

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

Fields marked with * are mandatory.

Introduction

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

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

1. Background for this consultation

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

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

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

Digital finance can contribute in a number of ways to tackle the COVID-19 outbreak and its consequences for citizens, businesses, and the economy at large. Indeed, digitalisation of the financial sector can be expected to accelerate as a consequence of the pandemic. The coronavirus emergency has underscored the importance of innovations in digital financial products services, including for those who are not digital native, as during the lockdown everybody is obliged

to rely on remote services. At the same time, as people have access to their bank accounts and other financial services remotely, and as financial sector employees work remotely, the digital operational resilience of the financial sector has become 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 priority 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.

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

More information:

- [on this consultation](#)
- [on the consultation document](#)
- [on digital finance](#)
- [on the protection of personal data regime for this consultation](#)

About you

* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- xEnglish
- Estonian
- Finnish

- French
- Gaelic
- German
- Greek
- Hungarian
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

* I am giving my contribution as

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| <input type="radio"/> Academic/research institution | <input type="radio"/> EU citizen | <input type="radio"/> Public authority |
| <input type="radio"/> Business association | <input type="radio"/> Environmental organisation | <input type="radio"/> Trade union |
| <input type="radio"/> Company/business organisation | <input type="radio"/> Non-EU citizen | <input type="radio"/> Other |

x

Consumer organisation

Non-governmental organisation (NGO)

* First name

Esko

* Surname

Kivisaari

* Email (this won't be published)

esko.kivisaari@financefinland.fi

* Scope

International

Local

National

Regional

* Organisation name

255 character(s) maximum

Actuarial Association of Europe (AAE)

* 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.

550855911144-54

* Country of origin

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



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Åland Islands | Djibouti
Dominica | Libya
Liechtenstein | Saint Martin
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and Miquelon |
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- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi
- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar /Burma
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- The Gambia
- Timor-Leste
- Togo
- Tokelau
- Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and

Central African Republic

Iraq

Palau

Caicos Islands
 Tuvalu

Chad

Chile

China

Ireland

Isle of Man

Israel

Palestine

Panama

Papua New Guinea

Uganda

Ukraine

United Arab Emirates

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* Field of activity or sector (if applicable):

at least 1 choice(s)

- Accounting
- Auditing
- xBanking
- 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

* Please specify your activity field(s) or sector(s):

Actuarial profession

* 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.

- 1) Missing regulatory clarity on application of AI and Machine Learning in insurance
- 2) Up to now, only a limited amount of AI use cases and success stories are available to insurance professionals
- 3) Scarce skills required for valuable and riskless application of AI, including a combination of statistical, coding and business knowledge
- 4) Legacy IT systems are source of error and currently often do not allow end-to-end digitization of insurance processes

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.

Challenges:

- Increasing cyber and systemic risks (Provide clear guidance on AI model requirements and ensure proper supervision of sophisticated models)
- Misuse of data and models (A solution is to invest in research and education/professionalism so that errors are eliminated. It is essential to be able to use data within the given legal and ethical frameworks.)

An advantage but also a challenge can be higher granularity when pricing yielding more precise prices potentially leaving certain groups uninsurable. Somewhat connected to this is the possibility of using protected attributes (like gender) indirectly.

Advantages

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 innovationfriendly;
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.

- Innovation is key for European financial markets to stay (or become even more) competitive, in particular with insurtechs, online retailers and big financials being on the verge of expanding their insurance business to Europe
- At the same time it needs to be assured that regulation avoids systemic risks that come with misuse of models and data

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.

- It is not fully clear which models are applicable under which constraints for specific actuarial tasks (such as pricing of insurance products via Neural Networks) under current legislation. Henceforth, this lack of clarity leads to weaker innovation.
- Some pieces of financial regulation require documentation on paper to customers – this is not technologically neutral
- Some global insurance players start innovation hubs outside the EU due to sometimes weaker data protection framework. The GDPR gives legal clarity, is important with respect to customer protection and makes the EU insurance market less vulnerable to disruption of foreign companies and big players from other industries. This being said the current interpretation and implementation of the GDPR hinder innovation.

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.

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

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

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

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Distributed Ledger Technology (except crypto-assets)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cloud computing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artificial Intelligence/Machine learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Internet Of Things (IoT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Biometrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

5000 character(s) maximum

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

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.

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

Funding experimentation on certain applications of new technologies in finance (e.g blockchain use cases)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promoting supervisory innovation hubs and sandboxes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

5000 character(s) maximum

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

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

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

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

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

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 type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
Intra-European wholesale payments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
Consumer credit provision to households with risk taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
Consumer credit distribution to households with partner institution (s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
Mortgage credit provision to households with risk taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>

Mortgage credit distribution to households with partner institution (s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Credit provision to SMEs with risk taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Credit distribution to SMEs with partner institution(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Credit provision to large corporates with risk taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Syndicated lending services with risk taking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Risk-taking activities in Life insurance products	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk-taking activities in Non-life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Risk-taking activities in pension products	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intermediation / Distribution of life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intermediation / Distribution of non-life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Intermediation / Distribution of pension products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other insurance related activities, e.g. claims management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Re-insurance services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investment products distribution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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"/>

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

5000 character(s) maximum

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

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

5000 character(s) maximum

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

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

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

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

5000 character(s) maximum

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

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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Liquidity risk for particular credit institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Liquidity risk for asset management companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Credit risk: household lending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Credit risk: SME lending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Credit risk: corporate lending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Pro-cyclical credit provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x

Concentration risk for funds collected and invested (e.g. lack of diversification)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x
Undertaken insurance risk in life insurance	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Undertaken insurance risk in non-life insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>	<input type="radio"/>
Operational risks for technology companies and platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>	<input type="radio"/>
Operational risk for incumbent financial service providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<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 type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>
Money-laundering and terrorism financing risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<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"/> x

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

5000 character(s) maximum

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

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

5000 character(s) maximum

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

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

Please rate each proposal from 1 to 5:

	1 (significant reduction in risks)	2 (reduction in risks)	3 (neutral)	4 (increase in risks)	5 (significant increase in risks)	N. A.
Default risk for funds held in non-banks and not protected by Deposit Guarantee Scheme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Misselling of investment products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Misselling of credit products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Misselling of pension products	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inadequate provision of information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input 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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Discrimination e.g. based on profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 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"/>

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

5000 character(s) maximum

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

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.

- If technology companies in financial services do not model premiums, reserves or other balance sheet items properly and basic actuarial principles are violated, companies can incur losses by design or can be subject to significant legal risk. Consequently, the well-being and financial security of policyholders is endangered and systemic risks may emerge
- With the use of "standard AI systems and data" for prediction modelling in insurance, the systemic risk of black swans increases - as AI based on existing data, it mainly learns and predicts from existing historic experience

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.

- Interpretation and clarity of current regulation should be sharpened - no need at this point to rewrite legislation. Extension of existing legislation can be an effective way forward
- Apply existing insurance governance processes: the actuarial function shall review and give an opinion on the use of the AI system at use for the corresponding actuarial and business processes influencing profitability

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.

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.

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.

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

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

5000 character(s) maximum

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

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 checked="" type="radio"/> x	<input type="radio"/>	<input 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 checked="" type="radio"/> x	<input 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 checked="" type="radio"/> x	<input type="radio"/>	<input type="radio"/>
Promote a universally accepted public electronic identity	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input 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 checked="" type="radio"/> x	<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"/> x

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

5000 character(s) maximum

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

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

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

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

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

5000 character(s) maximum

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

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

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

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

5000 character(s) maximum

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

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.

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

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Promote convergence among national authorities in setting up innovation hubs and sandboxes, through additional best practices or guidelines	<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 checked="" type="radio"/>	<input type="radio"/>	<input 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 checked="" type="radio"/> x	<input type="radio"/>	<input 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"/> x	<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"/> x

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

5000 character(s) maximum

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

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

5000 character(s) maximum

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

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

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

5000 character(s) maximum

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

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

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

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

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

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

5000 character(s) maximum

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

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

An increasing number of new digital financial products and services expose consumers and retail investors to both opportunities and risks: more choice, more tailored products, more convenience, but also bad advice, mis-selling, poor information and even discrimination. Accordingly, it is important to carefully consider how to tap the potential of

innovative products, services and business models while empowering and protecting end-users, to ensure that they benefit from a broader access to, and range of innovative products and services across the Single Market in a safe and sound manner. This may also require reviewing existing legislation to ensure that the consumer perspective is sufficiently taken into account. In addition, promoting financial 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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Promote digital financial services to address financial inclusion	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 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"/>

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

5000 character(s) maximum

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

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.

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?

- Actuarial Association of Europe represents actuaries across Europe. Actuaries are heavy users of data already historically but even more so with Big Data. Actuaries know well the errors one can do with data. We would like to stress the importance of professionalism in the use of data to avoid problems in the models generated.

5000 character(s) maximum

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

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-financial reporting data from listed companies	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SME data	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Prudential disclosure stemming from financial services legislation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Securities market disclosure	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disclosure regarding retail investment products	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<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"/> x

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

5000 character(s) maximum

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

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

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

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Standardised (e.g. XML) and machine-readable format	<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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Application Programming Interfaces to access databases	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public EU databases	<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"/>

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

5000 character(s) maximum

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

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.

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cheaper traditional services for consumers/investors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Business opportunities for new entrants in the financial industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 type="radio"/>	<input checked="" type="radio"/> x	<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"/> x	<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"/> x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced access to credit for small businesses	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<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"/> x

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

5000 character(s) maximum

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

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

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Privacy issues / security of personal data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial exclusion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Poor consumer outcomes (e.g. unfair pricing strategies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input 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 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"/>

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

5000 character(s) maximum

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

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.

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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Consumer credit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
SME credit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Mortgages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/> x	<input type="radio"/>
Life insurance products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<input type="radio"/>
Pension products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> x	<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"/> x

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

5000 character(s) maximum

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

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

5000 character(s) maximum

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

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

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

Please explain your reasoning and provide the example per sector:

5000 character(s) maximum

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

- Actuaries are heavy users of data, also generated by other services. Some non-standard examples are listed here:
 - Driving behavior for motor insurance pricing and prevention
 - Smart watches for health or life insurance pricing
 - Banking data for proper credit scoring for e. g. LPI insurance
 - Buying behavior for cross- and upselling purposes
 - Smart home devices for claims prevention and claims handling
 - Satellite pictures after floods, storms or other catastrophes

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

Please rate each proposal from 1 to 5:

	1 (irrelevant)	2 (rather not relevant)	3 (neutral)	4 (rather relevant)	5 (fully relevant)	N. A.
Standardisation of data, data formats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clarity on the entities covered, including potential thresholds	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input 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 checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interoperability across sectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clarity on the way data shared will be used	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 checked="" 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"/>

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

5000 character(s) maximum

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

Support the uptake of Artificial intelligence in finance

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

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

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

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

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

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

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

5000 character(s) maximum

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

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

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.

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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
1.3. Lack of skills to develop such models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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

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	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 type="radio"/>	<input checked="" 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 type="radio"/>	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2.4. Difficult to challenge a specific outcome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2.5. Biases and/or exploitative profiling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.8. Loss of privacy	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.9. Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

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

5000 character(s) maximum

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

3. Supervisory authorities

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

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

5000 character(s) maximum

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

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

Please rate each proposal from 1 to 5

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

New EU rules on AI at horizontal level	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New EU rules on AI for the financial sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Experimentation on specific AI applications under the control of competent authorities	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Certification of AI systems	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 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 type="radio"/>

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

5000 character(s) maximum

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

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of clarity regarding the interpretation of regulatory requirements (e.g. reporting)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Lack of real time access to data from regulated institutions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of interactions between RegTech firms, regulated financial institutions and authorities	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequent changes in the applicable rules	<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"/>

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

5000 character(s) maximum

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

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

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

5000 character(s) maximum

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

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.

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.

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.

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.

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.

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.

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