Consultation on a new digital finance strategy for Europe / FinTech action plan

Fields marked with * are mandatory.

Introduction

This consultation will soon also be available in 23 European Union official languages.

If you wish to respond in one of these languages, please wait until then to provide your replies.

1. Background for this consultation

Digitalisation is transforming the European financial system and the provision of financial services to Europe's businesses and citizens. In the past years, the EU and the Commission embraced digitalisation and innovation in the financial sector through a combination of horizontal policies mainly implemented under the umbrella of the Digital Single Market Strategy, the Cyber Strategy and the Data economy and sectoral initiatives such as the revised Payment Services Directive, the recent political agreement on the crowdfunding regulation and the FinTech Action Plan. The initiatives set out in the FinTech Action Plan aimed in particular at supporting the scaling up of innovative services and businesses across the EU, for example through enhanced supervisory convergence to promote the uptake of new technologies by the financial industry (e.g. cloud computing) but also to enhance the security and resilience of the financial sector. All actions in the Plan have been completed.

The financial ecosystem is continuously evolving, with technologies moving from experimentation to pilot testing and deployment stage (e.g. blockchain; artificial intelligence; Internet of Things) and new market players entering the financial sector either directly or through partnering with the incumbent financial institutions. In this fast-moving environment, the Commission should ensure that European consumers and the financial industry can reap the potential of the digital transformation while mitigating the new risks digital finance may bring. The expert group on Regulatory Obstacles to Financial Innovation, established under the 2018 FinTech Action Plan, highlight these challenges in its report published in December 2019.

The Commission's immediate political focus is on the task of fighting the coronavirus health emergency, including its economic and social consequences. On the economic side, the European financial sector has to cope with this unprecedented crisis, providing liquidity to businesses, workers and consumers impacted by a sudden drop of activity and revenues. Banks must be able to reschedule credits rapidly, through rapid and effective processes carried out fully remotely. Other financial services providers will have to play their role in the same way in the coming weeks.

Digital finance can contribute in a number of ways to tackle the COVID-19 outbreak and its consequences for citizens, businesses, and the economy at large. Indeed, digitalisation of the financial sector can be expected to accelerate as a consequence of the pandemic. The coronavirus emergency has underscored the importance of innovations in digital financial products services, including for those who are not digital native, as during the lockdown everybody is obliged to rely on remote services. At the same time, as people have access to their bank accounts and other financial services remotely, and as financial sector employees work remotely, the digital operational resilience of the financial sector has becoming even more important.

As set out in the Commission Work Programme, given the broad and fundamental nature of the challenges ahead for the financial sector, the Commission will propose in Q3 2020 a new Digital Finance Strategy/FinTech Action Plan that sets out a number of areas that public policy should focus on in the coming five years. It will also include policy measures organised under these priorities. The Commission may also add other measures in light of market developments and in coordination with other horizontal Commission initiatives already announced to further support the digital transformation of the European economy, including new policies and strategies on data, artificial intelligence, platforms and cybersecurity.

2. Responding to this consultation and follow up

Building on the work carried out in the context of the FinTech Action Plan (e.g. the EU Fintech Lab), the work of the European Supervisory Authorities and the report issued in December 2019 by the Regulatory Obstacles to Financial Innovation Expert Group, and taking into account the contribution digital finance can make to deal with the COVID-19 outbreak and its consequences, the Commission has identified the following four priority areas to spur the development of digital finance in the EU:

1. ensuring that the EU financial services regulatory framework is fit for the digital age;
2. enabling consumers and firms to reap the opportunities offered by the EU-wide Single Market for digital financial services;
3. promoting a data-driven financial sector for the benefit of EU consumers and firms; and
4. enhancing the digital operational resilience of the EU financial system.

In this context and in line with Better Regulation principles, the Commission is launching a consultation designed to gather stakeholders' views on policies to support digital finance. It follows two public consultations launched in December 2019, focusing specifically on crypto-assets and digital operational resilience.

This consultation is structured in three sections corresponding to the priorities areas 1, 2 and 3 presented above. Given that the ongoing consultation on digital operational resilience fully addresses the issues identified as part of this priority area, questions on this priority area are not reproduced in this consultation. As for priority area 1, this consultation includes additional questions given that this priority area goes beyond the issues raised in the currently ongoing consultation on crypto-assets. In addition, the Commission will also be consulting specifically on payment services. Payment services and associated technologies and business models are highly relevant for the digital financial fabric, but also present specificities meriting separate consideration. These considerations are addressed in a specific consultation on a Retail Payments Strategy launched on the same day as this one. Finally, and specific to financial services, the Commission is also supporting the work of a High Level Forum on Capital Markets Union, that is expected to also address key technology, business model and policy challenges emerging from digitalisation.

The first section of the consultation seeks views on how to ensure that the financial services regulatory framework is technology neutral and innovation-friendly, hence addressing risks in a proportionate way so as not to unduly hinder the emergence and scaling up of new technologies and innovative business models while maintaining a sufficiently cautious approach as regards consumer protection. While an in-depth assessment is already on-going on crypto-assets, assessment of whether the EU regulatory framework can accommodate other types of new digital technology driven services and business models is needed. Looking at a potentially more complex financial ecosystem

- including a wider range of firms, such as incumbent financial institutions, start-ups or technology companies like BigTechs - the Commission is also seeking stakeholders' views on potential challenges or risks that would need to be addressed.

The second section invites stakeholder views on ways to remove fragmentation of the Single Market for digital financial services. Building on the preparatory work carried out in the context of the 2018 FinTech Action Plan, the Commission has already identified a number of obstacles to the Single Market for digital financial services and is therefore seeking stakeholders' views on how best to address these. In addition, the consultation includes a number of forward-looking questions aiming to get stakeholders' feedback as regards other potential issues that may limit the deepening of the Digital Single Market and should be tackled at EU level.

Finally, the third section seeks views on how best to promote a well-regulated data-driven financial sector, building on the current horizontal frameworks governing data (e.g. General Data Protection Regulation; Free Flow of Data Regulation) but also on the recent sectoral developments such as the implementation of the revised Payment Services Directive in the EU. Considering the significant benefits data-driven innovation can bring in the EU across all sectors, the Commission recently adopted a new European Data Strategy and a White Paper on Artificial Intelligence. Building on these horizontal measures, the Commission is now seeking stakeholders' views on the potential additional measures that would be needed in the financial sector to reap the full benefits of the data economy while respecting European values and standards. Responses to this consultation will inform forthcoming work on a Digital Finance Strategy/FinTech Action Plan to be adopted later in 2020.

Please note: In order to ensure a fair and transparent consultation process **only responses received through our online questionnaire will be taken into account** and included in the report summarising the responses. Should you have a problem completing this questionnaire or if you require particular assistance, please contact fisma-digital-finance@ec.europa.eu.

More information:

- on this consultation
- on the consultation document
- on digital finance
- on the protection of personal data regime for this consultation

About you

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* Language of my contribution

General questions

Europe's strategic objective should be to ensure that European consumers and firms fully reap the benefits stemming from digital finance while being adequately protected from the potential new risks it may bring. To achieve that, the European financial sector needs to be at the forefront of innovation and its implementation in a market and production environment in order to better serve consumers and firms in an efficient, safe, sound and sustainable manner. Strong and innovative digital capacities in the financial sector will help improve the EU's ability to deal with emergencies such as the COVID-19 outbreak. It will help to further deepen the Banking Union and the Capital Markets Union and thereby strengthen Europe's economic and monetary union and to mobilise funding in support of key policy priorities such as the Green Deal and sustainable finance. It is also essential for Europe to safeguard its strategic sovereignty in financial services, and our capacity to manage, regulate and supervise the financial system in a way that promotes and protects Europe's values and financial stability. This will also help to strengthen the international role of the euro.

With a view to adopt a new Digital Finance Strategy/FinTech Action Plan for Europe later this year, the Commission is now seeking your views to identify the priority areas for action and the possible policy measures.

Question 1. What are the main obstacles to fully reap the opportunities of innovative technologies in the European financial sector (please mention no more than 4)?

Please also take into account the analysis of the expert group on Regulatory Obstacles to Financial Innovation in that respect.

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

We have identified the following obstacles

1. Lack of regulatory clarity

The current development of the financial sector towards an ever-increasing use of technology underlines the need to take steps to clarify the application of the existing regulatory framework. Different interpretations of regulatory and supervisory measures on one hand and lack of clarity as to whether current European financial frameworks apply create undesirable fragmentation across the EU and can limit innovation.

For example, currently there is no clarity as to the appropriate prudential treatment of financial institutions' exposures to crypto-assets that are not subject to EU law. Another example can be given regarding the difficulty to use AI in KYC processes, as there is still a lack of clarity around these technologies at European level (i.e. facial recognition, digital identity). Further, although EU rules are quite harmonised with regards to reporting, National Competent Authorities (NCAs) practices remain fragmented, which creates a lack of clarity for new players.

2. Coordination between the different competent authorities

The existing regulatory framework was not necessarily designed with these innovative technologies in mind. Most of these new technologies (e.g. DLTs, AI, cloud computing) are also global and therefore require a coordinated response at the EU level between NCAs and at the international level. In this regard, the AMF supports the work of the the European Forum for Innovation Facilitators (EFIF) that promotes coordination and cooperation among national innovation facilitators.

This also raises the question of the efficiency of the regulators' sectorial approaches. New technologies are questioning the way we frame innovation. We can observe that AI or DLT solutions applied in the financial sector may raise cross-sectorial issues such as data management, personal data protection, financial regulation, cybersecurity and the use of algorithms. Therefore in order to respond to the new challenges posed by these technologies, a horizontal approach would be desirable involving different competent national and European authorities (e.g. data protection authorities, financial and banking authorities, agencies for cybersecurity).

3. Harmonisation of existing regulations and clarifications

The potential gain of innovations applied to financial sector cannot be fully exploited in the EU without clarification and harmonisation of existing rules. The EU regulatory framework should not unduly restrict potentially beneficial innovations but, at the same time, not leave risks unaddressed. In this regard, the EU should take a proactive lead in promoting innovative way of regulate and monitor financial innovation in order to shape financial innovation projects and promote its fundamental European values (e.g. fair competition, data privacy).

For example, harmonisation of national approaches is required at EU level in order to facilitate digital onboarding (e.g. KYC regulations, AML/CFT measures), is required at EU level in order to facilitate digital onboarding. Another example could be given regarding the national treatment of crypto-assets in Europe.

In order to build a common view on financial innovation, some additional clarification would also be needed. The concepts of “innovation hub” and “regulatory sandbox” need to be harmonised at EU level in order to guarantee a level playing field throughout Europe with regard to the instalment or use of sandboxes and innovation hubs. In addition, the possibility of conducting tests at European level: should also be clarified (i.e testing innovation is key in a fast-changing world in order to reduce the time-to-market-cycle, regulatory burden and uncertainty).

4. Increase the agility of regulatory framework by allowing innovative firms to conduct tests

Another way to make EU regulation more flexible would be to encourage and facilitate the testing of innovation at European level.

In this regard, the European Commission may wish to draw inspiration from the practices that prevail today in the pharmaceutical industry, where innovation is encouraged through a system of strictly precise phasing clinical tests. If applied to the field of financial services, this approach could in practice result in a phased-in licensing process where one could imagine that a company wishing to test a regulated service with a limited circle of investors and involving small amounts of money could do so without being licensed, subject to compliance with the main principles of regulation (typically those defined in level 1).

One possible way to materialise would be to create experimental spaces that would be reserved for projects for which regulatory obstacles have been identified (e.g. in the field of blockchain).

Another way would be to allow the competent authorities to send no-action letters to the company that would benefit from this scheme, specifying the terms of the projects, the conditions under which the test phase would be authorised (duration, number of participants involved, etc.), similar to the no-action letters used by the SEC in the United States[1].These testing zones could be open to any company that falls within the existing regulatory framework. However, as in the case of experimental spaces, such a mechanism should necessarily be authorised at European level. It should leave it to the NCAs to select the projects that can be admitted, provided that an effective Europe wide convergence and information exchange mechanism is in place.

[1] The US SEC used a no-action letter to authorize the Paxos project to test the development of a blockchain settlement and clearing service over a 23-month period as part of a feasibility study. Further information available on the US SEC website : https://www.sec.gov/

Question 2. What are the key advantages and challenges consumers are facing with the increasing digitalisation of the financial sector (please mention no more than 4)?

For each of them, what if any are the initiatives that should be taken at EU level?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

We believe that the digitalisation of the financial sector can bring significant benefits to consumers, in particular in terms of:

- Price: digitalisation can result in more attractive rates/fees, as it can reduce compliance costs and remove legacy costs. Expansion of the Internet has reduced distribution costs considerably and facilitated access by professionals to the various national markets. Numerous barriers have been overcome more easily: it costs less to make information available in the local language, there is no longer any need to have a physical presence on each market, etc.

- Facilitating the cross-border supply and access: digitalisation can ensure continuity 24/7 on multiple devices as well as provide access potentially to a wider scope of products. The increasing digitalisation of the financial sector can serve investors, by facilitating the cross-border supply of financial products within the EU, which thus have a wider investment scope and contribute to the creation of a single European market. It can also benefit economic agents by offering them more choices for funding.

- Community and traceability: digitalisation can improve communication with and among consumers and allow customers to start discussions with the service providers, give advice to their new services to test, build trust with them. New technologies also potentially facilitate better interactivity between the professionals and savers. They enable the former to systematise their questionnaires prior to providing any advisory service. These digitalised questionnaires are standardised, ensuring the same level of quality (minimal), and can be controlled more easily. Digitalisation facilitates thus traceability and storage of information gathered via online questionnaires.

- Convenience: Digitalisation can also contribute to seamless and intuitive user experience, better online experience and functionality with simple and intuitive customer visuals and journey, easy onboarding and better quality of service. It may also allow for better readability and understanding of the offers by retail investors. The new technologies can also help maintain contact with clients and update changes in their situation, thus preventing mis-selling due to poor knowledge of the client's most recent situation.

However, the digitalisation of the financial sector may also raise challenges which need to be addressed, in particular regarding:

- Complex products: The risks of a poor match between the product and the investor's need are increased. Analysis of the product and its fundamental characteristics (performance/risk/liquidity) remain an essential part of the purchase. Digital (remote) relations are better adapted to the distribution of simple, comparable and reliable (safe) products geared to a population that is relatively autonomous in the management of its investments (having the necessary knowledge and experience). Conversely, the more "financial" products, with local legal and tax characteristics, should not be sold without advice.

- Unsuitable products and restrict access to customer services: if algorithm rules are not defined correctly i.e. to allow the exclusion of customers outside of the target market defined by manufacturers, there is a risk that customers access products and services not suitable for them. Further, firms may be tempted to cut operating costs by restricting access to customer service which is generally detrimental to consumers. There may also exist asymmetries between the formalities required to subscribe to a service (typically easy and straightforward) and those required to terminate the service (sometimes requiring sending a letter through registered physical mail). It is also generally the case that the terms and conditions (including the pricing parameters) applicable to the client's relation with the provider contain provisions allowing the provider to change the terms (including applicable fees) unilaterally, subject only to a prior notice to the customer of generally 30 days. There may be an opportunity in assessing the need to regulate the capacity of providers to amend (or otherwise impose changes to) the terms of their products and services to the detriment of clients.

- Education of the population regarding digital tools: Not all consumers are "connected", especially the elderly (people aged 75 and over), and when they are, the question arises of how well they are able to use online services. It might, during a transition period at least, lead to a form of financial exclusion. In addition, logging on does not necessarily imply appropriate use of the means available online. When they are connected, consumers might, through lack of objectivity and judgement, act precipitously without taking the time to reflect. More generally, the behaviour of savers is evolving as the new technologies take hold in their daily life, as are consumer habits. It is necessary to understand these new consumer reflexes. The challenge at European level is to articulate financial literacy and digital literacy: Aligning MiFID II requirements according to distribution channel; Territoriality of the investment service: where does the investment service take place, in the investor's country or the asset manager's country?; Advice must remain the cornerstone of the sales process, especially for patrimonial products, but the KID and the POG approach could usefully be supplemented by setting up independent comparative information and explanations on existing differences between the savings and investment products available in the Member States.

- Improvement of the presentation of mandatory information necessary to the consent: beyond the regulatory information, a certain amount of contractual information is decisive when problems occur; savers' knowledge and understanding are essential (in particular with regard to complaints, mediation and competent courts process).

Building on previous policy and legislative work, and taking into account the contribution digital finance can make to deal with the COVID-19 emergency and its consequences, the Commission services are considering four key priority areas for policy action to spur the development of digital finance:

1. ensuring that the EU financial services regulatory framework is technology-neutral and innovation friendly;
2. reaping the opportunities offered by the EU-wide Single Market for digital financial services for consumers and firms;
3. promoting a data-driven financial sector for the benefit of EU consumers and firms; and
4. enhancing the operational resilience of the financial sector.

Question 3. Do you agree with the choice of these priority areas?

- Yes
- No
- Don't know / no opinion / not relevant

Question 3.1 Please explain your answer to question 3 and specify if you see other areas that would merit further attention from the Commission:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

We support the list of priority areas set out by the Commission. However, we believe that more clarity should be brought regarding the innovation friendly principle.

Regarding innovation-friendly principle: This principle may encourage a broad range of actions from experimentation i.e. regulatory sandboxes, and Outcome-oriented legislation to "Sunset clauses" (i.e which terminate or repeal some or all provisions of a legal text after a specific date, unless further legislative action is taken to extend them) and "top-runner approach" (i.e. legislative provisions that envisage the updating of a requirement in order to reflect higher performance levels that have become possible because of scientific or technological progress). Therefore, more clarity as to the meaning of the concept of "experimentation" would be necessary in order not to create fragmented approaches to this principle across the EU (e.g. are regulatory waivers possible within the framework of a national regulatory sandboxes?).

I. Ensuring a technology-neutral and innovation friendly EU financial services regulatory framework

In order to be fit for the digital age, the EU financial services regulatory framework should neither prescribe nor prevent the use of particular technologies whilst ensuring that regulatory objectives continue to be satisfied. It should also not hinder the emergence and scaling up of innovative business models, including platform-based ones, provided that the new risks these new business models may bring are properly addressed. The Commission undertook an in-depth assessment of these issues in the context of the FinTech Action Plan and is already acting on certain issues. Even so, in this fast-moving and increasingly complex ecosystem, it is essential to monitor technological and market trends on a regular basis and to identify at an early stage whether new regulatory issues, including e.g. prudential ones, are emerging and, if so, how to address them in a proportionate manner.

Question 4. Do you consider the existing EU financial services regulatory framework to be technology neutral and innovation friendly?

- Yes
- No
- Don’t know / no opinion / not relevant

Question 4.1 If not, please provide specific examples of provisions and requirements that are not technologically neutral or hinder innovation:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that the EU financial services regulatory framework is in principle technology-neutral, with the aim of ensuring that similar activities are subject to the same or very similar standards regardless of their form. Nevertheless, some regulatory requirements may hinder the development of certain technologies.

For instance MiFID II delegated regulation (2017/565) defines the conditions applying to the provision of information required by the regulation, in a durable medium other than on paper. So information on paper is the principle, which is not technology-neutral and hinders innovation to the AMF’s viewpoint. In its advice to the EC published on 31 March 2020, ESMA recently recommended amending Article 3 of the MiFID II Delegated regulation so that, when information must be provided in a durable medium, the provision of such information by means of electronic communications shall become the norm and default option. We support the continuation of this work.

In addition, the AMF is of the view that if new technologies are developed, Levels 2 and Level 3 should make it possible to incrementally integrate these technologies, without Level 1 preventing this development. One example is the review of the suitability guidelines which were reviewed in May 2018 to consider recent technological developments of the advisory market, i.e. the increasing use of automated or semi-automated systems for the provision of investment advice or portfolio management (so called ”robo-advice”).

Additionally, some other cases could raise certain concerns regarding technological neutrality and the principle of innovation friendly :

- Shareholder meetings by electronic communications. In light of current events, there may be an opportunity for the Commission to evaluate the need to establish EU rules for convening, informing, holding and deliberating by electronic means at shareholders meetings held in camera. Indeed, the AMF has observed that in the exceptional circumstances of the covid-19, French issuers faced a lot of technical issues, in particular to identify shareholders and to provide them with an answer to their questions during the meeting. As the smooth functioning of general meetings is vital for issuers and their shareholders, the AMF is of the view that European issuers should ensure minimum and harmonised standards for convening, informing, holding and deliberating by electronic means at shareholders meetings even though being able to attend physically the meeting should remain possible. This would improve technology neutrality.

- Further, more work could be done to adapt suitability assessments to the digital channel. Customers do not pay the same attention to questions posed through a screen than to questions asked by a physical person inside an office. Therefore, rules should be adjusted and be proportionate to ensure the adequate balance between investment protection and economic viability of digital services (e.g. automated online discretionary investment management).

In addition, the cross-border provision of retail financial services to customers is growing quickly and there are more and more cases where financial institutions are providing their services to customers residing in other MSs, especially through digital means and using digital platforms (i.e. there are more and more situations where authorities need to assess whether the provision of the services is taking place across borders and falls within the FPS or the ROE). However, there is no clear definition of cross-border provision of financial services in any of the Level 1 texts reviewed. In this regard, MiFID II lacks clear criteria for determining the location where the service is provided and which authority is responsible for its supervision. Therefore, this lack of clear criteria could hinder innovative players and could thus be seen as not innovation friendly.

The AMF would like to underline that technological neutrality should not hinder the development of financial innovation in the EU. Traditional financial regulations were not designed with new technologies in mind and a strict application of this principle may lead to hampering innovation. The current development of DLT and crypto-asset illustrates that specific risks and opportunities may emerge from a specific technology.

What matters is flexibility by design, in addition to the certainty and trust it conveys. In order to support innovation, EU regulatory framework should aim to (i) further improve the design of existing and future regulations as regards their impact on innovation; (ii) achieve an optimal balance between predictability of the regulatory environment and adaptability to technological progress; (iii) simplifying and increasing the effectiveness of the regulatory framework (iv) search for future-proof, more forward-looking and innovation friendly approaches (e.g. no-action letter, testing zones).

Question 5. Do you consider that the current level of consumer protection for the retail financial products and services established by the EU regulatory

framework is technology neutral and should be also applied to innovative ones using new technologies, although adapted to the features of these products and to the distribution models?

- Yes
- No
- Don't know / no opinion / not relevant

Question 5.1 Please explain your reasoning on your answer to question 5, and where relevant explain the necessary adaptations:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The framework tries to be technology neutral but operationally, some treatment differences may occur, especially related to the provision of advice. It may be difficult to provide consumers with adequate financial advice through a digital medium.

For example, new technologies potentially facilitate better interactivity between the professionals and savers. They enable the former to systematise their questionnaires prior to providing any advisory service. These digitalised questionnaires are standardised, ensuring the same level of quality (minimal), and can be controlled more easily. Digitalisation facilitates thus traceability and storage of information gathered via online questionnaires. The new technologies can also help maintain contact with clients and update changes in their situation, thus preventing mis-selling due to poor knowledge of the client's most recent situation.

However, the questionnaires remain declarative, and the client's answers cannot easily be challenged online unlike in face-to-face interviews. Similarly, as we noted during our recent mystery visits on-line, some websites may not provide any secure response mechanisms, and even encourage clients to change their answers in order to get access to higher-risk products, which do not correspond to their original profile. This type of problem has to be solved in order to prevent a "double hardship" for the client cumulating being sold the wrong product and having no possible recourse.

We are also observing the development of leads (forms for collecting data and canvassing after publishing on the internet via banners). This use is increasing by scammers, but is also present for certain regulated products (ex: real estate collective investment schemes). The cycle used is as follows: internet advertising, conducts data collection (leads), telephone call (weak link in consent). The weakness of consumers via telephone contact is proven.

Identify areas where the financial services regulatory framework may need to be adapted

The use of Distributed Ledger Technology (DLT), and in particular the use of one of its applications, the so-called crypto-assets, have been identified as an area where the European regulatory framework may need to be adapted. A public consultation on crypto-assets is on-going to gather stakeholders' views on these issues. Beyond the area of crypto assets, and looking at other technological and market developments, the Commission considers that it is important to identify potential regulatory obstacles to innovation at an early stage and see how to best address these obstacles not to slow down the uptake of new technologies in the financial sector.

Question 6. In your opinion, is the use for financial services of the new technologies listed below limited due to obstacles stemming from the EU financial services regulatory framework or other EU level regulatory requirements that also apply to financial services providers?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Distributed Ledger Technology (except crypto-assets)					X	
Cloud computing						X
Artificial Intelligence/Machine learning						X
Internet Of Things (IoT)						X
Biometrics						X
Quantum computing						X
Other					X	

If you see other technologies whose use would be limited in the financial services due to obstacles stemming from the EU financial services legislative framework, please specify and explain:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Yes, the use of crypto-assets which are qualified as financial securities (so-called "security tokens") is to the AMF's viewpoint limited due to obstacles stemming from the EU financial services legislative framework, namely some articles of MiFID II, CSDR and the Settlement Finality Directive.

Please refer to the AMF's comprehensive legal analysis publication on 6 March 2020 called "Legal analysis on the application of financial regulations to security tokens" available in English at this link.

In a nutshell, following this analysis, the AMF has identified several legal obstacles to the development of digital securities: (i) the need to identify a blockchain manager acting as a securities settlement system, which de facto excludes decentralised platforms of digital securities and, more generally, the use of public blockchains which are based on a decentralised consensus not allowing to identify any operations manager; (ii) the obligation of intermediation by a credit institution or an investment firm so that individuals may obtain access to the settlement and delivery system, which does not seem compatible with the current functioning of digital assets platforms by direct access; and (iii) the obligation to settle securities transactions in cash, in central bank or commercial currency. As long as financial transactions remain secure, regulation should be technology-neutral and therefore should not lead to the prohibition of the blockchain.

Question 6.1 Please explain your answer to question 6, specify the specific provisions and legislation you are referring to and indicate your views on how it should be addressed:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

To address the above-mentioned obstacles to the development of security tokens stemming from the EU financial services legislative framework, three avenues could be contemplated:
(i) amendment of the European texts for which obstacles to the development of digital securities have been identified;
(ii) creation of bespoke regulations for digital securities in order to allow for the specific features of the blockchain and its decentralised nature, such regulations being hard to conceive at this stage given the market's lack of maturity;
(iii) establishment of experimental spaces at the European level allowing the NCAs to resolve certain requirements laid down by the European regulations and identified as incompatible with the blockchain environment, provided that the entity benefiting from this exemption complies with the key principles of the regulations and that it is the subject of heightened supervision by the NCA. This system would require the establishment of a governance mechanism at the European level so that the NCAs could exchange and harmonise their practices. Such a system would have the advantage of clearing the regulatory obstacles to the emergence of digital securities market infrastructure projects which could take shape in a secure environment, without immediately modifying the European regulations, which could take place at a later stage, once the ecosystem is more mature, in a secured way and backed up by the expertise that the NCAs would have derived from the support of companies.

Beyond the purely regulatory aspect, the AMF considers that the emergence of efficient blockchain settlement infrastructures presupposes the existence at European level of an interbank settlement instrument compatible with this technology, i.e. an interbank stable settlement coin to allow DvP on chain. Removing regulatory obstacles to the development of security tokens is a key priority as projects cannot be developed as regulations currently stand.

Question 7. Building on your experience, what are the best ways (regulatory and non-regulatory measures) for the EU to support the uptake of nascent technologies and business models relying on them while also mitigating the risks they may pose?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Setting up dedicated observatories to monitor technological and market trends (e.g. EU Blockchain Observatory & Forum; Platform Observatory)				X		

Funding experimentation on certain applications of new technologies in finance (e.g blockchain use cases)					X	
Promoting supervisory innovation hubs and sandboxes					X	
Supporting industry codes of conduct on certain applications of new technologies in finance		X				
Enhancing legal clarity through guidance at EU level for specific technologies and/or use cases		X				
Creating bespoke EU regimes adapted to nascent markets, possibly on a temporary basis					X	
Other						

Please specify what are the other ways the EU could support the uptake of nascent technologies and business models relying on them while also mitigating the risks they may pose:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

With regard to the obstacles mentioned in question 1, the AMF has identified some ways the EU could support the innovation (see question 1 above).

1.More regulatory clarity

The current development of the financial sector towards an ever-increasing use of technology underlines the need to take steps to clarify the application of the existing regulatory framework. Different interpretations of regulatory and supervisory measures on one hand and lack of clarity as to whether current European financial frameworks apply create undesirable fragmentation across the EU and can limit innovation (see question 1).

2.Coordination between the different competent authorities

The existing regulatory framework was not necessarily designed with these innovative technologies in mind. Most of these new technologies (e.g. DLTs, AI, cloud computing) are also global and therefore require a coordinated response at the EU level between NCAs and at the international level. In this regard, the AMF supports the work of the EFIF that promotes coordination and cooperation among national innovation facilitators.
This also raises the question of the efficiency of the regulators' sectorial approaches. New technologies are questioning the way we frame innovation. We can observe that AI or DLT solutions applied in the financial sector may raise cross-sectorial issues such as data management, personal data protection, financial regulation, cybersecurity and the use of

algorithms. Therefore in order to respond to the new challenges posed by these technologies, a horizontal approach would be desirable involving different competent national and European authorities (e.g. data protection authorities, financial and banking authorities, agencies for cybersecurity). 3.Harmonisation of existing regulations and clarifications The potential gain of innovations applied to financial sector cannot be fully exploited in the EU without clarification and harmonisation of existing rules. In this regard, the EU should take a proactive lead in promoting innovative way of regulate and monitor financial innovation in order to shape financial innovation projects and promote its fundamental European values (e.g. fair competition, data privacy). For example, harmonisation of national approaches is required at EU level in order to facilitate digital onboarding (e.g. KYC, AML/CFT measures), is required at EU level in order to facilitate digital onboarding. Another example could be given regarding the national treatment of crypto-assets in Europe. In order to build a common view on financial innovation, some additional clarification would also be needed. The concepts of "innovation hub" (IH) and "regulatory sandbox" (RS) need to be harmonised at EU level in order to guarantee a level playing field throughout Europe with regard to the instalment or use of RSs and IHs. In addition, the possibility of conducting tests at European level: should also be clarified (i.e testing innovation is key in a fast-changing world in order to reduce the time-to-market-cycle, regulatory burden and uncertainty). 4.Increase the agility of regulatory framework by allowing innovative firms to conduct tests Another way to make EU regulation more flexible would be to encourage and facilitate the testing of innovation at European level.In this regard, the European Commission may wish to draw inspiration from the practices that prevail today in the pharmaceutical industry, where innovation is encouraged through a system of strictly precise phasing clinical tests. If applied to the field of financial services, this approach could in practice result in a phased-in licensing process where one could imagine that a company wishing to test a regulated service with a limited circle of investors and involving small amounts of money could do so without being licensed, subject to compliance with the main principles of regulation (typically those defined in level 1). One possible way to materialise would be to create experimental spaces that would be reserved for projects for which regulatory obstacles have been identified (e.g. in the field of blockchain). Another way would be to allow the competent authorities to send no-action letters to the company that would benefit from this scheme, specifying the terms of the projects, the conditions under which the test phase would be authorised (duration, number of participants involved, etc.), similar to the no-action letters used by the SEC in the United States .These testing zones could be open to any company that falls within the existing regulatory framework. However, as in the case of experimental spaces, such a mechanism should necessarily be authorised at European level. It should leave it to the NCAs to select the projects that can be admitted, provided that an effective Europe wide convergence and information exchange mechanism is in place.	

Assess the need for adapting the existing prudential frameworks to the new financial ecosystem, also to ensure a level playing field

Financial services providers are increasingly relying on technology companies to support delivery mechanisms for financial services. Technology companies are also increasingly entering financial services directly. Such trends will have an impact on the customers, the supply chain, incumbent financial institutions and their regulators and supervisors. Big technology companies are able to quickly scale up services due to network effects and large user bases. Their entry may accordingly over time significantly change market structures. This may require a review of how the EU financial legislative framework regulates firms and activities, in particular if technology companies were to become direct providers of specific services (e.g. lending) or a broader range of financial services or activities. This may also require a review of how to supervise the overall risks stemming from financial services of such companies.

Financial regulation should harness the opportunities offered by digitalisation – e.g. in terms of innovative solutions that better serve customers - while protecting the public interest in terms of e.g. fair competition, financial stability, consumer protection and market integrity. The Commission accordingly invite stakeholders' views on the potential impact of technology companies entering financial services and possible required policy response in view of the above public policy objectives.

Question 8. In which financial services do you expect technology companies which have their main business outside the financial sector (individually or collectively) to gain significant market share in the EU in the five upcoming y e a r s ?

Please rate each proposal from 1 to 5:

	1 (very low market share - below 1%)	2 (low market share	3 (neutral)	4 (significant market share)	5 (very significant market share - above 25%)	N. A.
Intra-European retail payments						X
Intra-European wholesale payments						X
Consumer credit provision to households with risk taking						X
Consumer credit distribution to households with partner institution (s)						X
Mortgage credit provision to households with risk taking						X

Mortgage credit distribution to households with partner institution (s)	○	○	○	○	○	X
Credit provision to SMEs with risk taking	○	○	○	○	○	X
Credit distribution to SMEs with partner institution(s)	○	○	○	○	○	X
Credit provision to large corporates with risk taking	○	○	○	○	○	X
Syndicated lending services with risk taking	○	○	○	○	○	X
Risk-taking activities in Life insurance products	○	○	○	○	○	X
Risk-taking activities in Non-life insurance products	○	○	○	○	○	X
Risk-taking activities in pension products	○	○	○	○	○	X
Intermediation / Distribution of life insurance products	○	○	○	○	○	X
Intermediation / Distribution of non-life insurance products	○	○	○	○	○	X
Intermediation / Distribution of pension products	○	○	○	○	○	X

Other insurance related activities, e.g. claims management						X
Re-insurance services						X
Investment products distribution						X
Asset management						X
Others						

Please specify in which other financial services you expect technology companies to gain significant market share in the EU in the five upcoming years:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 8.1 Please explain your answer to question 8 and, if necessary, describe how you expect technology companies to enter and advance in the various financial services markets in the EU Member States:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 9. Do you see specific financial services areas where the principle of "same activity creating the same risks should be regulated in the same way" is not respected?

- Yes
- No
- Don't know / no opinion / not relevant

Question 9.1 Please explain your answer to question 9 and provide examples if needed:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that the principle of "same activity creating the same risks should be regulated in the same way" is generally applied in European financial regulation. Nevertheless, such a mechanism should not be implemented too strictly. Indeed, in specific circumstances, it should allow for exceptions, for instance in the context of a sandbox, so that it does not hinder innovation (e.g. DLT and crypto-assets: see response to question 6, see the AMF's response to the EC consultation on crypto-assets and DLTs at this link and the AMF's legal analysis on the application of financial regulations to security tokens at this link).

Nevertheless, one exception can be highlighted. Investors being offered financial products or investment services through physical branches might not receive the same level of protection when they are being marketed products through digital means from providers based in other countries, in comparison when they are being offered products from branches or headquarters.

The most obvious example is the difficulties several European regulators have encountered with regard to Binary Options and Forex trading platforms authorised in Cyprus and acting through the free provision of services throughout most of the Union. Host country authorities have been unable to provide an appropriate response to these players' non-compliance with regulation, and inappropriate marketing communication for target clients, owing to their own lack of competence in the free provision of services, while the activities targeted address retail investors on their territory. Faced with this situation, the authority in the country of origin of the said players is often disinclined to act with regard to the protection of investors settled in a different territory to its own, and where its knowledge of local distribution networks is often limited as well.

The AMF is of the view that whatever the channel used (digital or not), the investor should benefit the same level of protection.

Question 10. Which prudential and conduct risks do you expect to change with technology companies gaining significant market share in financial services in the EU in the five upcoming years?

Please rate each proposal from 1 to 5:

	1 (significant reduction in risks)	2 (reduction in risks)	3 (neutral)	4 (increase in risks)	5 (significant increase in risks	N. A.
Liquidity risk in interbank market (e.g. increased volatility)						X
Liquidity risk for particular credit institutions						X
Liquidity risk for asset management companies						X
Credit risk: household lending						X
Credit risk: SME lending						X
Credit risk: corporate lending						X
Pro-cyclical credit provision						X

Concentration risk for funds collected and invested (e.g. lack of diversification)						X
Concentration risk for holders of funds (e.g. large deposits or investments held in a bank or fund)						X
Undertaken insurance risk in life insurance						X
Undertaken insurance risk in non-life insurance						X
Operational risks for technology companies and platforms						X
Operational risk for incumbent financial service providers						X
Systemic risks (e.g. technology companies and platforms become too big, too interconnected to fail)						X
Money-laundering and terrorism financing risk						X
Other						X

Please specify which other prudential and conduct risk(s) you expect to change with technology companies gaining significant market share in financial services in the EU in the five upcoming years:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 10.1 Please explain your answer to question 10 and, if necessary, please describe how the risks would emerge, decrease or increase with the higher activity of technology companies in financial services and which market participants would face these increased risks:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 11. Which consumer risks do you expect to change when technology companies gain significant market share in financial services in the EU in the five upcoming years?

Please rate each proposal from 1 to 5:

	1 (significant reduction in risks)	2 (reduction in risks)	3 (neutral)	4 (increase in risks)	5 (significant increase in risks	N. A.
Default risk for funds held in non-banks and not protected by Deposit Guarantee Scheme						X
Liquidity risk						X
Misselling of insurance products						X
Misselling of investment products				X		
Misselling of credit products						X
Misselling of pension products						X
Inadequate provision of information					X	

Inadequate complaint and redress process and management				X		
Use/abuse of personal data for financial commercial purposes					X	
Discrimination e.g. based on profiles				X		
Operational risk e.g. interrupted service, loss of data				X		
Other						

Please specify which other consumer risk(s) you expect to change when technology companies gain significant market share in financial services in the EU in the five upcoming years:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The Covid-19 crisis has revealed digital weaknesses, even in digital companies. Diagnoses have to be made and remedies to be brought. We could also list:

- The emergence of many means of unsolicited contacts which tend to reduce the border between advertising and canvassing;
- The risks of fraud with online customer identification;
- The identification of the decisive information of the online consent;
- Personal data processing and cyber-attacks: The current framework does not make possible to fight effectively against the increasingly important emergence of cybercrime which targets retail investors, nor to take into account the emergence of new actors specialised in the collection and enrichment of personal data intended for the use of financial services. These are unregulated, outsourced services. Another important element in the value chain that can generate a risk comes from the use of third parties, unauthorized and unsupervised, who do not themselves provide services subject to approval, for example call centers

In addition, technology companies do not often grasp the spirit of the investor protection safeguards stated in MIFID. Suitability assessments, definition of target markets, those are very important features to consider in order to reduce the risk of a person losing savings that he or she cannot afford to lose.

Question 11.1 If necessary, please describe how the risks would emerge, decrease or increase with the higher activity of technology companies in financial services and which market participants would face these increased risks:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The so-called “BigTech firms” have grown rapidly in recent years and are now entering the financial sector. The entry of BigTechs into financial services may pose risks to financial stability and investor protection. First, the scale of these new players into financial services may have consequences on the traditional market infrastructures (see FSB, 2019). Their technologies, data and resources could also lead to a rapid dominant position on the European market. Therefore, risks to financial stability and market concentration may arise.

Further, BigTechs use an important quantity of data and global customer networks raise many concerns regarding cyber-attacks and the treatment of personal data. The data-driven business model of BigTechs represents an evolution of the way financial services are provided. Although, BigTechs may bring lower cost and cheaper financial services and products, the potential risks attached to these new business models need to be assessed and monitored by regulators at European and international levels.

The AMF highlights that the treatment of these actors remains complex and that any extension of the scope of regulated entities must be subject to a prior review of the resources needed to exercise an effective monitoring of these entities. An intermediate avenue that could be explored would be to require that certain key functions can only be outsourced by regulated entities to providers located in the European Union.

Question 12. Do you consider that any of the developments referred to in the questions 8 to 11 require adjusting the regulatory approach in the EU (for example by moving to more activity-based regulation, extending the regulatory perimeter to certain entities, adjusting certain parts of the EU single rulebook)?

- Yes
- No
- Don't know / no opinion / not relevant

Question 12.1 Please explain your answer to question 12, elaborating on specific areas and providing specific examples:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Regulation should be activity based i.e. "same activity creating the same risks should be regulated in the same way". Nevertheless, experimentation, bespoke solutions should be possible. More generally, the AMF believes it is essential to make our regulatory frameworks and our supervisory practices more agile (please refer to our answer to questions 1 and 7).

In this context, it might be appropriate to adopt an activity-based regulatory approach, as opposed to an entity-based approach, even if this leads to the inclusion of a new typology of actors in the field of regulated entities.

Although certain provisions need to be adjusted to respond to constraints that digital services have in terms of customer attention span (e.g. robo advisors, automated online discretionary portfolio management, online advisory portfolio management), legal stability is important for innovative players. European actors may be vulnerable to the fast pace of changes to the EU regulatory landscape. This is particularly the case for smaller businesses that do not have sufficient internal resources to monitor and quickly adapt to new regulatory requirements. For example, the (upcoming) Crowdfunding regulation provides for a review of the framework only two years after its entry into application, potentially requiring crowdfunding platforms to adapt (again) after only two years following their migration from the national regime to the EU regime.

Enhance multi-disciplinary cooperation between authorities

The regulation and supervision of Digital Finance requires more coordination between authorities in charge of regulating and supervising finance, personal data, consumer protection, anti-money-laundering and competition-related issues.l

Question 13. Building on your experience, what are the main challenges authorities are facing while supervising innovative/digital players in finance and how should they be addressed?

Please explain your reasoning and provide examples for each sector you are referring to (e.g. banking, insurance, pension, capital markets):

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

- Cross-border nature of innovation and divergences across NCA regulations

The supervision of certain types of innovative players may raise territoriality challenges as well as different regulatory requirements at national levels (e.g. NCA national specificities for licensing innovative players).

These firms often experience burdensome procedures when seeking to scale up their activities cross-border as they may find it hard to be aware of the financial regulatory system and may struggle to fully understand procedures (e.g. for applications for authorisation). To help them as well as authorities the improvement of informal referral mechanisms between NCAs could be useful to facilitate firms' access to relevant contacts and a mutual recognition of each NCA's assessments. Further, the scope of authorities' expertise should be adapted and their roles should be better articulated (in our opinion, a silo approach is not appropriate). For example, it could be worth strengthening the coordination between NCAs and the European Union Agency for Cybersecurity (ENISA) and clarifying its articulation with other regulators.

- Understanding of new financial technologies by the authorities

The authorities face challenges to keep pace with the industry in terms of knowledge and understanding of DLT, AI, BigTech solutions and their real impact on financial sector (e.g. the impact of algorithms and automatisation in AI applications or DLT solutions).

In this regard, authorities may not necessarily have the level of expertise required to fully assess whether an innovative solution should be framed (i.e. understand the functioning of technology, the full risks and opportunities and provide the adequate regulatory responses to new business models). The NCAs have to understand the new business models proposed. For example, due to the fact that sometimes technology firms do not have a solid understanding on financial regulation, the firms do not know if they are providing investment advice or not or what type of investor they would like to target. Therefore, there is an educational piece really important to be performed by the NCAs to ensure that the market participants are well aware of applicable rules. However, in practice we observe that a legal advisor is generally required to go through various authorization processes.

To address these issues, there is a need for supervisors to increase their expertise and to have adequate human and economic resources in order to ensure they possess up-to-date understanding of financial innovations. It is also important that NCAs are engaged in a proactive dialogue regarding new technologies. At the European level, the EFIF group provides a useful forum for this purpose.

- NCAs' role in assisting small players with regulatory compliance

Small players that are either in the start-up phase or do not have sufficient resources to allocate towards legal and compliance work must nonetheless ensure compliance with a regulatory environment that increases in complexity on a yearly basis, at both national and EU level.

The role of NCAs is then to closely assist these actors, in particular during the authorization process. The AMF also issued relevant guidance in order to help these small players understand the regulatory framework and implement its requirements. This work, which is essential for fostering a fertile business ecosystem, is nonetheless resource-intensive and requires an ongoing effort that is different in nature, but not incompatible with, the classical supervisory role of NCAs. The Commission may consider whether an acknowledgement and encouragement of NCAs in their role of assisting small businesses in their compliance process would be appropriate at this stage.

- Supervision of marketing communications by the authority of the Member state in which said communications are disseminated

Marketing communications are an important tool for providers to attract investors. This topic is of particular concern since many retail investors base their investment decisions entirely on such marketing documents, even though they are provided with more complete documentation such as prospectus, KID or (in the upcoming Crowdfunding regulation) KIIS.

For example, since the entry into application of the French regime of crowdfunding (2014), French regulators have identified several cases where the information contained in marketing communications was not complete, balanced, clear and/or correct. In particular, it is common to see communications where the benefits are emphasised without an indication of risks and/or communications that provide an unrealistically optimistic impression of an investment. Since crowdfunding platforms are not always familiar with marketing rules, the AMF is of the view that the competent authorities should be entitled to require crowdfunding platforms to modify the content of the marketing communications (ex-ante power) in order to ensure that the information is correct, clear and not misleading before publishing it. This power would be particularly useful for instruments that are specifically targeted to retail investors.

The principle of controlling marketing communications is essential to investor protection and efficient pan-European distribution of digital financial products and services, especially in the case of retail/non-sophisticated investors and complex products. Whereas the competent authority of the 'home' Member State may be in charge of granting the authorisation for the provision of the relevant services, the Member State where the marketing documents are disseminated should always have the right to exercise control over the compliance of advertising activity. Indeed, as a principle, the supervision of marketing communications should be an integral part of the role of competent authorities of the Member State where the marketing communications are disseminated, taking into consideration (i) their knowledge of national laws on marketing, and (ii) their better knowledge of the local level of financial education (iii) their accountability to local investors and (iv) their linguistic competences,.

Question 14. According to you, which initiatives could be put in place at EU level to enhance this multi-disciplinary cooperation between authorities?

Please explain your reasoning and provide examples if needed:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that, considering the cross-border nature of Innovation taking place in the financial area, cooperation among NCAs and ESAs should be increased (e.g. cooperation between ESAs and data protection authorities such as the European Data Protection Supervisor EDPS).

In this regard, international cooperation in setting relevant and common standards is crucial for the development of innovative business models within the EU. Therefore, It is important that authorities are engaged in a proactive dialogue with innovative players (incumbent and start-ups) on technologies such as DLTs, AI, Cloud solutions or quantum computing.

For that purpose, the European Forum for Innovation Facilitators (EFIF) provides a useful forum and can thus become a single point of cooperation between authorities as well as a single access point for European innovative firms. The EFIF can also be used as a means to promote greater coordination with innovation facilitators established in third countries (i.e. outside the EU). This European dialogue should be aimed at promoting knowledge-sharing about specific use cases, assessing regulatory challenges but also at facilitating the provision of regulatory clarifications and changes to the financial framework when required.

The AMF supports the strengthening of the EFIF as a single access point for financial innovation.

II. Removing fragmentation in the single market for digital financial services

Removing Single Market fragmentation has always been on the radar of EU institutions. In the digital age, however, the ability of firms to scale up is a matter of economic productivity and competitiveness. The economics of data and digital networks determines that firms with substantial network effects enjoy a competitive advantage over rivals. Only a strong Single Market for financial services could bring about EU-wide businesses that would be able to compete with comparably sized peers from other jurisdictions, such as the US and China.

Removing fragmentation of the Single Market in digital financial services while maintaining an adequate level of security for the financial system is also essential for expanding access to financial services for consumers, investors and businesses across the EU. Innovative business models and services are flourishing in the EU, with the potential to bring greater choice and better services to consumers. Traditional players and start-ups are both competing, but also increasingly establishing partnerships to innovate. Notwithstanding the opportunities provided by the Digital Single Market, firms still face obstacles when scaling up across the Single Market.

Examples include a lack of consistency in the transposition, interpretation and application of EU financial legislation, divergent regulatory and supervisory attitudes towards digital innovation, national 'gold-plating' of EU rules, cumbersome licensing processes, insufficient funding, but also local preferences and dampen cross-border and international ambition and entrepreneurial spirit and risk taking on the part of business leaders and investors. Likewise, consumers face barriers in tapping innovative digital products and being offered and receiving services from other Member States other than of their residence and also in accessing affordable market data to inform their investment choices. These issues must be further addressed if the EU is to continue to be an incubator for innovative companies that can compete at a global scale.

Question 15. According to you, and in addition to the issues addressed in questions 16 to 25 below, do you see other obstacles to a Single Market for digital financial services and how should they be addressed?

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that the main obstacles to a Single Market for digital financial services are the existing divergences across member states' regulations and the multiplicity of supervisory entities that lead to intra-European regulatory arbitrage practices and which makes it difficult for innovative firms to scale up.

Indeed, divergent approaches to regulatory frameworks for digital financial activities (e.g. ICOs or Crowdfunding) result in the fragmentation of the internal market with a country-by-country regime favouring regulatory arbitrage. In the absence of a harmonised framework, it is likely that differences in Member States' approaches will create obstacles to the smooth functioning of the internal market. This risk of regulatory arbitrage is increased in the context of the provision of digital financial services or products, which are inherently easier to market on a cross-border basis.

In order to maintain the proper functioning of the internal market for the benefit of investors and of providers, to further improve this functioning and to ensure a high level of consumer and investor protection, it is appropriate to introduce an ambitious EU regulatory framework which lays down common rules for digital financial activities (such as electronic assets based on blockchain), corporate law but also tax law at Union level.

Such measures not only eliminate current obstacles to the exercise of the fundamental freedoms but also prevent such obstacles from emerging, including those that make it difficult for economic operators, including investors, to take full advantage of the benefits of the internal market.

In that regard, the AMF believes that a definition at European level of the notion of "cross-border marketing" and a clarification of the location criteria attached to cross-border marketing is needed (typically: to which Member State should the marketing to a French client of an investment service or product by a Cypriot provider via a Belgian website be attached). In that sense, the AMF supports the strengthening of ESMA's role as a European reference authority.

In addition, the AMF is in favour of clarifying the requirements associated with commercial documentation at the European level. The current diversity of practices for the control of commercial documentation may contribute to hamper the development of pan-European digital solutions (e.g. crowdfunding). Two schemes can be envisaged: (i) the documentation is reviewed by a designated European entity (e.g. ESMA) and the validation obtained from it is valid for all Member States or; (ii) clarify that it is prohibited to market a product in a Member State where the commercial documentation has not been validated by the competent authority beforehand.

Further, among developments needed to adjust the regulatory approach in the EU the notion of establishment appears to be an important one. Regulation of entities within the EU generally relies on the notion of establishment, with supervision being typically delegated to the authority of the relevant entity's country of establishment. This can increase the risk of regulatory arbitrage whilst still allowing entities to benefit from access to the EU market.

For this reason, the Commission may consider generally recalibrating the notion of establishment towards a higher focus on the location of activities in order to determine supervisory competence. A report published in July 2019 by the Joint Committee of the European Supervisory Authorities recommends that service providers should have an activity in the home Member State where they seek an authorization.

Facilitate the use of digital financial identities throughout the EU

Both start-ups and incumbent financial institutions increasingly operate online, without any need for physical establishment in a particular jurisdiction. Technologies are enabling the development of new ways to verify information related to the identity and financial situation of customers and to allow for portability of such information as customers change providers or use services by different firms. However, remote on-boarding relies on different technological means (e.g. use of biometric data, facial recognition, live video) to identify and verify a customer, with different national approaches regarding their acceptability. Moreover, supervisory authorities have different expectations concerning the rules in the 5th Anti-Money Laundering Directive permitting reliance on third parties for elements of on-boarding. The Commission will also consult shortly in the context of the review of the EU Anti-Money Laundering framework.

Question 16. What should be done at EU level to facilitate interoperable cross-border solutions for digital on-boarding?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Harmonise rules governing customer due diligence requirements in the Anti-Money Laundering legislation					X	
Harmonise rules governing the acceptable use of remote identification technologies and services in the Anti-Money Laundering legislation					X	
Broaden access for obliged entities to publicly held information (public databases and registers) to enable verification of customer identities			X			
Provide further guidance or standards in support of the customer due diligence process (e.g. detailed ID elements, eligible trusted sources; risk assessment of remote identification technologies)			X			
Facilitate the development of digital on-boarding processes, which build on the e-IDAS Regulation						X
Facilitate cooperation between public authorities and private sector digital identity solution providers				X		

Integrate KYC attributes into e-IDAS in order to enable on-boarding through trusted digital identities	○	○	○	○	○	X
Other	○	○	○	○	○	X

Please specify what else should be done at EU level to facilitate interoperable cross-border solutions for digital on-boarding:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF shares the opinion that harmonisation is required at EU level in order to facilitate digital onboarding. Indeed, currently, national approaches on digital identity, digital signature and AML/CFT could lead to a risks of fragmentation and hinder the development of innovative projects.

Question 17. What should be done at EU level to facilitate reliance by financial institutions on digital identities gathered by third parties (including by other financial institutions) and data re-use/portability?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Make the rules on third party reliance in the Anti-Money Laundering legislation more specific	○	○	○	○	X	○
Provide further guidance relating to reliance on third parties for carrying out identification and verification through digital means, including on issues relating to liability	○	○	○	○	○	X
Promote re-use of digital identities collected for customer due diligence						

purposes in accordance with data protection rules						X
Promote a universally accepted public electronic identity						X
Define the provision of digital identities as a new private sector trust service under the supervisory regime of the eIDAS Regulation						X
Other						

Please specify what else should be done at EU level to facilitate reliance by financial institutions on digital identities gathered by third parties (including by other financial institutions) and data re-use/portability:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 18. Should one consider going beyond customer identification and develop Digital Financial Identities to facilitate switching and easier access for customers to specific financial services?

Should such Digital Financial Identities be usable and recognised throughout the EU?

Which data, where appropriate and in accordance with data protection rules, should be part of such a Digital Financial Identity, in addition to the data already required in the context of the anti-money laundering measures (e.g. data for suitability test for investment services; data for creditworthiness assessment; other data)?

Please explain your reasoning and also provide examples for each case you would find relevant.

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 19. Would a further increased mandatory use of identifiers such as Legal Entity Identifier (LEI), Unique Transaction Identifier (UTI) and Unique Product Identifier (UPI) facilitate digital and/or automated processes in financial services?

- Yes
- No
- Don't know / no opinion / not relevant

If yes, in which framework(s) is there the biggest potential for efficiency gains?

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that mandatory use of identifiers such as LEI, UTI and UPI are key notably in the context of the possible set of a consolidated tape provider as proposed in the European Commission consultation on MiFID II. Such identifiers are key in the context of pre- and post-trade transparency of financial markets which benefit to an efficient price formation process.

Make it easier for firms to carry out technology pilots and scale up across the Single Market

Currently, three national competent authorities have established regulatory sandboxes with five more under development. Regulatory sandboxes are most often schemes to enable firms to test, pursuant to a specific testing plan agreed and monitored by a dedicated function of the competent authority, innovative financial products, financial services or business models. Besides, almost all competent authorities have established innovation hubs. Innovation hubs provide a dedicated point of contact for firms to ask questions to competent authorities on FinTech related issues and to seek non-binding guidance on regulatory and supervisory expectations, including licensing requirements. The European Forum of Innovation Facilitators (EFIF) is intended to promote greater coordination and cooperation between innovation facilitators established by financial sector supervisors to support the scaling up of digital finance across the

Single Market, including by promoting knowledge-sharing between innovation hubs and facilitating cross-border testing in regulatory sandboxes.

Question 20. In your opinion (and where applicable, based on your experience), what is the main benefit of a supervisor implementing (a) an innovation hub or (b) a regulatory sandbox as defined above?

5000racter(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Fintech innovation hubs provided by the AMF since 2016 supplemented by the national Forum Fintech and the related workstreams (with representatives from national authorities and the financial industry) offer an efficient way to assess the underlying technologies, either current or emerging ones. Such national frameworks, openness and initiatives aim to tackle new issues that might arise in the Fintech? sector, which is characterized by innovative services, processes and underlying technologies, including new market initiatives (e.g. DLT solutions, stablecoins development or AI solutions).

Further, the AMF highlights that there is no definition of the concepts of “innovation hub” and “regulatory sandbox” at the EU level, and this results in different schemes being set up depending on the Member state. For example, it is not clear today whether a company can test its services with a limited number of customers if the service is regulated at European level. In order to guarantee a level playing field throughout Europe with regard to the instalment or use of such innovation facilitators (i.e. Innovation Hub or Regulatory Sandboxes) should be further harmonized so that every national supervisory authorities follows common principles and standards, while the rules and procedures are as streamlined and transparent as possible. It should be noted however that fragmentation of regulatory approaches as well as cross-border issues across the EU cannot be solved only through innovation facilitators.

On the question of whether regulatory sandboxes should be confined to a single country, or organised on a cross-border basis, the AMF highlights that there is a strong demand from innovative actors for the creation of a regulatory sandbox at the European level.

Therefore, the AMF supports the establishment of a Regulatory Sandbox at European level whose operating procedures would be set out in a Level 1 regulation specifying the conditions under which the use of a sandbox could be considered, the products and activities covered by the system and the conditions under which tests could be conducted. This system would be led at national level but would require the establishment of a governance and coordination mechanism at European level so that national supervisors could exchange and harmonise their practices (see the AMF’s response to the EC consultation on crypto-assets and DLTs at this link and the AMF’s legal analysis on the application of financial regulations to security tokens at this link).

Question 21. In your opinion, how could the relevant EU authorities enhance coordination among different schemes in the EU?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Promote convergence among national authorities in setting up innovation hubs and sandboxes, through additional best practices or guidelines				X		
Facilitate the possibility for firms to test new products and activities for marketing in several Member States ("cross border testing")					X	
Raise awareness among industry stakeholders			X			
Ensure closer coordination with authorities beyond the financial						

sector (e.g. data and consumer protection authorities)					X	
Promote the establishment of innovation hubs or sandboxes with a specific focus (e.g. a specific technology like Blockchain or a specific purpose like sustainable finance)				X		
Other						

Please specify how else could the relevant EU authorities enhance coordination among different schemes in the EU:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 21.1 If necessary, please explain your reasoning and also provide examples for each case you would find relevant:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 22. In the EU, regulated financial services providers can scale up across the Single Market thanks to adequate licenses and passporting rights.

Do you see the need to extend the existing EU licenses passporting rights to further areas (e.g. lending) in order to support the uptake of digital finance in the EU?

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that it is premature at this stage to consider an extension of the passport system, considering that problems related to existing passports should first be addressed (e.g. problems relating to the free provision of investment services passports, i.e. difficulty for the host country authority to act against certain providers, just in case notifications).

Ensure fair and open access to relevant technical infrastructures for all financial service providers that wish to offer their services across the Single Market

(It should be noted that this topic is also included, from the payment perspective, in the Retail Payments consultation)

The emergence of providers of technical services supporting the provision of financial services bring both opportunities and challenges. On the one hand, such providers can facilitate the provision of cross-border services. On the other hand, they may in certain cases limit access to the platform or relevant devices' interface, or provide it under unfair and non-transparent terms and conditions. Certain Member States are starting to take measures in this respect.

Question 23. In your opinion, are EU level initiatives needed to avoid fragmentation in the Single Market caused by diverging national measures on ensuring non-discriminatory access to relevant technical infrastructures supporting financial services?

Please elaborate on the types of financial services and technical infrastructures where this would be relevant and on the type of potential EU initiatives you would consider relevant and helpful:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Empower and protect EU consumers and investors using digital finance across the Single Market

An increasing number of new digital financial products and services expose consumers and retail investors to both opportunities and risks: more choice, more tailored products, more convenience, but also bad advice, mis-selling, poor information and even discrimination. Accordingly, it is important to carefully consider how to tap the potential of innovative products, services and business models while empowering and protecting end-users, to ensure that they benefit from a broader access to, and range of innovative products and services across the Single Market in a safe and sound manner. This may also require reviewing existing legislation to ensure that the consumer perspective is sufficiently taken into account. In addition, promoting financial educatio and digital financial skills may be important to ensure that consumers and retail investors are able to make the most of what digital finance has to offer and to select and use various digital tools, whilst at the same time increasing the potential size of the market for firms.

Question 24. In your opinion, what should be done at EU level to achieve improved financial education and literacy in the digital context?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Ensure more affordable access at EU level to financial data for consumers and retail investors					X	
Encourage supervisors to set up hubs focussed on guiding consumers in the digital world					X	
Organise pan-European campaigns and advisory hubs focusing on digitalisation to raise awareness among consumers				X		
Collect best practices				X		
Promote digital financial services to address financial inclusion					X	
Introduce rules related to financial education comparable to Article 6 of the Mortgage Credit Directive, with a stronger focus on digitalisation, in other EU financial regulation proposals			X			
Other						

Please specify what else should be done at EU level to achieve improved financial education and literacy in the digital context:

5000 character(s) maximum *including spaces and line breaks, i.e. stricter than the MS Word characters counting method.*

Financial education and literacy is even more important in the digital age where consumers can make important decisions alone, in front of a screen. Although, financial education is mandatory (regarding OECD principles), it seems difficult to implement a general education policy at the EU level. The EU should encourage and support every state to promote lifelong financial education, beginning with courses at school. A financial participation for the promotion of educational campaigns, led by the national supervisors, could be interesting. In this regard, the AMF encourages ESMA to define key competences for digital financial education, building on the work of IOSCO and the OECD in this regard, while adapting them to the digital environment.

Finally, the AMF has developed new applications and content to support and inform investors. These initiatives include the Following:

- Launch of the "AMF Protect Epargne" application, which makes it easy to find an unauthorised company in the AMF's black list, to determine in a few clicks the potential risk of a scam of an investment offer, to be kept informed of AMF warnings and to enter into contact with AMF Epargne Info Service;
- The creation of a long-term investment journey with "La Finance pour tous". This journey, which is made up of web-based learning modules aimed at dispelling misconceptions about investment, especially share investments, will provide investors with insight into long-term investment challenges and the keys for action;
- A diversification tool to help investors gain practice in diversifying more or less risky asset portfolios in order to achieve a balanced result;
- Various events for investors: these include a meeting with individual investors today in Strasbourg with the French Federation of individual investors and investment clubs (F2iC) and Banque de France, a Facebook Live broadcast with the national consumer institute and a web conference on collective investment schemes on 1 October.
- This year the AMF is mobilising a broad panel of market participants around World Investor Week. Associations, professional associations and financial institutions will provide investor education activities throughout the week.

Click here (https://www.amf-france.org/en/news-publications/news-releases/amf-news-releases/amf-joins-forces-regulators-worldwide-promote-financial-education-and-investor-protection)

Question 25: If you consider that initiatives aiming to enhance financial education and literacy are insufficient to protect consumers in the digital context, which additional measures would you recommend?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Financial education alone is insufficient to protect consumers. Moreover, time is needed to improve financial education level: regulation is also necessary.

III. Promote a well-regulated data-driven financial sector

Data-driven innovation can enable better and more competitive financial services for consumers and businesses, as well as more integrated capital markets (e.g. as discussed in the on-going work of the High-Level Forum). Whilst finance has always been a data-intensive sector, data-processing capabilities have substantially improved over the recent years, enabling fast parallel computing at low cost. Large amounts of data have also become available as computers and their users are increasingly linked, supported by better storage data capabilities. These developments have enabled the use of artificial intelligence (AI) applications to make predictions about future outcomes at a lower cost. Following on to the European data strategy adopted on 19 February 2020, the Commission services are considering a number of steps in this area (see also the parallel consultation on the Mifid review).

Question 26: In the recent communication "A European strategy for data", the Commission is proposing measures aiming to make more data available for use in the economy and society, while keeping those who generate the data in control.

According to you, and in addition to the issues addressed in questions 27 to 46 below, do you see other measures needed to promote a well-regulated

data driven financial sector in the EU and to further develop a common European data space for finance?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

In order to provide investors with an easy and free-of-charge access to data, the AMF supports the creation of a centralised European database gathering financial and non-financial information reported by listed companies. In order to ensure the independence and security of the database, we are of the view that this database should be operated by ESMA.

When building the database, we would suggest to follow a realistic approach. As a first step, we would recommend to collect financial information, leveraging on the experience gained in the Prospectus Register and the EEAP.

Furthermore, while we believe that the information contained in the database should be standardized and machine-readable, it is of upmost importance to avoid excessive costs for issuers.

Finally, the role and responsibilities of all parties involved should be clearly defined: It should be clarified that issuers should are responsible for the information provided, and national competent authorities should have access to the reported information to fulfil their supervisory missions .

Besides, it could be interesting to explore the extent to which this database could make use of innovative technology such AI in order to allow smaller companies to publish unstructured information to the centralized database that would then be automatically formatted and converted to the database's structure requirements, reducing the potential burden for companies to restructure their data formatting and easing the transition for a larger set of participants .

Please see also responses provided by the AMF to the DG CONNECT's consultations on AI (White Paper on Artificial Intelligence) and Data (A European Strategy for Data).

Facilitate the access to publicly available data in finance

Financial institutions are currently required to make public a wealth of financial information. This information e.g. allows investors to make more informed choices. For example, such data include financial reporting and non-financial reporting, prudential disclosures under the Capital Requirements Directive or Solvency II, securities market disclosures, key information documents for retail investment products, etc. However, this data is not always easy to access and process. The Commission services are reflecting on how to further facilitate access to public disclosures of financial and supervisory data currently mandated by law, for example by promoting the use of common technical standards. This could for instance contribute to achieving other policies of public interest, such as enhancing access to finance for European businesses through more integrated capital markets, improving market transparency and supporting sustainable finance in the EU.

Question 27. Considering the potential that the use of publicly available data brings in finance, in which areas would you see the need to facilitate integrated access to these data in the EU?

The AMF is in favor of common European data spaces in the financial sector, because the value of data comes from reuse and cross-use, but only on condition that this is not to the detriment of the protection of personal data. The AMF would be against any lowering of data protection standards.

We share the objective of a single access point at EU level to publicly available data. We would like to underline that this objective implies in particular harmonised reporting requirements across the Member States. Currently, it appears that the level of publicity and the ease of access to data are heterogenous.

- As regards financial data for listed companies, we understand that the Prospectus Regulation sets out a harmonised financial reporting regime. However, access to SME financial data appears less straightforward, as it is kept in different locations (e.g. at the registries of the Commercial Courts in France) and treated in different formats in each Member State.

- As far as it is concerned, prudential disclosure covers a wide range of data. This data is not made public in full; only part of it is aggregated, treated and made public (indeed, some information should remain confidential and available solely to the authorities).

- Concerning securities markets, post trade information and reference data (required by MiFIR or MAR) are disclosed in a harmonised way and made publicly available.

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Financial reporting data from listed companies				X		
Non-financial reporting data from listed companies				X		
SME data			X			

Prudential disclosure stemming from financial services legislation						X
Securities market disclosure				X		
Disclosure regarding retail investment products			X			
Other						

Please specify in which other area(s) you would see the need to facilitate integrated access to these data in the EU:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

As part of the European Financial Transparency Gateway (EFTG) project, the Commission has been assessing since 2017 the prospects of using Distributed Ledger Technology to federate and provide a single point of access to information relevant to investors in European listed companies.

Question 28. In your opinion, what would be needed to make these data easily usable across the EU?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Standardised (e.g. XML) and machine-readable format					X	
Further development of the European Financial Transparency Gateway, federating existing public databases with a Single EU access point					X	
Application Programming Interfaces to access databases				X		
Public EU databases			X			
Other						

Please specify what else would be needed to make these data easily usable across the EU:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

- The clarification of the permitted uses of the data entrusted to the regulators;

- A glossary of terms with precise definitions to allow cross-reference of data from several regulations within the scope of the regulators.

- As previously mentioned, the implementation of AI solutions that would allow companies to post unstructured information, and which would then automatically structure that information according to the database's requirements with a minimum effort and cost on the company's side, could be a key factor for its success.

Further, it can be pointed out that the costs associated with the development of these standardised tools may not be negligible. This could discourage some SMEs considering it too cumbersome and expensive.

Consent-based access to personal data and data sharing in the financial sector

The Commission is reflecting how to further enable consumers, investors and businesses to maximise the benefits their data can bring in the financial sector, in full respect of our European standards and values, in particular the European data protection rules, fundamental rights and security.

The revised Payment Services Directive marked an important step towards the sharing and use of customer-permissioned data by banks and third party providers to create new services. However, this new framework is limited to payment data held by payment services providers, and does not cover other types of data relevant to financial services and held by other firms within and outside the financial sector. The Commission is reflecting upon additional steps in the area of financial services inspired by the principle of open finance. Any new initiative in this area would be based on the principle that data subjects must have full control over their data.

Better availability and use of data, leveraging for instance on new technologies such as AI, could contribute to supporting innovative services that could benefit European consumers and firms. At the same time, the use of cutting-edge technologies may give rise to new risks that would need to be kept in check, as equally referred to in section I.

Question 29. In your opinion, under what conditions would consumers favour sharing their data relevant to financial services with other financial services providers in order to get better offers for financial products and services?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

In our opinion, consumers would be willing to share their data with other financial providers under the main following conditions:

- They keep control over their data; they can modify or remove it;
- Their data cannot be sold;
- The quality of the products/services they are offered or the improvement of the customer experience (e.g. the customer does not have to repeat adequacy tests).

Under the RGPD's conditions. It should be subject to explicit and framed consent. Some actors insert this very small in forms or in long contracts. Savers unknowingly give their agreement to be canvassed.

Wealth managers/ Private banking customers usually share high level information of the portfolios held in different banks, in order to challenge and negotiate better deals with their advisors. In other to share clients KYC, we think it will be important to protect customers from unsolicited marketing and to ensure their data is safe.

Question 30. In your opinion, what could be the main benefits of implementing an open finance policy in the EU?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
More innovative and convenient services for consumers/investors, e.g. aggregators, comparison, switching tools						X
Cheaper traditional services for consumers/investors						X
Efficiencies for the industry by making processes more automated (e.g. suitability test for investment services)						X
Business opportunities for new entrants in the financial industry						X
New opportunities for incumbent financial services						

firms, including through partnerships with innovative start-ups						X
Easier access to bigger sets of data, hence facilitating development of data dependent services						X
Enhanced access to European capital markets for retail investors						X
Enhanced access to credit for small businesses						X
Other						X

If you see other benefits of implementing an open finance policy in the EU, please specify and explain:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 31. In your opinion, what could be the main risks of implementing an open finance policy in the EU?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Privacy issues / security of personal data					X	
Financial exclusion					X	
Poor consumer outcomes (e.g. unfair pricing strategies)				X		
Misuse of consumers' financial data					X	
Business confidentiality issues				X		
Increased cyber risks				X		
Lack of level playing field in terms of access to data across financial sector activities				X		
Other					X	

If you see other risks of implementing an open finance policy in the EU, please specify and explain:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF sees other risks associated with the extension of data portability:

1) Instability: the Open Banking market is not mature yet, which implies that we have not yet drawn all the consequences of the introduction of PSD 2. An impact study would be necessary before any consideration is given to an extension.

2) Service quality: an increase in consumers' utility is not necessarily guaranteed by a stronger competition. There is a significant risk that these service providers (AIS and PIS) try to differentiate themselves only through the price. This would imply an impoverishment of the offer of service.

3) Threat of non-European competitors: premature implementation of an Open Finance policy in the EU could have a counterproductive impact on the EU economy, as it would facilitate access to the single market by non-European BigTechs.

4) Finally, we insist on a major risk: non-compliance with the General Data Protection Regulation (GDPR). This risk is particularly significant when it comes to sharing data with GAFAM subsidiaries, since they are subject to the Cloud Act, which raises sovereignty and data protection issues.

The AMF considers that the risks assessed in the table above and presented here are too great to make it desirable to undertake an extension of data portability.

Question 32. In your opinion, what safeguards would be necessary to mitigate these risks?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF considers that the risks assessed in the table above and presented in the previous question are too great to make it desirable to undertake an extension of data portability.

Question 33. In your opinion, for which specific financial products would an open finance policy offer more benefits and opportunities?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Savings accounts						x
Consumer credit						x

SME credit	◯	◯	◯	◯	◯	X
Mortgages	◯	◯	◯	◯	◯	X
Retail investment products (e. g. securities accounts)	◯	◯	◯	◯	◯	X

Non-life insurance products (e.g. motor, home…)						X
Life insurance products						X
Pension products						X
Other						X

If you see other financial products that would benefit of an open finance policy, please specify and explain:

5000 character(s) maximum
including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 33.1 Please explain your answer to question 33 and give examples for each category:

5000 character(s) maximum
including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 34. What specific data (personal and non-personal) would you find most relevant when developing open finance services based on customer consent?

To what extent would you also consider relevant data generated by other services or products (energy, retail, transport, social media, e-commerce, etc.) to the extent they are relevant to financial services and customers consent to their use?

Please explain your reasoning and provide the example per sector:

5000 character(s) maximum
including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

As mentioned above, the AMF is not in favor of the extension of the data portability yet and considers we should first conduct an analysis of the implementation of open banking through PSD2.

Question 35. Which elements should be considered to implement an open finance policy?

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Standardisation of data, data formats						X
Clarity on the entities covered, including potential thresholds						X
Clarity on the way data can be technically accessed including whether data is shared in real-time (e.g. standardised APIs)						X
Clarity on how to ensure full compliance with GDPR and e-Privacy Directive requirements and need to ensure that data subjects remain in full control of their personal data						X
Clarity on the terms and conditions under which data can be shared between financial services providers (e.g. fees)						X
Interoperability across sectors						X
Clarity on the way data shared will be used						X

Introduction of mandatory data sharing beyond PSD2 in the framework of EU regulatory regime	○	○	○	○	○	X
If mandatory data sharing is considered, making data available free of cost for the recipient	○	○	○	○	○	X
Other	○	○	○	○	○	X

Please specify what other element(s) should be considered to implement an open finance policy:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Support the uptake of Artificial intelligence in finance

Artificial intelligence (AI) can bring considerable benefits for EU citizens and businesses alike and the Commission is committed to support its uptake with appropriate frameworks and investment. The White Paper on Artificial intelligence details the Commission's vision on a European approach for AI in Europe.

In the financial sector, AI and machine learning solutions are increasingly applied throughout the entire value chain. This may benefit both firms and consumers. As regards firms, AI applications that enable better predictions can result in immediate cost savings due to improved risk analysis or better client segmentation and product price differentiation. Provided it can be achieved, this could in the medium term lead to better risk management and improved profitability. As an immediate effect, AI allows firms to save on costs, but as prediction technology becomes more accurate and reliable over time, it may also lead to more productive business models and entirely new ways to compete.

On the consumer side, the use of AI applications can result in an improved price-quality relationship of financial services, better personalisation and in some cases even in financial inclusion of previously excluded consumers. At the same time, AI may entail new risks such as opaque decision-making, biases, discrimination or loss of privacy.

The Commission is seeking stakeholders' views regarding the use of AI and machine learning solutions in finance, including the assessment of the overall opportunities and risks it could bring as well as the specificities of each sector, e.g. banking, insurance or investment services.

Question 36: Do you/does your firm already deploy AI based services in a production environment in the EU?

- ○ Yes
- ○ No
- ○ Don't know / no opinion / not relevant

Question 36.1 If you/your firm do/does already deploy AI based services in a production environment in the EU, please specify for which applications?:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

For its own needs, the AMF has produced proofs of concept (PoCs) on internal developments in AI. A Data-Science / Artificial Intelligence center of expertise (Datalab) was created within the AMF in 2018. Its objective is to respond to identified business issues and to develop improvement solutions based on data with the help of AI.

Examples of the different PoCs developed in the Datalab are:
-
- Detection of weak signals and new scams on unregulated financial products and unregular platforms
- Identification of links between stakeholders in an investigation
- Improving the AMF's IT expenditure forecasting
- Detection of weak signals and scam trends by web-scraping/behavioural analysis
- Verify the completeness and consistency of the Reference Documents (RDs)
- Follow-up on declarations of the number of shares
- Follow-up on the risk section of the Reference Documents

The Datalab has developed an industrialisation methodology to put AIs into production for the benefit of the different departments. In this respect, two applications based on artificial intelligence are already in production and used by the operational team. Two other AIs (are in the process of being industrialised (planned for May 2020).

In addition, the AMF Market Surveillance launched the ICY platform in March 2016 which focuses on the implementation, on the one hand, of technical capacities allowing an advanced exploitation of large amounts of data, and on the other hand, of 3 areas presenting both innovation and operational challenges:
- Area 1: Machine learning for investor classification (monitoring, surveillance, customer supervision, etc.);
- Area 2: Deep learning for text analysis (or NLP) in order to make more effective use of information (regulatory or not) available in a non-standardised format;
- Area 3: Deep learning for image recognition applied to the detection of market manipulation such as layering.

Question 37: Do you encounter any policy or regulatory issues with your use of AI?

Have you refrained from putting AI based services in production as a result of regulatory requirements or due to legal uncertainty?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

No. The use of AI is only for AMF’s supervision needs. The data used and the legal framework remains the same as usual.

Question 38. In your opinion, what are the most promising areas for AI-

applications in the financial sector in the medium term and what are the main benefits that these AI-applications can bring in the financial sector to consumers and firms?

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF did not receive a large amount of AI projects applied in the financial sector (between 5 and 10). We noted that the majority of projects coming to the AMF were robot advisor.

We think that AI can improve the overall service to clients. For some customers, this may allow them to have faster response time thanks to the analysis which is carried out automatically. This may also lie in the provision of decision support tools.

Please see also responses provided by the AMF to the DG CONNECT's consultations on AI (White Paper on Artificial Intelligence) and Data (A European Strategy for Data).

Question 39. In your opinion, what are the main challenges or risks that the increased use of AI-based models is likely to raise for the financial industry, for customers/investors, for businesses and for the supervisory authorities?

Please rate each proposal from 1 to 5:

1. Financial industry

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
1.1. Lack of legal clarity on certain horizontal EU rules						X
1.2. Lack of legal clarity on certain sector-specific EU rules				X		
1.3. Lack of skills to develop such models				X		
1.4. Lack of understanding from and oversight by the supervisory authorities			X			
1.5. Concentration risks					X	
1.6. Other				X		

Please specify what other main challenge(s) or risk(s) the increased use of AI-based models is likely to raise for the financial industry:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF also wishes to raise a sovereignty issue on the AI development in the EU, due to the growing reliance on cloud computing services provided by a limited number of third-party providers, which are largely non-European.

2. Consumers/investors

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
2.1. Lack of awareness on the use of an algorithm				X		
2.2. Lack of transparency on how the outcome has been produced				X		
2.3. Lack of understanding on how the outcome has been produced					X	
2.4. Difficult to challenge a specific outcome			X			
2.5. Biases and/or exploitative profiling				X		
2.6. Financial exclusion					X	
2.7. Algorithm-based behavioural manipulation (e.g. collusion and other coordinated firm behaviour)					X	
2.8. Loss of privacy		X				
2.9. Other			X			

Please specify what other main challenge(s) or risk(s) the increased use of AI-based models is likely to raise for customers/investors:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

AI can potentially create or introduce biases in algorithms and scoring systems. These biases should not, for example, create discrimination against certain categories of client. The biases which could be integrated into the algorithm must be identified, understood, treated and corrected by the firms. AI should be considered as a tool for companies and not as the central decision-making tool. In other words, there should be associated with the review by experts. Firms should implement an AI governance disposal.

3. Supervisory authorities

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
3.1. Lack of expertise in understanding more complex AI-based models used by the supervised entities		X				
3.2. Lack of clarity in explainability requirements, which may lead to reject these models					X	
3.3. Lack of adequate coordination with other authorities (e.g. data protection)			X			
3.4. Biases				X		
3.5. Other						

Please specify what other main challenge(s) or risk(s) the increased use of AI-based models is likely to raise for the supervisory authorities:

5000 character(s) maximum
including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

Question 40. In your opinion, what are the best ways to address these new issues?

Please rate each proposal from 1 to 5

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.

New EU rules on AI at horizontal level	X					
New EU rules on AI for the financial sector	X					
Guidance at EU level for the financial sector					X	
Experimentation on specific AI applications under the control of competent authorities				X		
Certification of AI systems	X					
Auditing of AI systems	X					
Registration with and access to AI systems for relevant supervisory authorities	X					
Other						

Please specify what other way(s) could be best to address these new issues:

5000 character(s) maximum

including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF is of the view that the AI applied in financial services should not be regulated at this stage, because it hasn't really picked up yet in France or more generally in the European Union. It would be necessary to wait for a real emergence of AI in this sector before imposing new standards. Moreover, finance is a regulated sector, AI applied to financial services is de facto regulated depending on the applications in which it is employed.

For the same reasons, at this stage we think that it would be premature to set up a certification of AI systems.

Please see also responses provided by the AMF to the DG CONNECT's consultations on AI (White Paper on Artificial Intelligence) and Data (A European Strategy for Data).

Harness the benefits data-driven innovation can bring in compliance and supervision

RegTech tools that are emerging across Europe can bring significant efficiencies for the financial industry. Besides, national and European supervisory authorities also acknowledge the benefits new technologies can bring in the data-intensive supervision area. Following on the findings of the Fitness Check of EU supervisory reporting, the Commission is already acting to develop a supervisory reporting that is fit for the future. Leveraging on machine learning technology, the Commission is mapping the concepts definitions and reporting obligations across the EU financial services legislation to identify the areas where further standardisation is needed. Standardised concept definitions and reporting obligations are a prerequisite for the use of more automated processes. Moreover, the Commission is assessing through a Proof of Concept the benefits and challenges recent innovation could bring in the reporting area such as machine-readable and machine executable legislation. Looking at these market trends and building on that work, the Commission is reflecting upon the need for additional initiatives at EU level to facilitate the uptake of RegTech and/or SupTech solutions.

Question 41. In your opinion, what are the main barriers for new RegTech solutions to scale up in the Single Market?

Please rate each proposal from 1 to 5:

Providers of RegTech solutions:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Lack of harmonisation of EU rules				X		
Lack of clarity regarding the interpretation of regulatory requirements (e.g. reporting)						X
Lack of standards			X			
Lack of real time access to data from regulated institutions			X			
Lack of interactions between RegTech firms, regulated financial institutions and authorities		X				
Lack of supervisory one stop shop for RegTech within the EU				X		
Frequent changes in the applicable rules			X			
Other						

Please specify what are the other main barrier(s) for new providers of RegTech solutions to scale up in the Single Market:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that standardisation of concept definitions and information requirements is a prerequisite for the use of more automated processes. In this regard, the AMF supports the ROFIEG recommendation calling on the European Commission to adopt a strategy on how reporting and compliance processes may become both machine and human-readable, to the extent possible (recommendation 11).

Financial service providers:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Lack of harmonisation of EU rules			X			
Lack of trust in newly developed solutions			X			
Lack of harmonised approach to RegTech within the EU			X			
Other						

Please specify what are the other main barrier(s) for new Financial service providers solutions to scale up in the Single Market:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

First, RegTech/Suptech solutions will be able to scale up in Europe only if there is a certain degree of regulatory certainty that these solutions are compliant with application regulations. In addition further harmonization of EU regulatory framework and practices would be needed for the development of such solutions (e.g. reporting concrete operational processes, KYC provisions, transparency obligations applied to AI solutions).

Further, although the use of SupTech as part of the AMF's supervisory missions could improve practices there are still some risks.

- Although the use of a compliant/regulatory tool used by the supervisor and the compliance teams of regulated entities could improve practices, there is a risk that the use of such a common SupTech solution would create opportunities for circumvention by regulated entities (e.g. in the area of market abuse) and concerns about the quality of risk management (excessive dependence on a solution proposed by a service provider) ;

- Notwithstanding that the AMF supports the adoption of advanced RegTech and SupTech solutions by the financial sector, provided that the risks associated with a fully automated decision tools are addressed i.e. RegTech/SupTech solutions involving no human control.

Question 42. In your opinion, are initiatives needed at EU level to support the deployment of these solutions, ensure convergence among different authorities and enable RegTech to scale up in the Single Market?

- Yes
- No

◯ Don’t know / no opinion / not relevant

Question 42.1 Please explain your answer to question 42 and, if necessary, please explain your reasoning and provide examples:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

RegTech/SupTech solutions applied to financial sector, i.e. regulatory compliance and reporting processes as well as supervisory processes and risk analysis, have the potential to offer significant cost savings for firms to perform what are currently time-consuming and manual regulatory compliance and reporting processes. SupTech solutions also offer regulators and supervisors opportunities to automate and make their regulatory and supervisory processes more efficient and effective (e.g. solutions based on core technologies such as AI and DLT for compliance and digital regulatory reporting). The AMF thus supports the development and use of RegTech/SupTech solutions in order to enhance the effectiveness of market supervision and monitoring.

More specifically, in a context of increasing reporting requirements, the AMF supports the ROFIEG recommendation on RegTechs/Suptechs that calls on the European Commission to make financial services legislation more machine-readable and more machine-enforceable, especially with regard to reporting processes (recommendation 9). To this end, the experts Group stresses the need to standardise legal terminology (i.e. to adopt standards-based common RegTech and SupTech solutions) and the classification of actors, products, services and processes in order to fully draw the benefits of these solutions.

In addition, as RegTech/Suptech companies mostly base their activities on European regulations, harmonised regulatory framework across the EU would be needed. The more harmonised the rules, the lower the technical/legal investment required to perform their activities in other Member States and the quicker these solutions could be fully developed in Europe. Co-ordination with relevant authorities and international standard setters appears thus key for the development of a comprehensive approach to the adoption RegTech/SupTech solutions in the EU. In this regard, the AMF supports the work of the EFIF to improve information-sharing on RegTechs/SupTechs developments.

Finally, the AMF highlights that the use of SupTech solutions as part of the AMF's supervisory missions would be fully attractive only if it provides economies of scale, i.e. if the service provider also provides its services to the private sector. Indeed, without this type of economy of scale, the supervisor will tend to choose solutions developed in-house in order to retain control over its data and protect its know-how and expertise.

Question 43. In your opinion, which parts of financial services legislation would benefit the most from being translated into machine-executable form?

Please specify what are the potential benefits and risks associated with machine-executable financial services legislation:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

As mentioned in the questions above reporting requirements have been significantly increased and RegTech/SupTech solutions could help enhancing efficiencies in reporting and compliance through machine readable and executable tools, automated and AI solutions for data input, aggregation and analysis.

These solutions could bring faster and less expensive regulatory reporting as well as more effective regulation and supervision especially for consumer protection, market integrity, KYC, AML/CFT and reporting processes. Nevertheless, the harmonisation of regulatory measures and practices across the EU is a prerequisite for RegTechs/SupTechs to perform their activities throughout the EU.

Question 44. The Commission is working on standardising concept definitions and reporting obligations across the whole EU financial services legislation.

Do you see additional initiatives that it should take to support a move towards a fully digitalised supervisory approach in the area of financial services?

Please explain your reasoning and provide examples if needed:

5000 character(s) maximumincluding spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that standardisation of terminologies, data formats and reporting obligations are key to ensure a uniform application of EU financial services legislation but also to ensure comparison of data by users.

As regard financial market data it should be ensured that users have a proper access to pre and post trade transparency on a reasonable commercial basis as provided by the texts. Therefore, as regard market data to be provided on a reasonable commercial basis ESMA has planned to work on guidance to develop a standardised publication format to be used by all trading venues, APAs and SIs for disclosing RCB information; standardisation of key terminology used; guidance on key concepts (e.g. per user fees); and guidance on the typology of costs to be included in the fee calculation as announced in its MiFIR review report on costs of market data and CTP of December 2019.

Question 45. What are the potential benefits and drawbacks of a stronger use of supervisory data combined with other publicly available data (e.g. social

media data) for effective supervision?

Should the Please explain your reasoning and provide examples if needed:

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

While regulation by data is essential, especially to identify risk areas quickly, among a multitude of data, the AMF highlights that social data can be manipulated and corrupted by anyone as it is freely available. It cannot be a trustworthy source of information used as evidence under supervisory procedures. However, the data from social media can be interpreted as signs of potential market abuse or online scams.

IV. Broader issues

Question 46. How could the financial sector in the EU contribute to funding the digital transition in the EU? Are there any specific barriers preventing the sector from providing such funding?

Are there specific measures that should then be taken at EU level in this respect?

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

As developed in its response to the consultation on the review of MiFID II/MiFIR and in accordance with its Action Plan on Investment Research published in January 2020, the AMF supports a change of rules on research so as to ensure a better coverage for SMEs.

In particular, the AMF views favorably the introduction of a form of proportionality on SME stocks that could be taken out of the unbundling rules. Another path would be to stir the sound development of issuer-paid research. This is all the more important for companies involved in the digital transition since they often need to raise large financing for capital markets and in this respect financial information such as provided by research in investment is a key factor.

Question 47. Are there specific measures needed at EU level to ensure that the digital transformation of the European financial sector is environmentally sustainable?

5000 character(s) maximum including spaces and line breaks, i.e. stricter than the MS Word characters counting method.

The AMF believes that digitalisation is part of the tools which can help overcome some obstacles to the growth of sustainable finance.

Other consultations focusing on sustainable finance hence discuss the benefits of the digital transformations to support sustainable finance (e.g. the use of digital reporting for ESG disclosures, the use of blockchain technology to facilitate traceability of green and sustainable projects, the application of digital solutions to facilitate the integration of investors' ESG preferences and access to finance for green projects, or the application of AI to the analysis of ESG data).

At the same time, the environmental impact of information technologies is increasing rapidly and becoming a growing concern. Estimated at around 3% of worldwide total emissions (similar to air traffic), the carbon footprint of the digital sector could double by 2025 and reach the carbon footprint of light vehicles (*NB:* this issue is discussed in a recent publication of French authorities, including the AMF and the French authority for the regulation of electronic communications). In that context, the European Commission’s digital strategy has set an objective of climate neutrality by 2030. Efforts towards carbon neutrality for the sector involve decarbonizing energy use, optimizing energy needs and favoring numerical sobriety. At the same time, new usages such as the digital transformation of the European financial sector will lead to a sharp increase in carbon emissions.

It seems necessary to fully integrate environmental considerations in digital projects within the financial sector. In many cases, digitalization might have a positive impact by avoiding emissions (e.g. by reducing the need for physical contacts or mailing, etc.), but, in other cases, it may lead to new sources of carbon emissions. Financial institutions should therefore carefully consider the environmental impact of their digital strategy on their efforts to reduce their own carbon footprint, or, for an increasing number of institutions to reach carbon-neutrality. Some recent initiatives to increase transparency on carbon emissions associated to the use of digital tools, and to encourage digital practices that are less detrimental for the environment, might also be useful (for instance, the French Authority for electronic communications is exploring the environmental impact of telecoms networks and devices and is considering the publication of a yearly green barometer). In the specific cases of the use of digital tools for green project (e.g. use of blockchain technology), these considerations, and the associated transparency, will be especially important. Public or private initiatives for certifying environmental impact of certain technologies could be explored.

Additional information

Should you wish to provide additional information (e.g. a position paper, report) or raise specific points not covered by the questionnaire, you can upload your additional document(s) here:

The maximum file size is 1 MB.
You can upload several files.
Only files of the type pdf,txt,doc,docx,odt,rtf are allowed