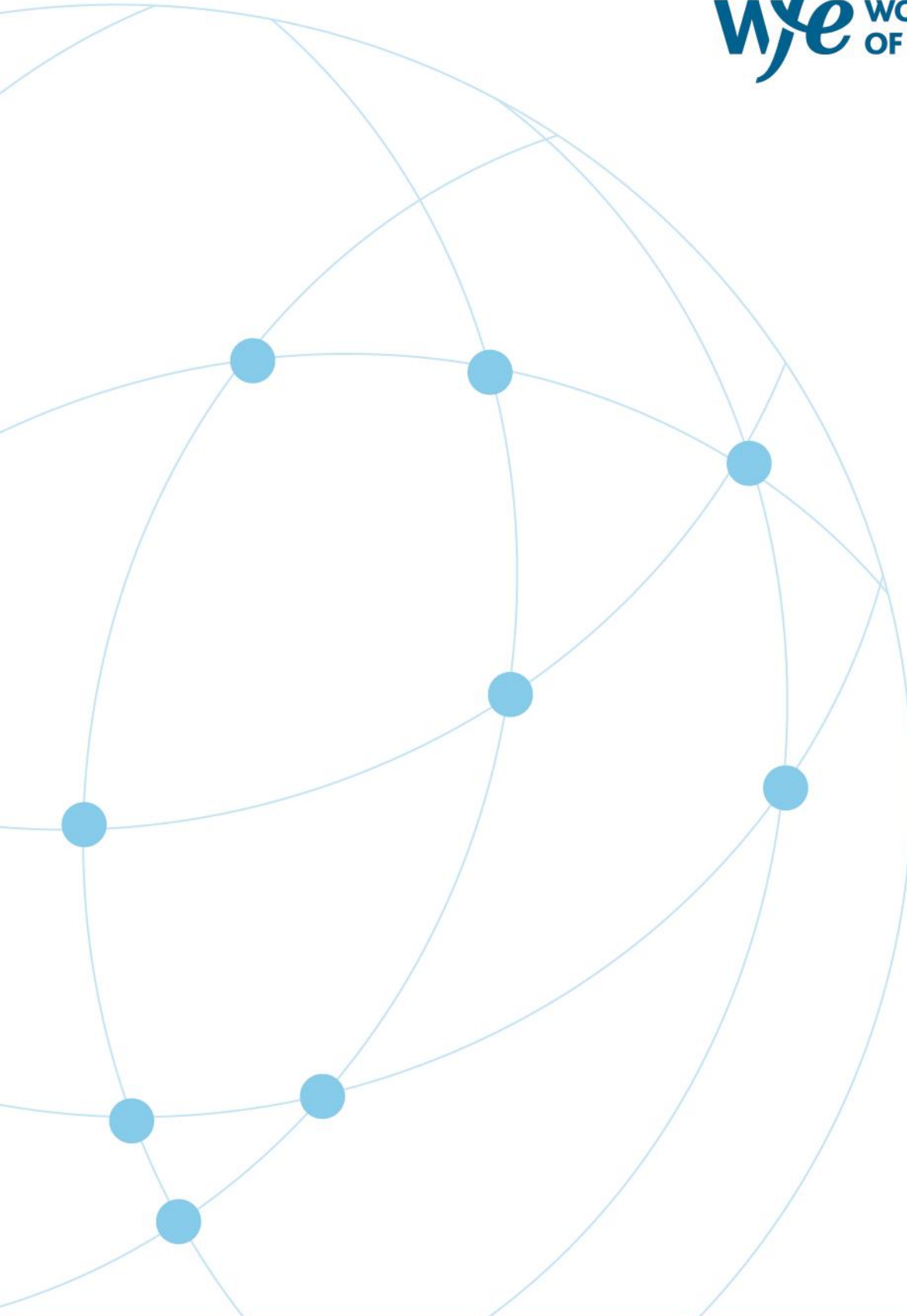




**WFE Response to targeted consultation on artificial
intelligence in the financial sector**

13th September 2024

Summary

The World Federation of Exchanges (WFE) welcomes the opportunity to comment on the EU's targeted consultation on artificial intelligence in the financial sector. As the global industry association for exchanges and clearing houses, we represent the providers of over 250 pieces of market infrastructure that see more than \$124tr in trading pass through them annually (at end-2023).

Exchanges and CCPs' extensive experience with technology makes them well-placed to offer views on the development of AI. While these technological innovations and the associated concerns about managing generative AI are significant, it is important to remember that, as trusted third parties providing secure and regulated platforms for trading securities, our members are already carefully scrutinising tools and establishing controls to govern AI use.

The WFE advises that:

- AI brings valuable contributions to financial services. Whether focused on individual productivity, operational efficiency or the development of new products, AI can help reduce costs and improve customer experience.
- AI has many and varied potential use cases in financial services and for exchanges and CCPs in particular.
- Challenges exist with the development and implementation of AI but these can be overcome by careful management.
- Reliance on third parties is a concern that regulators should monitor. Most importantly where these third parties have market power or dominance over most of the industry. However, outside of LLMs there is not a significant concentration of AI models.

Detailed Response

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

AI brings valuable contributions in various ways. First, it can identify intricate patterns within data that humans might overlook, aiding in accurately identifying and mimicking behaviours more accurately. Second, AI's ability to handle repetitive tasks can outpace human capabilities, boosting overall efficiency. Furthermore, AI systems ensure consistent task performance without succumbing to fatigue or distractions ensuring reliable results over time. Additionally, AI's ability to manage large datasets without demanding excessive resources highlights its scalability and resourcefulness, further enriching its value.

Our members generally see AI use cases in three broad categories:

1. Individual productivity – tools designed to improve the output of individual employees. Examples could include using generative AI to help develop code, virtual assistants to help staff or automated data entry.
2. Operational efficiency – tools designed to improve the efficiency of the overall operation of exchanges and CCPs. Examples include predictive tools to identify hardware that requires maintenance, automation of repetitive processes or fraud detection and prevention.
3. New product developments – these would be products and services that an exchange or CCP could offer to market participants or the broader market. Examples could include market data offerings and regulatory compliance solutions.

AI has many potential use cases for exchanges and CCPs:

- Fraud and money laundering detection: AI can be used to identify potential fraud due to its ability to analyse vast amounts of data, identify patterns, and detect anomalies.
- Market Surveillance: AI can be used to monitor financial markets for suspicious activities, detect market manipulation and fraud, ensure compliance with regulations, and maintain the integrity of the market.
- Risk Management: AI can be used to manage risk by analysing data, simulating models and monitor operational activities.
- Customer Support: AI can enhance customer support and provide efficient, responsive, and personalised services.
- Trade Execution & Settlement Optimisation: AI can be used to help optimise execution and settlement.
- Regulatory Compliance & Regulatory Filings: AI can enhance regulatory compliance by helping to monitor changes, provide audit trails and automate reporting requirements.
- Cybersecurity: AI can enhance cybersecurity defences by detecting threats, anomalies and phishing attempts.

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

Several challenges highlight the need for careful consideration and management of AI technologies in financial markets:

- The evolving nature of AI technologies can create regulatory uncertainty which can hinder innovation.
- AI systems are at risk of amplifying biases present in the training data which could lead to discriminatory outcomes.
- Some AI models, particularly the more complex ones, can be opaque and difficult to understand how decisions are made. It should be noted that some efforts are being made to overcome this by third party providers.
- Just as AI can improve cybersecurity it can also introduce new cybersecurity risks.
- Developing and implementing AI solutions can be costly, requiring significant investment in technology and skilled personnel.
- AI trained on incorrect or incomplete data will be less reliable.

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?

AI is not something which smaller firms, smaller exchanges or smaller CCPs will be able to heavily invest in. Some may be able to customise AI tools but even then that will not be very many firms. Therefore, third-party developers will be crucial for AI in financial services.

Market concentration can contribute positively to economic growth and industry development when it facilitates efficiency gains and innovation. The potential for AI to create large economies of scale is not much different from the potential of any technological advancements to create economies of scale. This may be done with third parties that specialise in technology and AI, working with other industries to deliver large economies of scale and significant expertise.

With the exception of LLMs, there is not currently a significant level of concentration of AI models among a small number of firms. While there are a limited number of cloud providers and open-source projects that provide the software and hardware tools used to train and serve AI models, the models themselves use diverse data inputs, proprietary knowledge and bespoke guardrails that vary as much by development group as by firm.

Nevertheless, regulators should monitor market concentration in AI to prevent market dominance from hindering regulatory compliance or risk management. AI systems may require large computational power with large data sets to produce expected and accurate results. The ability to provide the computational power necessary for complex models may reside with a handful of large technology companies which may drive further concentration and interconnectedness with these providers. Furthermore, firms often need to understand AI models to meet their regulatory obligations, but AI companies may claim proprietary restrictions.

Regulators are correct to be cognisant of the risks of AI to competition and market concentration. Regulators should be aware of these pressures on regulated firms, often by companies much bigger than them, and monitor the issue in case of negative outcomes.

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

Yes.

AI has great potential to automate routine and repetitive reporting tasks, reducing the time and effort required for manual data entry and compilation. This can lead to more efficient and timely reporting processes, allowing financial institutions to focus on more strategic activities.

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)?

Maybe in future. However, current AI capabilities suggest that the AI could only make an initial attempt before a qualified professional would be required to act (i.e. keeping a human in the loop).

Taking the Commission's example, it is possible that AI could be used to automate the conversion of accounting and financial statements from one standard, such as local Generally Accepted Accounting Principles (GAAP), to another, such as International Financial Reporting Standards (IFRS). However, accounting is not as simple as counting profits and losses. It requires judgement. Most AI cannot operate with a level of judgement yet.

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?

General-purpose AI models can be applied to a wider range of tasks beyond the specific applications of traditional supervised learning models. This flexibility allows financial institutions to leverage AI for more varied tasks. Unlike traditional AI models that often require significant manual input for adaptation, general-purpose AI systems can learn and adapt to new data and changing conditions autonomously, improving their relevance and effectiveness over time. General-purpose AI models can also scale across various functions within an organisation, providing consistent AI-driven insights and automation across different departments and use cases. This can lead to operational efficiencies and cost savings.

On the other hand, general-purpose AI models, especially those using deep learning or generative techniques, can operate as "black boxes," making it difficult to understand how they arrive at certain decisions. This lack of transparency poses challenges for ensuring accountability, particularly in regulatory environments where decision-making processes need to be clear and justifiable. Some third parties are taking steps to address these issues but regulators are right to be interested in the issue.

Established in 1961, the WFE is the global industry association for exchanges and clearing houses. Headquartered in London, it represents the providers of over 250 pieces of market infrastructure, including standalone CCPs that are not part of exchange groups. Of our members, 36% are in Asia-Pacific, 43% in EMEA and 21% in the Americas. The WFE's 87 member CCPs and clearing services collectively ensure that risk takers post some \$1.3 trillion (equivalent) of resources to back their positions, in the form of initial margin and default fund requirements. The exchanges covered by WFE data are home to over 55,000 listed companies, and the market capitalization of these entities is over \$111tr; around \$124tr in trading annually passes through WFE members (at end-2023).

The WFE is the definitive source for exchange-traded statistics and publishes over 350 market data indicators. Its free statistics database stretches back more than 40 years and provides information and insight into developments on global exchanges. The WFE works with standard-setters, policy makers, regulators and government organisations around the world to support and promote the development of fair, transparent, stable and efficient markets. The WFE shares regulatory authorities' goals of ensuring the safety and soundness of the global financial system.

With extensive experience of developing and enforcing high standards of conduct, the WFE and its members support an orderly, secure, fair and transparent environment for investors; for companies that raise capital; and for all who deal with financial risk. We seek outcomes that maximise the common good, consumer confidence and economic growth. And we engage with policy makers and regulators in an open, collaborative way, reflecting the central, public role that exchanges and CCPs play in a globally integrated financial system.

If you have any further questions, or wish to follow-up on our contribution, the WFE remains at your disposal. Please contact:

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