

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

Fields marked with * are mandatory.

Introduction

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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](#)

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- Hungarian
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* I am giving my contribution as

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| <input type="radio"/> Consumer organisation | <input type="radio"/> Non-governmental organisation (NGO) | |

* First name

Mette

* Surname

Stürup

* Email (this won't be published)

ms@fida.dk

* Organisation name

255 character(s) maximum

Finance Denmark

* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

Transparency register number

255 character(s) maximum

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

* Country of origin

Please add your country of origin, or that of your organisation.

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- Saudi Arabia
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- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen
- Sweden
- Switzerland
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- Syria
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- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi
- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- China
- Christmas Island
- Clipperton
- Cocos (Keeling) Islands
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- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jamaica
- Japan
- Jersey
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- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
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- Tajikistan
- Tanzania
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- The Gambia
- Timor-Leste
- Togo
- Tokelau
- Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
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- Turks and Caicos Islands
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- Uganda
- Ukraine
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- United States Minor Outlying Islands
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* Field of activity or sector (if applicable):

at least 1 choice(s)

- Accounting
- Auditing
- Banking
- Credit rating agencies
- Insurance
- Pension provision
- Investment management (e.g. hedge funds, private equity funds, venture capital funds, money market funds, securities)
- Market infrastructure operation (e.g. CCPs, CSDs, Stock exchanges)
- Technology companies
- Organisation representing European consumers' interests
-

Organisation representing European retail investors' interests

- National supervisory authority
- European supervisory authority
- Other
- Not applicable

* Publication privacy settings

The Commission will publish the responses to this consultation. You can choose whether you would like your details to be made public or to remain anonymous.

Anonymous

Only your type of respondent, country of origin and contribution will be published. All other personal details (name, organisation name and size, transparency register number) will not be published.

Public

Your personal details (name, organisation name and size, transparency register number, country of origin) will be published with your contribution.

I agree with the [personal data protection provisions](#)

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.

The financial sector want to use advantage of the opportunities offered by innovative technologies in under the same conditioners as institutions which are not banks. A strict regulatory framework forces the financial sector to carefully evaluate innovative technologies to comply with existing requirements, which slows down the technological adoption. In addition, the banking sector operates with specific requirements which other market players can bypass due to their categorization as “not banking institutions” although they provide the same services. This makes the principle of “same services, same risks, same rules and same supervision” crucial.

Regulatory fragmentation across Europe can also hamper the adoption of innovative technologies, detrimentally impacting tech-driven cross-border business (e.g. for cloud computing due to gold plating following the EBA Guidelines on outsourcing).

We therefore support the development of technology-neutral legislation that:

A) is horizontal and sufficiently flexible to protect all consumers irrespective of new technologies or products that may arise in the market; and

B) Provides clarity to the market regarding applicable requirements for digital innovation.

Without such clarity, traditional market players will be at a disadvantage when implementing new innovative services/functions.

Furthermore, ensuring ongoing education and up-to-date technical competences amongst legislators /authorities and having sufficient resources to engage also with new/emerging technologies and new actors is critical for the pace of innovation in the (traditional) financial sector.

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.

In the increasing digitalisation of the financial sector, and with the view to guarantee a sound and overarching protection of consumers, we recall that it is crucial for regulation to target services and products, not providers. For this purpose, the principle “same services, same risk, same rules, same supervision” should be applied not only by banks but also by third party providers.

Advantages:

1) Consumers have access to an increasing number of financial service providers that offer a varied and extensive selection of products and services. However, the outset of those service providers may be differ as some will be traditional financial service providers while others come from the tech industry. Consequently, it is crucial that the principle the principle “same services, same risk, same rules, same supervision” applies to all providers.

2) Customers can effectively and easily manage their finances and perform their day-to-day transactions due to vastly improved digital user interfaces. Access to such services however require strong customer authentication. Therefore, it should be a priority that all consumers are able to obtain the necessary

personalized security credentials digitally and in a highly user-friendly manner.

3) Technologies such as big data and AI may improve services for customers (e.g. innovative credit scoring and better product segmentation and development by using “big data”). Accordingly, GDPR and the rules in the payments area should be aligned to create the necessary comfort and clarity for market participants to be able develop such new services. Furthermore, national rules that add to the requirements under EU law should be avoided to the extent possible to prevent market fragmentation or issues of an unlevel playing field.

Challenges:

1) As digital solutions increasingly permeate financial services, it is important to ensure that these services can be accessed by the vast majority of consumers notwithstanding any psychical/mental challenges or lack of knowledge. More efforts on digital and financial education are therefore needed as well as ensuring that services are accessible to all customers.

2) Creating and associating personalized security credentials can currently be a complex process, and in particular for consumers without a national eID or with a limited bank engagement only.

3) Lack of trust in digital services or products, data protection and/or security concerns. On the latter, scamming, phishing, and hacker attacks are examples of potential threats to consumers.

Possible solutions are:

- Use of regulatory sandboxes.
- Widening the regulatory perimeter in line with the principle ‘same activity, same risk, same regulation.’

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.

Priority 1

We fully support the efforts towards the development of technology-neutral legislation that is horizontal and sufficiently flexible to protect all consumers irrespective of new technologies or products that may arise in the

market. We recommend a technologically neutral approach to provide clarity to the market regarding applicable requirements for digital innovation e.g. crypto-assets. Without such clarity, innovative services /functions will not be implemented by traditional market players.

Priority 2

We believe that clear, simple, future-proof and overarching rules, e.g. concerning taxonomy and the provision of information on crypto-assets, are essential in order to guarantee consumer protection, and to embrace the digitalization of the financial market.

Priority 3

We welcome the focus of the Commission on removing fragmentation of the Single Market in digital finance services and would also like to highlight the importance of, a consistent and harmonized regulatory framework

Priority 4

We support promoting a data-driven financial sector for the benefit of EU consumers and firms. However, it is important that the Commission take a holistic and horizontal approach rather than a specific financial industry approach. An important priority would be to foster increased cross-border and cross-sector collaboration. It is evident that collaboration is increasingly necessary for the successful implementation of innovative technologies, not least in respect to blockchain & DLT (due to the inherent dependence on network effects).

Priority 4

We welcome the initiative of the European Commission to bring forward legislative proposals for fostering the digital operational resilience framework for financial services with a view to harmonise rules across the EU. The interconnectedness of all actors within the financial ecosystem, including third party providers, and the evolution of ICT risks highlight the need for a common level of minimum security for the financial sector as a whole, based on international coordination.

Financial institutions already abide by different existing security frameworks that establish measures for ensuring the resilience of the banking system (e.g. NIS Directive, PSD2, MiFID II, CRD2, e-IDAS, GDPR, EBA Guidelines on ICT and security risk management, BIS CPMI-IOSCO Guidance on Cyber resilience for financial market infrastructures, TIBER-EU, EBA Guidelines on outsourcing, ECB IT risk self-assessment questionnaire). Any new requirements should be harmonised and also aligned with existing rules at EU and global level, to avoid duplications or overlaps.

New rules should follow a risk-based approach. This would ensure that the framework is future-proof and will provide entities the flexibility required to adapt based on the continuously evolving nature of cyber and technology risks. Rules regarding the implementation of oversight of third party providers, which would preferably be at European level on the basis of international coordination, should also be risk-based according to the type/ criticality of the service and they should target these providers without imposing additional requirements for banks.

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.

We appreciate that much effort that has been done the European Commission (and other European authorities) to ensure that the relevant EU regulation is technology neutral, we still believe that challenges exist.

1) Different EU Member States follow diverging interpretation criteria when transposing EU Directives into national laws. This leads to cross-border fragmentation and potentially to additional national requirements ("gold plating"). This is complicated further by national authorities exerting authority even where clear guidance exists as to what national authority is the competent authority. See for example the reporting requirement under PSD2 art. 98 and the Guidelines on the security measures for operational and security risks of payment services. More emphasis should therefore be placed on legal clarity and certainty across jurisdictions as well as international coordination.

2) PSD2/Strong Customer Authentication - the current requirements applied to certain forms of electronic payments, such as contactless transactions, may create barriers to the development of innovative and user-friendly forms of payment.

3) Regulation of the payments chain focuses on banks, e.g. regarding the Multilateral Interchange Fees/MIF. Digital wallets are not regulated, allowing dominant players to potentially squeeze margins, thus reducing sustainability of infrastructure and limiting the capacity to invest.

European banks require legal clarity and certainty regarding the applicable regulatory requirements for crypto-assets. To that end, we supports the Commission's work on a classification of crypto-assets. We support a continuous exchange with the financial industry to determine such classifications appropriately. We proposed a taxonomy for discussion and continuous exchange in its response to the European Commission consultation on crypto-assets.

The existing EU financial services regulatory framework also tends to create financial infrastructures, which are self-reinforcing and make it difficult to introduce technological change. This is a significant barrier for innovation and could be said to violate the principle of technology neutrality of EU regulation. An example of this is the CSDR, which is very prescriptive in terms of defining the structure, actors and technical setup of the post-trade market. Post trade (especially settlement) is an area where many believe that DLT holds significant promises, yet any meaningful application of DLT in post trade seems fundamentally incompatible

with the structure and setup currently prescribed by CSDR (such as the need for a CSD in the first place, as well as being fundamentally based on the concept of "accounts").

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.

We believe that horizontal and sufficiently flexible technology-neutral legislation is key to ensure sound consumer protection in a continuously evolving digital market. More specifically, flexibility would allow legislation to remain relevant, adapt to the changes in technology and ensure consumer protection. The timing of the EU decision-making process in terms of negotiations, implementation, etc, makes continuous adjustment of legislation in response to evolving technologies very difficult. Therefore, ensuring that legislation is technology neutral is necessary to ensure that it remains relevant to future, potentially rapid, technological changes and to ensure consistency in the protection of consumers.

For example, we particularly praise the design of the Distance Marketing of Financial Services Directive, that by being principle-based rather than rule-based, was able to adapt to evolving use of digital devices and continues ensuring a high level of consumer protection.

In our view, the time has therefore come to move towards an outcome based or principle based approach rather than requiring specific formats or methods. This would apply e.g. to the information requirements under PSD2 or the information to be given under the PAD.

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.

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

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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)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cloud computing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artificial Intelligence/Machine learning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet Of Things (IoT)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biometrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quantum computing	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

In our opinion, the uptake of DLT and crypto assets often link closely.

As also set out by the Association for Financial Markets in Europe (AFME) in response to the recent consultation on an EU Framework for Markets in Crypto-assets, we support that the Commission:

- Publish a detailed taxonomy on the classification of crypto-assets in order to provide regulatory clarity for market participants
- Applies existing regulation with any necessary amendments or additional guidance where possible to encourage innovation and foster a level playing field, applying the principle of ‘same activity, same risk, same regulation’
- Provide additional clarification on how existing rules will apply to crypto-assets, as those rules were not originally designed with crypto-assets in mind
- Ensures that the EU regulatory framework for crypto-assets is globally aligned, wherever possible, in order to sufficiently mitigate risks

We refer to AFME's response for further detail and suggestions.

As for biometrics, we observe that the use of e.g. keyboard stroke patterns and mouse movements for security/fraud prevention appears to be at odds with the GDPR as they are perceived to be biometric data.

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)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

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

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 u p c o m i n g 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intra-European wholesale payments	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumer credit provision to households with risk taking	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumer credit distribution to households with partner institution(s)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mortgage credit provision to households with risk taking	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mortgage credit distribution to households with partner institution(s)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit provision to SMEs with risk taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit distribution to SMEs with partner institution(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit provision to large corporates with risk taking						

	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Syndicated lending services with risk taking	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk-taking activities in Life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Risk-taking activities in Non-life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Risk-taking activities in pension products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Intermediation / Distribution of life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Intermediation / Distribution of non-life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Intermediation / Distribution of pension products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other insurance related activities, e.g. claims management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Re-insurance services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Investment products distribution	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asset management	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

Financial Services is witnessing an unprecedented time of change with digital transformation redefining the entire industry and the recent interest of BigTech firms in the sector, represents a key factor. Among the several areas impacted, payments will be at the top of the list. New opportunities to make payments, in addition to cards and SCT and SDD, have emerged in recent years and will likely be a driver for tech entrants to gain market share in the EU.

Based on our experience, new financial market entrants start by offering account and payment type of products and expand first to consumer lending (credit card) / SME lending (small loans without collateral) type of products.

Where financial services are not part of the core business, we would not expect significant risk taking to take place in areas that stretch far beyond those. However, this does not preclude achieving significant market shares e.g. within payments or extending credits to both households (credit cards) and/or SME's.

Mortgages and operating locally with products requiring collateral have a higher entry barrier due to limited data availability and lower digitalisation levels of collateral markets. This makes it more difficult to introduce scalable solutions. However, we observe rapid changes in this area.

Similarly, we tend to believe that insurance type of products are seen to have a higher entry barrier due to similar limitations with data and digitalisation.

Besides this, many non-financial companies would have the possibility to invest equity.

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.

In line with the “same services, same risks, same rules” principle, the actual requirements for technology platforms should be the same as financial institutions, to the extent they provide the same services.

An important example is crypto assets and the fight against money laundering and terrorist financing (AML /CTF).

Crypto-assets are open to the same use for AML/CTF as traditional financial assets. If crypto-assets are not included in the EU's AML/CTF legal framework, this could provide more incentives to criminals to increase the use of such assets, thus making AML/CTF harder to detect and to investigate. More specifically, covering only one moment of the exchange (fiat-to-crypto) would make it impossible to detect many illicit transfers. Similar considerations would apply to payment gateway providers, and non-bank technology platforms operating in the financial sector based on crypto-assets are insufficiently covered by AML regulation.

Many actors in the crypto-space also engage in activities that are comparable to conventional financial services activity, yet are not necessarily subject to the same regulatory regimes.

This would include for instance centralized crypto exchanges acting as custodians on behalf of their customers (e.g. an exchange holding its customers assets in "hot wallets" is comparable to a traditional custodian safekeeping customer assets in an account).

Similarly, many companies have raised funding through ICOs or STOs, which are often marketed as equivalent to traditional securities offerings - yet the actual assets are not subject to the same requirements e.g. in terms of customer protection, transparency and the general obligations of the issuer.

We acknowledge that there are no easy solutions to these observations, given that some crypto activity is actually novel and should be treated as distinct from conventional activity. Yet it may be hard to make this distinction, and this highlights the importance of the ongoing work to create a working taxonomy for crypto assets.

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)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liquidity risk for particular credit institutions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liquidity risk for asset management companies	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit risk: household lending	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit risk: SME lending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit risk: corporate lending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pro-cyclical credit provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentration risk for funds collected and invested (e.g. lack of diversification)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentration risk for holders of funds (e.g. large deposits or investments held in a bank or fund)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undertaken insurance risk in life insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Undertaken insurance risk in non-life insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Operational risks for technology companies and platforms	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operational risk for incumbent financial service providers	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Systemic risks (e.g. technology companies and platforms become too big, too interconnected to fail)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Money-laundering and terrorism financing risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

- 1) Liquidity: We do not expect fin-tech companies to impact liquidity risk in the interbank market
- 2) Credit Risk: Fin-tech companies might use a different approach to credit assessment. This will change the market and might put pressure on some cases. Usually Fintech companies will use a portfolio/data-driven assessment approach whereas traditional banks also use individual case credit assessments. We expect the risk will increase, as traditional banks will be pressured to provide terms equal to some of the (sometime more aggressive) new fin-tech banks.
- 3) Concentration risk might be reduced if the fin-tech companies are fragmented (many small fin-tech companies), otherwise it is neutral.
- 4) Operational risks are expected to be neutral or increase a bit. If the new Fintech companies have narrow focus and a simple business model with few manual procedures, it will be neutral or reduced a bit. However, we would predominantly expect that new Fintech entrants to be large and digital. However, with the changing regulation and new ways of making business they may be challenged when it comes to flexibility and assessing more complex risks.
- 5) Systemic risks will increase, as we will rely on digital procedures in new companies with an immature control environment, limited experience in the market and sometimes operating with a limited capital base.
- 6) Financial crime risk will likely increase with automation in the short run, as financial criminals might be able to game automatic solutions. On the business side, regulatory and compliance immaturity in the AML /CTF field within the tech companies may enhance this risk, especially in the start-up/fintech environment. Secondly, supervisors may be challenged by the lack of technological knowledge/understanding and sufficient resources to oversee all entities/sector under AML/CTF supervision. However, an EU regulatory framework consisting of a single rulebook, enhanced corporation and EU centralised supervision to supplement local supervision could reduce these risks significantly.

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Liquidity risk	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Misselling of insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Misselling of investment products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Misselling of credit products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Misselling of pension products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inadequate provision of information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inadequate complaint and redress process and management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use/abuse of personal data for financial commercial purposes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discrimination e.g. based on profiles	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Operational risk e.g. interrupted service, loss of data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input checked="" type="radio"/>				

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.

Other potential risks include:

- 1) The potential concentration of users in a relatively few number of BigTech companies may increase barriers to entry for other big or small market participants if the company/companies link or limit their services to users.
- 2) Due to the funds available to the Big Tech companies and their capacity to engage in any kind of activity, BigTech companies may potentially use aggressive tactics towards smaller Fintech companies and other market participants, e.g. "buy and kill" or predatory pricing to limit innovation and/or competition.

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:

The increasing engagement of large, technology driven companies in financial services may increase risks in relation to those areas that are not yet regulated in the same way for all the market participants carrying out the same activities.

For instance, the EU framework for prudential supervision aimed at ensuring the stability of the financial market, is not applicable to non-banks, such as technology companies performing similar financial services activities.

Market participants offering the same service or product should be subject to rules that are activity-based and according to the risks that the specific activities produce. This principle should apply to all types of rules and regardless of whether the activities are carried out by a financial institution, a start-up, or a Big-tech.

The risk scenarios thus would depend much on whether the activity/provision of the service in question requires a formal financial license. E.g. general deposit taking would require a traditional bank license, and therefore the entity in question would be subject to same requirements of other traditional players (i.e. same risk).

Hence, much would also depend on the ability of supervisory authorities to oversee technology companies as well and ensure that same levels of risk, consumer protection etc. apply.

Secondly, the relative size of the company in question would likely affect its ability to adhere to existing regulation and requirements.

Thirdly, the "concentration power" of tech companies will likely imply that BigTechs will become responsible

for more and more of consumers' everyday activities (including financial services). This leads to an increased lock-in of users, which ultimately risks resulting in anti-competitive outcomes, where consumers have negative incentives to look for alternative providers, and creating significant entry-barriers for other players.

Finally, the provision of services from entities in other jurisdictions outside EU will likely challenge the ability of authorities to monitor developments and allow due oversight.

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.

Current bank regulatory and supervisory frameworks generally predate the technologies and new business models of technology driven companies. This creates a risk of unintended regulatory gaps when new business models move critical banking activities outside regulated environments or, conversely, results in unintended barriers to entry for new business models.

We therefore believe that EU authorities should promote innovation by all players under fair and even conditions by:

- 1) Shifting from entity to activity-based regulation and moving to principle-based rules. Moving towards activity-based regulation is appropriate, especially in relation to crypto-assets. A current example would be the area of crypto assets and the need for establishing the appropriate measures to mitigate the ML/TF risks associated with crypto-asset activities.
- 2) Extending the regulatory perimeter to non-financial entities with the potential to create systemic risks. Special focus should be on operational risk, including cybersecurity, fraud or cybertheft, consumer protection, procyclicality, etc.
- 3) Levelling the playing field as regards access to data. The revised Payment Services Directive (PSD2) has stimulated competition and innovation, however it has also created an asymmetry in terms of access to data: with the consent of the customer, non-financial firms can access financial transactions, but their users cannot easily share the data held in those firms. Enhancing the existing right to data portability under Article 20 GDPR, as proposed by the Commission in its Data Strategy, is recommended as the way forward. Meanwhile, the Commission should begin to explore a portability right for firms, starting with the ability of

businesses to port their data from large digital platforms (e.g. through Digital Services Act).

4) Adapt competition policy and regulation to the challenges of digital markets. Focus should be on dynamic competition and risks to innovation, and taking data fully into account. Adapting the merger control thresholds in order to capture firms with low turnover but highly competitive potential would be important as well. Finally, introducing ex ante regulation when needed, e.g. neutrality requirements for key digital platforms to ensure fair access to platforms and infrastructures that are relevant for the delivery of financial services, and to prevent self-preferencing of their own competing products.

Finally, ensuring that the provision of financial services from entities in other jurisdictions outside EU are subject to same rules and regulations would help to uphold both a level playing field and ensure due consumer protection.

One area is crypto assets. In the current ecosystem of cross-border and digital transactions, the we acknowledges the need for establishing the appropriate measures to mitigate the ML/TF risks associated with crypto-asset activities. In order to ensure a consistent protection against money laundering, there cannot be an unjustified differentiation between traditional financial institutions and other market participants. In case crypto-asset service providers would be excluded from the status of 'obliged entities' under EU AML /CFT framework, the resulting lack of requirements would leave room for weaker defences. In turn, criminal networks could exploit this lower level of protection, ultimately undermining the AML efforts by financial institutions. Ensuring that crypto assets service providers comply with the same rules as financial institutions would make it easier for the latter to engage in doing business with such providers, if able to deliver KYC information.

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.

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.

The pace of evolution of new technologies makes it difficult for authorities to keep up to speed with the latest developments, which can result in reactive decisions and partially contradictory/conflicting objectives. In addition, regulation and the institutional architecture are often siloed.

Onboarding procedures, where diverging views in each country are creating a patchwork of solutions in the market, which respond to regulatory requirements rather than robustness, efficiency, or customer service needs.

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.

In our opinion, the challenges may best be addressed by:

- 1) Ensuring sufficient (and competent) supervisory resources at all levels, both NCAs and EU authorities;
- 2) Building an even stronger EU framework on collaboration among authorities;
- 3) Establish EU supervision on top of national supervision.

In addition, we believe that regulatory sandboxes may be a useful tool for authorities a) to understand innovation while testing new, innovative solutions in a safe environment, b) to identify regulatory barriers to innovation that may exist, and c) to test the foundation for their decision making process. Having all relevant authorities- either financial or non-financial (Data Protection authorities, Competition authorities, AML authorities) - participating at the same time in sandbox projects will also help to enrich and provide more value to this environment.

A framework for cooperation among different national sandboxes will also help to create synergies among the different authorities, as well as to contribute also to harmonization. There would be merit also in having an EU wide regulatory framework of experimentation, which would help to better understand and face barriers for cross-border innovation in the financial sector in Europe.

Finally, sandboxes may allow informal discussions to take between companies and authorities, without risking that authorities take up formal cases based on these discussions (in order for the authorities to have a better understanding of different markets etc.).

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.

To compete successfully, financial service providers need to obtain efficiency and scale. They should therefore be able to leverage technological developments for cross-border provision of financial services within the EU Single Market (and other jurisdictions).

A well-functioning Single Market and effective harmonisation in the rules, supervision and enforcement is thus key for the cross-border provision of services. As previously indicated the lack of an EU framework for crypto-related activities is a key issue.

Also, insufficient harmonization in the implementation and enforcement of the EU framework is an issue, e.g. uneven transposition of EU Directives that lead to differences in national implementation (and subsequent fragmentation/potential unlevel playing field).

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Harmonise rules governing the acceptable use of remote identification technologies and services in the Anti-Money Laundering legislation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Broaden access for obliged entities to publicly held information (public databases and registers) to enable verification of customer identities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
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)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitate the development of digital on-boarding processes, which build on the e-IDAS Regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitate cooperation between public authorities and private sector digital identity solution providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Integrate KYC attributes into e-IDAS in order to enable on-boarding through trusted digital identities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input checked="" type="radio"/>				

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Provide further guidance relating to reliance on third parties for carrying out identification and verification through digital means, including on issues relating to liability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Promote re-use of digital identities collected for customer due diligence purposes in accordance with data protection rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Promote a universally accepted public electronic identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Define the provision of digital identities as a new private sector trust service under the supervisory regime of the eIDAS Regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other



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.

A Digital Financial Identity could potentially be highly beneficial for fast and easy on-boarding, especially if usable and recognized throughout the EU and both in public and private sectors.

Only a harmonized cross-sectoral approach will, however, provide for the required market penetration with regard to digital identities.

In addition, it is also important to note that in our experience, this will likely also be a technically complex and highly challenging task and thus potentially a very costly task. Therefore, a thorough analysis of the costs and benefits must be carried out.

At this point in time a Digital Financial Identity would in our opinion not require any further data than is already required by the multitude of existing laws and regulations such as AML regulations, tax law and others.

However, where suitable and based on a careful balancing with affected data protection principles, additional identification attributes and data could be obtained where legitimate.

In this context, regulated identity platforms could provide users and regulated entities alike with both, safe data storage and convenient (AML and GDPR-) compliant re-use of (verified) identification attributes and additional data.

In addition, the identification systems at the "substantial" level of assurance that are provided under the

eIDAS Regulation are based on a two-out-of-three-factor authentication, including possession, knowledge and inherence. Hence, the loss of one of the two factors is not sufficient to compromise the digital identity in contrast to face-face procedure.

It is crucial to highlight the importance of having a comprehensive and internationally agreed digital identity assurance framework that can facilitate the use of harmonised digital identity systems across jurisdictions. This would also help to remove frictions when providing services across-borders, while ensuring the appropriate level of reliability for the digital ID solution used in light of the potential money laundering/terrorist financing, fraud and other illicit financing risks. Best practices or lists of reliable digital identity systems or solutions would be appreciated, in order to create a global and trustworthy ecosystem on the basis of the FATF approach.

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.

Although we support the mandatory use of identifiers such as Legal Entity Identifier (LEI), Unique Transaction Identifier (UTI) and Unique Product Identifier (UPI) and while we believe that they would help facilitating digital and/or automated processes in financial services and bring efficiencies, we would however like to point out that the mandatory use should be an obligation for the addressee of such a provision and not a direct or indirect obligation for the intermediaries carrying out services for such addressees. This means that the end-user, which is the entity to be identified, should have a LEI available and should be responsible for its use, its maintenance and updating. When obliging the intermediary instead of the end-user, many operational problems arise which can result in burdensome processes and severe financial damages. The EMIR or MiFID II provisions may serve as an example.

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?

5000 character(s) maximum

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

To a large extent, existing financial regulation and supervision are designed to handle known business models and risks. However, new technology and new business models introduced at an increasing pace challenges both current legislation and supervisory practices, which in turn are difficult to adapt at short notice.

As previously indicated, regulatory sandboxes may contribute to bridging those gaps, however, only if activities can be contained within the existing regulatory perimeter.

Secondly, it is important to ensure European harmonisation between regulatory sandboxes in order to maintain equal access to sandboxes in all markets, enabling future portability and to avoid market fragmentation and regulatory arbitrage.

Thirdly, any experimental products may expose consumers to new risks.

Finance Denmark therefore supports a harmonised EU framework for regulatory sandboxes that:

1. In a controlled environment and to a limited extent, allows market participants to experiment with new products/services (the "sandbox");
2. Grants all financial undertakings the right, irrespective of their financial license, to use the framework;
3. Is managed by relevant authorities/supervisors and develops as relevant EU legislation becomes subject to revision;
4. Protects consumers/customers by requiring that service providers to bear all losses/costs incurred by them in respect of products/services that are discontinued.

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:

		2				
	1		3	4	5	

	(irrelevant)	(rather not relevant)	(neutral)	(rather relevant)	(fully relevant)	N. A.
Promote convergence among national authorities in setting up innovation hubs and sandboxes, through additional best practices or guidelines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Facilitate the possibility for firms to test new products and activities for marketing in several Member States (“cross border testing”)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Raise awareness among industry stakeholders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Ensure closer coordination with authorities beyond the financial sector (e.g. data and consumer protection authorities)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
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)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

Cross-border coordination within the EU is fundamental to promote the scale-up of technological innovation and to prevent an unlevel playing field or regulatory arbitrage. This is the principle underpinning the EU framework for experimentation. Coordination across EU member states should be enhanced. This would imply at least the possibility for a national authority to rely on the outcome of the testing done by another authority within a national sandbox via a system of mutual recognition.

The EBA should take the role as the central hub, facilitating exchange of information as well as the gathering of legal interpretations of existing regulations by national authorities in order to support the uptake of common approaches. An EU representation should be organised by the EU authorities in any international

initiative (e. g. the Global Financial Innovation Network (GFIN)) to ensure that the views of the Union are represented and to allow EU financial entities to be part of any trials across multiple jurisdictions globally.

Likewise, any EU framework of experimentation should also keep in mind similar initiatives that are promoted in third countries, as well as the GFIN work, to ensure knowledge sharing and to avoid a regulatory /innovation arbitrage.

For a supervisor to understand how and if to supervise/regulate e.g. an implementation of AI, they need to both understand the applied technology as well as how the AI is intended to support the business model in order to evaluate the relevant risks with regard to consumer protection and financial stability.

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.

Lending might probably serve as a good lever for supporting the general uptake of digital finance.

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

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.

It is essential that the EU continue to have an appropriate regulatory framework to enable future innovation, a competitive level playing field and fair access to the capital market technical infrastructure (hardware and software) during the ongoing digital transformation of financial services.

We encourage the Commission to continue to pursue EU level initiatives to avoid fragmentation in the Single Market caused by diverging measures on ensuring non-discriminatory access to relevant technical infrastructures supporting financial services.

In the context of technical infrastructures, we observe that the priorities of Member States vary. In order to ensure a level playing field and to avoid regulatory fragmentation, the adoption of uniform measures for all Member States that are to be applied equally according to effect/impact in the EU regardless of origin is desirable, also to ensure scale of economies as base for future development.

Depending on the service in question, access to relevant technical infrastructures (e.g. NFC chips in mobile telephones) should be granted balanced and on fair, reasonable and non-discriminatory (FRAND) or proportionate, objective and non-discriminatory (POND) terms and not automatically.

Terms must be transparent and objective, and tailored for the specific service. Service owners shall be allowed to charge for access as long as the charge is proportionate to the underlying cost related to granting access and it is not prohibitively preventing access.

The service owner should be able to deny access on a POND basis. Denials should be well founded depending on the service in question.

One single supervisory authority should ensure equal enforcement in all Member States, and an independent body could be considered for assessing rejections, and be empowered to instruct service owners.

Finally, competent authorities should issue appropriate guidelines.

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 education 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	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Encourage supervisors to set up hubs focussed on guiding consumers in the digital world	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organise pan-European campaigns and advisory hubs focusing on digitalisation to raise awareness among consumers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collect best practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote digital financial services to address financial inclusion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
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	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

- Promote national platforms for financial education. These national platforms should include a wide range of stakeholders, including representatives of consumers, financial services companies, pension funds, banks, and of course Finance Ministries, Central Banks, Education Ministries and Economics Ministries.
- Promote better educational systems so that citizens can be made better aware of possible problems stemming from the use of digital services.
- Cybersecurity is a critical aspect of digital finance. We recommend that cybersecurity initiatives such as those led by ENISA also are expanded to create room for discussion on personal finance aspects of the digital economy.

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.

We support a European data economy building on a robust legal framework and competitive European infrastructures and which promotes policy measures that addresses issues related to connectivity,

processing and storage, computing power and cybersecurity.

We observe major differences in the maturity of Member States markets. E.g., there are big differences between i.e. the Scandinavian tech-savvy countries and Germany, being a country with limited central digital data records. Therefore, a common standard of requirements would be very beneficial for market developments to unfold.

Measures should be strengthened especially in providing legal frameworks and guidelines for standardising the way personal/company data should be made visible and accessible for end users and how end users provide consents to data utilisation.

Standardisation and ""API-fication"" of data to ensure portability and to enable easy transfer of data across industries and defining how utilisation of data is governed in a way that ensures end user control to full data value chain are crucial factors for success.

By accelerating such initiatives, significant momentum could be achieved for the European financial sector and other industries to provide new data related services to end users and improve quality of existing services to the benefit of consumers and the economy in general.

The fundamental requirements for efficient open finance are first and foremost to distinguish between machine data and personal data

For both categories it is important to ensure standardization of data and data formats including clarity on the way data can be technically accessed and in this context ensure that data is shared in real time ensure a level playing field for machine data in general (not personal data), both data access and data use is either free of charge or based on a cost-based approach (e.g. Long Run Increment Cost – LRIC+) including no limitations/restrictions in usage of the obtained data.

In case there is a move towards free of charge machine data, it would be relevant to take a similar approach in the market data space (raw market data) in contrast to the present ""Reasonable Commercial Basis"" approach in MiFIDII/MiFIR in order to create a level playing field for raw data in general. Years ago, market data was actually free of charge.

When discussing Open finance we should move away from the principle of PSD2, where banks have to give access to data without a contractual relation and without any fair distribution of value. All market players should be able to benefit and build sustainable business cases.

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?

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Non-financial reporting data from listed companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
SME data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Prudential disclosure stemming from financial services legislation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Securities market disclosure	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disclosure regarding retail investment products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Further development of the European Financial Transparency Gateway, federating existing public databases with a Single EU access point	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Application Programming Interfaces to access databases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Public EU databases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

Initially, it is important to note that we believe the approach and selection proposed appears too narrow. Only focusing on data usability may thus be insufficient to achieve the sought for market developments.

In our view, the whole value chain should be developed concurrently to ensure end user control, consents, standardised technical portability and transparency to data utilisation. Developing standardised guidelines and legislation applicable across industries should hence be the main focus.

That being said allowing financial institutions to easily integrate standardised APIs would be beneficial to all industry participants (including supervisory authorities and third-party providers) and would help to promote a level playing field.

APIs should be uniform where possible and technical details of the required API functionality and standards landscape should be clearly defined. APIs are the preferred method for transmission as they are secure, efficient and can provide data access on a real-time and/or regular basis.

Further, access can also be more easily revoked, where appropriate. Interoperability between different APIs will be essential to make data sharing a reality (both within and across sectors).

In addition, authorities should carry out the following actions to facilitate the usability and re-usability of data across Europe:

- Help the re-user identify the exact authority that holds a specific set of data (i.e. one-stop-shop) and provide single point of access for comprehensive datasets (e.g. relating to sustainability);
- Ensure that requests for data access are processed quickly and within agreed deadlines;
- Ensure anonymization of specific data for concrete use-cases;
- Offer the opportunity to process data within a secure environment;
- Clarify from the outset the legal rules on the purposes the data can be used for; and
- Ensure the cost of the action is proportionate to the use case.

There needs to be added value for consumers by solving a concrete issue or making a process easier. Data can give the consumer a better insight/overview in their own financial affairs, early warnings on i.e. spending, help to keep a budget, save money, and get better and more tailored offers. It needs to be very transparent for the consumer what their data is being used for and how it benefits them. The solutions must therefore always be based on active consent and they must be at a very high level of security (cyber). We observe trends in the market that implies lower service prices for consumers when sharing information, and we believe this trend will accelerate. Developments in the insurance industry provides a good example of this.

Hence, financial institutions will need to be trusted not to share the information further unless the consumer accepts this. The consumer (or their data) could otherwise themselves become a commodity as we see in the BigTech companies.

Therefore, in our opinion, important preconditions that encourage data sharing by individuals (retail or wholesale) include ensuring:

- Secure transmission of data (e.g. via APIs);
- Efficient and timely transmission of data (i.e. transmission that is simple, on-going, real time and standardised); and
- That the individual is in control of their data, by enhancing data portability and securing data protection rights.

Further, data sharing is only successful if users are able to complete the necessary processes, including any authentication processes (identity verification) and a selection of relevant datasets.

This requires the data sharing process to be efficient, user-friendly and is able to maintain users' confidence. Certain standard approaches can help ensure that all organisations adhere to this, including for example, maximum API response times, minimum API uptimes and the removal of artificial barriers during the user journey.

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Cheaper traditional services for consumers/investors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiencies for the industry by making processes more automated (e.g. suitability test for investment services)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Business opportunities for new entrants in the financial industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
New opportunities for incumbent financial services firms, including through partnerships with innovative start-ups	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easier access to bigger sets of data, hence facilitating development of data dependent services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced access to European capital markets for retail investors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced access to credit for small businesses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Financial exclusion	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor consumer outcomes (e.g. unfair pricing strategies)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Misuse of consumers' financial data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business confidentiality issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased cyber risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of level playing field in terms of access to data across financial sector activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

Moving beyond the PSD2 framework towards open finance without also taking similar action in other sectors would deepen the existing data asymmetry faced by banks and heighten the risks associated with it. In the current framework, some firms are acting as data gatekeepers, while others must share data with no reciprocity. The gatekeeper role is especially relevant as regards to BigTech Firms who have started to leverage control over the customer interaction and extensive data to enter new sectors, including financial services' verticals. These risks need to be taken into account in regards to open finance initiatives.

If regulatory initiatives are put in place for only Financial Institutions (where PSD2 is already in place), this

would further facilitate an unlevel playing field and could put FIs' digital competitiveness at risk.

A situation where organisations carry the costs for the business models of their competitors (for instance where PSD2 has allowed other organisations to develop banking services without maintaining banking technology infrastructure) not only limits the organisation's ability to invest in innovation, but also may limit their ability to maintain and continuously improve their technical infrastructure and on their business model. This could potentially affect the sector's resilience.

In addition, action is needed from policymakers to delineate clearly between raw/observed data and elaborated/inferred data insights. Users have rights relating to their raw and observed data; organisations can then use their expertise to build around this data (for instance through data validation, combination and analysis). Such data is the product of the intellectual property of an organisation, so to continue to encourage research, development and innovation, organisations must be able to retain this value.

Further, this data is often unique to an individual organisations' business model and processes and would not necessarily be easily standardised or understood by other industry participants. Therefore, we believe that elaborated or inferred data insights should not be shared between organisations on a mandatory basis, except where required as part of specific competition policy interventions where a market failure is clearly detected.

Unless harmonized at EU level, we also observe that regulatory fragmentation may occur and that Member States implement different legislative measures (e.g. public data in one country might not be public in another country). Consequently, market participant are likely to spend significant amounts of resources to monitor, identify and mitigate risks across EU Member States in case of different legal frameworks and interpretations.

Moving beyond the PSD2 framework towards open finance without also taking similar action in other sectors would deepen the existing data asymmetry faced by banks and heighten the risks associated with it. In the current framework, some firms are acting as data gatekeepers, while others must share data with no reciprocity. The gatekeeper role is especially relevant as regards to BigTech Firms who have started to leverage control over the customer interaction and extensive data to enter new sectors, including financial services' verticals. These risks need to be taken into account in regards to open finance initiatives.

If regulatory initiatives are put in place for only Financial Institutions (where PSD2 is already in place), this would further facilitate an unlevel playing field. Open data policy should be cross-sectoral (not financial services specific) in order to bring significant benefits to end users.

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	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumer credit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
SME credit	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mortgages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retail investment products (e.g. securities accounts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Non-life insurance products (e.g. motor, home...)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Pension products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

In our view, the below would benefit the most from an open finance policy:

- 1) Credit related due to better understanding of the customer's financial situation
- 2) Mortgages due to improved understanding of collateral value and new service development.

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.

In general, we support cross-sectoral data sharing to be organised as ecosystems.

For the financial industry, data which relate to financial service value chains in mortgages, credits, and insurance would be the most relevant for market participants to be able to develop new competitive services within and across the value chains.

Access to additional and varied data, if facilitated appropriately, could also improve existing service offerings to end-users, for instance through improved risk management by the Financial Institution (e.g. better fraud and cyber incident detection). Combatting fraud and scams – some of the fastest growing crimes across Europe – is a clear example of where greater data sharing between sectors could result in societal benefits (protecting customers from losing their money, and stemming the flow of funds to organised crime). These types of crimes are increasingly undertaken through the exploitation of vulnerabilities across multiple organisations (e.g. social media sites, online sales platforms, dating websites, telecoms networks, and financial services firms). Therefore, greater sharing of data between these organisations could enable potential fraud and scams to be identified earlier, stopping them at their source.

For consumers, the availability of (digital) housing data and mortgages would likely create opportunities for the development of a more competitive European market for mortgages/house lending. Therefore, the availability of reliable and up-to-date data on ownership, relevant property data (size, energy consumption, etc.), valuation and loan-to-value would be important components of a European data eco-system for real estate.

A cross-sectoral approach will also be key to fulfilling sustainability objectives, as outlined in the European Green Deal, as data on emissions, energy usage, and climate risk mapping will be key in identifying more sustainable products and services and ways of doing business.

We therefore also invite the Commission to facilitate the development of data ecosystems for the sharing of relevant Environmental Social Governance (ESG) data. A "European Green Deal Data Space" may support access to and sharing of data that is useful across a number of different sectors, including the financial sector. The financial sector could use relevant data to contribute to its role in helping its customers and wider economy meet their sustainability objectives, including through better climate change related risk assessments, or the provision of green-loans. Data would be best organised as an ecosystem in these cases.

Question 35. Which elements should be considered to implement an open f i n a n c e p o l i c y ?

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Clarity on the entities covered, including potential thresholds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Clarity on the way data can be technically accessed including whether data is shared in real-time (e.g. standardised APIs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Clarity on the terms and conditions under which data can be shared between financial services providers (e.g. fees)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Interoperability across sectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Clarity on the way data shared will be used	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Introduction of mandatory data sharing beyond PSD2 in the framework of EU regulatory regime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If mandatory data sharing is considered, making data available free of cost for the recipient	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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 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.

While AI is not necessarily a new technology, it continues to evolve at a rapid pace and has the potential to change the way the sector operates. Yet, there are different areas where regulatory requirements could limit the use of AI in the provision of financial services.

For example, questions arise regarding the development of AI and the General Data Protection Regulation (GDPR). Notably, automated decision-making rules (and rights of individuals) under Article 22 of the GDPR, and a strict interpretation of it, may hinder banks from embracing AI to provide better services and safer solutions, since significant manual processes may still be necessary. AI-based decision-making should be subject to oversight and control, but efficiencies may not be realised if human intervention in individual cases becomes significant. In this regard, the exemptions provided by Article 22(2) of the GDPR are welcome.

Some of the principles set forth in the GDPR are particularly relevant and may pose some challenges for the development and use of AI. One example is the data minimisation principle against the volume of data needed to develop accurate AI data analytics. This is particularly important as AI and Machine Learning (ML) techniques pose an opportunity to provide more accurate results than less advanced analytics techniques thanks to processing large volumes of diverse and quality data. As an example, using large samples of data is one way of reducing the risk of bias in the outcomes. Another is the purpose limitation principle, which requires that models developed using AI will not "recycle" information which may prove useful to provide more accurate analysis, if collected for other purposes, thereby limiting the possibilities of finding new insights on existing data.

IP considerations can also cause legal uncertainty. For instance, who should be the holder of the IP rights when a supplier provided an AI solution with the technical and financial support of a bank? Program code and techniques can be valuable commercial intellectual property: requiring protection and open to “inspection” only from entitled third parties (e.g., supervisory authorities).

It is also important to mention that there are several areas where banks suffer from a competitive disadvantage when compared to other market participants which are not subject to the same regulatory framework (e.g., prudential requirements) or where the regulation could limit the use of AI in the provision of financial services (e.g., prescriptive requirements regarding creditworthiness assessment under Mortgage Credit Directive).

Finally, banks may suffer from a competitive disadvantage when compared to other market participants which are not subject to the same regulatory framework (e.g., prudential requirements) or where the regulation could limit the use of AI in the provision of financial services (e.g., prescriptive requirements regarding creditworthiness assessment under Mortgage Credit Directive).

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.

For the banking sector, AI provides great opportunities to enhance customer interaction and experience, improve cybersecurity and consumer protection, strengthen risk management and enhance the efficiency of banking processes.

Improved customer experience

AI can help to ensure that customers are empowered through innovative products and services stemming from the technology. The continually evolving data-driven approach can be applied to and improve many processes that might typically rely on intuition or limited or incomplete information. In compliance with data protection regulation and data usage requirements, AI-supported automated services will bring a wide range of choice in terms of services offered and customization capabilities driven by better use of data through advanced analytics, for example:

- Offering contextualised, personalised products and experiences.
- Making more accurate credit-worthiness assessments.
- Providing better financial advice.
- Better protecting customers from fraud.

In addition, through the lowering of complexity and costs associated with some services (e.g. advisory services and credit provision services) AI can help lead to easier access to financial services and facilitate financial inclusion. For instance, it is expected that robo-advisor’s main contribution will be bringing portfolio investment to client groups who previously had no access to it.

Fraud prevention

The cost of fraud associated to non-cash means of payment can be quite and the risk is only set to increase. As the digital space continues to evolve, fraudsters may take advantage of new system’s vulnerabilities,

people's lack of digital awareness, or situations such as Covid-19 which has seen a proliferation of scams. AI can provide great assistance in the detection of fraud and other suspicious activities that are linked to financial crime generally. Having a more secure system means increasing trust in the bank for both clients and financiers.

Increased cybersecurity:

The security needs of financial institutions are unique, as cybercriminals constantly target attacks at entities where they can experience the most financial gain. Meanwhile, consumers trust their institutions to protect their confidential information. By leveraging AI, financial institutions can automatically analyse massive amounts of data traffic to detect anomalies which may be threats. The more data that is analysed, the more effective AI becomes: developing familiarity with typical behaviour patterns and recognizing suspicious activity faster which leads to more efficient alert systems and threat remediation. Analysing high volumes of security data allows machine learning algorithms to anticipate future attack vectors based on existing data. With AI, banks can constantly improve their security posture.

Better risk management:

Data analytics contributes widely to a better internal understanding of banks' activities, a more effective risk management, and an improved monitoring of compliance. Financial institutions of all types, whether incumbent, challenger or digital-only, are investing great resources to deploy such services within the framework of already existing regulation, including, but not limited to CRD IV, MiFID II and the GDPR.

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2. Lack of legal clarity on certain sector-specific EU rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3. Lack of skills to develop such models	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.4. Lack of understanding from and oversight by the supervisory authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.5. Concentration risks	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1.6. Other	<input type="radio"/>	<input checked="" type="radio"/>				
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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.

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	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2. Lack of transparency on how the outcome has been produced	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3. Lack of understanding on how the outcome has been produced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4. Difficult to challenge a specific outcome	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5. Biases and/or exploitative profiling	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6. Financial exclusion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7. Algorithm-based behavioural manipulation (e.g. collusion and other coordinated firm behaviour)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.8. Loss of privacy	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2.9. Other	<input type="radio"/>	<input checked="" type="radio"/>				
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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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3.2. Lack of clarity in explainability requirements, which may lead to reject these models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3. Lack of adequate coordination with other authorities (e.g. data protection)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3.4. Biases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.5. Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
New EU rules on AI for the financial sector	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guidance at EU level for the financial sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Experimentation on specific AI applications under the control of competent authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Certification of AI systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Auditing of AI systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Registration with and access to AI systems for relevant supervisory authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Lack of clarity regarding the interpretation of regulatory requirements (e.g. reporting)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Lack of standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of real time access to data from regulated institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Lack of interactions between RegTech firms, regulated financial institutions and authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of supervisory one stop shop for RegTech within the EU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequent changes in the applicable rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of trust in newly developed solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Lack of harmonised approach to RegTech within the EU	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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.

We believe that harmonised approaches to setting parameters for the use; location and processing of data are critical to enable EU wide RegTech solutions with consistent and centralised application across multiple geographies.

Consistency of interpretation of definitions in directives and elimination of "gold plating" will be required to allow RegTech installation and ongoing system maintenance to be minimised, e.g. consistent data requirements for Customer Due Diligence or for Suspicious Transaction Reporting.

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.

Areas that require high volume repeated activity with significant data elements, most obviously in regulatory reporting on transaction activity.

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) maximum

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

Primary additional area is in data protection.

Enabling cloud based solutions and hosted rather than on premise solutions will enable the standardising and centralising of RegTech solutions alongside the simplification of the solutions that standardising concept definitions and reporting obligations will bring.

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.

Benefits will primarily be more targeted and rounded identification of areas for regulatory interaction.

Drawbacks include opaque modelling making it difficult for firms to adequately assess and manage regulatory risk; the potential for "crowd trending" to direct focus and resources to issues that have a wide impact but potentially reduce focus on issues affecting minority or vulnerable groups where regulatory intervention is actually more important.

Digitally limited consumers may also become further disenfranchised as financial services increases the use of digital technologies and regulators increase monitoring only where digital factors are present. E.g. misselling investigations only where the consumer group is social media literate.

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.

In general, we believe that the financial sector is able to contribute substantially to the digital transition in EU, and we observe no immediate credit/funding restrictions.

However, we do note that specific Danish legislation on how to perform and document credit assessments limits and slows down our ability to digitalize the credit process. This in turn limits our capacity to process lending applications digitally, and prolongs the credit granting process towards our customers.

Similarly, other local Member State's regulation may inhibit the development and large-scale deployment of automatised lending solutions. Thus, a fragmented regulatory landscape may exist within the EU. We therefore suggest that the Commission further investigates the extent of regulatory fragmentation, and whether undue obstacles for digitized credit processes exist within the EU.

In addition, we observe that tight legislation generally risks resulting in cumbersome manual processes (e.g. credit assessment, AML, etc.). While this may serve to reduce systemic risks, it also constitutes a significant entry barrier for new Fintech companies.

Therefore, we would welcome harmonised rules on an EU level to ensure that the automatised granting of credits is not unduly hindered and that the EU regulatory framework is conducive for the digitalisation of credit processes.

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.

We believe that synergies to a large extent exist between the digitalisation of financial services and sustainable finance. Therefore, the Commission should explore ways to exploit those synergies by:

- 1) Leveraging data richness to help agents better monitor and integrate sustainability considerations in their decision-making processes;
- 2) Ensuring that financial agents, regulators and supervisors also leverage data and scenario analysis for the successful management of financial risks around climate-related issues;
- 3) Fostering technology adoption, which would help increasing transparency and accountability around environmental policies and private investments (i.e. DLTs) or enable energy efficiencies and optimization of resources (i.e. widespread adoption of cloud computing enables climate-driven location of data centres).

Consequently, a stable regulatory and policy framework is needed to ensure adequate incentives. Such a framework should be holistic, encompassing all actors and ensuring a level playing field, building on existing practices and regulatory frameworks to avoid overlaps and flexible enough to accommodate the financial and technology developments as they develop.

Potential barriers with regards to investment in software should also be removed and awareness held also on increasing energy consumption inherent with large scale digitalisation.

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

Useful links

[More on this consultation \(https://ec.europa.eu/info/publications/finance-consultations-2020-digital-finance-strategy_en\)](https://ec.europa.eu/info/publications/finance-consultations-2020-digital-finance-strategy_en)

[Consultation document \(https://ec.europa.eu/info/files/2020-digital-finance-strategy-consultation-document_en\)](https://ec.europa.eu/info/files/2020-digital-finance-strategy-consultation-document_en)

[More on digital finance \(https://ec.europa.eu/info/business-economy-euro/banking-and-finance/digital-finance_en\)](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/digital-finance_en)

[Specific privacy statement \(https://ec.europa.eu/info/files/2020-digital-finance-strategy-specific-privacy-statement_en\)](https://ec.europa.eu/info/files/2020-digital-finance-strategy-specific-privacy-statement_en)

[More on the Transparency register \(http://ec.europa.eu/transparencyregister/public/homePage.do?locale=en\)](http://ec.europa.eu/transparencyregister/public/homePage.do?locale=en)

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