ECSDA
European Central Securities Depositories Association

Published on 15 June 2017

European Central Securities Depositories Association response to the European Commission consultation on FinTech

This paper constitutes ECSDA's response to the consultation issued by the European Commission on 23 March 2017 entitled "FinTech: A more competitive and innovative European financial sector."

ECSDA represents 41 European Central Securities Depositories (CSDs), across 37 European countries. The members of the association are located both within and outside of the European Union. Jointly, ECSDA members hold securities valued for more than € 53bn, and deliver annually securities for more than €1.1 tn.

Executive Summary

We thank the European Commission for the opportunity to provide our responses to the questions raised in the consultation.

We are very supportive of innovation and technological developments, including in the areas directly linked to CSD activities. Members of ECSDA observe and actively participate in some innovation initiatives.

There are many factors that are likely to transform the financial industry radically. Costs and margin pressure, the needs of a single access point, to name a few, are likely to blur the borders between different business models in financial and other markets. The role of CSDs is likely to change in the future as well. European legislators should not aim at providing a rigid legislative framework based on current business model and activities, or preventing the development of financial institutions, including of CSDs, in the future. Current strictly regulated players should have equal chances to succeed in the future, and be allowed and encouraged to evolve.

The importance of a regulated entity providing fundamentally important services for the economy is, however, likely to increase even further. We therefore, would like to emphasise the following principles:

I. A technology-neutral policy - equivalent business activities should be subject to equivalent regulation.

II. A need for a reflection on legal aspects of new technology.

III. The global reach of this technology beyond the EU needs to be taken into account.

IV. The gradual development of technology will require interoperability and complementarity between any new and current technology.

1. Fostering access to financial services for consumers and businesses

Despite the fact that this section is currently not relevant for Central Securities Depositories, it might be relevant in the future.

Q1.1 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?

No comments.

Q1.2. 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.

No comments.

Q1.3. 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?

No comments.

Q1.4. 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)?

No comments.

Q1.5. 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?

No comments.

Q1.6. Are national regulatory regimes for crowdfunding in Europe impacting on the development of crowdfunding? In what way? What are the critical components of those regimes?

No comments.

Q1.7. How can the Commission support further development of FinTech solutions in the field of non-bank financing, i.e. peer-to-peer/marketplace lending, crowdfunding, invoice and supply chain finance?

No comments.

Q1.8. What minimum level of transparency should be imposed on fund-raisers and platforms? Are self-regulatory initiatives (as promoted by some industry associations and individual platforms) sufficient?

No comments.

Q1.9. Can you give examples of how sensor data analytics and other technologies are changing the provision of insurance and other financial services? What are the challenges to the widespread use of new technologies in insurance services?

No comments.

Q1.10. Are there already examples of price discrimination of users through the use of big data? Can you please provide examples of what are the criteria used to discriminate on price (e.g. sensor analytics, requests for information, etc.)?

No comments.

Q1.11. Can you please provide further examples of other technological applications that improve access to existing specific financial services or offer new services and of the related challenges? Are there combinations of existing and new technologies that you consider particularly innovative?

No comments.

2. Bringing down operational costs and increasing efficiency for the industry

Q2.1. 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?

The field of tax services seems to be an area where a collaboration between financial market infrastructures and other actors could be particularly beneficial. The involvement of multiple actors will help ensure a successful integration of Distributed Ledger Technology (DLT) and Blockchain in financial services. DLT solutions could provide the market with not only a high degree of transparency but it is also beneficial in terms of reducing cost throughout the whole process and life cycle of an asset, from issuance to trading and post-trade, including clearing, settlement and custody services.

In the case of CSDs, we note that the application of DLT is most likely to start in the area of ancillary services, particularly the ones involving the processing and storage of data. In our field, some of the promising cases of use of FinTech in terms of improving the efficiency of post-trade processes and reducing the cost of financial transactions could be:

1) ***Use of distributed ledgers to store information on end investors***

DLT could potentially bring enhanced transparency, making it much easier for issuers and regulators to identify shareholders, bondholders and other investors. The registration of securities could be managed in the distributed ledger, removing the need for investor identification details to be "passed on" from one intermediary to another. This kind of technology could be used for example for the authentication of shareholders in the process of e-voting and could be matched with an application for counting votes and obtaining voting results by the shareholder.

2) ***Use of smart contracts for processing corporate actions***

Where corporate actions on securities are not yet fully automated, e.g. for instruments such as investment fund units or complex derivative contracts, the use of 'smart contracts' could potentially bring about significant efficiencies.

3) ***Use of DLT and smart contracts for management of claim procedures and contracts***

We are aware of initiatives in other industries (e.g. in insurance) where this has been tested. We are watching with interest as to how post-trade could be inspired by the technology that effectively connects external programmes and certificates managed outside the DLT network and the use of smart contracts.

Q2.2. 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 promotion of regulatory sandboxes and consortiums of companies at EU and national levels is essential. We would advise that the authorities closely follow key projects related to FinTech, especially those related in Blockchain. Such involvement would help activate the regulatory response that ensures the "technology-neutrality" invoked as a guiding policy by EU authorities, including in this consultation.

Q2.3. What kind of impact on employment do you expect as a result of implementing FinTech solutions? What skills are required to accompany such change?

It is foreseeable that employees will need more technological skills, as the number of technologies embedded in the work environment in finance-related professions will become greater. We can expect a rising demand

for software developers and business process analysts. Legal and regulatory experts would also need to expand their knowledge to a certain level of understanding of technology.

The programming and basic knowledge of such technologies, which was limited to a closed range of professions, will become essential in the education of new professionals. To ensure that the European Union remains a thought leader and a major technological pole, the promotion of digital education is required. Such education will be needed not only from a consumer protection or financial integration perspective, but also be required within the "*financial sector, within regulatory bodies and within society as a whole, including vocational training*", as recently underlined by the European Parliament (European Parliament resolution of 17 May 2017 on FinTech (2016/2243(INI)).

People (and not machines) shall master and retain full control and understanding of technology, modelling and automated processes.

Q2.4. 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?

The use of distributed ledgers could allow for faster, more complete and accurate regulatory reporting. DLT could improve the quality of data while reducing the ownership hierarchy to a single and transparent chain. This could create significant efficiencies for the reconciliation of records, as well as discoverability, analysis and reporting of data.

In our opinion, one of the main challenges would be to create a single standard of data and protocols, which would enable an interoperability between systems.

Q2.5. What are the regulatory or supervisory obstacles preventing financial services firms from using cloud computing services? Does this warrant measures at EU level?

The data ownership aspect is very critical to financial services firms. The importance of data security cannot be overstated as the potential implications of reputation risk in this context are considerable in the event of a data breach.

Q2.6. Do commercially available cloud solutions meet the minimum requirements that financial service providers need to comply with? Should commercially available cloud solutions include any specific contractual obligations to this end?

Currently, it is considered that there are several leaders in the field of developing DLT applications. One in particular is the most developed and established technology and has a strong and widespread community of developers. The other is likely to become stable soon. Both technologies have a wide number of sponsors, a

huge number of them related to the finance sector that are willing to create applications over the basis of both technologies. However, as trust and legal certainly are of utmost importance for CSDs, the minimum requirements would make their usage in our area more likely. At the same time, they should not be too rigid in order to allow for innovation and quick evolution of technology.

Q2.7. Which DLT applications are likely to offer practical and readily applicable opportunities to enhance access to finance for enterprises, notably SMEs?

There are technological challenges to be understood. For instance, Smart contracts will need to become more complex for them to adapt to transactions and back-office operations in the financial sector. Furthermore, interoperability (between different DLT applications and systems, as well as between DLT and currently operating systems) will be not just a technological solution, but also a governance challenge between sponsors and developers of cooperating companies.

Furthermore, there is a challenge in promoting the necessary willingness for being part of the development of DLT initiatives among the relevant authorities. There is a need for cooperation between project developers and sponsors, and authorities could be regarded as a neutral stakeholder of such initiatives, and that could help their governance.

Q2.8. What are the main challenges for the implementation of DLT solutions (e.g. technological challenges, data standardisation and interoperability of DLT systems)?

We foresee that there will be a long transition phase between existing and DLT solutions. End-to-end processes involve many participants and this requires finding a consensus and interoperability among different systems and interfaces. A variety of DLT solutions need to be aligned/synchronised towards a variety of different interfaces.

Q2.9. 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?

Firstly, in line with a technology-neutral policy, the same activities should be subject to the same regulation. We believe that any actor that performs the functions of a regulated entity, including of a CSD, shall be regulated in the same way. If settlement can be provided on a distributed ledger, it shall only be provided by an entity subject to CSD Regulation (Regulation EU 909/2014).

Secondly, there is a need for a reflection on legal aspects of the new technology. Technological challenges are being progressively resolved, and the legal environment needs to evolve at the same pace. One of the challenges in terms of regulation is related to the enforceability of possible solutions in case of disputes arising from DLT. In a first instance, contractual frameworks may offer certain comfort to parties directly

involved in the initiative. However, regulators need to foresee and establish the enforceability of rights and obligations vis-à-vis third parties, including in cases of insolvency of the contractual parties.

Thirdly, the global reach of this technology that surpasses the borders of the EU is another regulatory challenge. In this regard, we should consider that the registry would be distributed, so that there is no single registry or a centralised infrastructure that determines the law applicable to transactions, but the wide number and variety of registries determines that each asset, and in the extreme scenario, each transfer, could be subject to various laws.

Q2.10. Is the current regulatory and supervisory framework governing outsourcing an obstacle to taking full advantage of any such opportunities?

No comments.

Q2.11. Are the existing outsourcing requirements in financial services legislation sufficient? Who is responsible for the activity of external providers and how are they supervised? Please specify, in which areas further action is needed and what such action should be.

No comments.

Q2.12. 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?

No comments.

3. Making the single market more competitive by lowering barriers to entry

Q3.1. Which specific pieces of existing EU and/or Member State financial services legislation or supervisory practices (if any), and how (if at all), need to be adapted to facilitate implementation of FinTech solutions?

Please see our response to question 2.9.

Q3.2. What is the most efficient path for FinTech innovation and uptake in the EU? Is active involvement of regulators and/or supervisors desirable to foster competition or collaboration, as appropriate, between different market actors and new entrants. If so, at what level?

The active involvement of regulators and supervisors in the creation of regulatory sandboxes and in defining the rules for new solutions, e.g. digital currencies, is essential to make the solutions effective. It is desirable that regulators and supervisors share their innovation know-how and best practices.

When a given scenario requires "neutral" members, the collaboration and assistance of authorities can be beneficial particularly for the cases of innovation in regulated areas.

Q3.3. 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.

No comments.

Q3.4. 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?

No comments.

Q3.5. 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.

No comments.

Q3.6. Are there issues specific to the needs of financial services to be taken into account when implementing free flow of data in the Digital Single Market? To what extent regulations on data localisation or restrictions on data movement constitute an obstacle to cross-border financial transactions?

No comments.

Q3.7. Are the three principles of technological neutrality, proportionality and integrity appropriate to guide the regulatory approach to the FinTech activities?

Apart from these principles, the transparency in governance mechanisms of these projects (for example in levels of consensus or validation) should be considered as one of the guiding principles.

Q3.8. How can the Commission or the European Supervisory Authorities best coordinate, complement or combine the various practices and initiatives taken by national authorities in support of FinTech (e.g. innovation hubs, accelerators or sandboxes) and make the EU as a whole a hub for FinTech innovation? Would there be merits in pooling expertise in the ESAs?

Sandboxes help technological projects to thrive in a dynamic framework but within the collaboration of regulators. This helps both regulatory institutions, as they can select and foster initiatives that meet with their principles and regulations, and companies, that have the institutional support needed to develop some FinTech projects.

In addition to this, hubs are natural consequences of the need to innovate. In considering international examples, gathering companies and experts in a melting pot has proven to have excellent results for technology industry that helps innovation and sharing of knowledge.

Q3.9. 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 establishment of an "Innovation Academy" would help in the development of EU-wide standards and solutions. It should aim to gather expertise from conferences, seminars, articles in the form of a repository of documents which should be made publicly available. Additionally, it could organise web discussion panels and webinars.

Q3.10. Are guidelines or regulation needed at the European level to harmonise regulatory sandbox approaches in the MS? Would you see merits in developing a European regulatory sandbox targeted specifically at FinTechs wanting to operate cross-border? If so, who should run the sandbox and what should be its main objective?

Yes, such an EU sandbox would be useful, as more and more EU-wide regulations and solutions are developed. It should be championed by European regulators including the European Commission and the European Supervisory Authorities.

Harmonisation would be positive, provided that the duration of the process required to reach this goal does not prevent or discourage the use of national sandboxes in the meantime.

Q3.11. What other measures could the Commission consider to support innovative firms or their supervisors that are not mentioned above? If yes, please specify which measures and why.

No comments.

Q3.12. Is the development of technical standards and interoperability for FinTech in the EU sufficiently addressed as part of the European System of Financial Supervision? Is the current level of data standardisation and interoperability an obstacle to taking full advantage of outsourcing opportunities?

No comments.

Q3.13. In which areas could EU or global level standards facilitate the efficiency and interoperability of FinTech solutions? What would be the most effective and competition-friendly approach to develop these standards?

No comments.

Q3.14. 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?

No comments.

Q3.15. 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.

No comments.

Contacts and references

Our EU Transparency Register number is 92773882668-44.

For any questions on this paper, please contact Anna Kulik, ECSDA Secretary General, at info@ecsda.eu or +32 2 230 99 01.