Decoding AI policy: AI governance in the United Kingdom

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Introduction

The Innovate UK BridgeAI programme aims to empower UK organisations to harness the power of artificial intelligence (AI) by funding and supporting innovators in agriculture and food processing, creative industries, construction, and transport, including logistics and warehousing sectors. The programme is designed to help innovators assess, develop and implement trusted AI solutions; connect businesses with AI experts; and elevate their AI leadership skills through training and upskilling.

UK innovators and businesses interact and operate in multiple markets and geographies. This is the first blog of a series aiming to help businesses gain a better understanding of the policy direction that some of the biggest markets are taking on AI, to prepare their operations, products, and services. Future articles will look at the EU, US, and the Rest of the World.

**This article is provided for general information purposes only. It does not constitute legal or formal advice in any form, and any information included in it should not be interpreted as such. For specific legal or formal advice, consult a qualified professional.**

Context:

The UK is moving towards a vertical AI governance model based on the existing, contextual and sector-based regulations and laws.¹ That means that, currently, existing regulators would be responsible for AI regulation and governance in their respective areas.²

Although the UK’s approach to AI was largely set out in the AI White Paper in March 2023, the UK Government has been working on AI policy for close to a decade.

In 2017, the Alan Turing Institute added artificial intelligence to its remit, becoming the UK’s national institute for data science and AI, and the following year, the Office for Artificial Intelligence was established.³

In 2021, the Government published the UK’s National AI Strategy, a 10-year vision to invest in the UK’s ‘leadership as a science and AI superpower’, support the transition to an AI-enabled economy, and establish the right national and international AI governance.⁴

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¹ https://www.adalovelaceinstitute.org/report/regulating-ai-in-the-uk/
³ https://cspl.blog.gov.uk/2020/03/19/ai-in-the-uk-the-story-so-far/
As stated in the *AI Strategy*, in 2022 the **AI Standards Hub**[^5] and the **AI Action Plan**[^6] were launched. The **Action Plan** set out the intention of following a non-centralised approach on AI regulation by allowing different regulators to ‘take a tailored approach to the use of AI in a range of settings’ via a set of principles, guidance and voluntary measures, and sandboxes.[^7]

### Developments in 2023

The **Pro-innovation Regulation of Technologies Review: Digital Technologies**[^8] recommended that Government and regulators work together ‘to develop a multi-regulator sandbox for AI’ to be operative by the end of the year, and suggested the **Digital Regulatory Cooperation Forum** (DRCF)^[^9] play a key role supporting the sandbox.

In response, the Government announced in September 2023 a new multi-agency pilot scheme providing tailored advice to businesses on how to meet the requirements for AI and digital technology. The service will be run by the DRCF and is set to launch next year.[^10]

The **Review on Digital Technologies**, led by Sir Patrick Vallance, also called for applying intellectual property (IP) and copyright law on the output of generative AI – rather than on the input[^11], for a code of practice for Generative AI providers, and for a requirement to label AI generated or altered images as such.[^12] The Government has also accepted these recommendations.[^13]

The Secretary of State recently outlined her vision to make ‘the UK the global centre for AI safety’ adding that ‘we want [AI] to be successful because of our regulations’.[^14] A new **Frontier AI Taskforce**[^15], chaired by Ian Hogarth, has been created to advise the Government.

[^5]: By the Alan Turing Institute, the British Standards Institute (BSI) and the National Physical Laboratory (NPL)
[^8]: The **AI Action Plan** also included a consultation on establishing ‘a pro-innovation approach to regulating AI’.
[^9]: DRCF brings together the Office for Communications (**Ofcom**), the Information Commissioner’s Office (**ICO**), Competition and Markets Authority (**CMA**) and the Financial Conduct Authority (**FCA**).
[^11]: In 2022, after a consultation, the Government announced important decisions on IP and AI, such as a new copyright and database exemption for text and data mining (TDM). https://www.gov.uk/government/news/artificial-intelligence-and-ip-consultation-on-copyright-and-patents-legislation
[^15]: Initially named Foundation Models Taskforce.
on Frontier AI models and systems which could pose significant risks to public safety and global security.16

The UK hosted the first Global Summit on AI Safety in November 2023 at Bletchley Park.17 The objectives of the summit were to establish a shared understanding of the risk posed by frontier AI, set a process for international collaboration on research on AI safety, and outline measures to increase the safety of these systems.18

Lastly, Innovate UK and Trilateral Research published last week the ‘Core Principles and Opportunities for Responsible and Trustworthy AI’ which serves as a single and common frame of reference on new commercial opportunities, core principles and innovation priorities relating to responsible and trustworthy AI in the UK.

The AI White Paper: A pro-innovation approach to AI regulation

Published in March 2023, the AI White Paper presents the framework that UK regulators would need to follow to regulate AI uses in their sectors. The framework has been developed to drive growth and prosperity by making responsible innovation easier, increase public trust in AI by addressing risks, and strengthen the UK’s position as a global leader in AI.19

The framework

The proposed regulatory framework is based on ‘the outcomes AI is likely to generate in particular applications’, rather than on the technology itself. It should be implemented by regulators ‘making use of their domain-specific expertise’ and does not have a statutory footing in the initial period of implementation to allow for collaboration and evaluation.20 The framework is purposely built to gather evidence to be adapted and developed further.21

20 Legislation (statutory regulations) will only we introduced after the initial implementation period if it is deemed necessary (i.e., to guarantee compliance and enforcement).

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The framework is based on 5 principles, which regulators are expected to implement proportionately to the risks and in accordance with existing laws and regulations:

- **Safety, security and robustness**: AI systems should function in a robust, secure and safe way throughout the AI life cycle, and risks should be continually identified, assessed and managed. This includes technical safety and functionality reliability.

- **Appropriate transparency and explainability**22: AI systems should function so that regulators have sufficient information about them and their associated inputs and outputs to give meaningful effect to other principles.
  - Transparency refers to ‘the communication of appropriate information to the relevant people’.
  - Explainability refers to ‘the extent to which relevant parties can access, interpret, and understand the decision-making process of the AI system’.

- **Fairness**: AI systems cannot undermine the legal rights of individuals or organisations, discriminate unfairly against individuals, or create unfair market outcomes.

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Regulators should be able to define and offer guidance on what fairness means in their sector and remit.

- **Accountability and governance**: AI systems governance measures should ensure effective oversight of their supply and use, with clear accountability established across their life cycle.

- **Contestability and redress**: Users, impacted third parties and actors in the AI life cycle should be able to contest an AI decision or outcome that is harmful or creates risk of harm. This should include clear routes to contestability and redress.

Regulators across all the sectors of the economy, such as the ICO, the CMA, the FCA, Ofcom, the Health and Safety Executive (HSE), the Medicines and Healthcare products Regulatory Agency (MHRA) and the Human Rights Commission would be expected to consider the above five principles to build trust and provide clarity for innovation.

Nevertheless, the Government recognises the need for a coordination role and has identified several ‘central support functions’ to ensure the framework is effective. Initially, these would be provided by Government and include:

- Monitoring and evaluating the framework’s effectiveness, including to which extent the implementations support innovation.

- Assessing and monitoring arising AI risks across the economy.

- Horizon scanning and gap analysis to inform responses to emerging AI trends.

- Testbeds and sandboxes to get new technologies to market.

- Education and awareness on AI to give clarity to businesses and citizens.

- Interoperability with international regulatory frameworks.

By engaging with experts, including technicians and lawyers, the Government will further its understanding of what actors across the existing supply chain within the AI lifecycle should be responsible and liable for demonstrating compliance with the AI regulatory principles to ensure that legal responsibility is ‘effectively and fairly distributed’.

**Assurance techniques**

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23 Laws such as the Equality Act 2010 and the 1998 Human Rights Act should be considered when drafting the guidance.

24 Referenced in previous footnotes: Office for Communications (Ofcom), the Information Commissioner’s Office (ICO), Competition and Markets Authority (CMA) and the Financial Conduct Authority (FCA).


The proposed framework is progressively complemented by assurance techniques, voluntary guidance, and technical standards (i.e., the UK AI Standards Hub) as tools to guarantee the trustworthiness of AI systems. BridgeAI co-hosted a webinar introducing the AI Standards Hub, watch it here.

Assurance techniques include: impact assessments, audit, performance testing, and formal verification methods. Examples of existing work are the Roadmap to an effective AI assurance ecosystem in the UK (2021) and the new portfolio of AI assurances techniques (2023) published by the Centre for Data Ethics and Innovation (CDEI).

Further analysis on AI assurance techniques, standards, and principles for responsible and trustworthy AI can be found in the Innovate UK and Trilateral Research Report on the ‘Core Principles and Opportunities for Responsible and Trustworthy AI’.

The leading role of UK regulators

The document states the Government’s intention to engage with industry and regulators to ensure the framework’s effectiveness and to develop technical standards.

UK regulators have already published substantial guidance on AI covering some of the framework principles such as transparency, explainability and fairness:

- The ICO, as the data protection regulator, plays a central role on AI regulation. Some of the resources and guidance on AI it has produced to date are:
  - Explaining decisions made with AI: practical advice on transparency and explainability of AI systems.
  - Guidance on AI and Data Protection (updated in 2023): how to apply the principles of the UK GDPR to the use of information in AI systems.
  - AI and data protection risk toolkit: support in assessing the risks to individual rights and freedoms caused by own AI systems.
  - ICO has also asked businesses to spend time understanding Generative AI data protection risks before adopting this technology.
  - Other ICO reports and opinions on AI can be found here.

- Other regulators have also done work on AI:
  - The FCA launched a consultation on AI’s impact to the work of the FCA and the Bank of England and Prudential Regulation Authority.
  - The MHRA published a new guidance (roadmap) on software and AI as a Medical Device Change Programme.
  - The MHRA, in collaboration with other agencies, has set up an AI and digital regulations service to provide guidance throughout the regulatory, evaluation

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27 In collaboration with the Alan Turing Institute
and data governance pathways in health and social care to help developers and adopters. Additional resources can be found [here].

- The **CMA** published on September 2023 its [initial review on the impact of AI foundation models](#) in competition and consumer protection.

### What are the next steps?

In the first six months after the publication of the *AI White Paper* (by the end of 2023), the UK Government is committed to engaging with industry, the public sector, regulators, academia, and civil society via the consultation included in the *White Paper*. It will also publish a response to the consultation and publish the *AI Regulation Roadmap* with the details to set up the central functions, as well as plans to pilot a new AI sandbox\(^{28}\) or testbed.

The Government will also work with key regulators to understand their ability to implement the framework and the support needed.

**BridgeAI** has a wide range of funding and support available for businesses, particularly in agriculture and food processing, creative industries, construction, transport, logistics and warehousing sectors. Find out more about the upcoming opportunities, events, and resources available [here].

Subscribe to the **BridgeAI** programme updates [here].

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