



A GUIDE

THROUGH THE COMMON FEATURES OF DIGITAL ASSET GENERATING EVENTS

THE AFTER-DARK: HOW CURRENT REGULATIONS APPLY,
AND HOW TO CHARACTERIZE DIGITAL ASSETS.



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This working paper aims at providing an analysis of the existing regulatory and legal framework and its application to the fund raising mechanism called Digital Assets Offering or Digital Asset Generating Events ("DAGE"), as well as discussing certain options to address these offerings within the Luxembourg regulatory framework in the future.

The views expressed in this working paper are intended for discussion purposes only, and set out in the spirit of stimulating debate and conversation on these interesting and important new developments in order to constitute the basis for constructive discussions regarding the offerings of digital assets.

In no way do these views engage the LHoFT or any of the contributors, who expressly reject any reliance or liability. Nothing in this paper should be taken as legal advice. Should you wish to pursue any such offerings, or to provide related services, you should engage a lawyer.

Introduction

New developments in the area of distributed ledger technology ("DLT") have led to the emergence of Digital Asset Generating Events ("DAGES"), techniques with which organizations raised nearly \$ 21.6 Billion in 2018¹.

In September 2017, a White Paper² produced by the LHoFT in collaboration with Stellar, aimed to explain the functioning of DAGES, why they are favoured by new businesses (and particularly those active in DLT technologies), key benefits and risks for issuers and investors; as well as the regulatory considerations required to keep nurturing innovation. It was produced with the aim to educate people interested in DAGES, be it authorities, DAGES issuers, financial services professionals, or others.

The popularity of DAGES rocketed during 2017, leading to numerous discussions regarding the application of current regulations, their potential adjustments and finally, whether or not to impose restrictions on contributors and investors.

However, the lack of credibility and the increasing number of scams led to self-regulation of the offering and the development of the so-called DAGES.

Regulators around the world have been rallying to find the best way to address this phenomenon. Some have taken preventive measures such as issuing investor warnings or limiting (or even banning) DAGES in the absence of appropriate regulations, others are actively collaborating between jurisdictions to keep fostering innovation while ensuring the protection of consumers and investors.

The purpose of this discussion paper is (1) to provide a conceptual framework to analyse the types of DAGES undertaken, (2) to analyse current Luxembourg regulations and Laws in place in order to determine which may apply to DAGES (notably with respect to security-like digital assets), and (3) to consider whether any of the current Luxembourgish Laws and regulations in force as of the date hereof should be adapted, given that some features of these instruments were not previously foreseen by the legislators.

This document has not been written to make an apologia of those who may have abused the DAGE trend to avoid current rules. On the contrary, the analysis aims at demonstrating that various current regulations already apply. As a result, this paper focuses on security-like digital assets akin to securities and which appear to fall within the current regulatory framework – also called Security Tokens.

In Luxembourg, and at the LHoFT, we believe it is paramount for the financial industry to continue collaborating and innovating. DAGES are an interesting way to raise funding, promote innovation, create network communities and encourage the creation of start-ups whilst democratising access to capital.

We should aim at promoting safe and compliant DAGES, applying minimum standards, putting together projects where consumer and investor protections are neither compromised nor ignored.

¹ Source: www.coinschedule.com/stats.html accessed on 8th of March 2019.

² Available for download: www.lhoft.com/uploads/projects/files/White_Paper_LHoFT_Stellar_2017-2.pdf

There are a lot of uncertainties around digital assets and their generating events, including whether they should be regulated or already fall under current regulation. Regulation can, however, be an effective way to ensure consumer and investor protection and its application should be addressed.

FOR LUXEMBOURG TO ENSURE IT REMAINS AT THE FOREFRONT OF INNOVATION, IT SHOULD IDENTIFY POTENTIAL ACTIONS IN THIS AREA. A NUMBER OF OPTIONS ARE AVAILABLE, AND CERTAIN ONES HAVE ALREADY BEEN CONSIDERED BY EUROPEAN ECONOMIC AREA LEGISLATORS AND BODIES:

- Setting up a sandbox whereby DAGE actors may get feedback from the regulator on the structure they are considering (FINMA);
- Providing a list of information which must be included in any White Paper (FINMA);
- Publishing consultation papers and showing the regulator's views and openness to discussions on DAGE related topics (AMF);
- Passing new legislation making it easier for crowd sales to be put in place (UK license, FCA);
- Defining different types of digital assets and assessing whether these would fall within the applicable concepts triggering existing prospectus or MiFID regulations (EBA, ESMA, FINMA, BaFin);
- Encouraging and supporting self-regulation initiatives.

We believe that Luxembourg – and in particular its financial sector – should also proactively publish clear and constructive views and guidance on DAGE matters.

For example, since in most cases it is difficult to take a clear-cut view on the question of whether a digital asset constitutes a security, we believe it is important to develop, with the help of the competent authorities and industry stakeholders, a framework that takes into account as many features as possible and fits them (by their legal qualification) into the existing legal framework.

Various Luxembourg Laws and regulations were reviewed in the preparation of this paper, including those related to consumer protection, e-commerce, prospectuses, investment funds, market abuse and secondary markets. This enabled a review of the characterisation of digital assets based on their features. Whilst the document does not include an analysis of wider licensing requirements applicable to actors involved in DAGES – as this would be dependent on not only the individual DAGE itself but also the business to be conducted by the DAGE issuer –, we have highlighted some of those requirements which may be relevant in one of our classification tables.

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Why Luxembourg should look into DAGEs: benefits & economic impact

Many governmental initiatives concentrate on the need for new forms of fundraising to encourage the creation of new businesses and business models. In Luxembourg, this includes the "start-up nation" and other initiatives. Therefore, before digging deeper into the subject of this working paper, it is interesting to have a look at the economic context in which DAGEs have emerged.

In 2015, the European Commission published its "Action Plan on Building a Capital Markets Union". The main objective of this plan was/is to strengthen European capital markets. The Commission's agenda covered various workstreams, some of which are of interest for the analysis of DAGEs.

According to the European Commission, SMEs (which include micro companies and start-ups) across the 28 European member states make up more than 99% of all enterprises and contribute to more than 66% of all employment.

As a result, SMEs are frequently referred to as being the backbone of the European economy.

However, SMEs continue to face limited funding choices, and therefore rely heavily on bank financing. Yet in the post-crisis economy characterised by low interest rates, bank lending has become increasingly scarce. In addition, banks in many EU member states frequently impose tough conditions on SMEs - either by making funding practically unavailable or by stifling the business after having obtained funding. For start-ups, the only other funding alternative often becomes partnering with venture capital firms or business angels. Strict screening and participation requirements, as well as large regional and sectorial inequalities in such funding, not only often make these options extremely burdensome, but also result in loss of control of their venture – assuming these fundings are available at all. Markets for venture capital and business angel funding remain under-developed in comparison to the demand for funding, and are also subject to hurdles for certain institutional investors.

The European Commission noted in its Capital Markets Union Action Plan of 2015 that alternatives, such as capital markets, have historically been less developed in Europe than in other parts of the world. It has therefore become a political priority to help SMEs, and in particular start-ups, to obtain easier and more accessible funding for their projects.

Due to the applicable regulatory frameworks, accessing European capital markets can be a cumbersome and costly way of financing. Most SMEs are not only unable to bear the costs linked to a public issuance of securities, but also struggle to deal with requirements such as track record and restrictions relating to business strategy (as start-ups frequently need to pivot during their development and the deployment of their ideas). On the other hand, large corporates generally have easier access to capital markets, with bigger resources for initial offerings and also for ongoing compliance obligations.

Retail investor participation in European capital markets remains very low compared to other parts of the world – while huge amounts of potential capital sits in old-fashioned savings accounts at banks. Ironically, strong consumer and investor protection rules are believed to be partly to blame for limiting the public's access to venture-type investments. SMEs are rarely publicly traded and, even when they are, such investments are restricted to qualified investors. Even indirect investments into SMEs via UCITS or similar funds are rarely available in smaller denominations and to retail investors.

It must be noted that the European Commission's Action Plan, as well as its Mid-Term Review in 2017, cover most of the above issues, and try to provide solutions. Various measures are being taken to free up funding capacities by banks and to promote alternative funding sources. However, as these are largely still at the implementation stage, SMEs have had to find other, more creative ways to finance their activities. In an environment shaped by technology, innovative funding methods like crowd-funding or DAGEs have opened up possibilities for raising money directly from retail investors without having to comply with complex and expensive regulatory requirements, whilst allowing those same retail investors to access investment possibilities in new and innovative small enterprises.

It should be noted that the majority of successful DAGEs were projects that had also previously received traditional venture capital financing from professional investors (although numerous successful projects had not³). It is also clear that venture capital actors are increasingly looking into DAGEs to allow more liquidity as well as a means to allow retail investors access to their investee companies.

³ Tokenisation: implications for the venture capital industry, ICO Report 2017, Mangrove Capital Partners (www.mangrove.vc/ico-report2017)

While Luxembourg promotes innovation and embraces Fintechs, there are further steps to be taken to ensure a long-lasting establishment of such highly innovative companies. Indeed, as previously mentioned, traditional financing is not adapted to certain needs, leaving some entrepreneurs with no possibility to develop their businesses. Raising funds via DAGEs can also bring an initial customer base – creating positive network effects for the project in addition to democratising investment opportunities in innovative projects.

We believe that positioning Luxembourg as a safe-haven for DAGEs would benefit the country itself – promoting it as a place for doing reliable DAGEs, with legally sound offerings and strong structures which are launched and run in compliance with the regulations in force. It is not our intention to encourage Luxembourg to seek to attract each and every DAGE. We would rather ensure that there is a clear framework around such issuances to foster innovative businesses to maintain their presence in Luxembourg, and that those issuers are assessed by the relevant authorities within reasonable timeframes.

Luxembourg, as re-affirmed in the "Rifkin report"⁴, has a prominent financial services industry. This represents a unique opportunity to strategically leverage financial investment and services that could facilitate and accelerate the transition to a digitally interconnected economy through enhancing Fintech and entrepreneurship.

⁴ Luxembourg strategic review of 14 November 2016- The Third Industrial Revolution, www.troisiemerevolutionindustrielle.lu

Executive Summary

While Luxembourg recently passed an amendment to the modified Law of 1 August 2001 on the circulation of securities to include the DLT, this is only a first step. Being proactive in accommodating and supporting new technologies and new business models and ideas will ensure continued attractiveness of Luxembourg as an interesting place to live and work. In terms of innovating companies, possibilities to obtain appropriate funding in a timely and effective manner.

DAGEs are seen as a way to support many innovative projects. This disruptive financing method should be actively addressed. Whereas some voices suggest to regulate and provide a specific framework around such type of fund raising, not having a dedicated framework does not mean there is a legal vacuum. It is therefore essential to acknowledge the application of the current legal and regulatory framework to DAGEs.

WITHIN OUR EXISTING REGULATORY FRAMEWORK, OPTIONS AND EXPECTATIONS FROM THE MARKET INCLUDE ISSUES SUCH AS THE FOLLOWING:

- whether and to what extent DAGEs may be outside the scope of the Prospectus Law and subject to its exemptions,
- whether some digital assets categories would be recognised and would fall within existing regulations,
- how a White Paper could be made Consumer Law compliant,
- whether regulated investment funds structures could involve (invest in or raise) digital assets etc.

In order to provide guidance as to which legislative and regulatory framework would apply notably to security-like digital assets, this paper also provides suggestions for the categorising of digital assets.

All matters included in this discussion paper are set out for conversation purposes only, intended to stimulate debate and discussion. Nothing in this paper should be taken as legal advice.

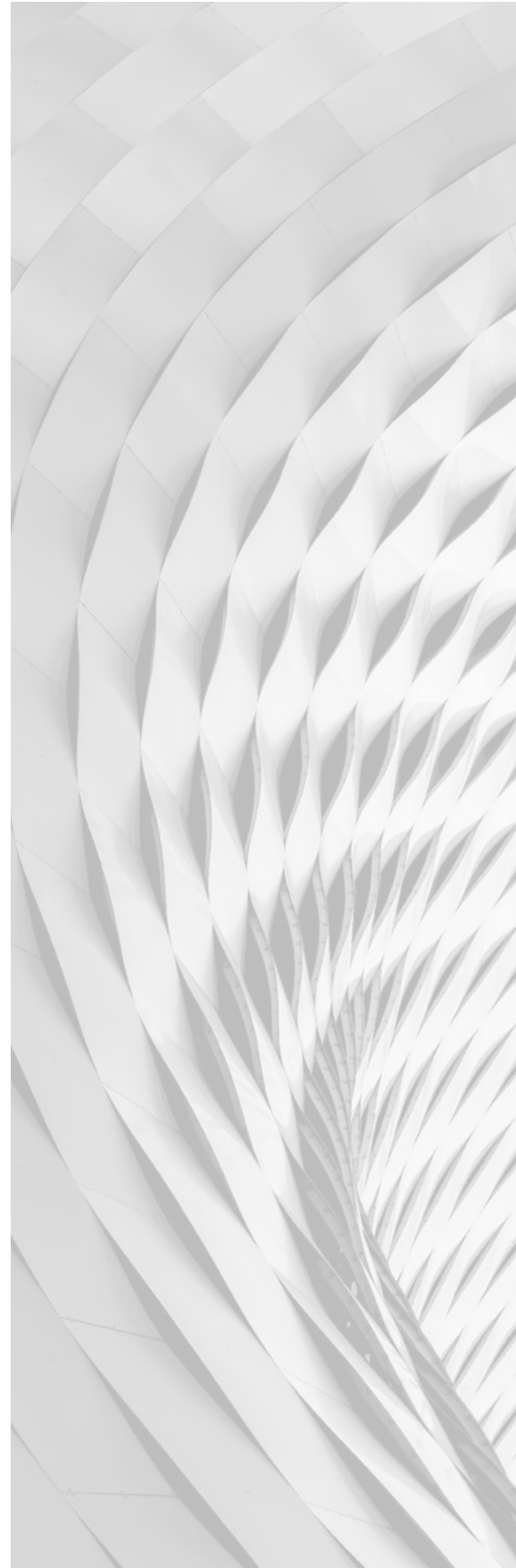
Section I: Digital Assets features



The characterization and legal qualification of DAGEs, and in particular of the underlying digital assets or coins, is both a delicate and complex endeavour, due to, amongst others, the wide variety of DAGE structures and digital asset types. Regulators, scholars and legal practitioners across the globe are striving to define the proper legal frameworks. While a general legal qualification of DAGEs has proven elusive, a case-by-case assessment of the particular digital assets features (characteristics), their purpose, function and underlying rights allows for carrying out a proper legal analysis and further permits establishing a digital assets classification.

Both regulators at European and national levels as well as authors, in the legal, economic and technical literature, have identified a number of common digital asset features.

Below is a non-exhaustive list of these common digital asset features and underlying rights which may be embedded into a digital asset.



FEATURE	DESCRIPTION
PROFIT-SHARING	Right to financial profit from the economic activities of the issuer/operator
REVENUE RIGHTS	Right to financial benefits from revenue streams of the issuer/operator
DEBT	Right to set cash flows from the economic activities of the issuer/operator
FRACTIONAL OWNERSHIP	Right to a partial ownership of a product
FUNGIBILITY	Can be exchanged for another identical digital asset (i.e. usable on a fungible basis)
TRADABILITY	Can be exchanged for other digital assets, cash or other financial instruments
TRANSFERABILITY	Right to transfer digital assets to another person
CURRENCY	Right to use as means of payment or settlement for services or goods
USUFRUCT	Right to fruits from property (recorded/registered on-chain or off-chain)
PROPERTY (OWNERSHIP) RIGHT	Right to property (recorded/registered on-chain)
ACCESS / UTILITY RIGHT	Right to access (and use) applications, products or services
CONTRIBUTION RIGHT	Right to contribute labour, effort or resources to a system, or to contribute, programme, develop or create features in a system
GOVERNANCE	Right to vote on decisions regarding the currency, project or platform (or, more rarely, the issuer/operator) and/or right to decide on products/ services /functionalities to be offered or deleted within the platform

OTHER FEATURES, WHICH DO NOT APPEAR TO BE CURRENTLY DECISIVE BUT MAY ALSO BE TAKEN INTO ACCOUNT WHEN ASSESSING DIGITAL ASSET QUALIFICATION ARE, AMONG OTHERS:

- information rights attached,
- speculative nature;
- nature and characteristics of the cryptography, the underlying DLT and the capacity of the digital assets issuer to influence the DLT;
- whether the digital asset will be used in an existing platform, or as a means to develop a platform; and
- the intention of the buyer when buying: service access vs profit/investment vs "donation" or project participation.

We kindly refer you to **Appendix II: Description of features** where we have assessed in more detail a number of digital asset features.

On the basis of the common digital asset features above, authors in the legal, economic and technical literature have also identified a number of digital asset categories, further acknowledged in guidelines, opinions and papers issued by European and national regulators and the recent reports published by EBA and ESMA⁵ on crypto-assets.

Currently the three most commonly recognised digital asset categories, and their respective key features, are (i) security-like digital assets, (ii) utility digital assets and (iii) digital assets conceived as virtual currencies (payment digital assets).

We have attempted to construe a broad definition of each one of these digital asset types, covering on one hand, the features traditionally introduced by the industry, and on the other hand, the constitutive elements put forward in the publications by the French, German and Swiss regulators⁶ as well as recent EBA and ESMA reports. Security-like digital assets are usually designed to represent an equity or debt claim towards primarily (the assets of) the digital asset issuer, offering their holders benefits similar to those of equity or debt instruments.

Security-like digital assets may embed a number of features, such as profit-sharing, revenue rights, debt and equity-like elements, governance, fungibility, tradability and transferability, as well as property (ownership) rights towards the digital asset issuer, an underlying product or project. The cumulative presence of all these features and their underlying rights is not necessary for a digital asset to be classified as a security-like digital asset. Regulators would normally analyse

⁵ Cf. EBA Report and ESMA Advice.

⁶ Cf. the AMF 2018 Consultation Paper, BaFin 2018 Position, FINMA, Guidelines for enquiries regarding the regulatory framework for initial coin offerings (DAGEs), 16 February 2018.

the purpose and function of the digital asset (i.e. whether there is an investment or economic rationale) and notably whether certain key elements and rights, including fungibility and tradability, right to profit from the economic activities of the issuer or right to cash flows from the issuer's revenue streams, may be found embedded in the digital asset in order to classify it as a security-like digital asset. Security-like digital assets generally operate and have a purpose similar to that of traditional securities or, as the case may be, financial instruments (in particular, they are purchased for investment or other economic purposes and may serve as a means to raise capital or increase the liquidity and tradability of certain illiquid assets). Digital assets which merely constitute a digital representation of a financial instrument on a DLT would also fall within this category⁷.

The present discussion paper mainly focuses on examining the legal qualification of security-like digital assets as well as the legal and regulatory implications of issuing, trading and providing services with respect thereto.

Utility digital assets are usually designed to give access (rights) to a service or product provided (or to be provided) by an organisation or ecosystem (in most cases related to the entity creating the digital assets). Utility digital assets involving already existing services or products, bear similarities to examples such as charging (topping up) club membership cards. Utility digital assets involving services or products still to be developed, are often more akin to examples such as pre-ordering charged club membership

cards. Such services or products may be offered both on-chain and off-chain, in exchange for one or more digital assets. As such, the utility digital asset may also serve as a means of payment for the service or product. Additionally, utility digital assets may be consumable (redeemable) or non-consumable. The main feature characterising utility digital assets is the right to access and use certain products or services. They may also be transferable to other users without necessarily falling within the category of security-like digital assets.

Payment digital assets serve as an alternative means of payment generally accepted by third parties, and are usually designed as a "digital representation of value that is neither issued by a central bank or public authority nor necessarily attached to a fiat currency but is used by natural or legal persons as a means of exchange and can be transferred, stored or traded electronically⁸". The aim of such digital assets is to mainly allow off-chain commercial transactions (i.e. in the real or financial economy). Payment digital assets should not be considered as legal currencies, and contrary to a fiat currency their value is not guaranteed by a central bank⁹.

More generally, the classification of a digital asset in a particular category requires a case-by-case analysis of its purpose and features (and the rights they confer to its holder), both individually and collectively¹⁰. Digital assets may further have features enabling their use for more than one purpose and certain features may also change during the course of the digital asset's lifecycle¹¹.

⁷ The Luxembourg government expressed the view in the parliamentary documents to the Law of 1 March 2018 amending the Luxembourg Law of 1 August 2001 on the circulation of securities (doc. parl. n°7363/00), that digital assets falling within the scope of the bill should be seen as numeric assets registered on a DLT which, as a paper or a dematerialized security, represent the security (titre).

⁸ EBA, Opinion on 'virtual currencies' (EBA/Op/2014/08), 4 July 2014, paragraph 19.

⁹ CSSF, Warning on virtual currencies dated 14 March 2018. ESMA Advice, p. 8.

¹⁰ Cf. AMF Consultation Paper 2018, p. 4; BaFin 2018 Position, p. 1.

¹¹ EBA Report, p. 6.

Section II: Qualifying Digital Assets under MiFID & the Prospectus Law



ONE OF THE MAIN, AND ARGUABLY THE MOST CONTROVERSIAL, ISSUE TO BE ASSESSED IS WHETHER A DIGITAL ASSET WOULD QUALIFY AS A TRANSFERABLE SECURITY (VALEUR MOBILIÈRE) WITHIN THE MEANING OF:

- the Prospectus Law,
- article 1(55) of the MFIL, which inter alia transposes MiFID II, and
- article 1(33) of the FSL, and together with the Prospectus Law and the MFIL,
- or more broadly, a financial instrument (instrument financier) pursuant to article 1(19) FSL and Section B of Annex II FSL.

The definitions of transferable securities in the above Laws are substantially similar and are comprised of the following elements: (1) classes of securities (titres), (2) which are negotiable on the capital market. In addition to these elements, the definitions set out a non-exhaustive list of instruments qualifying as transferable securities.

There is no clear statutory definition of a security under Luxembourg Law.

The term, which is not used consistently by the legislator, is understood to be a generic concept which includes the notions of "instrument financier" and "valeur mobilière"¹². It comprises all legal instruments customarily negotiated on the financial market, the money markets and the market for derivative products to the extent these products are securitized¹³. According to Luxembourg legal doctrine, the term designates in principle the right(s) (i) resulting from a legal act (negotium) vis-à-vis an issuer (or any other person having obligations under the security), materialised or, as the case may be, ascertained by (documentary) material in the broadest sense of the term (instrumentum), and (ii) corresponding to certain essential characteristics making them fungible and allowing their circulation on the capital markets¹⁴.

¹² State Council, doc. parl. n°4695/05; cf. Also doc. parl. n°4695/00.

¹³ Ibid.

¹⁴ Cf. Y. Prussen, "Le régime des titres et instruments fongibles", *Droit bancaire et financier*, ALJB, 2004, pp. 1287-1318; S. Conin, J. Schaffner, "Les titres et instruments financiers innommés : aspects juridiques et fiscaux", *Droit bancaire et financier*, ALJB, 2004, pp. 1411-1465; M. Brouillet-Mc Sorley, L-C Van Burik, "Le cadre juridique des systèmes de règlement des opérations sur titres en droit luxembourgeois", *Droit bancaire et financier*, ALJB, 2004, pp. 1377-1409; P. Mousel, F. Fayot, "La circulation des titres", *Droit bancaire et financier*, ALJB, 2004, pp. 1319-1376.

Hence, the notion of security is close to the notion of transferable security, as evidenced by case Law. Traditionally, Luxembourg courts have interpreted transferable securities (valeurs mobilières) as securities (titres) issued by public or private bodies, which may be listed and negotiated on a (regulated) market both in view of the uniformity of their characteristics (i.e. amount, rights, duration) and the simplified way of their transmission¹⁵.

The interpretation of the Luxembourg courts is in line with guidance of the European Commission, in the sense that it is not required that the instruments are actually negotiated on a market. It is sufficient that they are capable of being traded on a 'market', meaning any context where buying and selling interests in securities meet¹⁶.

THE DEFINITION OF FINANCIAL INSTRUMENT COMPRISES:

- transferable securities,
- money-market instruments,
- units in collective investment undertakings and
- certain derivative agreements.

The qualification under definition (3) will be discussed below.

Here, a brief consideration of (2) and (4) suffices – money market instruments are generally instruments which represent a financial claim on the issuer, and have a maturity of 397 days or less¹⁷. Hence, digital assets with cash flow rights may fall within this category. Digital assets themselves are not derivatives, but derivatives in respect of security-like digital assets should be considered financial instruments¹⁸.

Due to the broad notions of financial instrument and transferable security at the core of the Luxembourg Law regimes applicable to the markets in financial instruments and to prospectuses for securities, there is considerable legal uncertainty surrounding the application of those regimes to digital assets issued in a DAGE. While it is neither clear which features of a digital asset warrant qualification as a transferable security, nor which transactions involving digital assets are to be considered as part of the capital market, the notions are sufficiently broad to comprise any digital asset which is transferable, fungible and has cash flow rights (whether share-like or debt-like).

While absolute legal certainty may be unattainable in a features-based qualification of the digital asset and case-by-case approach, Luxembourg-based DAGEs can benefit from guidance and standards on the notions of "transferable security", "financial instrument" and "capital market".

¹⁵ Luxembourg District Court (Tribunal d'arrondissement de et à Luxembourg), 2 June 1989, n° rôle 27100, 38127 and 38505.
¹⁶ Ibid. See also Hacker, LL.M., Thomale LL.M, *Crypto-Securities Regulation: ICO's, Token Sales and Cryptocurrencies under EU Financial Law*, posted 30 November 2017, last revised 13 December 2017, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3075820, page 20.

¹⁷ See article 11 of Commission Delegated Regulation 2017/565.
¹⁸ Section B.4, Annex II FSL.

Section III: Prospectus Law Application

The Prospectus Law is a central piece of legislation that may apply to certain DAGEs. It implements in Luxembourg the provisions of the European Prospectus Directive.

The Prospectus Law will be fully replaced by the Prospectus Regulation, which should be fully implemented by July 2019. The Prospectus Regulation will bring certain new possibilities for Fintech – in particular granting specific exemptions allowing companies to carry on equity crowdfunding in Luxembourg without a prospectus for fundraising, up to certain caps.

We have limited our analysis of the Prospectus Law to the currently applicable rules. Our analysis does however refer to certain provisions of the publicly available Bill of Law No 7328 implementing particular provisions of the Prospectus Regulation in Luxembourg.

Prospectus rules are one of the focus points of regulators when it comes to assessing the legal qualification of DAGEs. ESMA, in its 13 November 2017¹⁹ statement addressed to firms involved in ICOs, identifies the Prospectus Directive as one of its main concerns in terms of regulatory requirements. This was further confirmed by the CSSF in its Warning regarding initial coin offerings ("ICOs") and tokens dated 14 March 2018, which also lists, amongst the Laws which may be applicable to DAGEs, the Prospectus Law.

Prospectus rules are often positioned at the forefront of discussions around the legality of DAGEs because they aim to protect investors by ensuring that they obtain sufficient information and transparency.

While many DAGE issuers have shared appropriate information with investors, certain DAGEs have also been covers for criminal schemes, such as exit scams or even those with no actual project.

DAGE issuers have often made consumer or investor information available to the public through new and innovative forms. Blogs, publications on social networks and White Papers are examples of the modern means used by digital asset issuers to communicate relevant information to their prospective investors. This does not mean, however, that DAGE issuers are necessarily opposed to traditional means of communications, nor to regulations or legal obligations to disclose information.

Actors intervening in a DAGE, including issuers, agents and public authorities are required to consider the impact of innovative communication channels and fund raising techniques in the context of existing regulation. These actors must work together to find the right balance between innovation funding and investor protection.

It is to be noted in this context, that a classic IPO of shares does not constitute a viable alternative to DAGEs for many start-ups. Most DAGEs are undertaken by early-stage start-ups without a functioning product, the necessary track record, and without the capacity (in terms of time and money) required for an IPO. DAGE fundraising is closer in nature to crowdfunding, angel investing, early round venture capital investing and bank lending. Most start-ups have no access, however, to angel or venture capital funding, and frequently fail due to a lack of liquidity. This is why DAGEs can be advantageous to finance the building of new projects and ecosystems.

Currently applicable rules do not yet provide sufficient flexibility to allow most issuers to carry out DAGEs in a sound legal environment.

It is therefore important for issuers to (i) understand when they fall under the scope of the prospectus rules, and (ii) which exemptions may be relevant for their activities.

III.1 Scope of application of the Prospectus Law

GENERALLY, NO "OFFER OF SECURITIES" MAY BE MADE TO THE PUBLIC WITHIN THE TERRITORY OF LUXEMBOURG WITHOUT PRIOR PUBLICATION OF A PROSPECTUS.

A. PROSPECTUS LAW APPLICATION

In its Circular 05/225, the CSSF describes the elements to be taken into account to identify whether an offer to the public is made "on the territory of Luxembourg". This includes, without limitation, the place of characteristic execution of the offer (i.e. place of the offer), the place of the public's residence as well as the location of the target market. Consequently, offers of securities made on the territory of Luxembourg, even vis-à-vis non-residents, are in principle made in Luxembourg, hence falling under the scope of the Prospectus Law.

AN ADDITIONAL ELEMENT TO BE TAKEN INTO CONSIDERATION WHEN PERFORMING A CASE-BY-CASE ANALYSIS SHOULD BE, IN THE CSSF'S VIEW:

- Whether there is a link with Luxembourg so that the offer is considered to be made in Luxembourg (e.g. Luxembourg is mentioned (explicitly or implicitly));
- The market that is being targeted by the offer (e.g. hyperlinks in (Luxembourg) websites);
- Whether the issuer is incorporated and widely known in Luxembourg.

DAGEs or more specifically DAGEs with respect to security-like digital assets, or the so called STO, are typically carried out by an offer displayed on the internet. There is a risk that such offers will be caught by several different regimes throughout the world. From a Luxembourg perspective, the CSSF has defined its own principles (in Circular 05/225) to determine whether an offer made on the internet targets the Luxembourg territory or not. In addition, Commission Delegated Regulation 2016/301²⁰ suggests inserting disclaimers on the offer documentation specifying to whom the offer is being addressed.

²⁰ Commission Delegated Regulation (EU) 2016/301 of 30 November 2015 supplementing Directive 2003/71/EC of the European Parliament and of the Council with regard to regulatory technical standards for approval and publication of the prospectus and dissemination of advertisements.

²¹ See Section I above.

²² Part II of the Prospectus Law applies to securities that are offered to the public and admitted to trading on a regulated market (subject to Community harmonization under Directive 2003/71/EC).

²³ Article 4(2)(j) of the Prospectus Law.

B. MATERIAL SCOPE OF APPLICATION

A considerably more difficult question to examine in the current state of the Luxembourg legislative framework is whether DAGEs would be considered as an "offer to the public of securities". The answer to this question depends on whether a digital asset can be considered as a transferable security²¹.

Part II²² of the Prospectus Law explicitly excludes from its scope of application securities qualifying as, amongst others, (i) money market instruments (such as treasury bills, certificates of deposit and commercial papers (excluding instruments of payment)) having maturity at the issue of less than twelve (12) months²³, and (ii) units of UCI other than closed-end type²⁴.

Part III of the Prospectus Law contains a simplified prospectus publication requirement regime for public offers of securities or other equivalent securities (titres assimilables) within the territory of Luxembourg that are not covered by Part II of the Prospectus Law (this concerns securities that will not be benefiting from the European passport). Part III of the Prospectus Law may therefore be relevant for securities which are outside the scope of the Prospectus Directive.

If these rules and guidelines are followed by issuers of digital assets, it should be possible (even with the currently applicable rules) to determine in a relatively safe manner which markets are targeted by a DAGE and which sets of rules must be followed.

Certain new technologies should ensure that only persons in the targeted markets can access information on the offer and subscribe to the offer (where the offer meets the requirements of the relevant rules).

As a result, it is recommended that the CSSF updates the criteria set out in Circular 05/225 to cover modern technologies such as geo-fencing applications. Such an initiative would provide an additional layer of security. This would also demonstrate that Luxembourg is keen to attract issuers that are committed to put in place necessary safeguards to allow for compliant and transparent digital asset issuances.

When a digital asset issuance falls within the scope of the Prospectus Law and a prospectus is drafted in accordance with the relevant applicable rules (and subsequently approved by a competent authority), the issuer will be able to distribute its digital assets throughout Europe on the basis of the European passport.

²⁴ Articles 4(2)(a) and 29(1) of the Prospectus Law. UCI other than closed-end type are defined in Article 2(1)(m) of the Prospectus Law as Fonds commun de placement, unit trusts and investment companies: (i) the object of which is the collective investment of capital provided by the public, and which operate on the principle of risk-spreading; and (ii) the units of which are, at the holder's request, repurchased or redeemed, directly or indirectly, out of the assets of these undertakings. The CSSF considers in Circular 05/225 (Part I, point 1.) and its Questions and Answers on the prospectus regime (version: 12 March 2013) (point VII.1.) that UCI other than closed-end type are to be understood, for the purpose of the Prospectus Law, as a UCI where the investor has no repurchase right relating to the units concerned.

As shown in Section I of this paper, digital assets can take different forms and may incorporate a large variety of features. Some of these forms and features will clearly show similarities with securities covered by the Prospectus Law. It could be held that an on-chain tradable digital asset allowing the holder to (i) vote on certain decisions of the company and (ii) receive an annual profit participation could amount to having a share in the issuing company. An offer to the public in Luxembourg of a digital asset with such features could require the production of a prospectus in respect of such digital asset. However, an individualised, non-transferable digital asset constituting a pre-financing for the development of a software application, which will be delivered to the holder after a pre-determined period of time is unlikely to be caught under the scope of the Prospectus Law.

The above examples are located at the ends of the spectrum of possible combinations of forms and features that may be found in the terms and conditions of digital assets. When it comes to the second example described above, such digital assets could include other innovative financing schemes, such as crowdfunding. Taking a clear-cut view on the question whether a digital asset constitutes a security is in most cases impossible. We encourage the competent authorities and stakeholders of this industry to develop a framework that takes into account as many digital asset features as possible and classify them (by their legal qualification) into the existing legal framework. Such work would obviously go beyond the scope of the Prospectus Law but would also feed into the

above analysis. The intention is to create a general legal framework that allows balancing digital asset features and their legal qualification to obtain a set of guidelines assessing which of the existing regulations a digital asset falls into.

C MAY A DAGE QUALIFY AS "A COMMUNICATION TO PERSONS IN ANY FORM AND BY ANY MEANS" ?

This question should not be as controversial as the previous one. DAGEs are generally promoted to the public and advertised on specialised Internet websites, personal blogs or other online channels. The interpretation of "means" within the meaning of the Prospectus Law should be understood in a broad sense, not excluding a priori any form of communication or media²⁵.

The notion of "persons" encompasses both professional and non-professional clients. No distinction should be drawn in relation to the nature or number of persons concerned (save for the exemptions discussed under paragraph III.2 below).

As a result, it appears that DAGEs may qualify as "a communication to persons in any form and by any means".

D DOES A DAGE PROVIDE SUFFICIENT INFORMATION ON THE TERMS OF THE OFFERING AND THE "SECURITIES" TO BE OFFERED, SO AS TO ENABLE A PARTICIPANT TO DECIDE TO PURCHASE OR SUBSCRIBE TO THESE "SECURITIES" ?

THE FOLLOWING KEY ELEMENTS NEED TO BE ASSESSED TO DETERMINE WHETHER A DAGE MAY FULFIL THE "SUFFICIENT INFORMATION" CONDITION FOR THE APPLICATION OF THE PROSPECTUS LAW:

- the offeror must have the intention to make an offer,
- the description of the offered "securities" must be communicated, and
- the conditions governing the offer (including, notably, the price of the offered "securities") must be determined or determinable.

To the extent that digital assets may be qualified as "securities", within the meaning and for the purpose of the Prospectus Law, the above conditions may potentially be satisfied in a DAGE where a White Paper or other information memorandum is published by or on behalf of the promoter of the DAGE.

This White Paper or information memorandum should provide "sufficient information" on, amongst others, the terms and conditions of the offer and the features of the digital assets.

However, it can also be argued that the White Paper or any other information published by or on behalf of the DAGE promoter constitutes a simple communication of information on a "security" or an "issuer" without "securities" being offered for purchase or subscription. This argument may not be viable in certain DAGEs, notably where digital assets may be assimilated to "securities" and having the features discussed under Section I above. It is advisable in all cases to perform a case-by-case assessment of the particular features of each DAGE. For the avoidance of doubt, it must be noted that in the majority of DAGEs, the White Papers produced for the purpose of describing the offered digital assets, will probably not entirely satisfy the requirements of the Prospectus Law with respect to the content of securities prospectuses to be provided to potential investors.

²⁵Circular 05/225, Part I, point 2.

III.2 Exemptions from the application of the Prospectus Law

Where a digital asset is thought to fall within the requirements of the Prospectus Law, drafting a prospectus in accordance with the relevant prospectus rules will be the recommended approach. This ensures investor protection and manages the issuers' liability in terms of disclosure. This is even more important when retail investors are targeted.

As the drawing up of a full prospectus is cumbersome and may (i) exceed the financial resources of a digital asset issuer or (ii) not be suitable in light of the objectives of a DAGE, a digital asset issuer should consider the circumstances where a prospectus is not required.

THE FOLLOWING ISSUANCE SCENARIOS ARE EXCLUDED FROM THE OBLIGATION TO PRODUCE A PROSPECTUS. THESE ARE THE MOST RELEVANT ONES IN THE CONTEXT OF A DAGE:

- securities included in an offer to the public where the total consideration of the offer in all Member States is less than EUR 1,000,000 over a period of 12 months (pursuant to the Prospectus Regulation);
- an offer of securities addressed solely to qualified investors;
- an offer of securities addressed to fewer than 150 natural or legal persons per Member State, other than qualified investors;
- an offer of securities addressed to investors who acquire securities for at least the total amount of EUR 100,000 per investor, for each separate offer; and
- an offer of securities whose denomination per unit amounts to at least EUR 100,000.

Similarly, Part III of the Prospectus Law provides for an exemption for issuances not crossing a threshold of EUR 1,500,000.

Other than the first exemption, the above exemptions are applicable to securities falling under Part II and Part III of the Prospectus Law.

In the context of exemptions, an issuer should note that a prospectus is to be seen as a framework to provide the necessary information to potential investors. Prospectus rules set the minimum level of information that the legislator deems necessary to enable an investor to take an informed investment decision.

Although issuers may be exempt from an obligation to produce a prospectus, they must nevertheless consider preparing an offer document to ensure transparency and clarity via the provision of adequate information to investors.

General civil Laws as well as in certain cases more specific rules (e.g. consumer protection rules), must be taken into account in this context in order for an issuer to manage its risks related to the provision of sufficient information.

A OFFER OF LESS THAN EUR 1,000,000 (OR EUR 8,000,000, ONCE APPLICABLE)

This current exemption for offers of less than EUR 1,000,000 could be relevant for issuers at the very beginning of their project. At a seed stage or early inception stage, start-ups are typically not looking for large amounts of money. Their objective is in principle to seek funding for the development of their initial idea.

As indicated in Bill of Law No 7328 (draft Law for implementing particular provisions of the Prospectus Regulation in Luxembourg), the threshold for an offer to be exempted from publishing a prospectus will be increased to EUR 8,000,000. This amendment is currently under discussion with the Luxembourg parliament and should enter into force in the coming months. Under the new exemption, issuers issuing securities below that amount will only have to notify the CSSF of the intention to issue securities for a total consideration of less than EUR 8,000,000.

As also indicated in Bill of Law No 7328, issuances falling between EUR 5,000,000 and EUR 8,000,000 will nonetheless trigger a requirement to publish an information notice addressed to potential investors. The information notice should contain succinct information on the issuer, the offered securities, the terms and conditions of the offer and the reasons driving the offer.

B**OFFERS TO INSTITUTIONAL INVESTORS: QUALIFIED INVESTORS AND DENOMINATIONS PER UNIT OF AT LEAST EUR 100,000**

For the purpose of the Prospectus Law, "qualified investors" means persons or entities that are described in points (1) to (4) of Section I of Annex II to MiFID II, and persons or entities who request to be treated as professional clients in accordance with Annex II to MiFID II, or recognised as eligible counterparties in accordance with Article 24 of MiFID II unless they have requested to be treated as non-professional clients. The MiFID II definition encompasses, amongst others, credit institutions, investment firms, insurance companies, collective investment schemes, pension funds and public entities.

This exemption embeds the risk that it must be closely monitored by the issuer as it must be able to check that each of its investors satisfies the requirements of the above-mentioned MiFID II provisions. In the context of a DAGE where digital assets are typically registered in a distributed ledger, on-going identification post-issuance may be difficult (and for some ledgers almost impossible) to put in place if transfers are allowed.

Offers of securities with a denomination of at least EUR 100,000 per unit are typically referred to as "wholesale" issuances. This type of security is usually only subscribed by institutional investors who are deemed to not need to receive the same level of information as retail investors.

In situations where a digital asset issuer is solely targeting institutional investors (such as regulated funds seeking to obtain an exposure to innovative companies in the financial technologies sector), digital asset issuers should consider increasing the minimum denomination sufficiently above the EUR 100,000 equivalent of the relevant cryptocurrencies used for the investment to provide a buffer for dealing with the volatility of virtual currencies and other potential exchange rate fluctuations.

C**EXEMPT OFFERS THAT NEED TO BE MONITORED BY THE ISSUER**

The exemptions relating to (i) offers addressed to less than 150 persons, and (ii) offers where investors acquire securities for at least the total amount of EUR 100,000 both require monitoring by the issuer.

For the first alternative, the issuer must make sure that the offer is in effect addressed to less than 150 persons. It is not the number of subscribers that is taken into account but the number of persons to whom the offer has been shown. This reduces the attractiveness considerably as it generally excludes offerings made through the internet where there have been no, or insufficient, access controls.

In the second situation, the issuer must know each of its investors as it must ensure that each investor acquires digital assets for a value of at least EUR 100,000. Although this should, in principle, be possible today with distributed ledgers, the threshold is often considered to be too high for typical investors targeted by DAGEs.

III.3**Conclusions**

It follows from this brief overview that very few DAGEs could benefit from the exemptions from the obligation to produce a prospectus for securities.

This currently leaves issuers whose digital assets qualify as securities with the choice between (i) producing a prospectus compliant with the requirements of the Prospectus Law, or (ii) finding other sources of funding for their project. The first option is often too expensive and time consuming, whereas the second option is often difficult to achieve.

As a first step, it would be helpful for regulators to clarify which digital assets fall into the scope of the prospectus rules or, if this is seen as a position that can only be taken on an EU basis, at least give some clarity as to whether DAGEs could fall within certain exemptions based on their issuance amount (expressed in cryptocurrency) or on the number of residents of each Member State which may subscribe to it.

In the longer term, regulators (with the help of the industry) should consider developing additional prospectus rules tailored to the needs of DAGE issuers.

Section IV: Consumer Law protections

Regarding the analysis of the role of Consumer Law protections, there are several possibilities and challenges posed by the launch of DAGEs in Luxembourg, including the Laws applicable to contracts made at a distance. Particular attention must be paid to pre-contractual information that must be provided. Market Abuse aspects will be discussed separately in section 5 below.

IV.1 Analysis of the Consumer Protection in the DAGE's environment

DAGEs are generally open to the public, and in most cases, the offer takes place at an early stage of the business development.

The fact that a start-up is involved in the DAGEs should not limit the possibility also for consumers or retail investors, after adequate disclosure, to give trust to the project, to purchase its services, or to invest in it.

In Luxembourg the Consumer Protection Law was consolidated in the 'Code de la Consommation' ("**Consumer Law**"), with the Law of 8 April 2011 where it is affirmed that "Consumer Law should no longer be considered as an exception but as a Law regulating the economy with the aim of ensuring transparency, loyalty and security of transactions and consequently the proper functioning of the market ²⁶".

²⁶www.legitech.lu/newsroom/articles/genesis-of-consumer-law-in-luxembourg/.

UNDER THE **CONSUMER LAW**, ARTICLE L. 010-1:

- a consumer is any natural person who acts for purposes that are not part of his commercial, industrial, artisanal or liberal activity;
- a professional is any natural or legal person, either public or private, who acts, even if under mandate, for purposes included in his commercial, industrial, artisanal or liberal activity.

It follows that a legal person is always a professional under the Consumer Law, and therefore where digital assets are purchased via a commercial company with legal personality the provisions of the Consumer Law will not be applicable at all, regardless of the features of the digital assets or the selling methods.

Other civil, commercial or company Law provisions (such as for misrepresentation or fraud), may, however, still apply.

A INFORMED DECISIONS- DUTY TO DISCLOSE NECESSARY INFORMATION

In relation to purchasers or investors qualifying as consumers under the Consumer Law, article L. 111-1 of the Consumer Law provides that the professional (seller) has a duty to clearly inform the consumer and to give him all the necessary information to ascertain the essential characteristics of the service/good offered. This includes any commercial document that the seller uses to promote its product (digital asset).

The White Paper, being usually the most relevant commercial document of a DAGE, should comply with the provisions of article 111-1 of the Consumer Law by setting out all of the required information.

Should a White Paper provide misleading information or if it is not in line with the above mentioned disclosure requirements, the purchaser may demand the rescission or resolution of the contract.

B PROHIBITION OF UNFAIR OR MISLEADING COMMERCIAL PRACTICES

ARTICLE L. 122-2 OF THE CONSUMER LAW PROHIBITS ANY KIND OF UNFAIR COMMERCIAL PRACTICES. CONSEQUENTLY, AN ISSUER SHALL NOT:

- provide false information, or
- try to mislead the consumer (like promising a reward or product/service that it is impossible to achieve).

Article L. 211-2 of the Consumer Law further provides that any abusive clauses in a contract are prohibited when there is an imbalance between the rights and duties of the consumer. Such a clause is considered null and void.

All DAGEs are distance sales – requiring particular attention to pre-contractual information.

ARTICLES L. 222-1FF OF THE CONSUMER LAW PROVIDES FOR SPECIFIC RULES FOR DISTANCE CONTRACTS SIGNED BETWEEN A PROFESSIONAL AND A CONSUMER. PARTICULAR ATTENTION IS GRANTED TO PRE-CONTRACTUAL INFORMATION THAT MUST INCLUDE:

- the identity of the seller, the address where the seller is incorporated;
- the essential features of the service/good offered;
- the price or, at least, the method with which the price will be calculated;
- how the price will be paid and the service rendered;
- the eventual right to withdraw.
- financial services only: additionally, article L. 222-12 of the Consumer Law provides specific duties on the professional where it offers a distance contract relating to financial services, where the issuer must also provide the identification numbers of its license and indicate the relevant supervisory authority, as well as a clear and straightforward indication of the specific risks associated with the contract. If the professional violates one of the provisions set by the articles L. 222-12, the sanctions applicable are provided at the article 63 of the Law on the financial sector of 5 April 1993.

A DAGE, no matter the nature of the digital asset, is always preceded by a distance advertising campaign through a partial disclosure of the DAGE project on a website or similar, and the publication of a White Paper prior to the launch of the digital asset, sometimes together with additional disclosure documents.

The entire advertising, subscription and delivery process of a DAGE is usually carried out on the Internet via the subscription of a distance contract with which the investor expresses its will to purchase a quantity of digital assets.

Certain risks are linked to the fact that certain digital asset offering schemes are scams - frauds with the non-declared purpose of raising money without providing any right. However, this risk is not particular to the DAGE or DLT space - similar risks are associated with 'standard' transactions carried out on a day-to-day basis.

IV.2 Conclusions

Consumer Law is applicable to DAGEs where the purchaser qualifies as a consumer. It is clear that any 'White Paper' or offer document and related documentation must provide all information required by the Consumer Law, and must be drafted not to mislead the consumer.

In most cases the correct application of the existing rules should be sufficient to ensure adequate consumer protection.

We suggest to issue a table or guide to provide issuers with a simple and clear overview of information duties to be fulfilled when launching a DAGE in Luxembourg. Providing guidance as to the minimum content and information required – both at launch and on an ongoing basis – would be an effective way to ensure correct application of current consumer protections.

Section V: Regulatory implications of trading digital assets on a secondary market



V.1 Market Abuse and ongoing disclosure

Broadly speaking MAR applies to financial instruments traded or to be traded on a "trading venue" or linked thereto. MAR could therefore apply to digital asset sales if the relevant criteria are met.

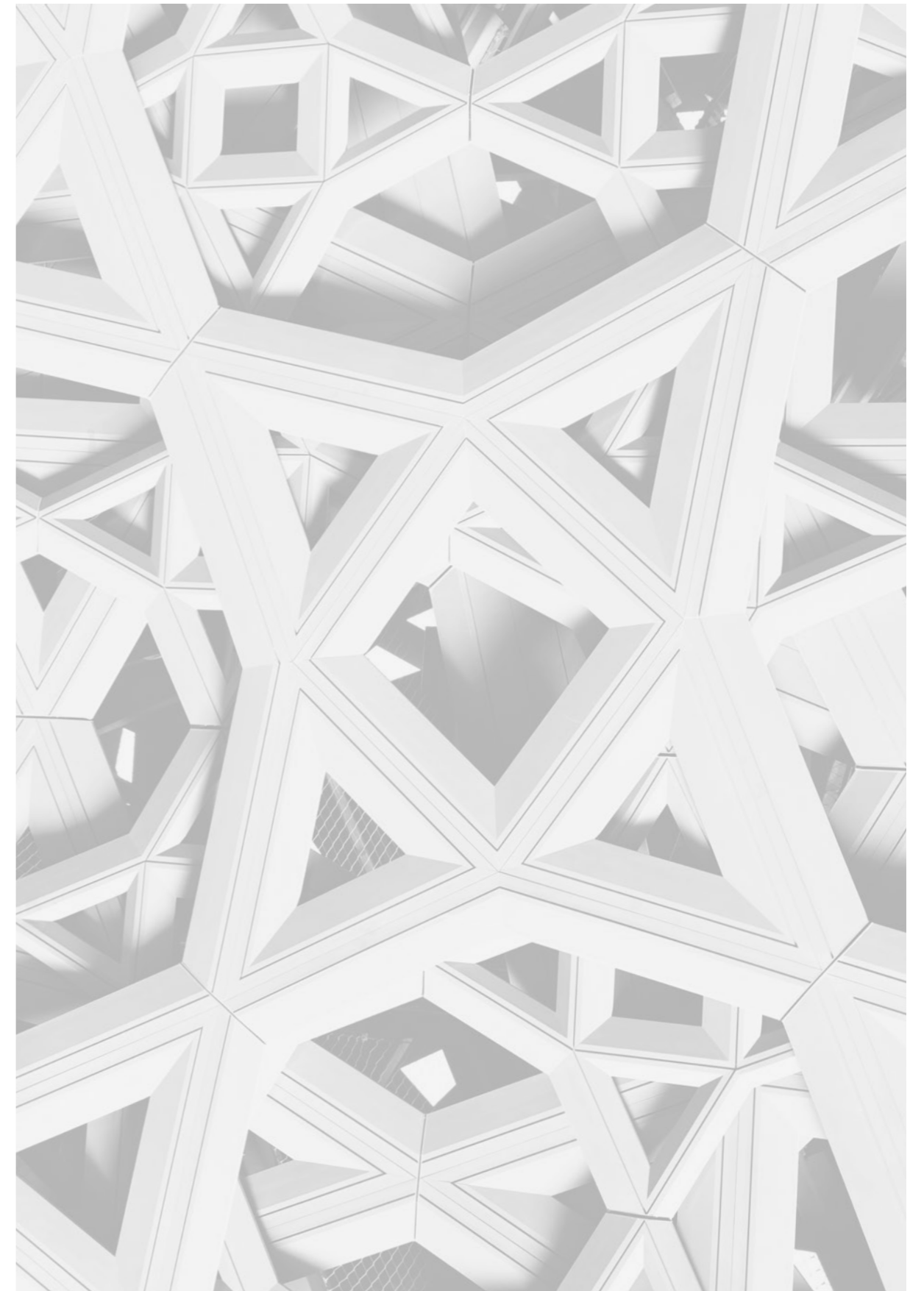
As currently no digital asset exchange is registered or licenced as a "trading venue" in the European Union, there are strong arguments that MAR is not applicable to digital asset sales.

However, considering the vibrant secondary markets of all digital assets (independent of whether they qualify as financial instruments or not) there are good arguments to have at least a basic regulatory framework dealing with questions like transparency requirements, publication obligations in respect of inside information and market abuse based on information asymmetries and manipulative behaviours.

Given the limited financial resources of SMEs and start-ups, the compliance costs will need to be taken into account when creating such a regulatory framework. The right balance needs to be found in order to make it at the same time viable for issuers and safe and protective for market participants.

V.2 Conclusions

Considering the inherent legal uncertainties as to the legal qualification of digital assets under current capital markets Law, we suggest (non-binding) guidance is provided. For example a table explaining to DAGE actors how certain digital asset features could be linked to other digital asset features and qualifications and the application of regulations.



Section VI: Other issuers: Fund Laws

The emergence in the recent years of DAGEs and digital assets as a new Fintech asset class has also caught the attention of the Luxembourg fund industry.

Numerous asset managers have, or are considering the possibility of, either establishing investment funds investing into digital assets, or issuing digital assets to investors, or both. Depositaries and other service providers are also considering the challenges and opportunities related to the servicing of investment funds investing in this new asset class.

VI.1 Investment by a Luxembourg fund into digital assets

The possibility for a Luxembourg investment fund to invest into digital assets depends on (i) the respective eligible assets requirements applicable to each type of fund, and (ii) the type of digital assets (security-like, utility or payment digital assets) considered for investment.

²⁷ Annex IV to the Commission Delegated Regulation (EU) No 231/2013 of 19 December 2012 supplementing Directive 2011/61/EU of the European Parliament and of the Council with regard to exemptions, general operating conditions, depositaries, leverage, transparency and supervision

²⁸ Article 19(8)(a) of the Law of 2013.

ADDITIONALLY, ALL SERVICE PROVIDERS (SUCH AS IN PARTICULAR THE MANAGEMENT COMPANY, THE AIFM AND THE DEPOSITARY, TO THE EXTENT APPLICABLE) MUST PUT IN PLACE ADEQUATE PROCEDURES IN ORDER TO BE ABLE TO SERVICE A FUND INVESTING INTO DIGITAL ASSETS. IT IS ANTICIPATED THAT THEY WILL ALSO HAVE TO JUSTIFY THE ADEQUACY OF THEIR PROCEDURES VIS-À-VIS THE CSSF. MORE SPECIFICALLY:

- A Luxembourg domiciled AIFM must apply to the CSSF in order to be authorised to manage a fund investing into digital assets. The type of strategy to be applied will depend on the type of digital asset (for payment digital assets for example, in the absence of any other more relevant strategy, the residual category of "other / other" strategies is likely to be applicable) ²⁷.
- Regarding the depositary regime applicable to digital assets it is necessary to analyse whether such assets constitute either "financial instruments that must be held in custody ²⁸" (subject to the strict liability regime) or "other assets ²⁹". It is generally considered that payment digital assets do not qualify as any category of financial instrument capable of being held in custody, and are therefore "other assets" for the purposes of the depositary regime. By contrast, security-like digital assets may qualify as financial instruments capable of being held in custody by a depositary ^{30 31}.

²⁹ Article 19 (8) (b) of the Law of 2013.

³⁰ Article 19 (8) (a) of the Law of 2013.

³¹ Given that utility tokens provide some functional utility to investors in the form of access to a product, such features do not correspond to any category of financial instrument capable of being held in custody. As such, utility tokens should also be treated as "other assets" for the purposes of the depositary regime.

VI.1.1 UCITS

UCITS can only invest in certain categories of eligible assets as expressly set forth by Law ³².

A DIRECT INVESTMENT BY UCITS

PAYMENT DIGITAL ASSETS AND UTILITY DIGITAL ASSETS

THE ESSENTIAL FEATURES OF PAYMENT DIGITAL ASSETS AND OF UTILITY DIGITAL ASSETS ARE THAT:

- payment digital assets operate as means of payment contractually accepted by parties to transactions ³³; and
- utility digital assets provide "some functional utility to investors other than payment for external goods or services, in the form of access to a product ³⁴".

Payment digital assets and utility digital assets do not meet the criteria for qualifying under any category of eligible assets for investment in UCITS. Therefore, payment digital assets and utility digital assets are not eligible for direct investment by UCITS ³⁵.

SECURITY-LIKE DIGITAL ASSETS

The essential feature of security-like digital assets is to "give their holders financial or voting rights ³⁶".

DEPENDING ON THE POLITICAL, FINANCIAL AND / OR INFORMATION RIGHTS GRANTED TO THEIR HOLDERS, SECURITY-LIKE DIGITAL ASSETS COULD QUALIFY AS TRANSFERABLE SECURITIES FOR THE PURPOSES OF THEIR ELIGIBILITY ASSESSMENT BY UCITS PROVIDED THAT:

- they present features similar to those of shares in companies, bonds, other securitised debts, or of any other securities giving the right to acquire or sell any such transferable securities, and
- they meet all criteria set forth by the Grand-Ducal Regulation of 8 February 2008 on e.g. maximum potential loss not exceeding the amount paid in, liquidity, valuation, available information, negotiability, etc.

³² Article 41 of the Law of 17 December 2010 concerning undertakings for collective investment ("Law of 2010").

³³ D. Zetzsche, P. Buckley, D. Amer and L. Föhr; "The ICO Gold Rush: it's a scam, it's a bubble, it's a super challenge for regulators", University of Luxembourg Law Working Paper Series, nr. 2017-011, p. 8 (ZBAF); Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017), p. 12.

³⁴ Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017), p. 12.

³⁵ Hacker, Philipp and Thomale, Chris, Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies under EU Financial Law (November 22, 2017), p. 12.

³⁶ Article 41 (2) of the Law of 2010.

Provided all such criteria are met, security-like digital assets could in principle be considered to be eligible for direct investment by UCITS.

However, pursuant to the press release of the CSSF dated 14 March 2018 underlining the complex and risky nature of these digital asset products, UCITS open to the retail public and pension funds may not invest either directly or indirectly in [digital assets]³⁷. Conversely, provided that it is ensured that the UCITS is, as far as acceptable under the Law of 2010, only placed with sufficiently sophisticated investors, the creation of such type of UCITS would seem a potential option.

B. INDIRECT INVESTMENT BY UCITS

UCITS are in principle allowed, subject to compliance with certain conditions, to gain indirect exposure to any type of assets by using for example (a) delta 1 certificates ("**Delta 1 Certificates**")³⁸, or (b) FDI on financial indices. This possibility, which has in the past been accepted in relation to the gaining of indirect exposure to commodities for example, should also be available in relation to the indirect investment into any type of digital assets.

DELTA 1 CERTIFICATES

Certificates on digital assets may qualify as eligible assets for investment by a UCITS if, in addition to meeting the criteria for the qualification as transferable securities, (i) physical delivery of the underlying digital assets must be excluded, and (ii) the dependence of the certificate on the digital assets must be structured as a 1:1 relation (delta 1). In such case, a certificate on digital assets could qualify as an eligible asset for investment by a UCITS.

FDI BASED ON FINANCIAL INDICES

FDI based on financial indices³⁹, such as for example FDI on indices composed of different payment digital assets, can be eligible assets for investment by UCITS, provided that such indices (i) are sufficiently diversified, (ii) represent an adequate benchmark for the market to which they refer, (iii) are published in an appropriate manner; and (iv) consist of different payment digital assets, i.e. they are not entirely composed of the same payment digital assets.

As noted above, pursuant to the press release by the CSSF dated 14 March 2018, these possibilities are however not available if the UCITS is open to the retail public and pension funds.

³⁶ Autorité des Marchés Financiers, Summary of replies to the public consultation on Initial Coin Offerings (ICOs) and update on the UNDAGERN Programme, 22 January 2018, p. 3.

³⁷ CSSF, press release 14 March 2018, Warning regarding initial coin offerings ("ICOs") and tokens (only in French), p. 4.

³⁸ Article 2 (1) of the Regulation of 2008.

³⁹ Article 9 of the Regulation of 2008 and ESMA, Guidelines on ETFs and other UCITS issues, ESMA/2014/937EN, point 51: "A UCITS should not invest in commodity indices that do not consist of different commodities.

Subcategories of the same commodity (for instance, from different regions or markets or derived from the same primary products by an industrialised process) should be considered as being the same commodity for the calculation of the diversification limits."

VI.1.2 Alternative investment vehicles

A. AIFM aspects

An alternative investment vehicle may qualify as an AIF in case it raises capital from a number of investors with the intent to invest in it in accordance with a defined investment policy for the benefit of those investors (do not require authorisation pursuant to Article 5 of Directive 2009/65/EC⁴⁰. 'Alternative Investment Fund Managers' are legal persons whose regular business is to manage one or more AIFs⁴¹). In such case, the AIF will be in the scope *ratione materiae* of the 2013 Law and it will need to appoint an AIFM. In this respect, a distinction has to be made between different options:

- to appoint a fully authorised AIFM subject to the entire AIFMD. In that case, the requirement to appoint a depositary in accordance with the AIFMD is applicable to the partnership.
- to appoint a registered AIFM, provided that the assets under management remain below the legal thresholds⁴². In this case, the registered AIFM is not obliged to comply with the entire AIFMD. In particular,

- the duty to appoint a depositary in accordance with the AIFMD is not applicable.
- a Luxembourg domiciled registered AIFM is only subject to a reporting obligation vis-à-vis the CSSF (and does not benefit from a European marketing passport⁴³).
- to appoint a non-EU AIFM. The non-EU AIFM is not subject to the AIFMD. Therefore, the AIF is also not required to appoint any depositary. However, as a result of the non-applicability of the AIFMD, the non-EU AIFM will not benefit from the EU marketing passport.

In all cases, the requirements to protect the best interest of the investors apply, and the AIFM must have adequate procedures in place in order to be able to service a vehicle investing in digital assets.

⁴⁰ Article 1(39) of the AIFM Law.

⁴¹ Article 1(46) of the AIFM Law.

⁴² either (i) EUR 100 million, or (ii) EUR 500 million for an AIF which is unleveraged and closed-ended for a minimum period of five years

⁴³ A European passport enables the AIFM to market the fund units across Europe. Absent a passport, any such marketing must be made on the basis of a private placement or a reverse solicitation, in compliance with applicable local rules in each country where the relevant marketing activities take place

B

SIFs

SIFs are not subject to restrictions in terms of eligible assets⁴⁴. Therefore, a SIF can in principle invest in any kind of digital assets, provided only that the SIF complies with applicable risk diversification requirements⁴⁵, i.e. it invests no more than 30% of its assets or commitments in the same type of digital assets issued by the same issuer.

Whilst no SIF has been authorised to date to invest either directly or indirectly into digital assets, provided that it is ensured that applicable risk diversification requirements are complied with and that the SIF's service providers have adequate procedures in place in order to service this type of fund⁴⁶, there is no impediment, according to the SIF Law, to invest into that asset class.

C

SICARs

SICARs are not subject to any risk diversification requirement⁴⁷. However, a SICAR can only invest its assets in securities representing risk capital⁴⁸, which is "characterised by the concurrent gathering of two elements, namely a high risk and an intention to develop the target entities⁴⁹".

The notion of risk capital refers to (i) venture capital, i.e. capital contributed to newly launched undertakings (start-up) or entities active in sectors with high development potential, and (ii) private equity financings, i.e. an investment in a non-listed private company, often of a relatively limited size and a significant level of risk⁵⁰.

The notion of development refers to the "value creation at the level of the portfolio companies⁵¹".

The investment in risk capital can take place via all financing modes, "be it by way of an equity contribution, bond issuance, bridge finance or similar financing, mezzanine-type financing, convertible debt, subject to the financing being a "risk capital" type of contribution⁵²".

Based on the foregoing, the investment by a SICAR in a digital asset must meet the criteria set out above, namely (i) a high risk, (ii) an intention to develop the target entity issuing the digital asset and (iii) an investment in risk capital. Therefore, it appears that security-like digital assets could potentially qualify as an eligible asset for investment by a SICAR. As for SIFs, assessment of the eligibility of security-like digital assets for investment by SICARs as well as the adequacy of the procedures implemented by the SICAR's service providers will ultimately rely on the CSSF.

⁴⁴ Article 1 (1) of the Law of 13 February 2007 on specialised investment funds ("Law of 2007").

⁴⁵ Circular CSSF 07/309 concerning risk-spreading in the context of specialised investment funds.

⁴⁶ See below.

⁴⁷ Article 1 of the Law of 2004.

⁴⁸ Article 1 (1) and (2) of the Law of 2004.

⁴⁹ Circular CSSF 06/241 on the concept of risk capital under the Law of 2004, point I, p. 1.

⁵⁰ Op. cit., point I, p. 2.

⁵¹ Ibid.

⁵² Op. cit., point I, p. 3.

D

RAIFs

The RAIF is an unsupervised vehicle not subject to any asset eligibility requirement⁵³. Therefore a RAIF is in principle capable of investing directly into any kind of digital assets.

The RAIF requires the appointment of a fully authorised AIFM⁵⁴ and of a Luxembourg based depositary⁵⁵. As mentioned above, these service providers must have appropriate authorisations and procedures in order to service this asset class.

NON REGULATED FUND STRUCTURES

Non-regulated fund structures are generally set up in the form of an ordinary "corporate" structure, such as an SCS, which has a legal personality, or as an SCSp which does not have any legal personality.

AIFM considerations exposed above apply to non-regulated fund structures.

⁵³ Article 1 of the Law of 2016.

⁵⁴ Article 4 (1) of the Law of 2016.

⁵⁵ Article 5 (1) of the Law of 2016.

VI.2

Issue of digital assets by a Luxembourg investment fund

The possibility for a Luxembourg investment vehicle to issue digital assets depends on (i) the type of digital asset to be issued (utility, security-like, or payment digital asset) and (ii) the type of fund concerned.

VI.2.1

Payment and utility digital assets

The issuing of payment and utility digital assets amounts to a commercial or industrial activity.

As the exclusive purpose of all types of investment funds is to invest capital raised by investors in accordance with a defined investment policy, the issuing of payment digital assets or of utility digital assets is not currently falling within the purpose of an investment fund.

VI.2.2 Security-like digital assets

Provided that the security-like digital assets have the same features as (i) SICAV⁵⁶ or (ii) units⁵⁷, such security-like digital assets could be treated as equivalent to SICAV shares or FCP units, respectively.

In that context, it would theoretically be conceivable for any type of investment fund (UCITS, SIF, SICAR, RAIF or partnership), established in either a corporate form ("SICAV") or in a contractual form ("FCP") where applicable, to issue shares or units, respectively, as security-like digital assets. However, the regulatory requirements surrounding the UCITS make it debatable if the issuing of security-like digital assets by a UCITS is indeed compatible with Luxembourg UCITS regulatory regime.

The possibility for UCITS, SIFs and SICARs to issue security-like digital assets to the investors will in any case have to be discussed with the CSSF.

⁵⁶ Article 1 (27) of the Law of 2010 and article 430-1 of Law of 2015. (e.g. right to receive dividends and the repayment of capital; right to attend meetings; voting rights; right to receive information; right to call a general meeting)

VI.3 Issue by others of digital assets having fund-like features by way of DAGE

As part of the analysis of digital asset features, it may become apparent that a digital asset issuance which was not intended to be structured as an investment fund may nevertheless fall within the definitions of an investment fund or related activities.

Where this is the case, applicability of the 2013 Law shall be scrutinised. The analysis of the considerations as well as the rules which should be applied (including the appointment of an AIFM) are similar to those set out in the sections above related to AIFM aspects.

The analysis below in Section VII: Licensing Laws is also relevant in such cases.

⁵⁷ Article 1 (27) and 8 (1) of the Law of 2010. (e.g. right to receive distributions and the repayment of capital; right to receive information)

VI.4 Conclusions

Based on applicable investment restrictions set out by the respective legal regimes, all Luxembourg investment funds could in principle invest in certain types of digital assets, either directly or indirectly.

For regulated fund structures, any such investment will have to be discussed with the CSSF. In the context of such discussions, it will have to be demonstrated that any rules on eligible assets and/or diversification rules (if applicable) are complied with. In addition, the fund initiator will have to give evidence that (i) the governing body of the fund has sufficient know-how and experience regarding the relevant asset class, and that (ii) the operational procedures implemented by the fund's service providers are adequate.

Finally, it has to be ensured that the relevant funds are only sold to sufficiently sophisticated investors, who are able to understand the potential risks to which the fund's investments are subject.

Wherever a Luxembourg investment vehicle intends to issue securities in the form of security-like digital assets, it is paramount to provide the investors with an adequate disclosure (for instance, in the offering document) concerning the features of such security-like digital assets. In particular, to the extent that the features of such security-like digital assets differ from the features of the securities typically issued by other fund structures, the investors must be fully informed about such differences as well as the potential risks that such differences may entail for the relevant investors. Furthermore, security-like digital assets currently may only be offered to sophisticated investors.

Section VII: Other Market Players: Financial Sector Laws

Depending on the legal qualification of the digital asset following the analysis of the asset's features, the principal actors who undertake commercial activities relating to a DAGE may be engaged in activities which require prior authorisation by the CSSF. In this section it is considered which licensing regimes could be applicable to these activities, if the digital asset can be categorized as a financial instrument or electronic money (subject to applicable exemption, which are not specifically dealt with herein).

THE PRINCIPAL ACTORS INVOLVED IN A DAGE ARE USUALLY:

- the issuer of digital assets (often the operator),
- the digital asset exchange,
- the DAGE manager,
- the DAGE advisor, and
- the wallet or custody provider of digital assets.

In order to assess the applicability of the Luxembourg financial sector licensing regimes to the activities of the principal actors, it is necessary to make a number of assumptions. In particular: (1) the actors' activities originate in Luxembourg, (2) the actors do not have any other license or are otherwise under the supervision of the CSSF, and (3) the actors have not been appointed as a tied agent in the sense of article 1(1) of the FSL.

VII.1 Issuer of Digital Assets

The main role of the issuer is the offering of digital assets⁵⁸, either in a private placement or to the public. Additionally, it may also be involved in the distribution of digital assets. Finally, the issuer may also run and execute smart contracts, by means of which it engages in activities for which authorisation by the CSSF may be required⁵⁹.

⁵⁸ The activity of transferring digital assets to the investors (i.e. the placement of the digital assets) will be considered separately (DAGE Manager).
⁵⁹ An exhaustive analysis of these licensing requirements is outside of the scope of this analysis. We will only focus on the issues addressed in the document.

TYPE	LICENSE REQUIRED?	REMARKS
FINANCIAL INSTRUMENT	NO	While the prospectus may require approval from the CSSF, the act of a primary offering of financial instruments to the public does not require authorisation of the Issuer under the Prospectus Law.
FUND UNIT	DEPENDS	The act of offering units in investment funds may require authorisation of the issuer under investment fund regulations. Notably, in light of the definition of an AIF pursuant to the Law of 2013, if the issuer raises capital from investors by offering digital assets and aims to invest the capital for the benefit of those investors, the DAGE may be construed as raising capital for an alternative investment fund and consequently, the issuer may be considered an AIF/AIFM under the Law of 2013. In that case, the issuer will need prior authorisation ⁶⁰ . However, if the investment management objective is present neither in the White Paper nor in the activities envisaged by the issuer, this regime should not apply. For example, as ESMA has clarified, if the issuer can be considered to be an undertaking having a general commercial or industry purpose which follows an investment policy set out in a business strategy, it does not have an investment management objective which satisfies the AIF definition ⁶¹ .
PAYMENT DIGITAL ASSET	DEPENDS	A payment digital asset may qualify as 'electronic money' in the sense of article 1(29) of PSL, in which case the issuer needs authorisation as an e-money issuer. Also, if such a digital asset is used to render payment services by the issuer ⁶² , authorisation for those services is required.
UTILITY DIGITAL ASSET	NO	The most distinguishing feature of a utility digital asset is the right of future access to a service or product, embodied in a digital representation ('credits') ⁶³ . The sale of a right to a product or service to be acquired in the future (i.e. a pre-order), is not covered by a specific regulatory regime supervised by the CSSF and therefore, the issuer would not require a license if it issues a utility digital asset ⁶⁴ . General business licence under the Law of 2011 may potentially be required.

⁶⁰ Articles 5(1) and 6(1) AIFML.
⁶¹ ESMA Guidelines ESMA/2013/611, nr. 29.
⁶² Cf EBA Report, p. section 2.1.

⁶³ In a DAGE or pre-DAGE, the digital asset is often sold at a discount. If the digital asset is transferable, some purchasers may seek a profit by selling the digital asset at a premium from the purchase price, on the assumption that the supply of digital assets remains fixed while demand will increase, but the market in utility digital assets should be considered separately and not confounded with the DAGE.
⁶⁴ In fact, pre-ordering products which are yet to be manufactured is a common business strategy (e.g. fast-moving consumer goods such as smartphones, clothing). The parties are free to determine the form of the title which serves as proof of that right.

VII 2

Digital Asset Exchanges (secondary markets)

A digital asset exchange needs prior authorisation by the CSSF, if the digital asset qualifies as a financial instrument or electronic money.

TYPE	LICENSE REQUIRED?	REMARKS
FINANCIAL INSTRUMENT		
• MULTILATERAL TRADING FACILITY (MTF)	YES AUTHORISATION TO OPERATE AN MTF	If the digital asset is a financial instrument, then bringing together multiple parties buying and selling interests in the digital asset within a multilateral system in a way that results in a contract (as specified in MFIL) involves the operation of a multilateral trading facility (MTF). Only certain regulated entities are allowed to apply for such authorisation, such as credit institutions, investment firms referred to in Article 24-9 of the FSL.
• ORGANIZED TRADING FACILITY	YES AUTHORISATION TO OPERATE AN OTF	Similar rules apply to the operation of an organised trading facility (OTF), a regime which only applies to digital assets which are to be classified as bonds, structured finance products or derivatives.
PAYMENT DIGITAL ASSET	YES PAYMENT SERVICE INSTITUTION	If the digital asset is a virtual currency, the exchange which handles funds of the participants or provides conversion services from fiat currency into the digital asset on a professional basis, will require authorisation by the CSSF as a payment service provider under the PSL ⁶⁵ .
UTILITY DIGITAL ASSET	NO	If the digital asset is considered to be a utility digital asset, the organization of an exchange to buy or sell the digital assets falls outside the scope of financial regulation. General business licence under the Law of 2011 may potentially be required.

⁶⁵ Article 4 PSL.

VII 3

DAGE Manager

The DAGE manager is typically engaged by the issuer to assist in the issuer's offering of digital assets to purchasers. Depending on its activities and the qualification of the digital assets, the DAGE manager may fall under one or more licensing regimes.

TYPE	LICENSE REQUIRED?	REMARKS
FINANCIAL INSTRUMENT		
	YES UNDERWRITER	The undertaking of placing digital assets on behalf of the issuer, or to underwrite digital assets, requires prior authorisation of the DAGE manager as an underwriter ⁶⁶ .
	YES BROKER IN FINANCIAL INSTRUMENTS	The business of receiving or transmitting orders in relation to one or more financial instruments, without holding funds or financial instruments of the clients, requires prior authorisation as a broker in financial instruments ⁶⁷ . The license is also required if instead of receiving or transmitting orders, the DAGE manager merely brings the issuer and the purchaser together for the purpose of the subscription of digital assets.
	YES COMMISSION AGENT	Concluding agreements to buy a financial instrument on behalf of a purchaser (i.e. the execution of an order), requires prior authorisation as a commission agent ⁶⁸ .
PAYMENT DIGITAL ASSET	NO	The DAGE manager acting on behalf of an issuer of a payment digital asset, is not subject to a licensing regime supervised by the CSSF. It may potentially be considered as an agent or intermediary of a payment service provider or electronic money institution. If the DAGE manager orders a payment digital asset on behalf of a client, a license is only required if the DAGE manager executes a payment transaction therewith ⁶⁹ .
UTILITY DIGITAL ASSET	NO	Similar to III.2 above, there is no applicable licensing regime to the DAGE manager if the digital assets are utility digital assets, unless the DAGE manager provides a payment service covered by the PSL. General business licence under the Law of 2011 may potentially be required.

⁶⁶ Article 24-6(1) FSL.

⁶⁷ Article 24-1(1) FSL.

⁶⁸ Article 24-2 FSL.

⁶⁹ See II.2.

VII 4 DAGE Advisors

There are a number of professionals providing advice in relation to a DAGE, such as legal advisors to the issuer or the members of the issuer's advisory board.⁷⁰ For the purposes of this paper, the focus lies on the DAGE advisor who advises individuals on transactions in digital assets (e.g. purchase, sale) or on the decision to exercise rights conferred by digital assets.

TYPE	LICENSE REQUIRED?	REMARKS
FINANCIAL INSTRUMENT	DEPENDS IF INVESTMENT ADVICE IS PROVIDED	The DAGE advisor who provides advice to individuals in respect of one or more transactions relating a financial instrument may need prior authorisation as an investment advisor, if the advice constitutes investment advice in the sense of Article 24 of the FSL. A key element is that the advice constitutes a personal recommendation in respect of a transaction involving a digital asset or on the decision to exercise rights conferred by digital assets ⁷¹ .
PAYMENT DIGITAL ASSET	NO	There is no applicable CSSF licensing regime. Potential general business licence under the Law of 2011 may be required.
UTILITY DIGITAL ASSET	NO	See above.

VII 5 Conclusions

If the digital asset should be classified as a financial instrument under the MFL following an analysis of its features, hence it is a security-like digital asset, the principal actors of a DAGE are all required to have a license in order to undertake their activities. Conversely, if the digital asset should be classified as electronic money under the PSL, hence it is a payment digital asset, only the digital

asset exchange and the DAGE manager are required to have a license to undertake their activities. Finally, if the digital asset should be classified as a utility digital asset, the actors do not require a license as their activities fall outside the regulatory perimeter. General business licence may still be potentially required.

⁷⁰ Involvement of legal counsel is a key success factor. There are a number of legal risks associated with DAGE, some of which are addressed in this paper. A Lawyer can help navigating those risks, e.g. by assessing the applicable regulations to the digital assets or the issuer's business model and by setting up procedures to comply with the relevant obligations (e.g. KYC, reporting). Furthermore, a Lawyer can also advise on the structuring of the DAGE transaction and ancillary contracts with third parties.

⁷¹ For more information see CSSF, Questions and Answers on the Statutes of "PFS", Part II, 1 June 2017, nr 23.

Section VIII: Tax

THIS SECTION PROVIDES HIGH-LEVEL CONSIDERATIONS ON (I) THE LUXEMBOURG TAX QUALIFICATION OF DIGITAL ASSETS, (II) THE TAX POSITION OF LUXEMBOURG BASED ISSUERS OF DIGITAL ASSETS, AND (III) THE TAX POSITION OF THE SUBSCRIBERS OF DIGITAL ASSETS. WE ADDRESS:

- corporate income tax ("**CIT**"),
- municipal business tax ("**MBT**"),
- net wealth tax ("**NWT**"), and
- value added tax ("**VAT**").

This section provides indicative information and considerations only, and should not be considered as tax advice. Any person interested in participating in a DAGE – be it as issuer, investor or financial service provider – should seek advice on Luxembourg-related tax matters from qualified Luxembourg tax counsel.

THE LUXEMBOURG TAX AUTHORITIES HAVE PROVIDED LITTLE SPECIFIC GUIDANCE SO FAR ON THESE MATTERS, HOWEVER:

- In the context of direct taxation, there is a circular dated 26 July 2018 on virtual currencies⁷² (the "**Tax Circular**"), and
- in the context of VAT, Circular (n°787 dated 11 June 2018), confirming the VAT exempt treatment of certain operations relating to cryptocurrencies⁷³ (the "**VAT Circular**").

⁷² Circulaire du directeur des contributions L.I.R. n° 14/5 - 99/3 - 99bis/3 du 26 juillet 2018 concernant les monnaies virtuelles.

⁷³ Circulaire du Directeur de l'Administration de l'Enregistrement, des Domaines et de la TVA n°787 du 11 juin 2018 concernant les opérations portant sur les devises virtuelles.

VIII.1 Digital assets do not constitute a functional currency

Where digital assets constitute securities, they constitute an asset for the investor.

Where normally tax reporting in Luxembourg must be done in Euro, other currencies are allowed to be used as currency for tax reporting as well ("functional currencies"). This does, however, not apply to virtual currencies. The Tax Circular confirms that virtual currencies cannot be used as functional currencies for accounting and tax purposes, i.e., taxpayers cannot do their accounting and determine their tax base in a virtual currency. Instead, digital assets considered as virtual currencies should also be treated as an asset by the investor. The use of virtual currencies as means of payment is treated for tax purposes as a disposal of the amount of virtual currency paid.

The conversion into Euro (or if applicable, another functional currency of the company) of the value of the digital asset and of the income derived from the digital asset is mandatory for tax and accounting purposes. The "exchange rate" to be applied is that applicable on the date of the transaction.

VIII.2

Debt v. equity qualification of digital assets

The qualification of digital assets as debt or equity instrument is relevant because interest on debt is in general deductible for CIT and MBT purposes (subject to limitations), and not subject to withholding tax. Also, debt reduces the net assets, and therefore the NWT base of a Luxembourg company⁷⁴.

A.

THE QUALIFICATION

For financial instruments, the debt or equity qualification for tax purposes relies on the features of that instrument.

The starting point is the commercial accounting treatment. Based on the principle of accrochement laid down in article 40 of the Luxembourg Income Tax Law ("LIR")⁷⁵, tax accounts in principle follow commercial accounts unless the tax Laws provide a basis for diverging therefrom.

The absence of typical loan features, such as inter alia the repayment modalities (modalités de remboursement) and the compensation by way of an interest, may lead to the presumption that a loan in fact qualifies as hidden capital (or a so-called "other participation") rather than debt.

⁷⁴ NWT is levied at a rate of 0.5% on the net assets of companies (subject to certain exemptions). The rate decreases to 0.05% for the tranche of net assets exceeding EUR 500 million.

⁷⁵ Loi modifiée du 4 décembre 1967 concernant l'impôt sur le revenu.

⁷⁶ Article 164 LIR. A typical type of profit distribution is a dividend.

⁷⁷ Article 164 LIR.

BOTH THE CIVIL AND ADMINISTRATIVE COURTS HAVE HAD THE OCCASION TO TAKE POSITION ON THE DEBT V. EQUITY QUALIFICATION OF CERTAIN FINANCING INSTRUMENTS AND HAVE FOCUSED ON CRITERIA SUCH AS:

- the remuneration under the instrument,
- the right to participate in the profits of the borrower,
- the granting of voting rights or other shareholders' rights to the creditor, and
- the economic circumstances (would a third party have granted a loan?).

As it strongly depends on the features of the digital assets, the debt or equity characterisation of digital assets will need to be performed on a case-by-case basis.

B.

DEDUCTIBILITY OF PAYMENTS UNDER THE DIGITAL ASSETS

Where digital assets qualify as equity for tax purposes, payments made to the digital asset holders would be assimilated to profit distributions, and would not be deductible⁷⁶.

⁷⁸ Reference is made to the rules introduced with effect as of 1 January 2019 (for intra-EU situations) in article 168bis LIR, as part of the implementation of Council Directive (EU) 2016/1164 of 12 July 2016 laying down rules against tax avoidance practices that directly affect the functioning of the internal market) and the rules to be introduced as from 1 January 2020 in implementation of Council Directive (EU) 2017/952 of 29 May 2017 amending Directive (EU) 2016/1164 as regards hybrid mismatches with third countries.

C.

WITHHOLDING TAX

If the digital asset is to be qualified as equity for tax purposes, payments to investors would be assimilated to profit distributions subject to 15% withholding tax (**WHT**⁷⁹), unless a tax treaty reduces or grants an exemption from WHT⁸⁰.

IF THE DIGITAL ASSET QUALIFIES AS DEBT, THERE WOULD BE NO WHT ON INTEREST PAYMENTS, UNLESS:

WHERE THE DIGITAL ASSETS QUALIFY AS DEBT, THE REMUNERATION (INTEREST) SHOULD IN PRINCIPLE BE DEDUCTIBLE, TO THE EXTENT IT IS NOT IN DIRECT ECONOMIC RELATIONSHIP WITH EXEMPT INCOME. HOWEVER, THE FOLLOWING RESTRICTION ON DEDUCTIBILITY SHOULD BE TAKEN INTO CONSIDERATION:

- If the digital assets are considered to constitute profit participating securities (titres), the remuneration paid to the investors under the digital assets will be non-deductible⁷⁷.
- If the digital asset holders also invest in the equity of the issuer, so that they qualify as related party of the issuer, compliance with transfer pricing rules will need to be monitored, as interest above an arm's length level is not deductible.
- Depending on the investments made by the issuer, the interest deduction limitation rule (article 168bis LIR) may restrict the deductibility of the interest. This rule applies only if the digital asset issuer is a company.
- Should Luxembourg, as country of residence of the issuer, qualify the digital assets as debt, whereas the country of residence of an investor qualifies the digital asset as equity, anti-hybrid rules may result in a limitation of the deductibility of the remuneration (to be paid by the issuer to the investor under the digital assets⁷⁸). This rule applies only if the digital asset issuer is a company.

- The interest is not at arm's length, in which case the excessive interest may be requalified as hidden profit distribution, subject to WHT;
- The digital asset holders are entitled to a profit-sharing interest⁸¹; or
- The digital assets qualify as bonds (or similar securities) which, in addition to a fixed coupon, entitle the digital asset holder to a variable coupon which depends on the issuer's profit distributions⁸².

⁷⁹ Article 146(1)(1) LIR and article 97(1)(1) LIR and article 148 LIR.

⁸⁰ The domestic WHT exemption laid down in article 147 LIR would likely not apply, as one of the requirements to benefit from such exemption is to hold a participation in the share capital of the Luxembourg subsidiary. As digital assets do not qualify as shares, it appears unlikely that article 147 LIR could apply without being first amended to accommodate digital financing instruments such as digital assets.

⁸¹ Article 146(1)(2) LIR and article 97(1)(2) LIR.

⁸² Article 146(1)(3) LIR and article 97(1)(3) LIR.

VIII.3 Considerations on the tax position of a Luxembourg resident digital asset issuer

A TAX TRANSPARENT ENTITY

If the issuer is a tax transparent entity, e.g., a partnership (SCS or SCSp), it will be exempt from CIT and NWT. It may, however, be subject to MBT if it carries on or is deemed to carry on a commercial activity.

A commercial activity is an independent activity with lucrative intent carried on with a certain degree of permanence and constituting a participation in the general economic life⁸³. The latter criterion distinguishes the (relatively passive) management of private wealth, with a view to earning regular proceeds, from more active forms of investing.

B TAXABLE ENTITY

For the CIT and MBT position of the digital asset issuer, please refer to section VIII.2 above regarding the deductibility of remuneration accrued/paid under the digital assets.

⁸³ Article 14 LIR.

Where digital assets qualify as debt, they will be a deductible liability for NWT purposes, unless they finance a NWT-exempt asset, e.g., a participation qualifying for the participation exemption, in which case that liability is not deductible.

Where the digital assets qualify as equity, they will not reduce the NWT base (which is equal to the net assets).

VIII.4 Considerations on the tax position of the digital asset holder

Regarding the WHT position, please refer to section VIII.2.C above

A LUXEMBOURG RESIDENT DIGITAL ASSET HOLDERS

Luxembourg resident digital asset holders would be subject to income tax on proceeds derived from the digital assets (remuneration paid by the issuer or capital gains).

For companies, even if the digital assets are deemed to constitute equity, the participation exemption would likely not apply, as one of the requirements to benefit from such exemption is to hold a participation in the share capital of the Luxembourg subsidiary. As digital assets do not qualify as shares, it appears unlikely that article 166 LIR could apply without being first amended to accommodate digital financing instruments such as digital assets. Hence, income from and gains on the digital assets would likely be subject to CIT and MBT. The digital assets would also be a taxable asset for NWT purposes.

Tax transparent entities are CIT and NWT exempt, but may be subject to MBT on income derived from the digital assets in case the entity carries on or is deemed to carry on a business.

Natural persons should determine whether:

the income from the digital assets arises in the course of a commercial activity (and therefore qualifies as business income), or

arises in the context of the management of private wealth, in which case the income will qualify as:

income from securities (revenus de capitaux mobiliers) for the remuneration paid by the digital asset issuer⁸⁴,

or, other income, for capital gains realised on the digital assets.

The disposal of digital assets at a gain within 6 months of their acquisition would be taxed as speculation gain⁸⁵.

The disposal of digital assets qualifying as equity and constituting an "important participation" in the issuer, i.e., a participation of at least 10% in the capital or, in the absence of capital, the own funds (fonds social) of the issuer, would also be taxable⁸⁶.

If the digital asset holder is an employee of the issuer and the digital asset has been granted to the employee for no consideration or for a price lower than the fair market value of the digital asset at the granting date, this will constitute a benefit in kind in the category of employment income subject to the Luxembourg withholding tax on wages (progressive income tax rate up to 45,78%). However, the disposal of digital assets by an employee of the issuer does not constitute an income from employment income and the above rules (i.e. articles 99bis and 100 LIR) should apply.

⁸⁴ The 50% exemption of dividend income provided in article 115(15a) LIR would likely not apply, for the same reason as article 166 LIR also likely does not apply (see above).

⁸⁵ Article 99bis LIR.

⁸⁶ Article 100 LIR.

B NON-RESIDENT DIGITAL ASSET HOLDERS

Regarding non-residents, provided they have no Luxembourg permanent establishment (PE) to which the digital assets are allocated, they will not be taxed in Luxembourg on capital gains unless the digital assets qualify as equity and the non-resident digital asset holders have held an important participation in the meaning of article 100 LIR (see above).

If the digital asset holder is a non-resident employee of the issuer, the same provisions as the ones applicable to Luxembourg resident employees should apply, i.e., the Luxembourg withholding tax on wages should apply on the value of the benefit in kind granted by the issuer, to the extent that the non-resident employee is subject to the Luxembourg withholding tax on wages on his/her employment remuneration.

The disposal at a gain of digital assets by a non-resident employee of the DAGE issuer may in certain circumstances be taxed in Luxembourg, unless the double tax treaty concluded between Luxembourg and the country of residence of the employee allocates the exclusive taxing rights to the country of residence of the employee.

The mere holding of the digital assets should not trigger the creation of a Luxembourg PE for the non-resident investor, unless the terms of the digital assets are such that the digital asset holders qualify as co-operators (co-exploitants) of a collective commercial enterprise (entreprise commerciale collective).

VIII 5 VAT considerations

The VAT status of the digital asset issuer, and that of the digital asset issuance itself, highly depend on the specific features of the assets. Such a high variability in the VAT impact – coupled with the scarcity of guidance provided by the Authorities, both at a national and European level – calls for a case-by-case review of each operation.

In the absence of rules specifically tailored to DAGE operations – apart from the VAT Circular which confirmed applicability of VAT exemption to cryptocurrencies on the basis of the so-called Hedqvist decision of the European Court of Justice⁸⁷ – one must rely on general VAT principles when it comes to security-like digital assets and utility digital assets.

⁸⁷ CJEU, 22 October 2015, case C-264/14, Skatteverket v. David Hedqvist

A SECURITY-LIKE DIGITAL ASSETS

The issuance of security-like digital assets could be analysed as an issuance of shares for the purpose of raising capital, due to the equity/debt-like characteristics of security-like digital assets.

Such an issuance of security-like digital assets should not by itself confer to the issuer the status of VAT taxable person, as the raising of capital through issuance of shares is not considered to be an economic activity. It is ultimately the precise nature of the activities carried out by the issuer, after the DAGE, that will help determining whether it is – or is not – to be treated as a VAT taxable person.

The issuance of security-like digital assets falling outside the scope of VAT – if it is not an economic activity –, no VAT should apply on the issuance operation.

B PAYMENT DIGITAL ASSETS

Based on a decision of the European Court of Justice, exchange of fiat currency against cryptocurrency, in consideration for a profit margin (e.g. applied on the exchange rate), should benefit from a VAT exemption. This conclusion was further confirmed by the Luxembourg VAT Authorities, through VAT Circular 787, whereby operations covering virtual currencies should benefit from the same VAT exemption as that applicable to operations on fiat currencies.

The exchange of cryptocurrency against fiat money with a margin should therefore be construed as a service from a VAT perspective, although VAT exempt under Luxembourg VAT Law.

Such issuance of digital assets as virtual currency may therefore lead to the qualification of VAT taxable person for the entity performing the DAGE. The activity, although exempt, would indeed be treated as an economic activity and would therefore fall within the scope of VAT. The question of VAT taxable person for the issuer of the digital assets may lead to VAT compliance obligations, e.g. VAT registration, filing of VAT returns etc.

However, where the cryptocurrency is exchanged against fiat money without margin, one could argue that the operation falls outside the scope of VAT due to the absence of remuneration.

C

UTILITY DIGITAL ASSETS

Digital assets giving rights to purchase a supply of services or goods are likely to trigger different VAT questions, as tackling such supplies is the essence of this tax.

In that regard, an analogy can be drawn between utility digital assets and face value vouchers. A distinction should then be made between single purpose vouchers (SPV) and multiple purpose vouchers ("MPV").

A SPV is a voucher for which, at the time it is issued, the place of supply of the underlying services/goods is known, together with the applicable VAT rate. In other words, a SPV is a voucher for which, when issued, there is no doubt as to the VAT regime that will apply to the future supply of services / goods.

Unless a VAT exemption would apply (i.e. the underlying supply of services / goods is VAT exempt), VAT will have to be taken into account at the time of the issuance, as it is then that the tax becomes due. In practice, this entails that VAT will apply on the price paid by the investor.

The issuance of utility digital assets by a SPV should therefore be carefully reviewed, to ensure full VAT compliance in the different jurisdictions involved.

Failure to properly plan such an issuance may not only lead to fines and criminal sanctions, but may also significantly impact the result of the DAGE: in case VAT would not be properly collected and remitted to the relevant State (or deducted, as the case may be), the VAT Authorities may claim the amount of VAT that should have been collected. Said amount may then be collected out of the proceeds of the DAGE. Proper planning is therefore key. An MPV, on the other hand, is a voucher relating to a supply of goods or services whose VAT treatment cannot be determined at the time it is issued (i.e. future location of the supply, or applicable VAT rate, is unknown). It is then only when the supply of goods or services is effectively claimed by the investor that VAT will become due.

Appendix I

Glossary

A

TERMS REFERENCE

AIF

Alternative Investment Fund

AIFM

Alternative Investment Fund Manager

AIFMD

Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on alternative investment fund managers (as amended)

AMF

Autorité des marchés financiers

AMF 2018 Consultation Paper

Synthèse des réponses à la consultation publique portant sur les Initial Coin Offerings (ICOs) et point d'étape sur le programme "UNDAGERN", 22 February 2018

BaFin

Bundesanstalt für Finanzdienstleistungsaufsicht

BaFin 2018 Position

Aufsichtsrechtliche Einordnung von sog. Initial Coin Offerings (ICOs) zugrunde liegenden Token bzw. Kryptowährungen als Finanzinstrumente im Bereich der Wertpapieraufsicht, 20 February 2018

Circular 05/225

CSSF Circular 05/225

CSSF

Commission de Surveillance du Secteur Financier

DLT

Distributed Ledger Technology

EBA

European Banking Authority

EBA Report

EBA Report with advice for the European Commission on crypto-assets dated 9 January 2019

ESMA

European Securities and Markets Authority

ESMA Advice

ESMA Advice on Initial Coin Offerings and Crypto-Assets dated 9 January 2019 (ESMA50-157-1391)

FCP (Fonds commun de placement)

Common investment fund

FDI

Financial derivative instrument

Financial Sector Law/FSL

Luxembourg Law of 5 April 1993 on the financial sector (as amended)

FINMA

Swiss Financial Market Supervisory Authority

IPO

Initial public offering

Law of 1915

Luxembourg Law of 10 August 1915 concerning commercial companies (as amended)

Law of 2004

Luxembourg Law of 15 June 2004 relating to the investment company in risk capital (as amended)

Law of 2010

Luxembourg Law of 17 December 2010 on undertakings for collective investment (as amended)

Law of 2011

Luxembourg Law of 2 September 2011 on the access to the craftsman, merchant, manufacturer and other independent professions (as amended)

Law of 2013

Luxembourg Law of 12 July 2013 on alternative investment fund managers (as amended)

Law of 2016

Luxembourg Law of 23 July 2016 relating to reserved alternative investment funds

LIR

Luxembourg Law of 4 December 1967 on the income tax (as amended)

MAR

Regulation (EU) 596/2014 on Market Abuse (as amended)

MFIL

Luxembourg Law of 30 May 2018 on markets in financial instruments

MiFID II

Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments (recast) (as amended)

MTF

Multilateral trading facility

Prospectus Directive

Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading (as amended)

Prospectus Law

Luxembourg Law of 10 July 2005 on prospectuses for securities (as amended)

Prospectus Regulation

Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market (as amended)

PSL

Luxembourg Law of 10 November 2009 on payment services (as amended)

RAIF

Reserved alternative investment fund

SICAR

Investment companies in risk capital

SICAV

Société d'investissement à capital variable (French anonyim)

SIF

Specialised investment funds

SME

Small and medium enterprises

SCS

Common limited partnership

SCSp

Special limited partnership

STO

Security Token Offering

UCI

Undertakings for collective investment

UCITS

Undertakings for collective investment in transferable securities

B**DEFINITIONS**

Business Angel, also called angel investor, is an individual who invests his personal finances in a given business project, most often in early-stage innovative start-ups.

Digital Assets are assets using cryptography, tokens (utility, securities) or any new type of assets created in the digital era. The will to use a generic term – as used per ESMA – results in the spectrum of the document, analysing the regulatory framework for security-like digital assets but not limited to it. Please verify the application of Law and regulation for any digital asset.

Digital Asset Exchange (DAE) or **Digital Currency Exchanges (DCE)** are businesses that allow customers to trade payment digital assets virtual currencies for other assets, such as conventional fiat money, or different virtual currencies. They can be market makers that typically take the bid/ask spreads as transaction commissions for their services or simply charge fees as a matching platform.

Distributed Ledger Technology (DLT) is a database using a network of independent and often geographically dispersed computers to share and keep a final and definitive record of transactions. It enables to record and transfer value – in the form of digital assets – in a peer-to-peer way, without the need for a central authority.

Financial Instruments The MFIL, as well as the FSL, which was amended by the MFIL provides that financial instruments are, inter alia, the following:

- transferable securities (valeurs mobilières).
- money-market instruments (instruments du marché monétaire).
- units in collective investment undertakings (parts d'organismes de placement collectif).

Digital Assets Generating Event (DAGE), also referred to as an initial coin offering, or token offering, a means by which funds are raised for a new digital asset venture. It results in the creation and emission of digital assets. A DAGE is used by start-ups as an alternative to regulated capital-raising processes. In a DAGE campaign, a percentage of the digital assets is sold to early backers of the project in exchange for legal tender or other cryptocurrencies, but usually for Bitcoin or Ether.

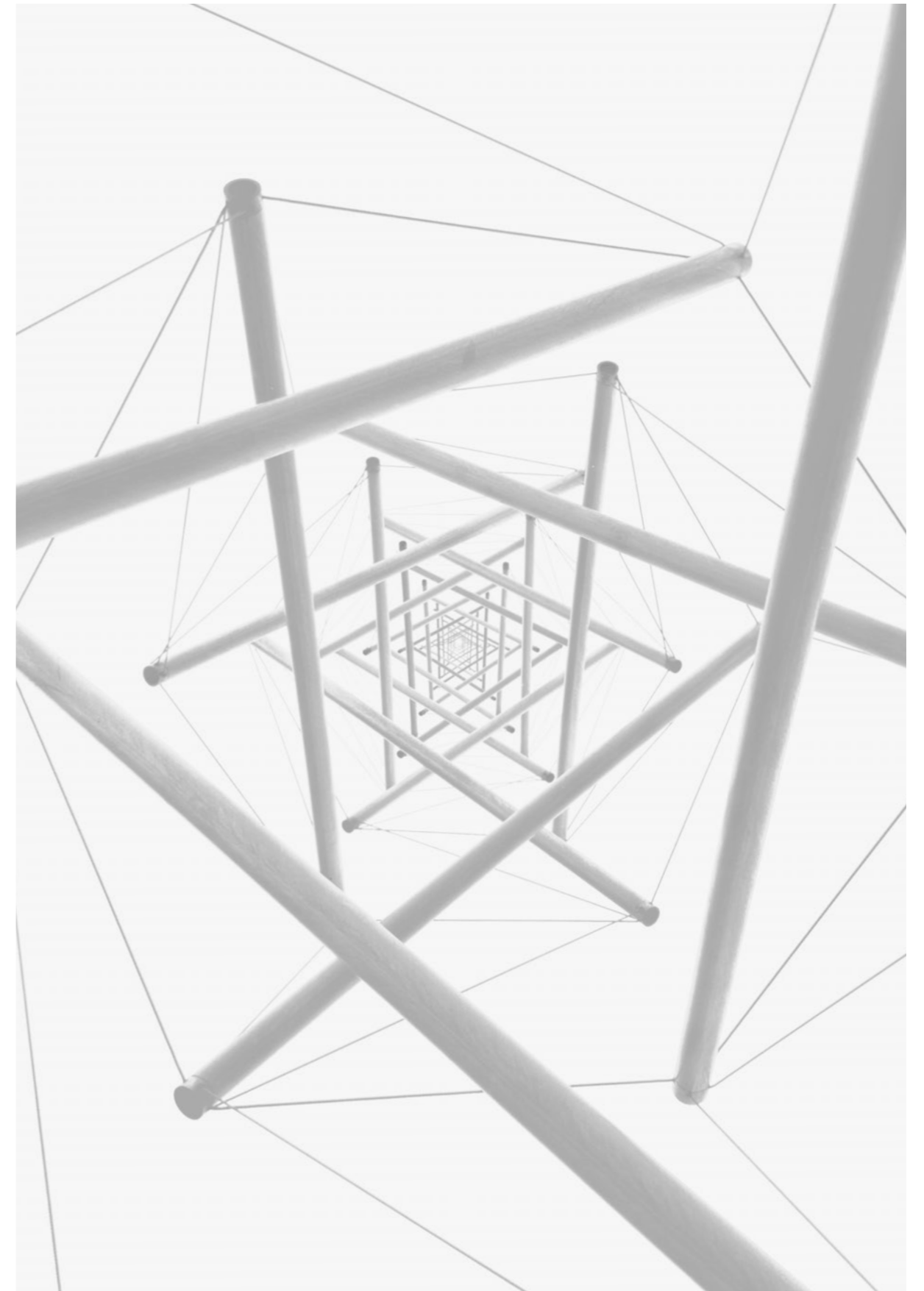
Market Abuse offences refer to certain types of behavior, such as insider dealing, unlawful disclosure and market manipulation. Firms must have safeguards in place to identify and reduce the risk of Market Abuse and other financial crimes. They are officially recognized as civil offenses by the MAR.

Payment Digital Assets (virtual currencies) European Central Bank: "a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community"; European Banking Authority: "a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a fiat currency, but is accepted by natural or legal as a means of payment and can be transferred, stored or traded electronically"

Regulatory Sandbox is a framework that gives the opportunity to regulated and unregulated entities to test innovative financial products, financial services or business models for regulatory compliance.

Transferable Securities MFIL, FSL and Prospectus Law, are further defined as: "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."

Venture Capital (VC) firm is an investment bank or other financial institution providing financing to innovative start-ups and early-stage businesses with long-term growth potential. This investment generally takes a monetary form, but it can also consist of technical or managerial expertise.



Appendix II

Description of Digital Assets features

FEATURE	DESCRIPTION	REGULATORY IMPACT	"REAL-WORLD" EXAMPLES
PROFIT-SHARING	Right to financial profit from the economic activities of the issuer/operator	No specific regulatory framework on its own (company Law). However, the digital asset may qualify as a security when profit-sharing is combined with other features, or if the issuer is a fund, in which case Laws such as the Prospectus Law, Prospectus Regulation, MFIL, MIFID2 or investment fund Laws may apply.	Share of profits/losses or as-set/liabilities Equity interests such as: <ul style="list-style-type: none"> • Company shares • Partnership interests • Investment fund interests Where convertible into, or rights to purchase, a "real-world" security investment
REVENUE RIGHTS	Right to financial benefits from revenue streams of the issuer/operator	No specific regulatory framework on its own (company Law). However, the digital asset may qualify as a security when profit-sharing is combined with other features, or if the issuer is a fund, in which case Laws such as the Prospectus Law, Prospectus Regulation, MFIL, MIFID2 or investment fund Laws may apply.	Profit participating loan Creditor/Lender Claim in bankruptcy as equity interest holder
DEBT	Right to set cash flows from the economic activities of the issuer/operator	No specific regulatory framework on its own (company Law). However, the digital asset may qualify as a security when profit-sharing is combined with other features, or if the issuer is a fund, in which case Laws such as the Prospectus Law, Prospectus Regulation, MFIL, MIFID2 or investment fund Laws may apply.	Negotiable debt obligations Bonds Loans Forms of claim or repayment obligation against digital asset issuer or a third party IOU Tokens e.g. Lykke, Tether

FEATURE	DESCRIPTION	REGULATORY IMPACT	"REAL-WORLD" EXAMPLES
FRACTIONAL OWNERSHIP	Right to a partial ownership of a product	No specific regulatory framework on its own (company and commercial Law). However, the digital asset may qualify as a security when profit-sharing is combined with other features, or if the issuer is a fund, in which case Laws such as the Prospectus Law, Prospectus Regulation, MFIL, MIFID2 or investment fund Laws may apply.	NetJets Time share rentals
FUNGIBILITY	Digital asset can be exchanged for another identical digital asset (i.e. usable on a fungible basis)	No regulatory impact on its own. If combined with tradability/transferability and security characteristics, may help qualify the digital asset as a security.	Fungible assets include: Currencies Shares
TRADABILITY	Digital asset can be exchanged for other digital assets, cash or other financial instruments	No regulatory impact on its own. If combined with tradability/transferability and security characteristics, may help qualify something as a security. If cash options, payment license or electronic money license may be required.	
TRANSFERABILITY	Right to transfer digital asset to another person	No regulatory impact on its own. If combined with tradability/transferability and security characteristics, may help qualify the digital asset as a security.	

FEATURE	DESCRIPTION	REGULATORY IMPACT	"REAL-WORLD" EXAMPLES
CURRENCY	Right to use as means of payment or settlement for services or goods	No specific regulatory framework.	Bitcoin Litecoin Gift vouchers
USUFRUCT	Right to fruits from property (recorded/registered on-chain or off-chain)	If the asset is on-chain, no specific regulatory framework. If the asset is off-chain, there may be an impact on proof of title and transferability (and consequently on definition of security).	<i>If also property feature:</i> Art lending Property rentals <i>If also equity feature:</i> Securitisations Co-ownership arrangements
PROPERTY (OWNERSHIP) RIGHT	Right to property (recorded/registered on-chain)	Usually no specific regulatory framework. If off-chain, there may be an impact on proof of title and transferability (and consequently on definition of security).	Commodities e.g. gold Collectibles – CryptoKitties, CryptoArt Land on a land registry Co-ownership arrangements The property is often unique (non-fungible).
ACCESS / UTILITY RIGHT	Right to access (and use) applications, products or services	Usually no specific financial sector regulatory framework. If cash options involved (e.g. revenue, withdrawals, credit card, etc.) • Payment services license or electronic money license might be required; Banking license might also be required if deposits or other repayable funds are obtained from the public (e.g. credit card).	Club memberships Loyalty cards Airline points cards Gift vouchers Subscriptions

FEATURE	DESCRIPTION	REGULATORY IMPACT	"REAL-WORLD" EXAMPLES
CONTRIBUTION RIGHT	Right to contribute labour, effort or resources to a system, or to contribute, programme, develop or create features in a system	No specific regulatory framework	Open source collaboration Ability to mine data in a system Mining Provision of storage etc.
GOVERNANCE	Right to vote on decisions regarding the currency, project or platform (or, more rarely, the issuer/operator) and/or right to decide on products/services /functionalities to be offered or deleted within the platform	No regulatory impact on its own. If combined with tradability/transferability and security characteristics, may help qualify the digital asset as a security.	Shares Bonds

Appendix III Contributors

We would like to warmly thank the experts from the legal industry in Luxembourg who have expressed their interest in digital assets and dedicated their time for this White Paper.

A Allen & Overy

Their Law firm in Luxembourg was founded in 1990 and merged in 2000 with Allen & Overy in order to integrate with one of the most prestigious Law firms of the British Magic Circle. More than a legal advisor in corporate or financial matters, they have become a strategic business partner for their clients. Allen & Overy has a dedicated Fintech taskforce capable of working flexibly both with start-ups and major financial institutions looking to incorporate innovative technologies in their businesses. They have the ability to operate seamlessly across a large number of jurisdictions worldwide on the full range of issues facing companies in the sector, drawing on significant resources across 44 offices.

As a means of furthering integration with the Fintech market, they recently launched Fuse, a tech innovation space aimed at fostering collaboration between lawyers, technologists and client companies.

› **PAUL PÉPORTÉ**
Partner, Luxembourg



Paul specialises in securities law and capital markets regulation. He advises clients on the full spectrum of debt and equity transactions, including securitisation, structured products, covered bonds, IPOs, placements and buy backs of securities, exchange offers, listing applications and ongoing obligations deriving from such listings.

› **BAPTISTE AUBRY**
Senior Associate,
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Baptiste advises on general banking, finance and ICM matters with a particular focus in lending, structured finance, derivatives and financial regulatory matters (including AML issues). Baptiste is a member of several ABBL working groups and also an active member of A&O's Fintech task force.

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Philippe advises on capital markets and banking & finance matters. He is a member of the "Distributed Ledger Technology" working group of the ABBL and is also a member of A&O's Fintech task force.

B Clifford Chance

Clifford Chance is one of the world's leading Law firms, helping clients achieve their goals by combining the highest global standards with local expertise. In Luxembourg they advise both international and Luxembourg-based clients, including financial institutions, business enterprises, on a wide range of matters.

Their Fintech team combines a leading local and global finance, regulatory and capital markets practice with an advanced technology capability. They are finance, funds, corporate, tax and capital markets lawyers with a long-standing experience on advising on the most complex matters, and with a deep understanding of the technological solutions Fintech actors are relying on to provide services in a different, technology-based way. They act for variety of large financial operators seeking to implement new technologies into their existing infrastructures as well as for a number of innovative Fintech operators.

› **STEVE JACOBY**
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Steve is the managing partner of Clifford Chance Luxembourg and co-head of the banking, finance and capital markets group. He advises clients on lending, securitisation, capital markets, regulatory, derivatives, general banking law, corporate law and insolvency matters. He specialises on financial regulation, including PSD2, MiFID2, as well as civil, commercial and securities law questions in relation to Fintech projects.

Steve is a frequent speaker at conferences and active locally and internationally in working groups on Fintech subjects, including Blockchain / DLT and crypto-assets.

He is a member of the Clifford Chance Global Tech team and in charge of the Clifford Chance Luxembourg Tech initiative.

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Boika specialises in banking and financial services regulation as well as derivatives, finance, securities, insolvency and general banking law matters. She advises financial sector professionals with respect to the implementation of technology-based solutions and assists FinTech companies with their legal and regulatory obligations. Boika is a member of the Clifford Chance Tech team.

C Fieldfisher

Fieldfisher is a European Law firm with market leading practices in many of the world's most dynamic sectors. It is a forward-thinking organisation with a focus on technology, finance & financial services, energy & natural resources, life sciences and media.

Fintech is about using technology to create business platforms and market infrastructure which are faster, more efficient, more secure and robust. As a leading finance and technology firm, Fieldfisher is perfectly placed to advise Fintech innovators and users in ways that create value and mitigate risk.

Fintech at Fieldfisher is an important and fast-growing sector where it advises clients on commercial contracts, fundraising, IP, M&A, tax and regulation. Its industry-leading lawyers collaborate across practices and offices to share innovative best practice and provide an efficient and total legal solution.

INGRID DUBOURDIEU

Asset Management, Finance,
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Ingrid advises local and international financial institutions and professional investors on all Luxembourg legal, regulatory and compliance matters. She specialises particularly in the structuring, conduct of business and governance of financial professionals, including regulated and non-regulated investment funds and Fintechs. She is a member of the ALFI Blockchain and Digital Assets Working Group and APSI DLT working groups. She has already assisted on several related projects, such as crypto funds and DAGEs.

D Elvinger Hoss Prussen

Their firm was founded in 1964 by lawyers committed to excellence and creativity in legal practice. Since then, they have shaped a firm fit for one purpose: to deliver the best possible advice for businesses, institutions and entrepreneurs. Their partners are uncommonly supportive of clients and of each other; and they form cross-border arrangements with peers based on each case's demands.

On technology-related matters, they provide a full range of legal advice and regulatory guidance by involving ad hoc teams of specialists active in their various practice areas such as ICT, IP and data protection; regulatory; capital markets; corporate; mergers & acquisitions; finance and investment funds. Their experience covers notably Fintech, Regtech and Fundtech (DLT, blockchains, payment services, digital assets, virtual currencies, tokenization), information technology, space industry, big data, machine learning and analytics.

GARY CYWIE

Counsel



Gary specialises in Technology and IP matters. His particular areas of expertise are the drafting and negotiating of IT outsourcing agreements in the financial services and insurance sectors, software licence and maintenance agreements and commercial contracts. In addition, he specialises in data protection and privacy, internet and e-commerce, electronic signature, electronic archiving, IT security and media and telecommunications. Gary is also involved in Fintech developments, more particularly in relation to digital ledger technologies (DLT) such as blockchains, smart contracts and virtual currencies.

E LëtzBlock - the Luxembourg Blockchain & DLT Association asbl

LëtzBlock is a non-profit association set up to promote the understanding, discussion and adoption of DLT and Blockchain technologies across all sectors in Luxembourg.

Complementing existing actors, LëtzBlock brings together the different Luxembourg Blockchain ecosystems, via community meetups, training, interdisciplinary working groups, and active engagement with governmental, sectorial, academic, business and community stakeholders.



MONIQUE BACHNER

Solicitor / Avocat à la Cour,
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ILA (the Luxembourg Director's Association)



Monique works at the cross roads of Law, governance, innovation and regulation. In addition to her corporate advisory work, she is active in areas such as technology and ethics, the governance of decentralized and autonomous ecosystems, and smart contracts.

F Loyens & Loeff

Entrepreneurship, innovation, client focus, quality awareness, and social engagement all characterise their firm's culture. Their Luxembourg Fintech team is deeply engaged in the debates around new regulation defining the Fintech ecosystem, and advises start-ups, financial institutions and investors on corporate and tax structuring, financing, licensing and regulatory requirements. Thanks to their clients' and peers' feedback, Chambers & Partners, the most renowned legal directory in the world, ranked them Band 1 for Fintech in Luxembourg.



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Anne-Marie Nicolas, attorney at Law and Avocat à la Cour, is a partner in the Banking and Finance Practice Group in their Luxembourg office. She advises in cross-border finance transactions, debt (re)structuring, as well as on regulatory (including financial technologies) and corporate governance matters.



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G. Independent contribution

MELVIN TJON AKON

Attorney at Law, admitted to the Bar of New York State



Melvin is a legal advisor who combines Law, economics and data science to assist clients across the broad spectrum of bank lending, capital markets and financial services. Prior to becoming an attorney, he worked as a research assistant at various institutions, including the Dutch Trade and Industry Tribunal, the Dutch Competition Authority and the University of Chicago.



H. The LHoFT

The LHoFT (Luxembourg House of Financial Technology) Foundation is a public - private sector initiative that drives technology innovation for Luxembourg's Financial Services industry, connecting the domestic and international Fintech community to develop solutions that shape the world of tomorrow.

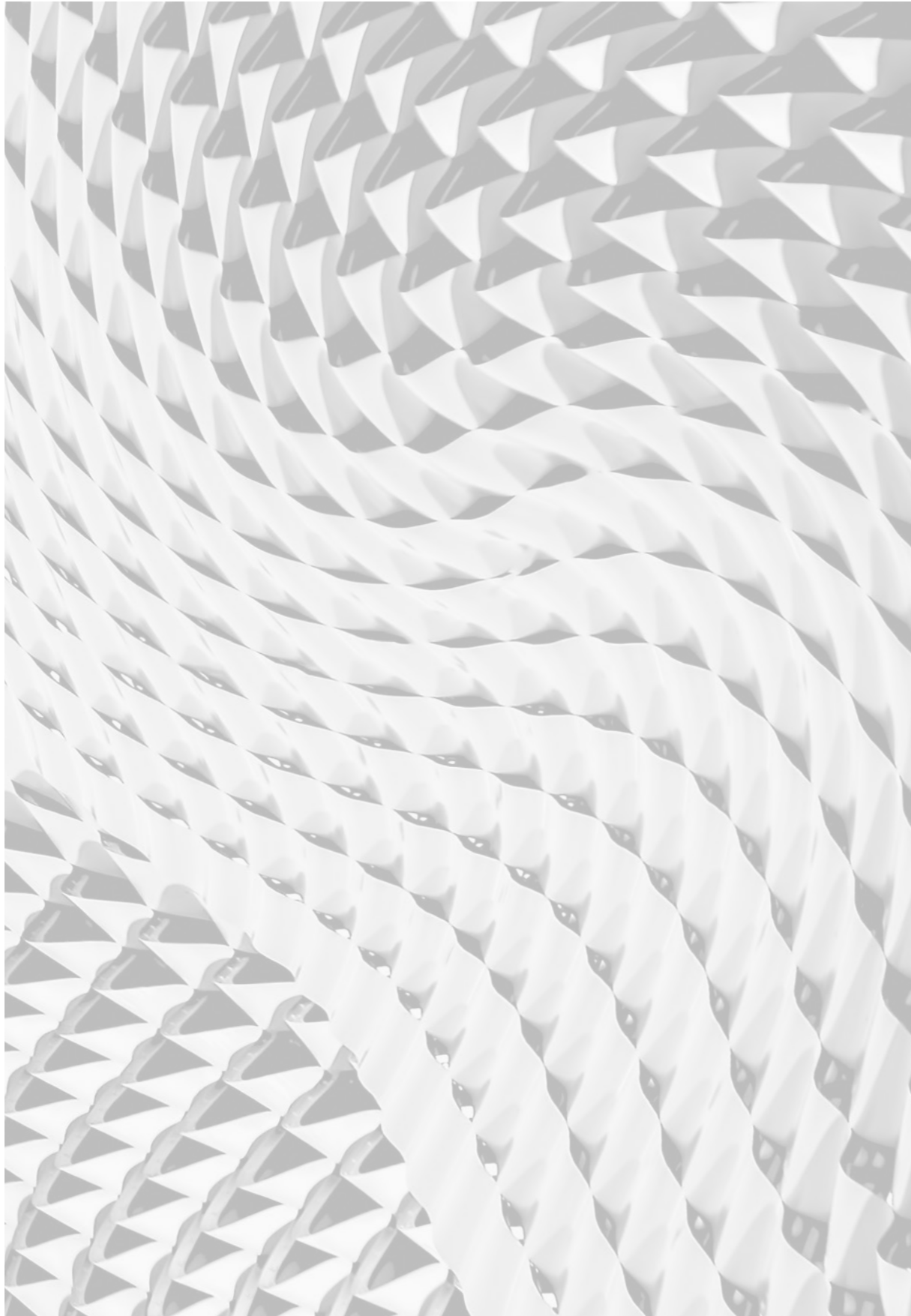
The broad mission of the LHoFT is to drive Financial Technology innovation within Luxembourg's financial services community to ensure the future competitiveness of the industry, to foster a comprehensive and collaborative globally connected Fintech ecosystem across all sectors and to position Luxembourg as a leading Fintech centre within Europe with global recognition for cutting edge innovation developments that progress financial services forward and as an attractive centre for innovative financial services businesses to establish their main EU offices. To achieve this goal the LHoFT Foundation is building a soft-landing platform that draws in a wider range of foreign Fintech participants for collaboration/partnership with the Luxembourg financial community, offering private offices, hot desks, as well as membership options.

EMILIE ALLAERT

Head of Operations and Projects



Emilie has always been active in the financial industry, focusing on the implementation of financial regulations, review of processes but also managing various IT projects with a special interest for the Fintech industry, the technologies development and its use within the financial sector. She uses her extensive experience in the banking and fund industry at the LHoFT, where she tackles some of the industry challenges with specific projects and helps review the business model of the financial industry in Luxembourg by promoting innovation and innovative solutions. She is particularly active in the digital assets and Blockchain area. She produced a report in collaboration with Stellar "Understanding Initial Coin Offerings: Technology, Benefits, Risks, and Regulations" (http://www.lhoft.com/uploads/projects/files/White_Paper_LHoFT_Stellar_2017-2.pdf). She is also co-chairman of the ALFI working group on Blockchain and digital assets.





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