2025

AI 8 Realities, 8 Billion Reasons to Regulate

Lord Holmes of Richmond MBE

Foreword

Why we need an AI Regulation Bill

The UK urgently needs an approach to AI that puts humans in charge and humanity at the heart. It can, and must, be pro-innovation, pro-investment, pro-consumer, pro-creative, pro-citizen rights.

Let's be completely clear, AI is already impacting our lives, across our society and economy, often without us even knowing it was in the mix. AI offers an incredible opportunity but what about harm mitigation, public engagement and a capability building, cross-sector regulatory approach?

It is these very questions of public trust and optimising the opportunities that lead me to introduce my private members bill – the Artificial Intelligence (Regulation) Bill (Nov 2023). I drafted the Bill with a focus on adaptive regulation, inclusive design, ethical standards, transparency, accountability, education, awareness and international cooperation.

The aim was to pro-actively engage the public, fellow parliamentarians and the government with the ideas, and legislative steps, we need to take to ensure we shape AI positively for all our benefit.

This report continues that effort and sets out the current reality of eight individuals at the sharp end of this under-regulated part of our modern world. Whether it's discrimination and bias in AI algorithms, disinformation from synthetic imagery, scams using voice mimicking technology, copyright theft or unethical chatbot responses we are already facing a host of problems from existing AI.

If we get it right we afford ourselves more than a chance to thrive with this most powerful, most promising of new technologies. For the 8 realities set out in this report, for the 8 billion citizens of our ever more connected world, for economic, social, and psychological benefit, it's time to legislate, together on AI, it's time to human lead.

Our data, our decisions, our AI futures.

Chris Holmes

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The following pages set out 8 individual experiences. Drawn from real situations, presented as archetypes for broader applicability. 8 realities, 8 billion reasons to regulate.

The Voter
You were one of two billion people around the world eligible to cast your vote in elections last year – hoping for a fair, trustworthy democratic process and a peaceful transition of power. How did fake news, micro-targeting and other AI interventions impact you, your vote and your faith in the system?

The Scammed
You've just had a call from your boss in Germany telling you to transfer £200,000 to a different business account but as you wait for the transfer to process it doesn't go through... and the funds 'disappear'.

The Benefit Claimant
You've just had your universal credit stopped – potentially due to an incorrect algorithmic assessment - but you have no way to find out how the decision was made, nowhere to appeal and no right of redress.

The Job Seeker
You keep applying for jobs you know you are qualified for but not getting an interview. As a recent graduate you fear that the automated systems used to shortlist candidates are discriminating against you, but are not clear how to appeal against their use.

Executive Summary

The Teenager
Your 14 year old son is increasingly quiet and withdrawn, spending lots of time talking to an AI chatbot who he says understands him better than anyone else and is slowly becoming the only ‘person’ he trusts.

The Creative
You are a photographer who can no longer make a living from the craft you spent decades developing. You are not averse to technology and in fact want to use it but simply cannot afford to keep going when AI developers are using your work as training data, refusing to respect copyright and IP law and offering no remuneration.

The Transplant Patient
Your seriously ill sister has been waiting 25 months for a liver transplant, but the National Liver Offering Scheme allocates livers on the basis of a Transplant Benefit Score which is calculated by an algorithm that uses age as one of the variables. As a young woman your sister is at a significant disadvantage.

The Teacher
You are a headteacher struggling with a recruitment and retention crisis, the latter compounded by workload pressures since the pandemic. You are hopeful that AI could help but how do you know which solutions will work and what happens if you get it wrong?

**8 realities,
8 billion reasons
to regulate**

The Voter

Research into AI enabled misinformation during recent UK and European elections found 16 confirmed viral cases in the UK, concluding that AI did not meaningfully impact election results. There is evidence, however, that these cases are causing damage to the integrity of the democratic system, leading to confusion and eroding trust among voters.

This is borne out by research from Full Fact and Ipsos UK which found three out of four members of the public thought misinformation would have at least some impact on the election result, with 54% believing generative AI would have an impact, and 58% concerned about the impact of deepfakes.

Mark Zuckerberg's recent announcement that Meta will eliminate fact-checkers and increase political content recommendations is likely to exacerbate this trend. Social media platforms initially described their mission as democratizing information. However, as a direct consequence of the business model of monetizing users attention, illegal content and hate speech have become increasingly problematic.

Content moderation has struggled with the tension between freedom of expression and dealing with potential online harms. This has become evermore contentious due to pressures from users, governments, and advertisers. As voters increasingly rely on social media for information outsourcing decisions to technology companies is not going to work. We need to address these issues to ensure that citizens have a consistently safe and informed experience when using the internet.

In 2020, our House of Lords Select Committee Report made recommendations related to media literacy and holding tech companies accountable that remain valid today. A new Parliamentary inquiry is investigating the role of algorithms and generative AI in spreading harmful content following recent anti-immigration riots.

The proposed AI Regulation Bill could address these issues through:

- Clause 1: Establishes an AI Authority to monitor and evaluate the overall regulatory framework's effectiveness and the implementation of the principles of safety, transparency, accountability and governance.
- Clause 2: Sets out the regulatory principles (referred to in Clause 1) and a 'must have regard' duty for the AI Authority.
- Clause 6: Would promote meaningful citizen engagement.

The Scammed

In 2019, the CEO of a UK-based energy firm was tricked by an AI generated voice deepfake into transferring thousands of pounds to a fraudster. Since then, LLMs and deepfakes are driving a fraud tsunami. In the last 12 months it is estimated that US$1.03 trillion has been lost to scams worldwide.

AI is making scams cheaper, more efficient and more effective. In the U.K. fraud now accounts for 40% of all reported crimes. The days of badly spelled 'I'm lost abroad please send money' emails are over, Fraud-as-a-Service LLMs like WormGPT will generate scams at your request.

Fraud targeting company executives and employees (where a caller impersonates the CEO or a senior executive), are on the rise, as are other types of social engineering attacks including phishing, romance scams, and business email compromise - 82% of data breaches involve a human element.

Fraudsters are calling banks directly and impersonating customers (or vice versa) or convincing a network provider to swap a user's phone number to a SIM card in their possession allowing them to compromise bank accounts that are linked to the number.

In the UK, £459.7 million in losses were attributed to authorised push payment fraud out of a total of £1.17 billion stolen by criminals over the previous year. This type of fraud occurs in real-time and once the money is deposited in the fraudsters' accounts it is incredibly difficult to recover the stolen funds.

Despite new rules introduced by the payment systems regulator, making financial institutions liable for APP fraud losses (splitting reimbursement 50:50 between sending and receiving institutions) there are ongoing questions and concerns about how to address AI driven fraud.

The proposed AI Regulation Bill could address these issues through:

- Clause 1: Establishes an AI Authority ensuring consistent regulatory oversight.
- Clause 5: Clarifying transparency, IP obligations and labelling. [Closing data gaps and setting standards, rooted in privacy, for data sharing between financial institutions and social media platforms will be key}.
- Clause 6: Would promote meaningful public engagement and awareness of risks.

The Benefit Claimant

The DWP has consistently failed to tell the public about the algorithms they use to make decisions about people's lives.

There are several problems with this lack of transparency. There are reports of people whose benefits have been indefinitely suspended by teams known to operate automated systems. People say they have not been provided with any explanation, or told what they need to prove or disprove for the benefit to be reinstated, nor how they might seek redress for any incorrect suspension and for the hardship it has caused.

The Department's existing automated systems have presented evidence of discriminatory effects against older people, people with disabilities and people of certain nationalities. Tests for unfair outcomes were limited to just three protected characteristics: age, gender, and pregnancy. The DWP previously admitted their "ability to test for unfair impacts across protected characteristics is currently limited."

An investigation by Big Brother Watch found that an algorithm wrongly flagged 200,000 housing benefit claimants for possible fraud and error, which meant that thousands of UK households every month had their benefit claims unnecessarily investigated. The Government's recently updated algorithmic transparency records did not include the DWP tools.

In January 2025, freedom of information requests, submitted by the Guardian revealed that Ministers have shut down or dropped at least half a dozen AI prototypes intended for the welfare system. It is reported that officials have said that ensuring AI systems are "scalable, reliable [and] thoroughly tested" are key challenges and say there have been many "frustrations and false starts".

The proposed AI Regulation Bill could address these issues through:

- Clause 2: Sets the principles from the (previous) Government's AI White Paper on a statutory basis, including, transparency, explainability, accountability, contestability and redress, and a duty not to discriminate.

Public Authority Algorithmic and Automated Decision-Making Systems Bill
Lord Clement Jones recent Private Members Bill, aims to establish a clear mandatory framework for the responsible use of algorithmic and automated decision-making systems in the public sector.

The Job Seeker

AI is increasingly being used in recruitment processes but there are concerns that the tools may negatively impact job-seekers who could be unfairly excluded from roles or have their privacy compromised. There are no AI specific laws regulating the use of AI in employment.

Potential discrimination claims have to be taken under the Equality Act 2010. The Information Commissioners Office (ICO) have published guidance to help organisations explain decisions made by AI systems to the people affected by them as well as a report on AI tools in recruitment.

Key issues identified in the ICO report include the over-collection of personal data, lack of transparency in AI operations, and potential biases in AI algorithms. In 2018, an Amazon AI recruitment tool was dropped because it systematically penalised CVs mentioning "women's" activities due to training data being drawn from years of male-dominated hiring patterns.

AI in recruitment has the potential to streamline processes and improve decision-making. However, its adoption also raises significant challenges. The Better Hiring Institute have made several recommendations for using AI in hiring including making sure organisations have a clear policy on AI that is inclusive, effectively communicated and ensures transparency, contestability and human oversight.

Two recommendations, that "organisations should have a Chief AI Officer" and the creation of a "national AI Authority, responsible for ... providing clarity to businesses and empowering individuals" are consistent with provisions in my AI (Regulation) Bill.

The proposed AI Regulation Bill could address these issues through:

- Clause 1: Establishes a horizontally focussed AI Authority empowered to ensure alignment of approach across relevant regulators and undertake a gap analysis of existing regulatory responsibilities.
- Clause 2: Sets the principles of transparency, explainability, accountability, contestability and redress, fairness, and a duty not to discriminate on a statutory basis.
- Clause 4: Makes provision for AI Responsible Officers.

The Teenager

The use of chatbots for mental wellness has been around since the early days of AI. In many ways, the connection between human and machine created by communication with AI-enabled products is exactly what was predicted by the Turing Test.

Chatbots such as Limbic are being used in the NHS. AI has great potential to improve access to mental health services providing scalable, cost-effective solutions that can, potentially, help eliminate traditional barriers to therapy such as high costs, long waiting times, and the stigma or practical difficulties of seeking psychological help.

In his book, 'Mastering AI', Jeremy Kahn acknowledges the potential benefits whilst also highlighting the lack of evidence comparing chatbots to human therapists. A fundamental ethical problem is that an effective therapeutic relationship is based on honesty and trust. When this is broken, there is potential for psychological and emotional harm.

Research into the "digital afterlife industry" in which 'griefbots' (AI chatbots that simulate the language patterns and personality traits of the dead using the digital footprints they leave behind) warned about the risk of social and psychological harm. The research highlighted the potential for companies to use 'deadbots' in ways that are linked to financial incentives such as advertising products or encouraging prolonged use.

There are reports of (non-mental health) chatbots encouraging users to commit suicide. In the US a lawsuit has been filed against the company behind Character.ai after, it is alleged, a chatbot encouraged a 14-year-old to kill himself. Character.ai describe the artificial personas created in the app as meant to "feel alive" and "human-like". The lawsuit alleges the company engineered a highly addictive and dangerous product targeted specifically to kids.

The proposed AI Regulation Bill could address these issues through:

- Clause 2: Sets the principles of safety, security and robustness, appropriate transparency, explainability, contestability and redress on a statutory basis.
- Clause 6: Would enhance public trust of such an important use case through "meaningful, long-term public engagement" as to the opportunities and risks presented by AI chatbots.

The Creative

The Data (Use and Access) Bill introduced an opt-out system for copyright holders, which would permit AI companies to use protected material by default unless rights holders explicitly request to opt out.

During Committee Stage in the Lords (Dec 2024) there were powerful arguments against this approach. At Report Stage (Jan 2025) Baroness Kidron's amendments to enforce existing property rights by improving transparency and laying out a redress procedure were passed. The Bill is now with the Commons and requires all of our efforts if the changes are to make it into statute.

The government have simultaneously published a consultation seeking views on the UK's legal framework for AI and copyright. The plans include a broad new exception for commercial generative AI training, something that would allow AI companies to train on British copyrighted works without a license.

The UK's existing copyright regime only allows text and data mining without a licence or permission for non-commercial research use. Creatives therefore argue that the use of their copyrighted work by commercial generative AI firms is illegal and represents theft on a mass scale. Certain organisations are doing deals (eg. FT & Shutterstock with OpenAI) and some are fighting back (eg. Getty Images Vs Stability AI & Mumsnet Vs Open AI).

It is obviously and unacceptably much harder for individuals. The Authors' Licensing and Collecting Society AI survey of members found only 7% of respondents had given permission for their work to be used and 92% want to be compensated for previous uses. The Association of Photographers responded to the AI Opportunities Action Plan by calling for "a positive choice for creators rather than the grim reality of displacement that they will inevitably face if plans for reform are enacted".

The proposed AI Regulation Bill could address these issues through:

- Clause 5: Would ensure that any person involved in training AI must supply a record of all third-party data and IP used in that training. That it must be obtained by informed consent and comply with all IP and copyright obligations.

The Transplant Patient

The National Liver Offering Scheme involves statistical modelling using the UK Transplant Registry database, to offer Donation after Brain Death (DBD) organs nationally based on transplant benefit. Since 2018, when the scheme was introduced nearly 70% of DBD livers have been prioritized for offering via the Transplant Benefit Score.

The novelty of the NLOS lies in its utility component. The Transplant Benefit Score is designed to allocate organs based on statistical predictions of transplant benefit based on the 'utility' of a transplant as well as a patient's need for it. This differs from other countries, which often prioritize based on the need for transplantation. The utility component estimates the predicted utility as 5-year patient survival after transplantation.

This measure was chosen due to the availability of data from the UK Transplant Registry (UKTR) for a current development cohort. Longer follow-up data was not available and predicting outcomes beyond 5 years is uncertain. Preliminary evidence suggests the National Liver Offering scheme is meeting aims related to minimising waiting list mortality and maximizing patient life years gained from liver transplantation but serious questions about fairness, transparency and right to redress have been raised.

Ethical considerations highlight the tension between prioritising need and benefit and emphasize transparency in the allocation process. The current system leads to the possibility of disadvantage for certain patient groups and sets up conflicts between individual benefit and the overall good of the waiting list population.

Would it be 'fairer' to include quality-of-life metrics such as estimating potential benefit outcomes while considering organ scarcity and using machine learning for better donor-recipient matching?

The proposed AI Regulation Bill could address these issues through:

- Clause 2: Sets the principles of safety, security and robustness, appropriate transparency, explainability, accountability, contestability and redress, fairness and a duty not to discriminate on a statutory basis.
- Clause 6: Would enhance public trust through "meaningful, long-term public engagement" as to the opportunities and risks, the Transplant Benefit Score would certainly come within this remit.

The Teacher

Respondents to a Department for Education Call for Evidence on GenAI in education demonstrated a clear appetite for increased support, including from government, to ensure its safe and effective adoption.

This included the provision of training and guidance, improvements to existing digital infrastructure in educational institutions, regulation around data protection, and wider reforms to curricula and assessment. In some instances, teacher and pupil access to GenAI tools was restricted due to data protection concerns, limiting adoption. The main cause for concern was that personal data—for example, information related to a pupil's identity, grades, or behaviour—may be input into the AI tools. The precedent for data breaches by LLM developers was also cited.

The Oak National Academy was set up during the pandemic and became an arms-length public body in 2022 with £43 million of government funding. Followed by £2 million to create an AI -powered lesson assistant Aila, launched in September 2024. Aila is purpose-built for teachers and intended to make the process of planning and resourcing lessons more efficient without sacrificing quality. It is also one of the use cases that is included in the recently updated algorithmic transparency records, revealing information about models (OpenAI GPT-4o and Cohere Rerank English) and datasets (Oak's lesson database of approximately 10,000 lessons and contains no personal data, protected characteristics, or proxy variables.)

Concerns have been raised amid fears that this is the first step towards "a one-size-fits-all state publisher that promotes a single curriculum, controlled by the ministers of the day." The British Educational Suppliers Association, the Publishers Association, and the Society of Authors supported by the National Education Union have put legal action on hold and the government is conducting a market impact assessment.

The proposed AI Regulation Bill could address these issues through:

- Clause 1: Establishes a horizontally focussed AI Authority empowered to ensure alignment of approach across relevant regulators and undertake a gap analysis of existing regulatory responsibilities.
- Clause 5: Clarifies transparency, IP obligations and labelling.
- Clause 6: Would promote meaningful public engagement and awareness of risks

Artificial Intelligence (Regulation) Bill [HL]

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[AS INTRODUCED] A **BILL** TO **Make provision for the regulation of artificial intelligence; and for connected purposes.**

BE IT ENACTED by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1 The AI Authority

(1) The Secretary of State must by regulations make provision to create a body called the AI Authority.

(2) The functions of the AI Authority are to—

(a) ensure that relevant regulators take account of AI;

(b) ensure alignment of approach across relevant regulators in respect of AI;

(c) undertake a gap analysis of regulatory responsibilities in respect of AI;

(d) coordinate a review of relevant legislation, including product safety, privacy and consumer protection, to assess its suitability to address the challenges and opportunities presented by AI;

(e) monitor and evaluate the overall regulatory framework's effectiveness and the implementation of the principles in section 2, including the extent to which they support innovation;

(f) assess and monitor risks across the economy arising from AI;

(g) conduct horizon-scanning, including by consulting the AI industry, to inform a coherent response to emerging AI technology trends;

(h) support test beds and sandbox initiatives (see section 3) to help AI innovators get new technologies to market;

(i) accredit independent AI auditors (see section 5(1)(a)(iv));

(j) provide education and awareness to give clarity to businesses and to empower individuals to express views as part of the iteration of the framework;

(k) promote interoperability with international regulatory frameworks.

3) The Secretary of State may by regulations amend the functions in subsection (2), and may dissolve the AI Authority, following consultation with such persons as he or she considers appropriate.

2 Regulatory principles
(1) The AI Authority must have regard to the principles that—
(a) regulation of AI should deliver—
(i) safety, security and robustness;
(ii) appropriate transparency and explainability;
(iii) fairness;
(iv) accountability and governance;
(v) contestability and redress;
(b) any business which develops, deploys or uses AI should—
(i) be transparent about it;
(ii) test it thoroughly and transparently;
(iii) comply with applicable laws, including in relation to data protection, privacy and intellectual property;
(c) AI and its applications should—
(i) comply with equalities legislation;
(ii) be inclusive by design;
(iii) be designed so as neither to discriminate unlawfully among individuals nor, so far as reasonably practicable, to perpetuate unlawful discrimination arising in input data;
(iv) meet the needs of those from lower socio-economic groups, older people and disabled people;
(v) generate data that are findable, accessible, interoperable and reusable;
(d) a burden or restriction which is imposed on a person, or on the carrying on of an activity, in respect of AI should be proportionate to the benefits, taking into consideration the nature of the service or product being delivered, the nature of risk to consumers and others, whether the cost of implementation is proportionate to that level of risk and whether the burden or restriction enhances UK international competitiveness.
(2) The Secretary of State may by regulations amend the principles in subsection
(1), following consultation with such persons as he or she considers appropriate.

3 Regulatory sandboxes
(1) The AI Authority must collaborate with relevant regulators to construct regulatory sandboxes for AI.

2) In this section a "regulatory sandbox" is an arrangement by one or more regulators which—
(a) allows businesses to test innovative propositions in the market with real consumers;
(b) is open to authorised firms, unauthorised firms that require authorisation and technology firms partnering with, or providing services to, UK firms doing regulated activities;
(c) provides firms with support in identifying appropriate consumer protection safeguards;
(d) requires tests to have a clear objective and to be conducted on a small scale;
(e) requires firms which want to test products or services which are regulated activities to be authorised by or registered with the relevant regulator before starting the test.
(3) The Secretary of State may by regulations amend the description in subsection (2), following consultation with such persons as he or she considers appropriate.

4 AI responsible officers
(1) The Secretary of State, after consulting the AI Authority and such other persons as he or she considers appropriate, must by regulations provide that any business which develops, deploys or uses AI must have a designated AI officer, with duties-
(a) to ensure the safe, ethical, unbiased and non-discriminatory use of AI by the business;
(b) to ensure, so far as reasonably practicable, that data used by the business in any AI technology is unbiased (see section 2(1)(c)(iii)).
(2) In the Companies Act 2006, section 414C(7)(b), after paragraph (iii) insert—
"(iv) any development, deployment or use of AI by the company, and the name and activities of the AI officer designated under the Artificial Intelligence (Regulation) Act 2024,".
(3) The Secretary of State may by regulations amend the duties in subsection (1) and the text inserted by section (2), following consultation with such persons as he or she considers appropriate.

5 Transparency, IP obligations and labelling
(1) The Secretary of State, after consulting the AI Authority and such other persons as he or she considers appropriate, must by regulations provide that—
(a) any person involved in training AI must—
(i) supply to the AI Authority a record of all third-party data and intellectual property ("IP") used in that training; and
(ii) assure the AI Authority that—

(A) they use all such data and IP by informed consent; and
(B) they comply with all applicable IP and copyright obligations;
(iii) any person supplying a product or service involving AI must give customers clear and unambiguous health warnings, labelling and opportunities to give or withhold informed consent in advance; and
(iv) any business which develops, deploys or uses AI must allow independent third parties accredited by the AI Authority to audit its processes and systems.
(2) Regulations under this section may provide for informed consent to be express (opt-in) or implied (opt-out) and may make different provision for different cases.

6 Public engagement
The AI Authority must—
(a) implement a programme for meaningful, long-term public engagement about the opportunities and risks presented by AI; and
(b) consult the general public and such persons as it considers appropriate as to the most effective frameworks for public engagement, having regard to international comparators.

7 Interpretation
(1) In this Act "artificial intelligence" and "AI" mean technology enabling the programming or training of a device or software to—
(a) perceive environments through the use of data;
(b) interpret data using automated processing designed to approximate cognitive abilities; and
(c) make recommendations, predictions or decisions; with a view to achieving a specific objective.
(2) AI includes generative AI, meaning deep or large language models able to generate text and other content based on the data on which they were trained.

8 Regulations
(1) Regulations under this Act are made by statutory instrument.
(2) Regulations under this Act may create offences and require payment of fees, penalties and fines.
(3) A statutory instrument containing regulations under section 1 or 2 or regulations covered by subsection (2) may not be made unless a draft of the instrument has been laid before and approved by resolution of both Houses of Parliament.
(4) A statutory instrument containing only regulations not covered by subsection (3) is subject to annulment in pursuance of a resolution of either House of Parliament.

(5) A statutory instrument containing regulations applying to Wales, Scotland or Northern Ireland must be laid before Senedd Cymru, the Scottish Parliament or the Northern Ireland Assembly respectively before being made.

9 Extent, commencement and short title
(1) This Act extends to England and Wales, Scotland and Northern Ireland.
(2) This Act comes into force on the day on which it is passed.
(3) This Act may be cited as the Artificial Intelligence (Regulation) Act 2024.

Artificial Intelligence (Regulation) Bill [HL]

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