



AFG response to the European Commission's public consultation on Fintech: A more competitive and innovative European financial sector

AFG, the French Asset Management Association (Association Française de la Gestion Financière) is the professional body representing the asset management industry. AFG's members are French asset managers : either boutique entrepreneurial houses or subsidiaries of banking, insurance or money management groups.

French asset managers manage in France assets worth nearly € 3,800 billion : € 1,800 billion in the form of investment funds and approximately € 2,000 billion in the form of discretionary mandates and funds domiciled abroad. Employing over 85,000 people – including 26,000 directly in asset management companies – the industry plays a key role in the financing of the real economy. 630 asset management companies operate in France, including 200 set up over the last 5 years. Over 450 of them are entrepreneurial, while 4 French groups rank among the global top 20. The French asset management industry (investment funds and discretionary mandates) ranks second on the European market with a 20% market share.

Section I - Fostering access to financial services for consumers and businesses

1.1. What type of FinTech applications do you use, how often and why? In which area of financial services would you like to see more FinTech solutions and why?

We have identified some Fintech's innovations that could potentially transform the Asset Management industry in terms of:

- Automate advice: during the initial on-boarding of clients and following interactions (Robo-advisors);
- Regtech: will enable to standardise existing reporting requirements;
- By using big data, and the assessment of non-structural data (extra financial data: from blogs or social networks) in addition to the fundamental analysis, the investment's decision strategies and process can be improved;
- By using artificial intelligence, Fintech have developed asset allocation tools based on individual preferences, risk tolerance, investments horizon;
- By using Fintech's tools, the internal processes front-to-back could be automatized;
- By using DLT technology the current information process could be potentially modified, in one hand the information process with stakeholders (custodians, account holders, distributors, data providers...) and in the other hand the information process inside the asset management company among departments.

Deloitte in its report “La fintech à la française¹” pointed out 11 main innovations in the financial services carried by Fintech:

1. Non-Traditional payment systems (funds transfer and decentralized payment systems based on blockchain technology such as Bit-Coin);
2. Cashless world (mobile payment, integrated invoicing, simplified payments and enhanced security payments online);
3. Disaggregation forces (Insurance comparators, the emanation of self-driving cars, the distribution of insurance products by Google, Amazon, Facebook and Apple (GAFA) and the development of the sharing economy focused on the uses and not the ownership that disrupt the insurance value chain);
4. Connected world (with connected objects that offer opportunities to rethink and to extend the business model from protection of goods and people to more prevention and assistance)
5. Buyer-seller’s connections (market provisioning - platforms);
6. Trading robots that will enable transactions to be carried out with greater automation and speed thanks to Big Data and Artificial Intelligence technologies;
7. Alternative lending platforms (deposits and fast loans, targeting investors with greater risk appetite and opening alternative financing to traditional bank financing);
8. Evolution of customer preferences (many innovations are customer-oriented, customized and coherent related to new distribution/communication channels, for example: development of online banks, evolution of services offered on smartphones);
9. Outsourcing of processes (for example: automation of back office tasks, the cloud computing allowing better connectivity, data sharing and data processing...);
10. Empowered investors (wealth management is democratized via innovations, social networks, robo-advisors ...);
11. Fundraising / Shareholding: crowdfunding, crowdlending.

1.2. Is there evidence that automated financial advice reaches more consumers, firms, investors in the different areas of financial services (investment services, insurance, etc.) and at what pace? Are these services better adapted to user needs? Please explain.

Digitalization brings changes in customer’s behaviour, and the use of devices such as smartphones, tablets and so on, constantly modifies the usages and needs of consumers.

We live in an era of on-demand consumption. Elements such as simplicity, accessibility, transparency, interactivity, personalization, attractive costs drive the consumption of all generations especially millennials. Fintech companies target these users and they are capable of setting up very quickly (in few months) agile tools adapted to this new trend of the demand.

In France, Fintech can develop thanks to this new consumption behavior particularly concerning banking services. According to a KPMG study, 36.2% of French consumers are Fintech customers.

¹ « La Fintech à la française : Une filière d’excellence à développer ensemble », Deloitte 2016

Concerning automated financial advice, this type of service indeed reaches a type of investors (non-sophisticated investment public) that haven't had until now access to financial advisers, thanks to a more affordable, easy-to-use solution, this kind of financial advice will probably even contribute to investors protection, as the information seems to be more transparent, they also include elements of financial education that contribute to the understanding of financial products, and thus investment process.

Automated financial advice can be fully digital and automated without human interaction, or can take the form of a hybrid solution with a human advisor at some point during the investment process. We believe that automated advice will not entirely substitute human interaction, as an advisor may respond directly to specific questions and provide information the consumer requires more precisely.

Another point of attention concerns the definition that is given to "advice" service and for which types of products (insurance, investments, pension...). In the EU, different types of advice are regulated differently and have different scopes depending on whether they fall into the banking, insurance or securities (investment management) remit. The definition of advice should then be as broad as to include all or the majority of individual's financial needs.

1.3. Is enhanced oversight of the use of artificial intelligence (and its underpinning algorithmic infrastructure) required? For instance, should a system of initial and ongoing review of the technological architecture, including transparency and reliability of the algorithms, be put in place? What could be effective alternatives to such a system?

As for any innovation or new process in the financial sector, an enhanced oversight of artificial intelligence and its underpinning algorithmic infrastructure is required. In terms of controlling system to put in place, it should be developed by experts taking into consideration all the elements that are analysed by the artificial intelligence particularly data and information consistency as well as algorithm infrastructure. However, the regulatory oversight should not discourage innovation by serving as a barrier to entry into the financial services market.

1.4. What minimum characteristics and amount of information about the service user and the product portfolio (if any) should be included in algorithms used by the service providers (e.g. as regards risk profile)?

It is difficult to identify minimum characteristics and amount of information. However, it is certain that more the data is available the more accurate the services will be. Algorithms depend on the input of data which has to be relevant and consistent in order to ensure that the output is based on the most reliable information.

1.5. What consumer protection challenges/risks have you identified with regard to artificial intelligence and big data analytics (e.g. robo-advice)? What measures, do you think, should be taken to address these risks/challenges?

Consumer protection lies in the understanding of the service and the risks (any kind) that they incur in using them particularly concerning robo-advisors' services and products. The information that digital advisors have to provide to customers includes: service's costs, as well as information about the potential risks (market, financial, operational, technological).

From the regulatory perspective, in addition to the well-known privacy and security challenges that come with the digitization of personal financial data, there are **new regulatory challenges** that are more specific to automated advice. The supervisor should invest in new kind of expertise in order to be able to assess². :

- the algorithms and data incorporated in the automated advisors;
- the choice architecture through which the advice is presented;
- the underlying information technology infrastructure;
- the downside risk from the scale that automation makes possible.

However, it is important to stress the importance of the principle of equity before the law, which applied to robo-advisors means that they should be subject to the same regulation framework and supervision as traditional advisors with a particular attention on some elements such as: Data protection and cybersecurity, trading practices, algorithms design and oversight, cost transparency, risk information and KYC requirements.

This being said and in consideration of the fact that this type of advice is still a niche, NCAs' investment engaged for its supervision should remain proportionate.

Section II - Bringing down operational costs and increasing efficiency for the industry

2.1. What are the most promising use cases of FinTech to reduce costs and improve processes at your company? Does this involve collaboration with other market players?

Fintech have benefited from a more favorable ecosystem since the 2008 crisis, notably in terms of regulatory openings (In the Credit and Payment markets regulatory evolutions open the way for new entrants), Fintech are supervised by regulators but they benefit from more flexible status due to the non-exhaustive nature of their activities.

Fintech activity is seen by a large majority of traditional players more as an opportunity, to integrate the solutions of these start-ups, than as a threat. As a matter of fact, traditional players are willing to interact with Fintech. In the case of asset management activity, the French Asset Management

² « Regulating Robo Advice across the financial services industry », Tom Baker, Iowa Law Review, Vol. 103, Forthcoming, U of Penn, Inst for Law & Econ Research Paper No. 17-11

association's *Research and Innovation* Commission provides, in his 2017 published report³, some specific examples of potential interactions between Fintech and traditional players.

Thus, the interactions between traditional players and Fintech can take different forms and might lead to synergies generating cost reduction and / or optimization of means: Partnerships, incubation, investment, acquisition ...

- Partnerships: collaboration between a fintech and a traditional company
- Incubation: A business incubator or a startup accelerator is a structure for accompanying business creation projects. The incubator can provide support in terms of accommodation, counseling and financing during the early stages of the company's life
- Investment: acquisition of stakes in Fintech capital
- Acquisition: purchase by a traditional company of a fintech

Fintech have a strong potential of development in France, despite some challenges that still need to be overcome, such as personal data security issues, lack of understanding of the solutions proposed by Fintech, ... However, it is certain that the emergence of these players is an opportunity for growth, transformation and innovation for both traditional players and Fintech themselves. Traditional players will be able to benefit from Fintech's technological know-how and for Fintech is also an opportunity to find customers as well as to find financing for their development with solid players.

The most **disruptive** use case from the Asset management perspective could be the use of DLT particularly for information sharing, data management solutions, DLT adopted by market participants as main infrastructure (transactions settlement and delivery, as well as payments infrastructure)⁴.

As currently all DLT implementations are proprietary solution without interoperability due to missing standards, DLT is not mature for a large scale implementation and/or for systemically critical financial infrastructures. In the field of post market and of payment versus delivery of securities, Target 2 Securities which is quite a recent improvement of the euro zone provides a very high degree of efficiency and one should of course avoid the risk of 'dropping the prey for the shadow'.

2.2. What measures (if any) should be taken at EU level to facilitate the development and implementation of the most promising use cases? How can the EU play its role in developing the infrastructure underpinning FinTech innovation for the public good in Europe, be it through cloud computing infrastructure, distributed ledger technology, social media, mobile or security technology?

The challenge for policymakers is to ensure that FinTech develops in a way that maximises the opportunities and minimises the risks for the good financial market functioning. As from now the Fintech innovation are still in experimentation, the European Commission should have an open-position in terms of legal framework. In fact, it would be detrimental to define too strict legal

³ « Guide de la transformation Digital des Sociétés de Gestion en SGP 3.0 », AFG 2017

⁴ « Unlocking economic advantage with Blockchain : A guide for asset managers », Oliver Wayman, J.P. Morgan

framework. Therefore, it should be sufficiently flexible to allow the development of future technologies.

2.3. What kind of impact on employment do you expect as a result of implementing FinTech solutions? What skills are required to accompany such change ?

The advent of new players - Fintech that have access to a large amount of data thanks to Big Data - comes with new talents that are able to combine two essential characteristics: technological skills for information processing and financial technical skills for qualitative and quantitative data analysis.

As highlighted in a PWC report: when new technologies enter the workplace, workers' skills and experience must evolve accordingly. Current employees need to keep abreast of new skills requirements and develop themselves to remain attractive to employers. Because new programming or digitally related skills cannot be taught formally, it is up to employees to build networks locally and embrace the emerging trends and technologies. Talent management frameworks should encourage and reward this attitude.

The implementation of a Fintech does not necessarily mean jobs destructions and unemployment, however it is certain that new skills will be needed, thus training is mandatory to create value-added jobs and business performance.

Of course any excessive regulatory advantage granted to 'sandboxes' which would not be withdrawn in due time once this new firms become competitive actors could have detrimental effects in terms of equilibrium of the financial ecosystem. In addition, one must look even further: in fact, a new phenomenon which has been recently observed is that many millennials get a little bit tired with screens and digital and often look for more traditional types of human relationships.

2.4. What are the most promising use cases of technologies for compliance purposes (RegTech)? What are the challenges and what (if any) are the measures that could be taken at EU level to facilitate their development and implementation?

Regtech (regulatory technology) refers to a new generation of players that deal with regulatory challenges in the financial services sector through innovative technology. These Regtech companies use technology to help businesses comply with regulations efficiently and inexpensively.

Their specificity is to rely on innovative technologies to respond quickly to the needs of their customers: artificial intelligence, Big Data, cloud infrastructures, **DLT...**

These new players are an agile response to regulatory requirements and have an impact on risk control, compliance, and legal activities, and might reduce low value added tasks in compliance processes.

According to a Deloitte report⁵ : Regtech have proven successful in some activities such as quant based obligations, information based obligations and risk identification and management tools for example: Legislation / regulation gap analysis tools, compliance universe tools, management Information tools, transaction reporting tools, regulatory reporting tools, risk data warehouses.

⁵ « Regtech is the new FinTech. How agile regulatory technology is helping firms better understand and manage their risks », Deloitte, 2016

Another Deloitte⁶ report stands that in the short term Regtech, thanks to the technological support, will help investment management firms to automate compliance tasks and reduce operational risk and costs associated with meeting compliance and reporting obligations. In the long term Regtech solution will empower compliance functions to make informed risk choices based on data-backed insight about the compliance risks they face and how they mitigate and manage those risks.

Here below, the main Regtech solutions in the asset management industry:

1. Risk Data through the use of Big Data by collecting and assessing of a large amount of data regarding risk elements and by providing industrialized market risk calculation services (volatility and ex-ante VaR, tracking error indicators).
2. Real-time transaction monitoring: for example, some regtech have developed tools for the industrial management of ALM (Anti Money Laundering); other companies provide services in terms of matching and confirmation of orders with market counterparties, whether these orders are OTC or are processed on trading platforms
3. Regulatory reporting: with software that allows the automated management of fund's prospectus, automatic document management and fast editing of changes and translation modules enabling the semi-automated production of documents in other languages.

2.7. Which DLT applications are likely to offer practical and readily applicable opportunities to enhance access to finance for enterprises, notably SMEs?

In France⁷, the DLT ability to improve and simplify the chain of post-trade operations, particularly through consolidation of securities registers and securities settlement, enabling security and speed of execution, has prompted 7 major Financial institutions to join forces to develop a post-market Blockchain infrastructure for the SME segment in Europe.

This pilot agreement aims to improve SME's access to capital markets while facilitating secure and transparent post trade operations. By reducing transaction costs while maintaining a high level of security, the solution would help SMEs raise funds more easily on capital markets. Blockchain technology has the potential to significantly enhance and streamline post-trade operations by facilitating securities registration for the European market and allowing fast execution of trades with clearing and settlement in real time.

⁶ « How Fintech can facilitate fund distribution », Deloitte, 2016

⁷ <https://www.euronext.com/en/news/major-financial-institutions-join-forces-develop-blockchain-infrastructure-sme-post-trade>

2.8. What are the main challenges for the implementation of DLT solutions (e.g. technological challenges, data standardisation and interoperability of DLT systems)?

In the long-term, Blockchain technology may completely redefine the landscape of the investment management industry, as DLT has the potential to make trading and post-trading processes much more efficient, improve transparency and audit trails, and eliminate intermediaries which may enable costs reductions.

The three challenges are of great importance in order to ensure the implementation of DLT solutions:

1. **Data standardisation** : By enforcing convergence on common data standards and eliminating the need for a central authority to hold a “golden record⁸,” DLT can reduce reconciliation and facilitate seamless transfer of digital assets. Focusing on key data formats (i.e. LEIs, UTIs, UPIs, ISINs and prices as a minimum) could facilitate the automation of reporting.
2. **Technological developments**: as the technology is at its early stage, the system has to be flexible for new technological developments
3. **Full interoperability of DLT systems**: this element is key and essential, no single blockchain will probably fulfill all requirements for all financial products. Interoperability is necessary but should be better defined depending on whether the instrument concerned is the subject of a secondary market or not, and whether transactions are treated as liabilities or as assets in the portfolios.

We have identified some other challenges that also require particular attention:

4. **Data protection**: one characteristic of the DLT is that they provide a fairly secure way of storing and managing information, including personal data by using cryptography (digital signatures, encryption, time-stamping). Thus this advantage of the technology should enable to build a truly effective framework for the protection of personal data in which the use of personal data must be specified and protected.
5. **Cybersecurity**: DLT might have certain advantages relative to current systems especially concerning security and resilience to a cyber-attack or a system breakdown. The distributed and shared nature of the system could facilitate the recovery of both data and processes in the case of an attack⁹. However, the risk of cyber-attack should not be underestimated.
6. **DLT Governance**: Securities markets are organized around networks of trusted parties with robust governance frameworks which are either prescribed by regulation or are the result of

⁸ « Unlocking economic advantage with Blockchain : A guide for asset managers », Oliver Wayman, J.P. Morgan

⁹ « Idem »

agreements between participants. These governance frameworks are meant to support trust by establishing the obligations, the liabilities and rights of the participants¹⁰.

It is then of great important for the market participants to put in place appropriate governance frameworks in order to deploy DLT in the market. Frameworks should include provisions on the liability of the respective parties, rules to approve/reject authorised participants... and they have to be adapted to the DLT features and functions.

2.9. What are the main regulatory or supervisory obstacles (stemming from EU regulation or national laws) to the deployment of DLT solutions (and the use of smart contracts) in the financial sector?

We have not yet identified regulatory or supervisory obstacles as the use of the DLT is at its early stage and no concrete solution using DLT technology has yet been put into production.

However, The French General Treasury launched a consultation on the DLT technology. The Sapin II act empowers the Government to reform the applicable law to certain financial securities in order to allow their representation and transmission thanks to the DLT.

The definition of a robust framework ensuring the legal certainty of the financial transactions carried out using this technology is an important lever for the public authorities, in a context where the rules of the game at European or international level are intimately linked to the ability to host specific projects. In order to identify any regulatory obstacle, AFG (French Asset Management Association) contributes significantly to the French Treasury work on the establishment of a legal framework for the DLT.

AFG has also created a Blockchain working group that encompasses the biggest asset managers on the financial center in Paris that aims to identify the potential impacts, risks and opportunities of this technology for the asset management industry.

AFG is also an active member on the Blockchain Commission of Paris Europlace which aims to accompany the French legislator in its desire to allow the use of Blockchain technology in financial markets.

¹⁰ « The Distributed Ledger technology applied to securities Markets », ESMA 2017

2.12. Can you provide further examples of financial innovations that have the potential to reduce operational costs for financial service providers and/or increase their efficiency and of the related challenges?

A PwC¹¹ report identifies three areas within the asset management industry that stand to benefit from Blockchain technology are:

- 1. Settlement:** By removing intermediaries and providing a trusted and shared view of permissioned data, blockchain could:
 - Reduce costs (e.g. fewer reconciliation errors)
 - Speed up settlement (e.g. faster validation)
 - Increase resilience (e.g. no single point of failure)
 - Improve transparency (e.g. easier to monitor)

- 2. Transfer Agency:** The increased transparency afforded by blockchain provides the opportunity to disintermediate and create direct linkage between fund managers and distribution platforms.
The prevalence of intermediaries (fund platforms and brokers) operating at an omnibus level changes the role of transfer agents.

- 3. Fund valuations:** Blockchain could bring benefits to the valuations process as it:
 - Enhances the accuracy and timeliness of record keeping
 - A time-stamped, source of pricing data
 - Opportunity to share common view of data with service providers

Section III - Making the single market more competitive by lowering barriers to entry

3.3. What are the existing regulatory barriers that prevent FinTech firms from scaling up and providing services across Europe? What licensing requirements, if any, are subject to divergence across Member States and what are the consequences? Please provide details

At this early stage, we have not identified regulatory or supervisory barriers that prevent FinTech firms from scaling up and providing services across Europe.

¹¹ « Blockchain - The next wave of digitisation in asset management », PwC Malaysia, December 2016

3.4. Should the EU introduce new licensing categories for FinTech activities with harmonised and proportionate regulatory and supervisory requirements, including passporting of such activities across the EU Single Market? If yes, please specify in which specific areas you think this should happen and what role the ESAs should play in this. For instance, should the ESAs play a role in pan-EU registration and supervision of FinTech firms?

The challenge for policymakers is to ensure that FinTech develops in a way that maximises the opportunities and minimises the risks for the good financial market functioning. As from now the Fintech innovation are still in experimentation, the European Commission should have an opened-position in terms of legal framework.

3.5. Do you consider that further action is required from the Commission to make the regulatory framework more proportionate so that it can support innovation in financial services within the Single Market? If so, please explain in which areas and how should the Commission intervene.

The challenge for policymakers is to ensure that FinTech develops in a way that maximises the opportunities and minimises the risks for the good financial market functioning. As from now the Fintech innovation are still in experimentation, the European Commission should have an opened-position in terms of legal framework.

3.7. Are the three principles of technological neutrality, proportionality and integrity appropriate to guide the regulatory approach to the FinTech activities?

Yes, the three principles of technological neutrality, proportionality and integrity are appropriate.

3.9. Should the Commission set up or support an "Innovation Academy" gathering industry experts, competent authorities (including data protection and cybersecurity authorities) and consumer organisations to share practices and discuss regulatory and supervisory concerns? If yes, please specify how these programs should be organised?

The innovation Academy approach is welcomed. Any approach of that kind is positive and will enable the synergy between industry experts, competent authorities and consumer organizations.

The programs can be organized by group (field of expertise) where representatives of the industry, authorities, consumers and experts will be able to expose a particular topic. The topic should be designed by a high-level committee which will be in charge of all the strategic decisions.

3.14. Should the EU institutions promote an open source model where libraries of open source solutions are available to developers and innovators to develop new products and services under specific open sources licenses? What other specific measures should be taken at EU level?

Yes, the EU institutions should promote an open source model as an open-source architecture brings more advantages by reducing implementation costs, by facilitating portability and access and by avoiding entry barriers.

3.15. How big is the impact of FinTech on the safety and soundness of incumbent firms? What are the efficiencies that FinTech solutions could bring to incumbents? Please explain.

Incumbent firms need to find the optimal engagement approach for interaction with Fintech as the impact of Fintech on its activities will depend on the interaction they select: Partnership, acquisition, investments...

In the asset management industry for example: Big data and artificial intelligence solutions have been adopted by several traditional players in order to improve the investment decisions and strategies, as well as to improve client profiles, for asset allocation, using non-structural data. Others have adopted robo-advisor's solutions to target other types of customers and thus amplified their services offer. Regtech solutions have an impact on cost reduction of compliance functions for incumbent firms.

The transformation process initiated by Fintech represents an opportunity for those involved to understand how and to what extent Fintech has an impact on their business, who will be able to take the right actions, learn from the past and be proactive in managing change.

Section IV - Balancing greater data sharing and transparency with data security and protection needs

4.2. To what extent could DLT solutions provide a reliable tool for financial information storing and sharing? Are there alternative technological solutions ?

It seems that DLT can provide a reliable tool for financial information and sharing, DLT is decentralized register or database which serves as an online ledger keeping record of transactions that cannot be modified. It is a storage and transmission of information technology, which main characteristics are: transparency, security and decentralization.

The main features of any DLT are the following¹²:

- a distributed database, that is the ability given to participants to share the same information;
- a consensus protocol allowing the participants to agree on legitimate transactions;
- a stamping mechanism for transactions: once validated, transactions become immutable;
- secure authentication of participants and of their holdings;
- a real-time settlement mechanism, which is a direct consequence of properly applying the consensus protocol.

Nevertheless¹³, it is important to point out some elements that need to be solved before using a DLT technology:

¹² « The FundsChain : Distributed Ledger Technology for Asset Management Industry », White Paper, November 2016

¹³ « Guide de la transformation Digital des Sociétés de Gestion en SGP 3.0 », AFG 2017

- As Blockchain information is anonymized, it will be necessary to provide identification keys to reassign the historical data to the legal entities concerned;
- The information exchanged in the Blockchain must be standardized to be exploitable, including over a long period (a multitude of standards would prevent economies of scale);
- In order to maintain security accounts through Blockchain, the law should recognize the terms of information's registration and retention

Concerning the Asset management industry, the use of DLT technology impacts both the management of the asset side and the management of the liability side. By using DLT technology the current information process could be potentially modified, in one hand the information process with stakeholders (custodians, account holders, distributors, data providers...) and in the other hand the information process inside the asset management company among departments.

Impacts of DLT on the asset side (Non-exhaustive list):

- Post trade
- Voting process at general meetings
- Transactions settlement management
- Collateral management
- Shareholders' register
- Transactions reportings: MIFID, SFTR, EMIR
- AIFM Regulatory reporting

Impacts of DLT on the liability side (Non-exhaustive list):

- Investment Funds distribution
- Direct distribution of funds to investors through PSD2
- The maintenance of the unitholder register
- The life cycle of the funds including the management of any fund's events from inception to dissolution
- Monitoring and payment of retrocessions
- Holder's informations, updating information harmonization (Fact sheet, KIID)
- Order's marking

The adoption of DLT technology would have significant positive effects for the asset management industry, provided that a global approach is taken enabling the substitution of some existing post-market infrastructure to a more efficient solution, which will be able to provide homogenized processing for listed and unlisted securities.

4.4. What are the challenges for using DLT with regard to personal data protection and how could they be overcome?

The provisions of the General Data Protection Regulation (GDPR- EU Regulation No 2016/679) on the protection of individuals with regard to the processing of personal data and on the free movement of this type of data would not prejudice the implementation of the DLT system.

Indeed, no right to oblivion can prosper on a DLT registration that would represent the property of a holder on its securities. As a result, a recent judgment of the CJEU (CJEU, 9 March 2017, aff. n° C-398/15) held that there was no right to be forgotten for the personal data contained in the register of companies of a Member State.

However, only relevant personal information for the use of the DLT will be required.

In any event, it is technologically possible to restrict access to the personal data of participants who would be registered in the DLT, or even to isolate this data from the shared DLT database (for example by creating a data register completely private and managed exclusively by the manager in which these data would be recorded).

4.7. What additional (minimum) cybersecurity requirements for financial service providers and market infrastructures should be included as a complement to the existing requirements (if any)? What kind of proportionality should apply to this regime?

Asset management industry pays special attention to Cybersecurity issue. The industry’s awareness concerns subjects such as: Data protection, business data security, ransomware, correct use of passwords...). European and national asset management associations contribute to the promotion of best practices on Cybersecurity.

According to the Investment Industry Regulatory Organization of Canada¹⁴, here below some cybersecurity recommendations for the Asset management industry:

- Deploy and maintain an automated asset inventory discovery tool, and use it to build an inventory of systems connected to the organization's private and public network
- Use Dynamic Host Configuration Protocol (DHCP) server logging to improve the asset inventory and help detect unknown systems through this DHCP information
- Ensure that the inventory system is updated when newly acquired and approved equipment connects to the network
- Deploy Network Access Control (NAC) and network level authentication via 802.1x. These security services prevent unauthorized devices from connecting to the network
- Utilize client certificates to validate and authenticate systems prior to connecting to an organization’s network.

In the area of Cybersecurity, AFG is raising awareness among asset management companies of the growing threats to computer data piracy and cyber-attacks, by organizing events where experts expose the main risks in the field of cybersecurity, especially for financial institutions.

AFG has also set up a working group to enable asset management companies to share their cybersecurity knowledge and to identify the main guidelines to be implemented in order to guard against cyber-attacks.

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¹⁴ [IIROC : Cybersecurity Best Practices Guide](#).