

REGULATING ARTIFICIAL INTELLIGENCE: THE NEED FOR AN INDEPENDENT REGULATOR

Introduction

There is little dispute that AI *should* be regulated. The UK government agrees,¹ divisive tech moguls like Elon Musk and Mark Zuckerberg agree,² even AI itself agrees that “regulating Artificial Intelligence is crucial.”³ The perennial problem, is how. The following paper will argue that the UK should create a dedicated domestic AI Regulator (‘the Regulator’) which categorises AI systems based on their potential risk, concluding that the UK would derive significant benefits from shaping international regulatory standards.

Why is Regulation Required?

First, AI decision making is opaque. AI systems have incredibly complex neural architectures, which consistently amend inputs based on outputs. Decision making is therefore neither linear nor static and it can be unclear specifically how, or why a result has been generated. There is no guarantee that AI will make the ‘right’ decision and even if so, individuals are legally entitled to understand why a decision was taken in relation to them.⁴ Second, centralisation of AI expertise can amplify bias and discrimination. Most technology companies in the UK employ fewer than 50 people, and only 22% of those working in AI are women.⁵ This lack of diversity could perpetuate bias and discrimination against groups who were not involved in the generation of the model. Third, AI development raises privacy concerns given the vast data sets which technology companies require to train their generative models. Indeed, the Government’s recent announcement of their intention to “unlock both public and private data sets to enable innovation by UK startups” does little to assuage those fears.⁶

Finally, the level of investment and political engagement in AI is increasing exponentially. The recent introduction of the Chinese ‘DeepSeek’ AI model can be viewed as a ‘Sputnik’ moment

¹ UK Government, *AI Regulation: A Pro-Innovation Approach* (White Paper, 2023) <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper> accessed 20 January 2025.

² BBC News, *UK Government’s Proposals to Regulate AI* (BBC, 9 October 2023) <https://www.bbc.co.uk/news/technology-66804996> accessed 27 January 2025

³ OpenAI, *ChatGPT Response to “Should AI be Regulated?”* (ChatGPT, 2023) <https://chat.openai.com> accessed 30 January 2025

⁴ *The Data Protection, Privacy and Electronic Communications (Amendments etc.) (EU Exit) Regulations 2019*, SI 2019/419, reg 5(1)

⁵ The Alan Turing Institute, *Where Are Women in AI? Mapping the Gender Job Gap* (The Alan Turing Institute, 2023) <https://www.turing.ac.uk/news/publications/report-where-are-women-mapping-gender-job-gap-ai> accessed 29 January 2025

⁶ UK Government, *AI Opportunities: Action Plan* (2023) <https://www.gov.uk/government/publications/ai-opportunities-action-plan/ai-opportunities-action-plan#fn:8> accessed 27 January 2025.

for the CCP.⁷ In response, President Trump announced an estimated \$500B in ‘Stargate’ funding for AI projects, coupled with his intention to row back on regulatory oversight promulgated in Executive Orders by former President Biden.⁸ An increase in transnational, unregulated AI systems is of grave concern. It is incumbent on the Government to review and amend regulations now, *before* any major unintended consequences.

Current Regulatory Environment

Legislation

There is currently no primary legislation governing the use or development of AI, rather, the Government operates a ‘principles-based’ voluntary approach to regulation laid down in the 2023 White Paper.⁹ They stated that it was not their intention to introduce new legislation as “new rigid and onerous legislative requirements on businesses could hold back AI innovation.”¹⁰ Further, there was no intention to create an AI regulator. Instead, every regulatory body, which could be affected by AI was required to publish their own individual sectoral guidance on by 30 April 2024. Moreover, it is for individual regulators to confirm what risk category an AI system should fall into. Conceptually, an AI system could be assessed as posing different levels of risk by different regulators.¹¹

Regulators are experts in their relevant fields; however, is irresponsible to expect each regulator to possess the resources and expertise required to assess the potential impact of AI systems within their ambit. Certain cross-sectoral legislation still provides legal protection.¹² However, a report by the Ada Lovelace Institute concluded that “it is not realistic to expect the ICO and EHRC to act as cross-cutting regulators to enforce the UK GDPR and EA with a completeness that will reliably protect against AI harms. They do not have sufficient powers, resources, or sources of information, and cooperation between regulators is not assured.”¹³ This porous lattice of regulatory principles is exacerbated by the Government’s decision not to put their principles-based approach on a statutory footing.

⁷ DeepSeek (DeepSeek, 2023) <https://www.deepseek.com/> accessed 30 January 2025.

⁸ BBC News, *AI Regulation: The UK’s New Framework* (BBC, 22 October 2023) <https://www.bbc.co.uk/news/articles/cy4m84d2xz2o> accessed 30 January 2025.

⁹ UK Government, *AI Regulation: A Pro-Innovation Approach* (White Paper, 2023) Executive Summary

¹⁰ Ibid.

¹¹ Ibid.

¹² Equality Act 2010, C.4; The Data Protection, Privacy and Electronic Communications (Amendments etc.) (EU Exit) Regulations 2019, SI 2019/419, reg 22.

¹³ Lawrence-Archer, A., Naik, R., *Effective Protection Against AI Harms* (AWO, 2023)

<https://www.awo.agency/files/AWO%20Analysis%20-%20Effective%20Protection%20against%20AI%20Harms.pdf> accessed 21 January 2025

Normative Approach

Recent Government initiatives highlight the inadequacy of our current approach. Specifically, the creation of the Regulatory Innovation Office (‘RIO’) to provide cross-sectoral support on AI.¹⁴ The Government argues it will “reduce red tape” and “kickstart innovation.”¹⁵ The idea that regulation burdens innovation is a pernicious misconception, especially for emerging technologies like AI. Well-designed regulations can foster innovation by providing clear guidelines and building trust, accelerating public adoption. When regulatory bodies establish standards for safety, ethics, and transparency, they create an environment where businesses can innovate with confidence, knowing they are conforming with pro-social norms and will not be burdened with legal issues upon deployment of their technologies. There is a lacuna in our regulatory environment, which a dedicated regulator would ameliorate.

The Proposed Regulator

General

The Regulator would be an independent, expert-led agency tasked with overseeing the safe and ethical development and deployment of AI systems across all sectors. The Regulator would be responsible for overseeing the entire lifecycle of AI technologies, from research and development to deployment and monitoring. This includes ensuring compliance with data protection laws, such as the UK GDPR, addressing ethical concerns like bias and fairness, and ensuring transparency in AI decision-making. The Regulator would also have the authority to conduct audits, enforce accountability, and impose penalties for non-compliance.

Categorisation of Risk

Borrowing from the EU AI Act, the Regulator could adopt a hierarchical framework, classifying AI systems into ‘risk categories’ based on their potential impact.¹⁶ A proposed example is:

¹⁴ UK Government, *Game-Changing Tech to Reach the Public Faster as Dedicated New Unit Launched to Curb Red Tape* (UK Government, 2023) <https://www.gov.uk/government/news/game-changing-tech-to-reach-the-public-faster-as-dedicated-new-unit-launched-to-curb-red-tape> accessed 29 January 2025

¹⁵ Ibid.

¹⁶ European Commission, *Proposal for a Regulation of the European Parliament and of the Council laying down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts COM/2021/206 final* (2021) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52021PC0206> accessed 25 January 2025

1. **Prohibited Risk** – Those systems which demonstrate a clear derogation from unqualified Human Rights Act 1998 Rights (i.e. Articles 2, 3 & 4), or which demonstrate a disproportionate derogation from qualified rights (e.g. Articles 8 & 10).¹⁷
2. **Frontier Risk Systems** – This category encapsulates powerful new AI systems at the forefront of development. The Regulator could choose to independently identify specific AI systems, or impose a threshold of computational power, which, if exceeded, would cause an AI system to fall within this specific threshold, for example 10^{30} FLOPS.¹⁸ Here, the Regulator would engage in more horizon scanning work, deploying AI Sandboxes and ring-fenced data development to ensure that developers can work confidentially.
3. **High Risk** – This category would encapsulate most of the regulatory work undertaken, encompassing any system which touches upon:
 - a. Education
 - b. Employment
 - c. Access to essential public and private services
 - d. Law enforcement
 - e. Migration
 - f. Administration of justice
4. **Low Risk** – This category would face little to no regulatory oversight, including spam filters or AI video games.

The Regulator should include an appellate system, whereupon a developer could request for their AI system to be downgraded if they could demonstrate a narrow window of impact, e.g. an AI system which works in healthcare, but as a triaging chatbot for NHS 111 requests.

International Harmonisation

The Regulator could operate in a similar fashion to the International Civil Aviation Organisation, which issues National Certificates of Airworthiness.¹⁹ The Regulator could issue those certificates or set general standards for AI systems which are widely deployed but not developed within the UK. Regulating every AI system would be unfeasible, yet setting the normative standard would capture the systems with the most potential for impact. Indeed, the

¹⁷ Human Rights Act 1998, c. 42, Sch. 1

¹⁸ Floating-points operation per second, a measure of computational power.

¹⁹ Civil Aviation Authority, *National Certificates of Airworthiness* (CAA, 2023) <https://www.caa.co.uk/commercial-industry/aircraft/airworthiness/certificates-and-permits/certificates-of-airworthiness/national-certificates-of-airworthiness/> accessed 31 January 2025

UK would derive significant 'first actor' benefits from instituting the Regulator. Setting standards will assist in shaping international harmonisation, which will prevent friction in response time to new AI systems. Further it would facilitate domestic development and investment.

Conclusion

In conclusion, the establishment of an independent AI regulator in the UK is essential to ensure the ethical and safe deployment of AI systems. By categorising risk and harmonising standards internationally, the UK can lead innovation while safeguarding public interests.

(1487 Words)

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