

Consultation Response

Artificial Intelligence – A European Approach to Excellence and Trust

12 June 2020

The Association for Financial Markets in Europe (AFME) welcomes the opportunity to comment on the European Commission's **WHITE PAPER ON ARTIFICIAL INTELLIGENCE – A EUROPEAN APPROACH TO EXCELLENCE and TRUST**. AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society.

AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia.

AFME is registered on the EU Transparency Register, registration number 65110063986-76.

We have provided our response to the consultation questions, as well as an appendix which provides further details on our views.

Consultation Questions – Section I – An Ecosystem of Excellence

Q1: In your opinion, how important are the six actions proposed in section 4 of the White Paper on AI?

- Working with Member states – 5 (very important)
- Focussing the efforts of the research and innovation community – 4 (important)
- Skills – 5 (very important)
- Focus on SMEs – 4 (important)
- Partnership with the private sector – 5 (very important)
- Promoting the adoption of AI by the public sector – 4 (important)

Q2: In your opinion, how important is it in each of these areas to align policies and strengthen coordination as described in section 4.A of the White Paper?

- Strengthen excellence in research – 4 (important)
- Establish world-reference testing facilities for AI – 4 (important)
- Promote the uptake of AI by business and the public sector – 5 (very important)
- Increase the financing for start-ups innovating in AI – 4 (important)
- Develop skills for AI and adapt existing training programmes – 5 (very important)
- Build up the European data space – 4 (important)

Association for Financial Markets in Europe

London Office: 39th Floor, 25 Canada Square, London E14 5LQ, United Kingdom T: +44 (0)20 3828 2700

Brussels Office: Rue de la Loi 82, 1040 Brussels, Belgium T: +32 (0)2 788 3971

Frankfurt Office: Bürohaus an der Alten Oper, Neue Mainzer Straße 75, 60311 Frankfurt am Main, Germany
T: +49 (0)69 153 258 967

www.afme.eu

Q3: In your opinion how important are the three actions proposed in sections 4.B, 4.C and 4.E of the White Paper on AI?

- Support the establishment of a lighthouse research centre that is world class and able to attract the best minds – 4 (important)
- Network of existing AI research excellence centres – 4 (important)
- Set up a public-private partnership for industrial research – 5 (very important)

Q4: In your opinion, how important are each of these tasks of the specialised Digital Innovation Hubs mentioned in section 4.D of the White Paper in relation to SMEs?

- Help to raise SME's awareness about potential benefits of AI – 4 (important)
- Provide access to testing and reference facilities – 5 (very important)
- Promote knowledge transfer and support the development of AI expertise for SMEs – 4 (important)
- Support partnerships between SMEs, larger enterprises and academia around AI projects – 5 (very important)
- Provide information about equity financing for AI startups – 5 (very important)

Consultation Questions – Section II – An Ecosystem of Trust

Q5: In your opinion, how important are the following concerns about AI?

- AI may endanger safety – 1 (not important at all)
- AI may breach fundamental rights (such as human dignity, privacy, data protection, freedom of expression, workers' rights etc.) – 3 (neutral)
- The use of AI may lead to discriminatory outcomes – 3 (neutral)
- AI may take actions for which the rationale cannot be explained – 3 (neutral)
- AI may make it more difficult for persons having suffered harm to obtain compensation – 3 (neutral)
- AI is not always accurate – 2 (not important)

5.1: Do you have any other concerns about AI that are not mentioned above? Please specify:

Our response to Q5 is for capital markets only, which is a highly regulated industry. Applications of AI, not the technology itself, should be risk assessed, and this should take into account existing mitigants, such as regulation. Please see our paper attached.

Q6: Do you think that the concerns expressed above can be addressed by applicable EU legislation? If not, do you think that there should be specific new rules for AI systems?

'Other' - We believe that authorities have a range of supervisory tools that are generally more appropriate than legislation. Please see our paper attached.

Q7: If you think that new rules are necessary for AI system, do you agree that the introduction of new compulsory requirements should be limited to high-risk applications (where the possible harm caused by the AI system is particularly high)?

‘No opinion’ – please see our appendix below.

Q8: Do you agree with the approach to determine “high-risk” AI applications proposed in Section 5.C of the White Paper?

‘Other’ – please see our appendix below.

Q9: If you wish, please indicate the AI application or use that is most concerning (“high-risk”) from your perspective:

AFME has no comments in response to this question.

Q10 In your opinion, how important are the following mandatory requirements of a possible future regulatory framework for AI (as section 5.D of the White Paper)?

- The quality of training data sets – 3 (neutral)
- The keeping of records and data – 3 (neutral)
- Information on the purpose and the nature of AI systems – 3 (neutral)
- Robustness and accuracy of AI systems – 3 (neutral)
- Human oversight – 3 (neutral)
- Clear liability and safety rules – 3 (neutral)

Q11 In addition to the existing EU legislation, in particular the data protection framework, including the General Data Protection Regulation and the Law Enforcement Directive, or, where relevant, the new possibly mandatory requirements foreseen above (see question above), do you think that the use of remote biometric identification systems (e.g. face recognition) and other technologies which may be used in public spaces need to be subject to further EU-level guidelines or regulation:

‘No opinion’.

Q12: Do you believe that a voluntary labelling system (Section 5.G of the White Paper) would be useful for AI systems that are not considered high-risk in addition to existing legislation?

‘Not at all’ – please see our appendix below.

Q13: What is the best way to ensure that AI is trustworthy, secure and in respect of European values and rules?

‘No opinion’ – please see our appendix below.

Q14: Do you have any further suggestion on the assessment of compliance?

Please see our appendix below.

Consultation Questions – Section III – Safety and liability implications of AI, IoT and Robotics

AFME does not consider this section to be applicable to wholesale financial services. If the scope of this legislation is expanded in the future, industry consultation and full impact analysis would be critical.

Appendix – Additional AFME Comments on the White Paper

Executive Summary

AFME supports the European Commission ('the Commission') focus on promoting the uptake of AI within Europe and addressing the relevant risks. We have submitted a response to the Commission's consultation on the White Paper on Artificial Intelligence from the perspective of wholesale capital markets, a highly regulated financial services sector.

We have drafted this appendix to provide further detail to our consultation response and to provide further support to the Commission on this important initiative.

The key points that we would like to raise are that:

- The capital markets industry is keen to engage with authorities to develop AI in Europe, building understanding and skills and maintaining high standards for its use. Increased public-private partnership should be a key focus.
- Regulation should remain technology-neutral and principles-based. Regulation should also avoid creating unnecessary barriers to innovation and the development and adoption of AI by firms. Regulation which focuses on a particular technology (such as a specific AI technique) is less effective as it does not address underlying behaviours or practices, for which a technology is simply a tool to perform. Given the speed of technological advances, it is also difficult for technology-specific regulation to maintain pace with developments in its use.
- Within the Commission's plans for a European approach to AI, AFME supports the focus of the Commission on high-risk AI applications, and in particular the Commission's focus on safety and fundamental rights. However, we have concerns regarding the proposed regulatory approach: notably the risk of duplication with existing regulatory requirements, particularly for sectors that are already highly regulated such as capital markets, and the lack of clarity on how such a regulatory framework would work in practice.
- In addition, the current approach to voluntary labelling for non-high-risk applications raises strong concerns regarding the practical application and usefulness for clients. We welcome the proposal for an EU AI governance framework, but support that it should be inclusive of different sectors (particularly those which are comparatively mature in their approach to use of AI and are highly regulated, such as financial services) and draws on global expertise.
- Finally, we encourage the Commission to continue consultation with all industry sectors on its proposals, beyond those which are designated as high risk, to ensure that the resulting framework is suitable and draws on experiences of working successfully with AI.

Introduction

AFME established its Artificial Intelligence (AI) Task Force in 2017 with the objectives of increasing awareness of AI in capital markets and supporting the development of future policy. These objectives are intended to enable the continued successful adoption and utilisation of this technological capability for the industry.

The Task Force has produced a series of White Papers¹ giving an overview of the use of AI within capital markets and considering issues such as ethics and transparency.

AFME and its AI Task Force welcome the opportunity to respond to the Commission's White Paper 'On Artificial Intelligence – A European Approach to Excellence and Trust' (the "Consultation"). This Consultation is a timely appreciation of the issues surrounding the development of AI in Europe and we hope its findings will help foster further positive discussions on the potential challenges and benefits of the technology.

This paper outlines some key AFME views on the Consultation which we would be happy to discuss in more detail.

Key Recommendations

A. Defining AI

'Artificial Intelligence' is a broad and complex term, which is often misused or misunderstood. While there are many definitions in use, we note the 2017 Financial Stability Board (FSB) report 'Artificial Intelligence and Machine Learning in Financial Services', defines AI as *"the theory and development of computer systems able to perform tasks that traditionally have required human intelligence"*². The World Economic Forum interprets the term more broadly, noting that AI *"...develops computers that can do things traditionally done by people...sense or perceive the world and collect data... and act independently – all underpinned by the ability to learn and adapt over time"*³.

However, we appreciate that definitions used in reports or academic papers attempt to describe AI as a concept and may, if used to develop policies, create uncertainty on the scope of the technologies subject to the proposed regulatory framework.

The challenge is how to provide a definition that is accurate (e.g. avoiding the inclusion of other non-AI analytics technologies), future-proof (considering the pace of innovation in the field) and broadly harmonised with other major jurisdictions.

In relation to the definition⁴ provided by the Commission's High Level Expert Group (HLEG) on AI, we are broadly supportive of its focus on the ability of AI systems to perceive, reason, interpret, decide, learn and adapt. However, there are certain key elements of the definition which would benefit from revision as the definition is reviewed on an ongoing basis.

To this end, we have provided the following drafting suggestions for the HLEG definition to focus on adaptive systems (changes in red), which avoids unnecessary capture of all automated systems, and to simplify where possible (changes in blue).

"Artificial intelligence (AI) systems are ~~software (and possibly also hardware)~~ systems ~~designed by humans~~ that ~~given a complex goal~~, act in the physical or digital ~~dimension~~ world by perceiving their environment through data acquisition, interpreting the collected ~~structured or unstructured~~ data, reasoning on the knowledge, or processing the information, derived from this data and ~~deciding~~ ~~identifying~~ the best action(s) to take to achieve the given goal. AI systems ~~can either use symbolic rules~~

¹ Available at <https://www.afme.eu/reports/publications/details/AITransparency>

² <http://www.fsb.org/2017/11/artificial-intelligence-and-machine-learning-in-financial-service/>

³ <http://reports.weforum.org/digital-transformation/artificial-intelligence-improving-man-with-machine/>

⁴ <https://ec.europa.eu/digital-single-market/en/news/definition-artificial-intelligence-main-capabilities-and-scientific-disciplines>

~~or learn a numeric model, and they can also~~ adapt ~~their behaviour~~ themselves or their own algorithms by analysing how the environment is affected by ~~their~~ previous actions, ~~knowledge or data~~.

~~As a scientific discipline, AI includes several approaches and techniques, such as machine learning (of which deep learning and reinforcement learning are specific examples), machine reasoning (which includes planning, scheduling, knowledge representation and reasoning, search, and optimization), and robotics (which includes control, perception, sensors and actuators, as well as the integration of all other techniques into cyber-physical systems)."~~

These drafting suggestions are based on the following rationale:

- ~~software (and possibly also hardware)~~: we believe that this is unnecessary expansion – we suggest that ‘systems’ is sufficient;
- ~~designed by humans~~: we believe that this is unnecessary and not future-proof. Thus, it does not seem to be an essential and defining characteristic of AI;
- ~~given a complex goal~~: while often applied to complex problems, the goal of an AI application does not have to be complex, i.e. this is not a defining characteristic;
- ~~dimension world~~: we feel that ‘dimension’ more usually refers to the physical priorities of an object, rather than being used in a digital sense, which may cause confusion;
- ~~structured or unstructured~~: we suggest that there is no need to specify, if it can be either. This drafting also seems to exclude semi-structured data, which we do not believe was the intention;
- ~~Deciding~~: not all AI systems make or action the ultimate decision. We suggest that it would be more accurate to position that AI identifies the most efficient solution to achieve a goal, but may or may not have the ability to execute;
- ~~can either use symbolic rules or learn a numeric model, and they can also~~: we suggest that this may actually narrow the definition by stating that these are the only types of models, or that there are only two ways to train a model, which is conceptually incomplete;
- ~~their behaviour themselves or their own algorithms~~: we suggest that “behaviour” is ambiguous and could be read too narrowly;
- ~~their~~ previous actions, ~~knowledge or data~~: we note that AI adaptation can be based on more than just previous actions; and
- We suggest that the second paragraph is removed altogether, as to list current techniques seems both unnecessary and not future-proof. If it is retained, it should be amended to remove the assertion that AI “includes” robotics. While the two can intersect, robotics is often used without any AI elements.

In the end, the Commission proposals around the use of AI should be linked to the level of risk posed by the application itself, and not to any particular technology. It is the application which may endanger safety, may breach fundamental rights (such as human dignity, privacy, data protection, freedom of expression, workers' rights etc.) or may lead to unjustifiable discriminatory outcomes. Therefore, we call again for a technology-agnostic regulation that focuses on the risk of applications regardless of the technology being used.

B. Ecosystem of Excellence

AFME welcomes the Commission’s consideration of how an ‘ecosystem of excellence’ can be developed in Europe. While all of the focus areas that the Commission considers are important, we have highlighted three as particularly key in our survey response:

i. Working with Member States

Harmonisation across the EU is important, especially for those firms whose businesses are cross-border. Knowledge sharing between centres of excellence and the wider EU community can foster the development of AI. The breadth of AI lends itself well to specialisms across different research centres. It is critical that those centres are joined up and can collaborate to significantly increase the visibility and impact of their work.

We would also strongly support deep EU and Member State involvement in the Global Financial Innovation Network (GFIN)⁵, given its global reach and depth of experience. Experiences of working with AI and any best practices developed should be both sought and shared at a global level in order to maximise opportunities to harness the benefits for the EU. This should also help to narrow the gap that is likely to develop between the EU centres of excellence in AI and the wider EU.

ii. Working with the Industry

Public-private partnerships to develop AI will be key. These should be cross-sectoral, to learn from those industries that are more advanced in their use of AI. While many initiatives already exist, such as the regulatory sandboxes provided by some financial regulators, there remain hurdles to their uptake. The process to use them can be inefficient, or firms may be concerned about (for example) data or intellectual property concerns. We suggest that the Commission explores further ways to work with the industry, on key topics such as explainability, where rapid technological change continues to prompt discussion about how to set appropriate standards. This collaboration should have an overarching objective of supporting innovation and avoiding the creation of unintended barriers, for example by supporting research rather than seeking to 'pick winners' among specific technologies or applications.

Similarly, we would suggest that only providing equity financing information for AI start-ups will have limited impact. Anecdotal feedback from existing programmes is that AI start-ups can develop in this way with minimal assistance and can also borrow / access grants (depending on their stage). Instead, a key driver of success is access to data and the ability to prove their concepts and build traction. We also believe that raising awareness with funders about the time it can take to generate revenue is important, so that they do not inhibit start-ups by pushing for revenue to be realised too soon. This may be a wider consideration for venture capital/private equity models and is worth addressing in the data strategy if AI start-ups are seen as a key catalyst for AI innovation and adoption in Europe.

The support for firms listed in the White Paper should be extended beyond SMEs, to ensure a level playing field across all parts of an industry, and to maintain the competitiveness of EU firms in the global context.

iii. Building Technical Education and Skills

We support the Commission's focus on this issue and note the importance of this for sectoral regulators as well as firms themselves.

C. Ecosystem of Trust

Overall, it is critically important that AI is recognised as a tool; the potential for risks or harms to arise or be heightened is dependent on how it is used. Any regulatory framework or voluntary scheme must be

⁵ <https://www.thegfin.com/>

technology-neutral and designed on this basis, recognising (i) that the risks applicable to the use of AI are also applicable to the use of many other types of technology and (ii) that the object of trust should be the user of the technology (i.e. a firm), not an individual type of technology itself. Regulation or policy which focuses on the specifics of a technology, as opposed to the core obligations and principles to ensure the trustworthiness of the technology provider or user, could negatively and unnecessarily impact the adoption of AI within Europe.

With that in mind, we note that capital markets is a highly regulated industry, and our comments on the Commission's proposals for an Ecosystem of Trust (both below and in response to the consultation questions) are made from this perspective.

i. High Risk Applications

AFME supports the Commission's focus on safety and fundamental rights. Limiting any new requirements to those applications that may pose a real and relevant risk to citizens (e.g. on their safety or physical integrity) will prevent these requirements from creating barriers to innovation and inhibiting the broader development of AI in Europe. This focus on safety should be the foundation, to ensure a consistent application of the requirements across any activities to which they are applied, based on comparable risks.

On this basis, AFME is of the view that financial services is not a high-risk sector, particularly noting the comments below and the example set out at the end of this Appendix.

However, we also feel that the EU is a leader in protecting consumers and fundamental rights. It is crucial that the regulatory landscape for AI in Europe appropriately balances risk reduction with fostering innovation, allowing firms in Europe to harness the benefits of AI and maintain their competitive position globally; particularly in key sectors for the European economy. In assessing the approach to high risk applications, we recommend the Commission consider the following:

Existing Regulation

In considering the future regulatory framework for high-risk AI applications, it is critically important that existing regulatory requirements that apply to any sector or activity are taken into account, and that any new regulatory framework is not conflicting or duplicative with the existing rules. For example, many sectors are already subject to requirements relating to governance, record-keeping and obligations to customers, which apply equally to their use of AI. The extent to which high-risk status applies to any given sector will also change over time, meaning that any sector assessment must be dynamic and periodically reviewed, to limit duplication with the existing regulatory environment.

Those sectors that are highly regulated have already had to develop processes for identifying and mitigating a variety of risks. For example, in financial services (see the final section of this paper), firms are under obligations relating to areas such as consumer protection, conduct risk, duty to clients, internal governance, third-party risk management, technology, cloud, outsourcing, operational resilience and data privacy and model risk management. Many of these will already address the risks related to firms' AI use, throughout the lifecycle of any AI application. It is for this reason (i.e. the mitigated, not intrinsic, status of these risks in capital markets) that we have not marked highly any of the risks identified in Question 5 of the consultation.

These processes will be tailored to the needs and specificities of that sector, and (in relation to AI) to the different levels of risk of the AI applications. The imposition of an additional regulatory framework may conflict with the work done to date and would be less effective as a risk mitigation tool.

For these highly regulated sectors, if following an analysis of existing sectoral regulation – which should also include relevant data and privacy laws/regulations – residual concerns are identified, the Commission should consider its full toolkit of regulatory and non-regulatory measures to determine the most effective solution. This could range from targeted guidance, and supervisory adjustments, among others, not only legislative amendments.

Unintended Consequences

We note that the designation of a sector as ‘high-risk’ may also create unintended opportunities for regulatory arbitrage. Where an activity can be performed by a firm from outside the designated sector (or from outside the EU), this firm would be in a position to provide products or services which utilise in-scope high-risk AI applications to consumers, without adhering to the new regulatory obligations intended to ensure trustworthy AI. To ensure that citizens’ safety and fundamental rights are well protected, and to avoid creating an unlevel playing field among firms, once an application has been identified as high-risk, the Commission should ensure it is appropriately covered by the regulatory framework regardless of sector, following the principle of “same activity, same risks, same rules.”

In addition, we also request clarity on the criteria to be considered to designate high-risk activities (specifically on how to evaluate “that significant risks are likely to arise”), the procedure to follow and the body responsible for making the decision. This assessment would presumably have to be performed by a central authority, rather than on a firm-by-firm basis. It would therefore fall either to the Commission or, given their specialist expertise, to sectoral authorities. The latter would, however, be limited by their own regulatory perimeter in terms of the activities or entities they supervise. We would like to emphasize again that in order to ensure a consistent framework the focus on safety and citizens’ fundamental rights should be the foundation to evaluate including a new activity in this framework, ensuring that the same requirements are applied based on comparable risks.

Further Consultation

Finally, we note that the regulatory approach for high-risk activities as proposed in the Consultation will need refinement via further consultation once the scope has been defined. This will be important not just for any sectors categorised as high-risk, but also more broadly to allow all industry sectors to comment on how the regulatory approach will apply to individual high-risk applications. Furthermore, it will allow the sharing of experiences from sectors that are already highly-regulated, such as financial services.

Conclusion on High Risk Applications

In conclusion, it may be more helpful in many sectors, where applicable regulation already exists, for existing rules to be applied in a technology-neutral way and for authorities to assist firms in how to meet supervisor’s expectations (for example to avoid unjustifiable discrimination or achieve suitable levels of interpretability). A strong public-private partnership, as highlighted in the actions to build an Ecosystem of Excellence, will aid both institutions and public authorities to share information and further understanding on AI techniques and methodologies to address concerns outlined in the white paper.

This may be done in conjunction with a review of the regulatory perimeter, where activity by non-regulated firms may bring new risks. This could assist in creating a harmonized framework of regulators and supervisors’ expectations on AI applications depending on the level of risk they pose.

ii. Voluntary Labelling

AFME has concerns relating to the proposal for a voluntary labelling system for AI applications. The awarding of a quality label introduces an element of market discipline; it would be difficult to ensure that such systems would remain market-driven, and therefore truly voluntary, and not become effectively mandatory.

A voluntary labelling scheme also cuts across the principle that the object of trust should not be AI as a technology, but firm using a given AI application. This should be a focus of education about the use of AI in the EU; clearly explaining the benefits and dispelling the myths that may have arisen about the technology.

Practicality

In relation to how such a system would work in practice, it is likely to be disruptive and even a voluntary system imposes disproportionate obligations, such as audit costs. This is also a potential consideration for the High Level Expert Group Guidelines for Trustworthy AI (HLEG Guidelines), for which the Assessment List runs to several pages and more than 50 items; significantly more than is necessary for many low-risk uses of AI. Any firm which decided to certify certain AI applications would need to be assured that it was clearly beneficial for themselves and for their clients.

A voluntary labelling system would also be very difficult to tailor to a specific application or use case. This specificity would be necessary for a truly accurate assessment to be made. This lack of specificity would become apparent in the applicability of the criteria to each AI application, in the definition of each criterion across different participating firms (e.g. how would you define 'accuracy' in a comparable sense), and in that such a system would not be able to take into account the individual risk thresholds and management framework of any participating firm.

Consumer Benefit

Furthermore, it is not clear that enough consideration has been given to how a voluntary labelling system could be useful to consumers, or how it would be presented. For instance, there would be no commentary to explain why any given AI application had, or did not have, the label applied (which would be key in a voluntary, market-driven system). This would be particularly detrimental to those applications for which the labelling system was inappropriate or insufficiently accurate/specific, or for which it would create disproportionate cost or disruption. It is also unclear what the label would convey to the consumer; there is therefore a risk that an insufficiently specific voluntary labelling system (that under the current proposals would then in effect become mandatory and set the market benchmark) would actually cut across the principle of human autonomy, by misleading or confusing customers with incomplete information.

It is worth noting that the above considerations are in respect of a voluntary labelling scheme as proposed in the White Paper. There can be instances where voluntary disclosure on a more general basis is useful for consumers, particularly in instances where disclosing to consumers that they are interacting with an AI system rather than a human.

iii. Governance Framework

AFME welcomes the proposal for an EU governance framework for AI, but, as above, we strongly believe that it must not conflict with or duplicate existing horizontal or sector-specific requirements. As such, a standing committee may be a suitable solution, provided that it is able to balance a relatively small size for effective decision-making with the ability to draw upon expertise from any specific sectors that may be impacted. Sector-specific involvement is particularly key given the detailed nature of some of the requirements that are

being proposed, their potential interaction with existing requirements, and the need to tailor them to the different needs and structures of firms in each sector.

The Commission should also consider whether it might be able to include experts from outside the EU, particularly from those jurisdictions which have advanced AI sectors. For example, we believe that the approach taken by the Monetary Authority of Singapore (MAS) and the Personal Data Protection Commission of Singapore (PDPC) has been particularly well structured for financial services⁶. This would also minimise the risk of the EU governance framework conflicting with other requirements globally.

iv. Conformity Assessments

In relation to how adherence to any EU framework on AI (whether mandatory or voluntary) would be assessed, we are concerned by the suggestion to require external, independent conformity assessments. External ex-ante testing of AI applications, beyond that which already takes place internally as part of the development and lifecycle management, and supervisory requirements, of AI applications, would be extremely intrusive and would also create a significant resourcing challenge for the testing entity. Ex-post testing should remain the responsibility of the entity using the AI, as part of the standard lifecycle management of any technology application.

⁶ See, for example: <https://www.mas.gov.sg/news/media-releases/2018/mas-introduces-new-feat-principles-to-promote-responsible-use-of-ai-and-data-analytics> and <https://www.pdpc.gov.sg/-/media/files/pdpc/pdf-files/resource-for-organisation/ai/sqmodelaigovframework2.pdf>

Example: Regulation of Artificial Intelligence in Financial Services

As noted in AFME's White Papers, financial services is a highly-regulated activity. In general, financial services regulators take a technology-neutral, activity-based approach to regulation. This means that financial services firms using AI are subject to obligations that apply regardless of the technology they are using to conduct their business, for example obligations relating to data protection, duty to clients, executive accountability, third-party risk management, technology, cloud, outsourcing, operational resilience and data privacy⁷. Their use of AI has therefore already had to take into account an analysis of the related risks and continues to do so on an ongoing basis.

The regulatory focus on activities rather than technology means that regulations are more likely to keep pace with quickly changing developments in techniques and computing power and avoid creating unnecessary barriers to innovation.

However, there are certain situations in which financial services regulators have considered it appropriate to regulate the particular use of a technology, for example algorithmic trading (which may, but does not necessarily, involve the use of AI)⁸. In-scope firms are required to have suitable systems and risk controls in place to ensure resilience and avoid creating and/or contributing to disorderly markets. They must notify their local regulator of their algorithmic trading activity and keep detailed records in a specified format. They must perform suitability assessments on clients that use their algorithmic trading services. These specific obligations are in place given the speed and scale at which algorithmic trading can take place, and the market impact which it can have.

However, in general the use of technologies such as AI are not subject to individual regulations and financial services regulators have not indicated that they intend to move towards this model. Instead, the application of existing activity-based regulation ensures that the use of AI is held to no less high a standard than other technologies or manual processes, while preventing unnecessary restrictions being placed on its continued development.

AFME contacts

David Ostojitsch, david.ostojitsch@afme.eu

+44 (0)20 3828 2761

Fiona Willis, fiona.willis@afme.eu

+44 (0)20 3828 2739

⁷ For example, in Europe, the Markets in Financial Instruments Directive and Regulation, the General Data Protection Regulation, or the Capital Requirements Directive.

⁸ Markets in Financial Instruments Directive (2014/65/EU) Article 17 and Commission Delegated Regulation ((EU) 2017/589)