

# Targeted consultation on artificial intelligence in the financial sector

Fields marked with \* are mandatory.

## Introduction

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In financial services and beyond, there is a broad technology-driven trend towards greater use of AI. The Commission highlighted the need for a targeted consultation on the use of AI in financial services. The goal is to identify the main use cases and the benefits, barriers and risks related to the development of AI applications in the financial sector.

In general, the development and use of AI in the EU will be regulated by the [AI Act](#), the world's first comprehensive AI law. The AI Act which was voted by the European Parliament on 13 March and expected to enter into force in July, aims to guarantee the safety and fundamental rights of people and businesses, while strengthening AI uptake, investment and innovation across the EU. To support further these objectives, an [AI innovation package](#) has been adopted by the Commission on 24 January 2024. It contains a series of measures to support European startups and SMEs in the development of trustworthy AI that respects EU values and rules. This follows the political agreement reached in December 2023 on the AI Act.

The AI Act is designed to complement the already existing financial services *acquis*, that, while not explicitly targeted at regulating AI, is an important framework to manage the related risks in specific applications and includes several relevant requirements for financial entities when providing financial services. It does so by pursuing objectives to ensure healthy financial markets, such as transparency, market integrity, investor protection and financial stability. For example, when providing investment services, including through reliance on AI such as trading algorithms, investment firms must comply with the [MIFID/R framework](#) and the [market abuse rulebook](#).

The aim of this consultation is not to lead to policy work that would generate new duplicative requirements in relation to the use of AI by the financial sector, or to new requirements that have the potential to stifle AI innovation.

## Objective of the consultation

The present targeted consultation will inform the Commission services on the concrete application and impact of AI in financial services, considering the developments in the different financial services use cases.

The views from stakeholders will support the Commission services in their assessment of market developments and risks related to AI and in the implementation of the AI Act and existing financial services legislation in the financial sector. The consultation is focused on the objectives of the financial sector *acquis* and the AI Act and is not intended to focus on other policy objectives such as competition policy. It is intended to improve the effective implementation of these legal frameworks.

This targeted consultation will include questions with multiple choice and open answers. The questionnaire contains three parts:

1. a first part with general questions on the development of AI
2. a second part with questions related to specific use cases in finance
3. and a third part on the AI Act related to the financial sector

For the purpose of this targeted consultation, the concept of AI corresponds to the definition of an AI system established in the AI Act, which covers “*any machine-based system designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments*”.

## Target group

The targeted consultation will gather input from all financial services stakeholders including companies and consumer associations. Views are particularly welcome from financial firms that provide or deploy/use AI systems. This consultation is designed for respondents developing or planning to develop or use AI applications in financial services.

## Responding to the consultation

Respondents are invited to complete the questionnaire by 13 September 2024. They are invited to elaborate by providing input and additional insights to their answers.

## Outcome

Depending on the progress made, the Commission will publish a report on the findings and an analysis of the main trends and issues arising with the use of AI applications in financial services.

Please note that the information collected will not be shared with third parties and if used, it will be anonymised, in such a manner that it does not relate to any identified or identifiable financial institution.

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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 [eu-digital-finance-platform@ec.europa.eu](mailto:eu-digital-finance-platform@ec.europa.eu).

More information on

- [this consultation](#)
- [the consultation document](#)
- [digital finance](#)
- [the digital finance platform](#)

- [the protection of personal data regime for this consultation](#)

## About you

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\* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hungarian
- Irish
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

\* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business

- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

**\* First name**

Dusan

**\* Surname**

Ristic

**\* Email (this won't be published)**

dusan.ristic@deutsche-boerse.com

**\* Organisation name**

*255 character(s) maximum*

Deutsche Boerse Group

**\* 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.

20884001341-42

**\* Country of origin**

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

- Afghanistan
- Åland Islands
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Djibouti
- Dominica
- Dominican Republic
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Eswatini
- Ethiopia
- Falkland Islands
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macau
- Madagascar
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar/Burma
- Saint Martin
- Saint Pierre and Miquelon
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- São Tomé and Príncipe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen

- 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
- Central African Republic
- Chad
- Chile
- China
- Christmas Island
- Clipperton
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jamaica
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- Palau
- Palestine
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- The Gambia
- Timor-Leste
- Togo
- Tokelau
- Tonga
- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States

- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Cook Islands
- Costa Rica
- Côte d'Ivoire
- Croatia
- Cuba
- Curaçao
- Cyprus
- Czechia
- Democratic Republic of the Congo
- Denmark
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- Lebanon
- Lesotho
- Liberia
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar
- Réunion
- Romania
- Russia
- Rwanda
- Saint Barthélemy
- Saint Helena
- Ascension and Tristan da Cunha
- Saint Kitts and Nevis
- Saint Lucia
- United States Minor Outlying Islands
- Uruguay
- US Virgin Islands
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Wallis and Futuna
- Western Sahara
- Yemen
- Zambia
- Zimbabwe

\* Field of activity or sector (if applicable)

- Accounting
- Auditing
- Banking
- Credit rating agencies
- Insurance
- Pension provision
- Investment management (e.g. hedge funds, private equity funds, venture capital funds, money market funds, securities)
- Market infrastructure operation (e.g. CCPs, CSDs, Stock exchanges)
- Social entrepreneurship
- Other
- Not applicable

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association', 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

### \* **Contribution publication privacy settings**

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

**Anonymous**

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

**Public**

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

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

## **Part 1: General questions on AI applications in financial services**

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### **Question 1. Are you using or planning to use AI systems?**

- Yes, we are already using AI systems
  - Not yet, but we plan to use AI systems within the next 2 years
  - No, we are not using it and we don't plan to use AI systems within the next 2 years
  - Don't know / no opinion / not applicable
-



## Question 2. What are the **positive** things you encounter when using AI?

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

Deutsche Börse Group (DBG) uses innovative technological solutions in a gradual and tested manner guaranteeing transparency, stability, and investor protection at all times, with the application of AI being no exception. We see the advantages of new technologies such as improved internal processes, increased operational productivity, resilience/compliance, or anticipating future trends and actively seek to realize them. We are testing use cases in a proof-of-concept phase along the whole value-chain.

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## Question 3. What are the **negative** things you encounter when using AI?

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

DBG could identify several aspects of AI use that warrant further consideration from AI practitioners across the industry, such as:

- AI models can perpetuate existing biases present in the data and if not monitored appropriately.
- AI models can sometimes be very complex with outcomes difficult to understand (the “black box” problem).
- AI models can sometimes produce false statements (the “hallucination” problem).
- Developing AI models requires significant investments in technological and personnel capacities.
- It is a pre-requisite to have a solid data governance (what data do we feed in, who owns the data, changes during the lifecycle etc.) to build AI.

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## Question 4. Will you be deploying AI for new or additional processes within your organisation?

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

**Question 4.1 Please explain for which new or additional processes you will be deploying AI within your organisation:**

5000 character(s) maximum

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

Deployment of AI technologies for new or additional processes within DBG is currently under investigation, following a structured approach that also includes a dedicated AI governance framework.

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**Question 5. Are you developing or planning to develop in-house AI applications?**

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

**Please explain your answer to question 5:**

5000 character(s) maximum

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

Deutsche Börse Group is actively engaged with an in-house dedicated teams developing AI solutions that take into account input from both IT specialists and DBG business units.

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**Question 6. Which tools are you using to develop your AI applications?**

**Examples: machine learning, neural networks, natural language processing, large language models, etc.**

**Please explain and give examples when possible:**

5000 character(s) maximum

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

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## Benefits of using AI applications in financial services

**Question 7. Please score the following benefits from most significant (10) to least significant (1):**

	1 -	2	3	4	5	6	7	8	9	10 +	Don't know - No opinion - Not applicable
Fraud detection: AI algorithms can analyse large amounts of data to detect patterns and anomalies that may indicate fraudulent activity, helping to reduce financial losses for businesses and customers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk management: AI can analyse and predict market trends, assess credit risks, and identify potential investment opportunities, helping financial institutions make more informed decisions and manage risks more effectively.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automation of routine tasks: AI can automate repetitive tasks such as data entry, transaction processing, and document verification, freeing up time for employees to focus on more complex and strategic activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost savings: by automating processes and improving efficiency, AI can help financial institutions reduce operational costs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personalised financial advice: AI can analyse customer data to provide personalised financial advice and recommendations, helping customers make better financial decisions and improve their financial well-being.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>Compliance and regulatory support: AI can help financial institutions stay compliant with regulations by analysing and interpreting complex regulatory requirements and monitoring transactions for suspicious activities.</p>	●	●	●	●	●	●	●	●	●	●	●
<p>Enhanced decision-making: AI can analyse large amounts of data and provide insights that can help financial institutions make better investment decisions, assess credit risks, and optimise their operations.</p>	●	●	●	●	●	●	●	●	●	●	●
<p>Improved security: AI can enhance security measures by identifying potential security threats, detecting unusual patterns of behaviour, and providing real-time alerts to prevent security breaches.</p>	●	●	●	●	●	●	●	●	●	●	●
<p>Streamlined processes: AI can streamline various financial processes, such as loan underwriting, account opening, and claims processing, leading to faster and more efficient services for customers.</p>	●	●	●	●	●	●	●	●	●	●	●
<p>Improved customer service: AI can be used to provide personalised and efficient customer service, such as chatbots that can answer customer queries and provide assistance 24/7.</p>	●	●	●	●	●	●	●	●	●	●	●

**Question 8. What are the main benefits/advantages you see in the development of your AI applications?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

See the response to Q2.

**Question 9. Please score the following challenges from most significant (10) to least significant (1):**

	1	2	3	4	5	6	7	8	9	10	
	-									+	
Lack of access to the required data, in general.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lack of access to the data in an appropriate digital format.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lack of access to appropriate data processing technology, e.g. cloud computing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

<p>Data privacy: it is crucial to ensure that sensitive financial information remains confidential.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Lack of trust in relation to performance levels/ security aspects/ certified solutions/ reliability of the technology.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Regulatory compliance with financial regulation: financial services are heavily regulated and not all types of AI applications are in line with requirements under these regulations.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Innovation: the ability to leverage on combining AI with other technologies to enhance its potential and generate new services?</p>	○	○	○	○	○	○	○	○	○	○	

<p>Transparency and explainability: AI algorithms can be complex and opaque. It can be difficult for humans to understand how AI arrives at certain conclusions, which can create issues of trust and accountability.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Bias and discrimination: AI models are trained using data, and if the data is biased, the AI model can also be biased, leading to unfair outcomes.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Reputational risk from undesirable AI behavior or output.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Liability risks: legal uncertainty on who bears the liability in case of damages generated by the malfunctioning of the AI applications.</p>	○	○	○	○	○	○	○	○	○	○	



<p>Skills gap: the development of AI requires specific tech skills, and there is a shortage of such skills.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Dependability: as financial institutions rely more and more on AI; the dependability of these systems becomes paramount. Any malfunction or error (e.g. in risk management) can lead to significant financial losses.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Job displacement: the use of AI can potentially automate certain roles in the financial sector leading to job displacement.</p>	○	○	○	○	○	○	○	○	○	○	

<p>Cybersecurity: AI systems could be targeted by cybercriminals, leading to potential data breaches or manipulation of AI systems.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Integration challenges: integrating AI technologies with existing systems and processes can be complex and expensive.</p>	○	○	○	○	○	○	○	○	○	○	
<p>Additional cost: the deployment and use of AI requires up-front investment and ongoing resources (acquiring or developing applications, keeping them up to date, training/skills).</p>	○	○	○	○	○	○	○	○	○	○	

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**Question 10. What are the main difficulties/obstacles you are facing in the development of your AI applications?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

See the response to Q3.

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**Question 11. Please rank the potential negative impact that widespread use of AI can have on the following risks, 8 being the highest risk:**

	1	2	3	4	5	6	7	8
Operational risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liquidity risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial stability risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market integrity risks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investor protection risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumer protection risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reputational risk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please explain your answer to question 11 and give examples when possible:**

*5000 character(s) maximum*

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

**Question 12. AI may affect the type and degree of dependencies in financial markets in certain circumstances, especially where a high number of financial entities rely on a relatively small number of third-party providers of AI systems.**

**Do you see a risk of market concentration and/or herding behavior in AI used for financial services?**

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

**Please explain in which areas of AI you see a risk of concentration:**

*5000 character(s) maximum*

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

Deutsche Börse Group recognizes that high entry barriers, due to the large upfront investments needed to develop AI systems internally, might lead to over reliance on a few third-party AI providers and a market concentration. At the moment, we do not observe high concentration amongst a small number of market participants but in case that changes, concentration and herding risks would need to properly be addressed to avoid suboptimal business practices and lack of transparency as a byproduct of concentrated market power.

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## AI and compliance burden

**Question 13. Can AI help to reduce the reporting burden?**

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

**Please explain in which areas you see AI reducing reporting burden:**

*5000 character(s) maximum*

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

Deutsche Börse Group sees a big potential for reducing reporting burden by automating repetitive reporting tasks and reducing the time required for manual data entry and compilation.

**Question 14. Do you think AI can facilitate compliance with multiple regulatory standards across the EU and thus facilitate market integration or regulatory compliance?**

**For example, would you consider it feasible to use AI for converting accounting and financial statements developed under one standard (e.g. local GAAP) to another standard (e.g. IFRS)?**

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

**Please explain and elaborate on your answer to question 14 and give examples when possible:**

*5000 character(s) maximum*

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

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## **Data access**

**Question 15. In order to develop AI applications, do you need access to external datasets that you currently don't have access to?**

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

**Please explain your answer to question 15:**

*5000 character(s) maximum*

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

High data (information) quality is at the heart of reliable and useful AI. In many cases firms will find that they already have access to vast internal data sets, especially, once the data is maintained in a way ensuring reliability, trustworthiness, interoperability, and a clear governance.

However, in some cases, external data may be relevant as well. The internet is providing for a comprehensive source of public data which may be used. While data absorbed from the internet may be easily available and mostly at no costs, it may come with some quality issues and concerns, as it may negatively impact the quality of the AI. Hence, it is important, that clear and strict data governance is being set-up and maintained to ensure risk avoidance, respectively risk management, especially for non-internal data but of course as well for internal data.

To be clear, correct, reliable and trustworthy data do come at a price, as the creation, cleansing, maintenance, and storage of data is a costly endeavor. Costs may be incurred inside and outside of an organization, when using data for AI or for any other purposes.

Already today, DBG requires and obtains as well external data sets from data providers such as data vendors, in order to conduct and foster its business. Indeed, market data vendors as well as exchanges on a smaller scope are providing high quality data to any interested parties alike, as part of their business model. These providers significantly invest in the provision of high-quality data in the first place, and hence provide for an important backbone and source of data which should be acknowledged by the EU regulator and should be strengthened by the EU, so they can continue to do so in future.

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## **Question 16. Which datasets would you need to develop meaningful AI applications and for which purpose/use case?**

### **Please explain and give examples when possible:**

*5000 character(s) maximum*

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

Please refer to response 15.

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## **Question 17. Do you face hurdles in getting access to the data you need to develop AI applications in financial services?**

- Yes
- No

- Don't know / no opinion / not applicable
- 

**Question 18. Are you familiar with the [EU Data Hub](#), a data sharing tool for supervisors and financial companies?**

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

**Question 18.1 Do you think the EU Data Hub can improve access to data?**

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

**Please explain your answer to question 18.2:**

*5000 character(s) maximum*

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

DBG is aware – at least to a certain extent - of the Data Hub initiative which is part of the European Data Strategy. We generally welcome the Data Hub as means to provide “synthetic data” for testing and training purposes, seemingly comparable to a sandbox approach. We generally consider the provision of “synthetic data” to be a possible alternative (under certain conditions) to data from other data sources, who are dependent on data revenues in order to provide their data in the first place.

While we see merit in the provision of “synthetic data”, we would like to better understand the nature and the creation of such data in the first place. We currently assume that this is data obtained on the basis of transaction reports in line with Article 26 MiFIR, similar to the sandbox operated by the FCA. In this case, or in any similar cases, we would like to caution, that data contributors should be informed accordingly and be involved before the use or publication of their data, even if this happens in an anonymized or synthesized form. We appreciate, that data synthetization is based on a software provided by a private firm, however, there would be benefits for data contributors to be involved accordingly, at least on request. Therefore, we suggest a simple approval mechanism for any further use of reported data in the context with the Data Hub. Furthermore, we strongly recommend more transparency as regards the derivation of “synthetic data” in the first place, in order to ensure that there is a common understanding, and that data is sufficiently “clean”.

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**Question 19. Should public policy measures (e.g. legislative or non-legislative) encourage the exchange of data between market participants, which can be used to train AI systems for use cases in finance?**

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

## Please explain which type of measures you would propose:

*5000 character(s) maximum*

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

DBG considers the existing public policy measures regarding AI systems adequate and comprehensive. They strike a good balance between indispensable economic freedom for companies active in the EU, while at the same time defining guardrails for further development of the market.

We understand the advantages which AI systems can bring to the financial sector, such as increasing productivity, ensuring compliance, fostering risk management and supporting data quality assurance. Many companies in the finance industry, among them DBG as well, are already exploring ways to leverage AI for business activities and we therefore consider the current setting with regard to AI regulation to be adequate and sufficient.

Thus, we strongly advocate to leave it to the market participants to decide which data they wish to share and with which other private entities they wish to share it, as part of their freedom to exercise an economic or commercial. In this way, autonomy and competition will be strengthened, innovation will be encouraged and incentives for EU companies to thrive will be created. In addition to that, the efficient allocation of resources will be ensured.

Furthermore, as already highlighted in our response to question 15, in the data economy, an increasingly important backbone for the EU economy, the production, operation, storage, distribution and management of data involves strong investments in technical and organizational infrastructures and innovations. These investments must be rewarded in order to incentivize economic activities and the creation of data in the first place.

To summarize, we do not see the need for any new public policy measures at this point, but rather advocate for allowing the markets to adjust to the new regulatory framework and market participants to find suitable application for AI systems.

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## Business model

### Question 20. Has AI changed your business model?

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

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### Question 21. Which parts of the value chain are being improved with AI?

#### Please explain and give examples when possible:

*5000 character(s) maximum*

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



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**Question 22. Are there functions that cannot/would not be improved by AI?**

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

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**General purpose AI**

For the purpose of this targeted consultation, respondents should consider general purpose AI as defined in [the AI Act](#) (article 3(63)), i.e. meaning any “AI model, including where such an AI model is trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable of competently performing a wide range of distinct tasks regardless of the way the model is placed on the market and that can be integrated into a variety of downstream systems or applications, except AI models that are used for research, development or prototyping activities before they placed on the market”.

**Question 23. Do you use general purpose AI models, including generative AI, and their respective reference architectures?**

- Yes
- Not yet, but we plan to use general purpose AI models within the next 2 years
- No
- Don't know / no opinion / not applicable

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**Question 24. How do you plan to operationalise and adopt general purpose AI at scale?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

---

**Question 25. How does the increasing availability of general purpose AI models, including generative AI applications, impact the need to access new datasets?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

---

**Question 26. Compared to traditional AI systems such as supervised machine learning systems, what additional opportunities and risks are brought by general purpose AI models?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

We believe that general purpose AI models offer higher capability and autonomy in interpreting large data and detecting patterns that go beyond capabilities of traditional supervised learning models.

However, we also recognize that general purpose AI models might suffer from the well-known problems of hallucination, that seems to be an inherent trait of such models, and the “black box” problem, making it quite difficult to understand how a certain decision has been reached. Nonetheless, the industry is well aware of these challenges and existing governance and risk protocols that deal with traditional AI systems are well equipped to mitigate ensuing risks and ensure reliable and trustworthy application.

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**Question 27. In which areas of the financial services value chain do you think general purpose AI could have a greater potential in the short, medium and long term?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

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**AI Governance in relation to non-high risk use cases, and which are not subject to specific requirements under the AI Act**

**Question 28. Have you developed, or are you planning to develop an AI strategy or other relevant guidelines within your organisation for the use of AI systems?**

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

**Please explain which AI strategy or other relevant guidelines you have developed, or are planning to develop:**

*5000 character(s) maximum*

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

Deutsche Börse Group has incorporated an AI strategy into its Horizon 2026 Strategy and is actively working on deploying AI technology and governance principles for scalable AI usage across DBG.

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**Question 29. Have you put in place or are you planning to put in place governance and risk management measures to ensure a responsible and trustworthy use of AI within your organisation?**

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

**Please explain which governance and risk management measures you have put in place or you are planning to put in place:**

*5000 character(s) maximum*

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

See response to Q28.

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## Forecasts

**Question 30. What are the main evolutions to be expected in AI in finance?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

---

**Question 31. Which financial services do you expect to be the most impacted by AI?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

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**Question 32. Do you have any additional information to share?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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



## Part 2: Questions related to specific use cases in financial services

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### Question 34. In which sector(s) are you using AI?

Please select as many answers as you like

- Banking and payments
- Market infrastructure
- Securities markets
- Insurance and pensions
- Asset management
- Other

### Questions per sector

#### Market infrastructure

[According to the European securities and markets authority \(ESMA\)](#), AI is currently not widely used by financial market infrastructures in their operations. However, use of AI systems in post-trading is emerging and will likely become more relevant in the future, such as for predicting settlement fails, anomaly detection, data verification and data quality checks.

### Question MARKET INFRASTRUCTURE 1. For which use case(s) are you using /considering using AI?

**Examples: risk management, sustainable finance, regulatory compliance, etc.**

### Please explain and give examples when possible:

*5000 character(s) maximum*

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

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**Question MARKET INFRASTRUCTURE 2. What are the opportunities that AI brings to your use case?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

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**Question MARKET INFRASTRUCTURE 3. What are the main challenges and risks that AI brings to your use case (e.g discrimination, opacity of the AI application developed, difficult to control/supervise it, etc.)?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

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**Question MARKET INFRASTRUCTURE 4. What is the main barrier to developing AI in your use case (e.g. lack of skills and resources, readiness of the technology, high regulatory costs for compliance with the relevant frameworks, etc.)?**

**Please explain and give examples when possible:**

*5000 character(s) maximum*

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

---

**Question MARKET INFRASTRUCTURE 5. Does AI reduce or rather increase bias and discrimination in your use case?**

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

**Please explain your answer to question MARKET INFRASTRUCTURE 5 and give examples when possible:**

*5000 character(s) maximum*

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



---

**Question MARKET INFRASTRUCTURE 6. Has general purpose AI opened new possibilities or risks in your use case?**

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

**Please explain your answer to question MARKET INFRASTRUCTURE 6 and give examples when possible:**

*5000 character(s) maximum*

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

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**Question MARKET INFRASTRUCTURE 7. On whom do you rely for the development of your AI solutions?**

- External providers
- In-house applications
- Partial collaboration with external providers
- Don't know / no opinion / not applicable

**Please explain your answer to question MARKET INFRASTRUCTURE 7 and give examples when possible:**

*5000 character(s) maximum*

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

## Part 3: AI Act

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In December 2023 the European Parliament and the Council reached a provisional political agreement on the [first comprehensive AI framework, put forward by the Commission on 21 April 2021](#). The regulation was adopted by the European Parliament on 13 March 2024 and will enter into force later this spring once it has been published in the Official Journal of the EU. This horizontal *acquis* is applicable across all economic sectors.

The [AI Act](#) defines an AI system as “a machine-based system designed to operate with varying levels of autonomy, that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments”. Recital 11 further sets out the reasons for this definition, notably setting out that it is based on key characteristics that distinguish it from simpler traditional software systems of programming approaches.

The AI Act will establish two high risk use cases for the financial sector:

1. AI systems intended to be used to evaluate the creditworthiness of natural persons or establish their credit score, with the exception of those AI systems used for the purpose of detecting financial fraud
2. AI systems intended to be used for risk assessment and pricing in relation to natural persons in the case of life and health insurance.

The aim of this section is to identify which are your specific needs in order for the Commission to be able to adequately assist you with appropriate guidance for the implementation of the upcoming AI framework in your specific market areas, especially in particular to the high-risk use cases identified.

### Scope and AI definition

**Question 33. Which of the following use cases that could fall into the categorisation of high-risk are potentially relevant to your activity?**

- AI systems intended to be used to evaluate the creditworthiness of natural persons or establish their credit score
- AI systems intended to be used for risk assessment and pricing in relation to natural persons in the case of life and health insurance
- Both
- None
- Don't know / no opinion / not applicable

---

**Question 35. Please explain the overall business and/or risk management process in which the high-risk use case would be integrated and what function exactly the AI would carry out:**

*5000 character(s) maximum*

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

---

**Question 36. Are there any related functions AI would carry out which you would suggest distinguishing from the intended purpose of the high-risk AI systems in particular to the use cases identified in question 34?**

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

**Please explain your answer to question 36 and give examples when possible:**

*5000 character(s) maximum*

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

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**Question 37. Please explain why these functions would/should in your view not be covered by the high-risk use cases set out in the AI act either because they would not be covered by the definition of the use case or by relying on one of the conditions under article 6(3) of the AI Act and explaining your assessment accordingly that the AI system would not pose a significant risk of harm if:**

**a) the AI system is intended to perform a narrow procedural task:**

*5000 character(s) maximum*

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

**b) the AI system is intended to improve the result of a previously completed human activity:**

*5000 character(s) maximum*

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

**c) the AI system is intended to detect decision-making patterns or deviations from prior decision-making patterns and is not meant to replace or influence the previously completed human assessment, without proper human review:**

*5000 character(s) maximum*

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

**d) the AI system is intended to perform a preparatory task to an assessment relevant for the purpose of the use cases listed in Annex III of the [AI Act](#):**

*5000 character(s) maximum*

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

---

**Question 38. At this stage, do you have examples of specific AI applications /use cases you believe may fall under any of the conditions from article 6(3) listed above?**

**Please describe the use case(s) in cause and the conditions you believe they may fall under:**

*5000 character(s) maximum*

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

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**Question 39. Based on the definition of the AI system, as explained above (and in article 3(1) and accompanying recitals), do you find it clear if your system would fall within the scope of the AI Act?**

- Yes
- No, it is not clear/ easy to understand if it falls within the scope of the AI Act
- Don't know / no opinion / not applicable

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**AI Act requirements**

**Question 40. Bearing in mind there will be harmonised standards for the requirements for high-risk AI ([Mandates sent to CEN-CENELEC can be monitored here](#)), would you consider helpful further guidance tailored to the financial services sector on specific AI Act requirements, in particular regarding the two high-risk AI use cases?**

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

**Please explain on which specific provisions or requirements and on what aspects concretely you would consider helpful further guidance tailored to the financial services sector:**

*5000 character(s) maximum*

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

---

## **Financial legislation requirements**

**Question 41. Future AI high-risk use cases would also need to comply with existing requirements from the financial legislation.**

**Would you consider helpful further guidance meant to clarify the supervisory expectations for these use cases?**

- Yes
  - No, the supervisory expectations are clear
  - Don't know / no opinion / not applicable
-

**Question 42. There are other use cases in relation to the use of AI by the financial services sector which are not considered of high-risk by the AI Act, but which need to comply with the existing requirements from the financial legislation.**

**Would you consider helpful further guidance meant to clarify the supervisory expectations for these use cases?**

- Yes
- No, the supervisory expectations are clear
- Don't know / no opinion / not applicable

**Please explain why you would consider helpful further guidance and indicate if it should be high-level and principles based or tailored to specific use cases:**

*5000 character(s) maximum*

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

From the Deutsche Börse Group's point of view, as a financial market infrastructure, most of activities /services performed by AI applications in the financial sector would be regulated by already existing rules and legislation. Therefore, we are of the view that the "same business, same risk, same rules" principle should apply. With that being said, high level principles that would avoid divergent interpretations and ensure level playing field across the EU would be the most inductive for the larger adoption of AI technology in the financial sector.

**Question 43. Are you aware of any provisions from the financial *acquis* that could impede the development of AI applications (e.g. provisions that prohibit the use of risk management models which are not fully explainable or the use of fully automated services for the interaction with consumers)?**

- Yes
- No, I am not aware of any provision(s) of this kind
- Don't know / no opinion / not applicable

## **Additional information**

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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) below. **Please make sure you do not include any personal data in the file you upload if you want to remain anonymous.**

The maximum file size is 1 MB.

You can upload several files.

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

### Useful links

[More on this consultation \(https://finance.ec.europa.eu/regulation-and-supervision/consultations-0/targeted-consultation-artificial-intelligence-financial-sector\\_en\)](https://finance.ec.europa.eu/regulation-and-supervision/consultations-0/targeted-consultation-artificial-intelligence-financial-sector_en)

[Consultation document \(https://finance.ec.europa.eu/document/download/054d25f5-0065-488a-96fb-2bb628c74e6f\\_en?filename=2024-ai-financial-sector-consultation-document\\_en.pdf\)](https://finance.ec.europa.eu/document/download/054d25f5-0065-488a-96fb-2bb628c74e6f_en?filename=2024-ai-financial-sector-consultation-document_en.pdf)

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[Specific privacy statement \(https://finance.ec.europa.eu/document/download/698ef635-9053-43c2-b3a3-709e18c1f88a\\_en?filename=2024-ai-financial-sector-specific-privacy-statement\\_en.pdf\)](https://finance.ec.europa.eu/document/download/698ef635-9053-43c2-b3a3-709e18c1f88a_en?filename=2024-ai-financial-sector-specific-privacy-statement_en.pdf)

### Contact

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