also enables a consistent treatment of securities in registered form, regardless of the methods used for the digitalisation (security accounts or distributed ledger). However, a specific regime for securities recorded in a distributed ledger would bring about a distortion.

Conversely, it provides less protection for investors compared with financial instruments registered in a securities account. In the event of a problem, investors who use an intermediary who has the corresponding private keys and would be able to transfer the tokens would only be able to turn to the issuer responsible for the recording of the securities in registered form in the distributed ledger.[65] Some market participants consider that an overly permissive regulation could have a negative impact on financial innovation because it would push technology to the fringes of traditional financial circuits.

[65] Article R. 211-4 of the Monetary and Financial Code specifies that an owner of financial securities may entrust the administration of records in a distributed ledger to a custodian account keeper only: "*A holder of registered financial securities may instruct an intermediary referred to in Article L. 211-3 to keep its securities account open with an issuer or to administer the entries in the shared electronic records system referred to in the same article*." Consequently, security tokens may take the form of administered registered securities. However, the form of administered registered security, with or without a distributed ledger, does not imply any obligation of restitution by the custodian account keeper.

b) In the medium term: consider the possibility of financial securities registered in a distributed taking on the form of bearer securities

French legislation could change to enable financial instruments recorded in a distributed ledger to take on the form of bearer securities, regardless of whether the distributed ledger is public or private. This would entail the amendment of Articles L. 211-7 and R. 211-2 of the Monetary and Financial Code. This is an avenue worth exploring in order to determine whether it is compatible with the CSDR and its impact in terms of investor protection. This approach should be examined in the light of the first projects involving the recording of shares in registered form in a distributed ledger.

This development calls for the definition of the role and responsibility of the various players in the ecosystem related to the distributed ledger.

We need to assess this solution to see to what extent it would reinforce the protection of investors with financial instruments recorded in a distributed ledger compared with financial instruments recorded as securities accounts in the books of a financial institution. In any case, it would be in line with the philosophy followed by the Blockchain Order 2017-1674 of 8 December 2017, which wanted the same level of protection for securities recorded in a distributed ledger as for securities recorded in a securities account, all the while remaining within the legal framework of ordinary law.[66] It also has the advantage of maintaining the flexibility necessary for the emergence of the first security token initiatives, since issuers and custodians of security tokens will be able to choose between registered or bearer security forms.