



## ESTABLISHING A PRO-INNOVATION APPROACH TO REGULATING AI - CALL FOR EVIDENCE

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ICAEW welcomes the opportunity to comment on the “Establishing a pro-innovation approach to regulating AI – call for evidence” published by Department for Digital, Culture, Media and Sport (DCMS) on 18 July 2022, a copy of which is available from this [link](#).

For questions on this response, please contact our Tech Faculty at [representations@icaew.com](mailto:representations@icaew.com) quoting REP 81/22.

Artificial Intelligence is a powerful technology, and its use is becoming ever more pervasive, with the potential to impact almost every aspect of society. A good regulatory regime is essential to ensure that AI is developed and used to benefit society and that harms associated with use of AI are adequately addressed.

The approach rightly seeks to balance support for innovation and the protection of individuals, and we broadly agree with the context specific approach to regulation. However, there are valid and significant challenges to be addressed, and the paper is limited in the detail required to provide confidence that the approach will work in practice, including how different regulators will ensure consistency and coherence in interpretation of the AI principles and how they will obtain the skills and resources to regulate AI effectively. We believe that there is need for a centralised body to ensure consistency of regulators’ approaches to management of AI risks and to monitor overall effectiveness of the regulatory environment.

In addition, there is a need to align the approach with that of wider international regulations. Most AI businesses, even the smallest, sell their products in global markets. Although the UK may implement a “light touch” approach, businesses operating outside the UK would have to comply with other regulations and in such cases, many businesses are likely to choose to apply the highest requirements, which may still stifle innovation, put those businesses looking to grow globally at a competitive disadvantage in the UK market, or deter international businesses from investing in the UK.

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This response of 26 September 2022 has been prepared by ICAEW Tech. Recognised internationally for its thought leadership, ICAEW Tech is responsible for ICAEW policy on issues relating to technology and the digital economy.

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## KEY POINTS

### CONTEXT SPECIFIC APPROACH

1. We agree that AI on its own is a generic/neutral technology and that regulating it based on the context and impact of its use is sensible. Allowing existing regulators to regulate AI would have some benefit including allowing businesses to continue working with existing regulators with whom they are familiar and already have working relationships. However, there are several practical questions to be addressed for the proposed context specific approach to be effective.
2. There are however concerns that existing regulators may not effectively cover every area where AI is used, and it is not clear how such instances would be identified and managed. Existing regulatory boundaries may also mean that certain activities fall through the cracks. An example of the limitations of regulatory boundaries was seen during the public outcry following the London Capital & Finance (LCF) investment scandal, where some investors lost lifetime savings following the collapse of the mini-bond issuer. In this case, the Financial Conduct Authority (FCA) regulatory scope covered specific LCF business activities but did not extend to the products themselves. In a similar way, there is the potential that some AI products and activities could fall outside existing regulators' scopes especially due to the new and evolving nature of AI products, which could result not only in financial loss but potentially physical harm and even death depending on the context of use. If a context specific approach is to be successful, a review of existing regulators and their scope must be undertaken to ensure that there is sufficient coverage for AI uses and products that pose significant/high risk along with a mechanism to identify cases that may fall through the cracks. A definition of what constitutes significant/high risk will be required (see point 3 below).
3. Coherent interpretation of the six high level principles by regulators will be challenging, and requirements and enforcement action could vary significantly between regulators for the same use of AI. This could lead to a lack of clarity for business, especially where they develop AI for use across different sectors. We believe that there is need for a coherent definition of "risk" and risk levels to consistently identify for example what would be considered "high risk". This would be similar to the EU AI Act which provides guidance on the risk levels associated with use of AI in various contexts and the requirements based to risk levels. A central register of risks which can be used by regulators to provide sector specific guidance on identification, assessment, and management of risks, and to oversee use of AI within their domains would also be beneficial. This will help ensure that regulators have a common understanding of risk, while at the same time providing the relevant context to assess and proportionately manage AI risk in specific domains. The definitions and register can be maintained by a central body which can oversee the functioning and effectiveness of the regulatory landscape. If risks are kept at a suitably high level, they should not require frequent updating. In addition, having a central body would allow monitoring of changes and advancements in AI which could provide regulators with better visibility of advancements and associated risks, allowing them to be more proactive and to react faster to changes. The setup of an independent body to help parliament oversee regulators' approach including consistency and proportionality has previously been recommended by ICAEW in representation REP94/21 in response to the consultation on Reforming the Framework for Better Regulation published by Department for Business, Energy & Industrial Strategy on 20 July 2021.
4. There are also concerns about regulators' capacity to effectively regulate AI, in addition to existing regulatory workloads. Further, as highlighted in the paper, they may not have access to the right level of skills and expertise to effectively regulate AI in their domains. Regulator responsibilities will go beyond ensuring that they themselves have the necessary skills, to validating that regulated organisations are also appropriately skilled, especially where they provide AI assurance services such as audit and regulatory compliance. Pooled resources, and secondments from industry and academia can help in the short-term but are unlikely to provide a long-term solution. Longer term government initiatives such as funding of a limited

number of PhDs in artificial intelligence and scholarships for master's degree conversion courses in AI and data science can also help, but more needs to be done. For the approach to work, it is critical that regulators have access to required short term and longer-term AI skills, and that they work together with the private sector to support regulated organisations and professions to develop AI skills and experience. Bodies such as the Artificial Intelligence Public-Private Forum which was set up to further dialogue on AI innovation between the public and private sectors can be established with open sector representation to facilitate conversations and jointly address the skills challenge.

## LIGHT TOUCH APPROACH

5. Whilst we agree that organisations should not be overburdened by onerous regulations, we are concerned that providing requirements as guidance and making them voluntary in the first instance may mean that they are not prioritised by businesses particularly where they have limited resources and competing priorities. AI solutions are already being developed and used in several areas of society and it is important that they do not lead to societal harms. It would only take one or two examples of negative stories involving AI to lower public opinion and trust in AI as has been seen in recent events such as fatal accidents involving driverless cars and bias in AI powered facial recognition systems. Stories such as this could reduce the demand for AI and stifle innovation. It is therefore important that regulatory requirements and minimum standards for AI are clarified and enforced in the short term, helping to ensure that AI is developed and used safely, while allowing time for businesses to prepare for compliance. One way for regulators to support innovation in a regulated environment would be to provide sandboxes where businesses can test and trial new AI products and solutions under regulatory supervision, with access to regulators' guidance and expertise. ICAEW member experience has shown that there is some inconsistency between regulators in terms of the culture, and maturity of running sandbox programs and we believe that some oversight of regulator sandbox programs would be beneficial to ensuring that they are used successfully.
6. The proposed approach is for regulators to focus on addressing issues where there is "clear evidence of real risk or missed opportunities" and on "high AI risk concerns rather than hypothetical or low risks". It is important to define what would qualify as "high risk" and "real risk" and to ensure consistency between regulators in the definition and measurement of risk. A common understanding of what high risk means in terms of impact on individuals and society is key e.g. loss of life and physical harm could be defined as high risk. In addition, the requirement for evidence could mean that only AI risks that have materialised are addressed whilst potential risks could be ignored.

## INTERNATIONAL OPERABILITY

7. We agree that lighter touch regulation would help encourage innovation and make the UK a more attractive place for businesses developing and using AI. We see this as being of most benefits to business operating solely in the UK, which are expected to be only a small percentage of AI businesses. Most AI businesses are looking to deploy their solutions outside of the UK to EU and wider global markets, and for such businesses, interoperability of UK regulation with regulations in other jurisdictions is important.
8. To make the most use of resources and to have a more global appeal, businesses are likely to adopt what is considered the "gold standard" for AI compliance. If the EU AI Act for example were to be seen as best practice (similar to GDPR for data protection) then businesses may look to comply with it to satisfy requirements in markets outside of the UK despite the lighter touch regulation in the UK. Large, multinational organisations will have a complex regulatory landscape with several overlapping regulations and in such cases, the default position is to adopt the most onerous framework to "kill many birds with one stone". The "light touch" approach may therefore not have the intended impact when considering AI regulations in other jurisdictions.
9. The approach appears to have some similarities to that in the EU. AI Act, particularly in relation to the concept of proportionality and assessing the risk level associated with various

uses of AI and the focus on “high-risk” uses. However, there are some differences such as the UK approach having no mention of areas where the use of AI would be prohibited. Without the necessary detail on the regulatory approach and requirements it is difficult at this stage to make an informed comparison between the UK approach and that of other jurisdictions to give an indication of its effect on businesses operating internationally.

10. Various international governmental and standards organizations such as the International Organisation for Standardisation (ISO) are working on global standards to coordinate and align views on ethical and trustworthy AI to bolster cross border interoperability. As with addressing the resourcing challenge there may be benefit in the public and private sectors working together to create widely accepted cross border standards to aid the development of AI that can be used in different jurisdictions.

## ANSWERS TO SPECIFIC QUESTIONS

### Question 1

***What are the most important challenges with our existing approach to regulating AI? Do you have views on the most important gaps, overlaps or contradictions?***

11. Aside from the challenges and gaps highlighted in the “key points” above, we note the following:
12. The AI regulation approach is to set out the core characteristics of AI to inform the scope of the AI regulatory framework and to allow regulators to set out and evolve more detailed definitions of AI according to their specific domains or sectors. However, there is already a cross-sector definition of artificial intelligence in existing UK legislation in Schedule 3 of The National Security and Investment Act 2021 (Notifiable Acquisition) (Specification of Qualifying Entities) Regulations 2021 [link](#). The approaches taken in the two pieces of legislation are inconsistent and there will need to be a revision of alignment between existing legislation and any new AI regulation.
13. We have concerns over the use of ‘autonomy’ as one of the criteria for defining AI within the scope of the AI regulatory framework. Using this criterion, AI used to make predictions or suggestions which are then relied upon or followed by human beings would not be in scope of the regulation. Whilst there is greater risk where AI acts autonomously, predictive or suggestive uses of AI can still be risky, especially due to human tendencies to trust ‘authoritative’ systems and to fall prey to automation bias. An example could be within the financial sector where the output of an automated money-laundering identification tool would be reviewed by a human being. The AI does not act autonomously, but if it fails to flag a risky transaction, or inappropriately flags items, in the absence of proper regulation it is highly likely that the humans consuming the system outputs will be misled and may act in ways which cause harm. Unless the prediction itself is seen as a ‘decision’ or ‘action’ the system here would be not acting autonomously but it is still creating risks. It is also worth noting that the definition of AI in the National Security and Investment Act 2021 referenced in the previous paragraphs includes technology used to make recommendations and predictions within the scope of AI.
14. Having a framework for the management of AI risks is an important concept that is not discussed in much detail in the paper. There are existing risk management frameworks such as International Organization for Standardization (ISO) 31000:2018 which can be adopted and tailored to manage AI risks. In addition, AI specific risk management frameworks such as the U.S National Institute of Standards and Technology (NIST) AI Risk Management Framework and ISO standard 23894 Information technology – Artificial intelligence – Risk management can provide guidance on the management of AI risks. Existing assurance practices such as the use of service auditor reports can also be directly adopted and tailored for AI. There may be some value in partnership between the public and private sectors to define a commonly accepted AI risk management framework.

### **Question 2**

***Do you agree with the context-driven approach delivered through the UK's established regulators set out in this paper? What do you see as the benefits of this approach? What are the disadvantages?***

15. We generally agree with the context-driven approach, although there are significant challenges that must be addressed, as explained in the "key points" section above. In addition:
16. Some regulators may be slow to react to new and emerging technologies, and there is a danger that where regulators are expected to set requirements, regulation may be out of step with developments in AI, which could stifle innovation either because it is incompatible with advancements, or because businesses are hesitant to venture into areas where regulation does not exist.
17. Regulators themselves may use AI as part of their regulatory work in their specific sectors in areas such as risk and exposure assessment or market surveillance to detect suspicious behaviour in financial markets and it is important that consideration is given to how such use will be overseen. Regulator use of AI will require oversight by an independent body whether by existing bodies such as the Financial Regulator's Complaints Commissioner for financial regulators or a new body set up to oversee regulation of AI across industries.
18. This approach puts huge responsibility on regulators to regulate AI within their domains. It may be helpful to have a regulators code of practice to provide greater accountability and to help regulators consider and encourage innovation in their domains. As previously mentioned, there could also be benefit in having an independent oversight body to monitor the overall effectiveness of the regime and that regulators are operating in accordance with practice code.

### **Question 3**

***Do you agree that we should establish a set of cross-sectoral principles to guide our overall approach? Do the proposed cross-sectoral principles cover the common issues and risks posed by AI technologies? What, if anything, is missing?***

19. We agree that having a set of cross-sectoral AI principles is beneficial in providing focus and direction to AI risk management activities, and in helping to drive consistency of focus across sectors. The identified principles cover most of the concerns related to AI, but believe they should also consider the following:
20. They do not seem to reference the important concepts of privacy and human wellbeing. These are areas where AI can have a significant impact especially when it comes to uses of AI such as in facial recognition and surveillance, and whilst they may be implied in the other principles, we believe it is worth making explicit reference to them.
21. The paper also does not reference wider areas of social concern such as sustainability and AI's impact on the environment. Whilst these do not have to be defined as principles, they are important considerations that should be included in the approach to regulation.
22. As mentioned in the "key points" section above, we believe the principles provide high level guidance and direction and should be supported by a centralised risk management framework to consistently translate the principles into high level risks and risk levels.
23. While there is a principle around clarifying the routes to redress and accountability, there is not much detail or clarity on how this will be achieved, with only mention of regulators being expected to implement measures to achieve this. A context specific regulatory environment may be complicated for individuals to navigate, and it is important that individuals have visibility into where AI is used to make decisions about them, and that they can easily identify which regulator to raise concerns with. In addition, the redress process should not be overly complicated and onerous so that individuals are not put off challenging outcomes where necessary. Having a central oversight body for individuals to address complaints and challenges may make the process easier and more straight forward and would also provide the body with relevant data to monitor the effectiveness of AI regulation across sectors.

#### **Question 4**

***Do you have any early views on how we best implement our approach? In your view, what are some of the key practical considerations? What will the regulatory system need to deliver on our approach? How can we best streamline and coordinate guidance on AI from regulators?***

24. Views on the key practical challenges and requirements to deliver have been covered in the “Key Points” sections above.

#### **Question 5**

***Do you anticipate any challenges for businesses operating across multiple jurisdictions? Do you have any early views on how our approach could help support cross-border trade and international cooperation in the most effective way?***

25. Views on this question have been covered in the “Key Points” sections above. Any sized AI company will likely operate across borders, particularly with the ubiquitous use of cloud technologies which make physical geographical borders less restrictive. Interoperability of the UK’s regulatory approach with other jurisdictions is therefore important.

#### **Question 6**

***Are you aware of any robust data sources to support monitoring the effectiveness of our approach, both at an individual regulator and system level?***

26. We believe that monitoring and feedback on the effectiveness of any approach will be important to ensure that regulation meets the intended objectives of encouraging innovation and protecting individuals. Identifying the best data sources will depend to a large extent on how the approach is implemented practically. In addition, data is unlikely to be in one place and will require some curation of various potential sources to create a meaningful resource. Some suggested sources of high-level information include:
27. Social media data can provide insight into public perceptions of AI including both positive experiences and complaints or dissatisfaction resulting from negative experiences. This data combined with data from regulators can also provide a view on the effectiveness of regulators including the speed with which they respond to investigate and respond to negative stories. Due to social media’s propensity to be manipulated, data obtained from social media will need to be verified and validated before it can be relied upon, including consideration of underlying sentiments.
28. Similarly, business forums and social media could also provide insight into the impact of the approach on businesses e.g. effectiveness of measures to promote coherence between regulators can be determined by comments and feedback from businesses on conflicting/duplicate requirements. As with individuals, data obtained from social media will need to be verified and validated before it is used.
29. Data on cases raised with regulators can also be useful in determining the effectiveness of the approach at deterring and identifying the development and use of AI that is not aligned to the identified principles and that leads to harm on individuals. Reviewing regulatory action can also help provide insight into proportionality of actions taken by regulator and the coherence of responses by different regulators for uses of AI that pose similar risks.