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THE SCOPE AND NECESSITY OF REGULATING ARTIFICIAL INTELLIGENCE IN INDIA

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ABSTRACT

Artificial Intelligence is the buzzword of the 21st Century. The world is on the threshold of the fourth Industrial Revolution. AI is fast appearing to be the most significant tool of making life easier for human beings. It is helping in increasing productivity¹. There is hardly any walk of life which remains untouched by the use of AI. A lot of technological innovations are taking place within the folds of AI itself. Generative AI, ChatGPT and DeepSeek are a few examples. In all areas of life like healthcare, education, agriculture, smart cities, infrastructure, smart mobility, transportation etc. AI and machine learning are presenting ample opportunities to improve our efficiency and working capacity on a large scale. However, simultaneously, its misuse is also causing concerns among the people. AI is being misused through deep fakes, data theft, cyber-crimes, and by terrorists, in particular. Moreover, there are ethical dilemmas also arising from the use of AI-whether it be the problem of unemployment due to automation, increasing economic inequality, or human biases in AI outcomes². Thus, in order to achieve a human-centric growth of AI, both the ethical and legal issues have to be tackled first. Otherwise, it would become a pliant tool in the hands of anti-social and unscrupulous elements roaming around us with impunity. Keeping in view of these aberrations, the U.S. and the European Union countries have passed Executive Orders and a full-fledged legislation respectively to regulate the use of AI in the interest of people at large. India first spurned the idea of making laws or formulating guidelines in this regard, but of late has changed its stance. Now, deliberations are on to regulate AI through passing legislation or issuing guidelines or something else in near future. Recent mishaps have put pressure on the government to regulate AI so that the common man may not become a target of evil-minded persons. This paper explores the various dimensions of this issue and suggests probable solutions.

Artificial Intelligence (AI) has emerged as one of the most transformative technologies of the 21st century, significantly expanding its influence across sectors such as healthcare, education, agriculture, finance,

¹ Ministry of Electronics and Information Technology (MeitY). (2023). *National Strategy on Artificial Intelligence and Responsible AI initiatives*. Government of India.

² Ministry of Electronics and Information Technology, *Responsible AI Initiatives in India* (Government of India 2023).

transportation, governance, and public administration. The rapid development of advanced AI systems, including Generative AI tools such as ChatGPT and DeepSeek, has enhanced efficiency, decision-making, and innovation on an unprecedented scale³. However, the growing integration of AI into everyday life also raises critical concerns relating to privacy, data protection, algorithmic bias, transparency, accountability, cybersecurity, and the protection of fundamental rights. In the Indian context, where digital transformation is accelerating rapidly, there is an urgent need for a balanced and effective regulatory framework that promotes innovation while ensuring ethical, responsible, and rights-based use of AI in accordance with constitutional and democratic values (NITI Aayog, 2018; UNESCO, 2021)⁴.

INTRODUCTION

At present, more than 90-crore Indians are equipped with Internet connectivity and by 2026, that figure will touch 120 crores, making India the largest connected and digitized country in the world.⁵ Undoubtedly, we are living in the age of new technological inventions, including Artificial Intelligence which has gradually encompassed almost every sphere of human activity. Governments and the policymakers across the world are just obsessed with AI witnessing the growth of new technologies like ChatGPT etc. The year 2023, in particular, is perceived to be a period in which artificial intelligence made a significant impact on social and economic relations. It happened due to the apparent success of large language models (LLMs), a family of generative models, in solving complex tasks.⁶ However, amidst this excitement, there are simultaneous voices of concern too. Geoffrey Hinton, a pioneer of AI, has emphasized its potential to surpass human intellectual capabilities. He says that 'AI will be comparable with the industrial revolution.' At the same time, he has warned that 'we also have to worry about a number of possible bad consequences, particularly the threat of these things getting out of control.'⁷ That implies that the new technologies can prove to be disruptive for societies and economies.

The negative concerns about the AI expressed by the experts are coming to be true in many cases. There are numerous examples of rampant AI misuse. It has become a pliant tool for more sophisticated forms of fraud, generally known as cyber fraud. AI-generated images, videos and audio clips are being manipulated to create realistic but false representations of events and individuals. Deepfakes are fake videos made with AI-powered tools which are being used in political campaigns and social media to spread misleading information, undermining public trust. Moreover, with the help of AI, governments and institutions can monitor social media, track individuals or suppress certain types of content which may result in curtailment of free speech. Besides that, there are other important issues such as ethics and bias in the use of AI⁸. This widespread malaise of AI misuse is threatening social stability and rules-based order. The alarming upsurge in cases of cybercrime, digital frauds and abuse of social media, in particular, have successfully led to reputation destroying, targeting and shaming vulnerable people and triggering suicides even. The victims are deprived of their privacy and dignity. Unfortunately, in the present situation, there are no guardrails to protect citizens⁹. The service providers have not been able to redress the grievances of the victims in a timely and effective manner. In short, India is lacking in this regard-there is no robust enactment yet to stem the tide of AI misuse which is growing exponentially day by day¹⁰.

³ Ministry of Electronics and Information Technology, *Responsible AI Initiatives in India* (Government of India 2023)

⁴ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (2021)

⁵ Rajeev Chandrasekhar, Reaching out with AI, *The Indian Express*, Nov 18, 2024.

⁶ Anupam Guha, An AI for the people, *The Indian Express*, Dec 29, 2023.

⁷ Anand Sharma, Shimpay Sharma and Alexandra Celestine, Raise the guardrails, *The Indian Express*, Dec 12, 2024.

⁸ World Economic Forum, *AI Governance Alliance: Briefing Paper Series* (2024)

⁹ OECD, *OECD Principles on Artificial Intelligence* (OECD Publishing 2019)

¹⁰ World Economic Forum, *AI Governance Alliance: Briefing Paper Series* (2024)

GLOBAL SITUATION TO REGULATE AI

➤ European Union

In order to provide a healthy ecosystem for the judicious use of AI and to mitigate the risks, the European Union passed a law on AI in December 2023, which came into force on August 1, 2024. This legislation is known as the Artificial Intelligence Act, 2024. This Act classifies AI's potential risks under different categories imposing certain obligations upon developers. It remains the only such law in the world. The Act prohibits arbitrary and real-time remote biometric identification in public spaces for law enforcement. It bans emotion detection, which is now recognized to be harmful pseudoscience, in workplaces. It prohibits authorities from using AI systems to generate social scores/credits. However, critics have pointed out certain gaps in the law. To begin with, emotion detection is outside the regulatory ambit so far as it is not used in workplaces, which leaves scope for the use of this harmful and fraudulent tech. Secondly, the law does not address virtual assistants and chatbots with the potential for damage. One common example, which is harmful too, is apps using chatbots to give physical and mental health advice. Thirdly, while regulations are being made, there is no mention of industrial policy on AI. Consequently, the provisions like who owns AI, how it impacts labour and wage, and where the proceeds go, cannot really be altered. Vague frameworks of "trust" and "responsible AI" fill this vacuum.¹¹ The European Union has taken a predictably tougher stance as compared to other countries including US and UK, 'by proposing a regulation that segregates AI as per use case scenario, based broadly on the degree of invasiveness and risk.'¹²

➤ United States of America

In July 2023, it was announced by the US government that it had persuaded the companies OpenAI, Microsoft, Amazon, Anthropic, Google, Meta, etc. to abide by "voluntary rules" to "ensure their products are safe". These rules, however, did not mention anything about the political-economic factors influenced by AI deployment. Therefore, the rules reduced the problem to one of safety testing, nor did they help self-regulations become enforceable in any manner. By October 2023, the US Congress showed no inclination towards drafting a regulation on AI. Consequently, the US administration signed an "Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence", though the challenges mentioned above largely uncovered.¹³ The US has also proposed the Algorithmic Accountability Act, 2023 to assess the impact of AI in high-stakes areas like employment, housing and credit.¹⁴ The US approach is expected to see further deregulation.

The United States is a global leader in the development and deployment of Artificial Intelligence (AI), with its applications spanning sectors such as healthcare, finance, education, defense, transportation, manufacturing, agriculture, and public administration¹⁵. AI technologies are widely used for medical diagnostics, autonomous vehicles, predictive analytics, cybersecurity, natural language processing, and advanced research and development. The country is home to major AI innovators, including OpenAI, Google, Microsoft, and Meta, which have significantly contributed to advancements in machine learning

¹¹ Anupam Guha, An AI for the people, The Indian Express, Dec 29, 2023.

¹³ Anupam Guha, An AI for the people, The Indian Express, Dec 29, 2023.

¹⁴ Anand Sharma, Shimpy Sharma and Alexandra Celestine, The Indian Express, Dec 12, 2024.

¹⁵ The White House. (2023). *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*

and generative AI¹⁶. Recognizing AI's strategic importance, the U.S. government has adopted various policies and initiatives, including the National Artificial Intelligence Initiative, to promote AI research, innovation, and responsible development. AI is also increasingly utilized in government operations, national security, and public service delivery, making it a critical driver of economic growth and technological competitiveness¹⁷. However, the expanding scope of AI has raised concerns regarding privacy, algorithmic bias, accountability, labor market disruption, and national security, leading to growing calls for comprehensive regulatory oversight and ethical governance frameworks¹⁸.

➤ UNITED KINGDOM

The United Kingdom (UK) has shown a decidedly “light-touch” approach that aims to foster, and not stifle, innovation in this burgeoning field.¹⁹ Artificial Intelligence (AI) has become a key driver of digital transformation in the United Kingdom, influencing both public and private sectors. In the legal domain, AI is reshaping traditional legal practice by improving efficiency in legal research, document review, contract analysis, and dispute prediction²⁰. However, its rapid integration raises serious ethical and regulatory challenges, requiring careful balancing between innovation and the principles of law such as fairness, accountability, transparency, and justice.

Scope of Artificial Intelligence in the UK

(a) Legal Sector Applications

AI is widely used in legal practice in the UK, including:²¹

- **Legal research tools** (case law and statute analysis)
- **Document automation** (drafting contracts, agreements, wills)
- **E-discovery** in litigation (sorting large volumes of digital evidence)
- **Predictive analytics** (estimating case outcomes)
- **Chatbots and virtual assistants** for client interaction
- **Compliance monitoring tools** in corporate law

These tools increase efficiency and reduce cost, improving access to justice.

¹⁶ Organisation for Economic Co-operation and Development (OECD). (2024). *Artificial Intelligence in the United States: Policy Perspectives*

¹⁷ OECD, *Artificial Intelligence in the United States: Policy Perspectives* (2024)

¹⁸ The White House, *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* (2023)

¹⁹ Anil Sasi, PM Modi a co-chair of Paris AI summit: What's on the agenda?, *The Indian Express*, Jan 28, 2025.

²⁰ UK Government. *AI Regulation White Paper: A Pro-Innovation Approach to AI Regulation* (2023)

²¹ Data Protection Act 2018 (UK).

(b) Broader Sectoral Applications

AI is also widely used beyond law:²²

- Healthcare (diagnosis support, patient monitoring)
- Finance (fraud detection, credit scoring)
- Transport (autonomous systems, traffic management)
- Public services (digital governance and automation)
- Education (personalized learning systems)
- Security and policing (surveillance analytics)

Legal and Regulatory Framework in the UK²³

Unlike the EU's strict AI Act, the UK follows a **flexible, principles-based regulatory model**. Focuses on five core principles:²⁴

- Safety, security and robustness
- Transparency and explainability
- Fairness
- Accountability and governance
- Contestability and redress
- **Financial Conduct Authority (FCA)** guidelines for AI in finance.²⁵
- Sector regulators (like ICO) provide AI governance oversight.

Legal Ethics and AI in the UK²⁶

AI raises major ethical concerns in legal practice:

(a) Professional Responsibility

Lawyers must ensure:

- Human oversight of AI outputs
- Verification of AI-generated legal content

²² Equality Act 2010 (UK)

²³ The Law Society of England and Wales, Generative AI Guidance (2024–2025)

²⁴ UK Courts (various rulings on AI-generated legal citations, 2023–2025 developments).

²⁵ UK Government. *AI Regulation White Paper: A Pro-Innovation Approach to AI Regulation* (2023)

²⁶ Equality Act 2010 (UK)

- Compliance with court rules and professional standards

(b) Confidentiality

- AI tools must not expose client confidential data
- Risk of data leakage in cloud-based AI systems

(c) Accuracy and Reliability

- AI may generate incorrect or fabricated legal references
- Courts in the UK have already warned against reliance on AI without verification

Judicial and Professional Concerns

UK courts have expressed concern over misuse of AI:

- Lawyers submitting **AI-generated fake case citations**
- Emphasis on **duty of candour to the court**
- Sanctions possible for professional misconduct

The **Law Society of England and Wales** has issued guidance stating:

- AI can assist legal work but cannot replace professional judgment
- Lawyers remain fully responsible for AI-assisted outputs

Advantages of AI in the UK Legal System

- Faster case processing
- Reduced legal costs
- Improved access to legal services
- Efficient document management
- Enhanced legal research capabilities

➤ China

China has released its own set of measures to regulate AI.²⁷ China has developed one of the most advanced and comprehensive regulatory frameworks for Artificial Intelligence (AI), focusing on balancing technological innovation with national security, social stability, and public welfare. Instead of enacting a single AI law, China regulates AI through a series of measures, including the Provisions on Algorithmic Recommendation Services (2022), Deep Synthesis Provisions (2023), and Interim Measures for Generative

²⁷ Cyberspace Administration of China. (2023). *Interim Measures for the Management of Generative Artificial Intelligence Service*

Artificial Intelligence Services (2023)²⁸. These regulations require transparency in algorithmic decision-making, mandatory labeling of AI-generated content, protection of personal information, and accountability of AI service providers for harmful or unlawful content. China's AI governance is further supported by the Personal Information Protection Law (PIPL), Data Security Law, and Cybersecurity Law, which establish strict standards for data protection and cybersecurity. While China's approach has been praised for proactively addressing AI-related risks, it has also faced criticism for extensive government control and restrictions on freedom of expression. Nevertheless, China's regulatory model serves as a significant example of how governments can establish legal safeguards to ensure the responsible and secure development of AI technologies²⁹.

➤ 5.India

At present, there is no separate law to regulate artificial intelligence related issues in India. Though AI governance cannot be separated from the data governance and there are specific laws like the Data Protection Act (DPDP), the Information Technology Act (IT Act), and the Right to Privacy judgment which has accorded fundamental right status to this right, the need has arisen to enact law to cover certain aspects of AI which are proving harmful to human beings. India has so far adopted a pragmatic approach towards the regulation of AI. India's position has well-articulated by the Union Minister of Electronics and Information Technology, Ashwini Vaishnaw in these words: "As India builds a future-ready workforce, its AI regulatory framework must foster innovation while ensuring responsible deployment"³⁰. Unlike the "heavy-handed regulatory framework which risks stifling innovation, or the "market-driven governance", which often concentrates power in the hands of a few, India is following a pragmatic techno-legal approach. The government is investing in techno-legal safeguards to address AI-related risks. The government is financing AI-driven projects at top universities and IITs to develop tools to tackle deepfakes, privacy concerns, and cybersecurity threats."³¹

The Government of India is reportedly open to bringing in a law on AI to secure its vision for the tech. It is necessary to deal with irresponsible AI and its potential to stir up xenophobia, which in turn could slow down AI's spread. The job of ensuring ethical behaviour both by technology developers and their business clients falls naturally on the government. This is also the approach of the EU, which has put people at the centre of the societal response to AI-as opposed to the US response, which is using collaboration between the administration and Big Tech to drive ethical use.³²

Here, it would be pertinent to discuss the issue of ethics and bias in the context of AI, which also needs a regulatory framework. Ethics is involved with algorithmic bias, discrimination in AI applications, consent over data, surveillance and monitoring (invasion of privacy) and finally, legal accountability. It raises a basic question-how to fix ethical responsibility for AI.³³ In this context, the Government of India is working on a set of voluntary codes of conduct and ethics for companies to follow for the work they do with AI or generative AI³⁴. Ministry of Electronics and Information Technology has developed this that will be akin to

²⁸ National People's Congress of China. (2021). *Personal Information Protection Law (PIPL)*

²⁹ National People's Congress of China. (2017). *Cybersecurity Law of the People's Republic of China*.

³⁰ Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021

³¹ Aswini Vaishnaw, The Digital path to a developed India, Hindustan Times, Feb 6, 2025.

³² Editorial, GoI, Appoint a Minister for AI, The Economic Times, Dec 28, 2023.

³³ Mohan Kumar, French-Indian tango over the future of AI, Hindustan Times, Feb 2, 2025.

³⁴ NITI Aayog. (2018). *National Strategy for Artificial Intelligence: #AIforAll*. Government of India

“informal directive principles” for companies, especially those working to build their large language models (LLMs) or using data to train AI and machine learning models. The voluntary code of conduct is expected to be released early next year (2025). Prior to that in March 2024, the IT ministry had issued an advisory asking all platforms to ensure that “there computer resources do not permit any bias or discrimination or threaten the integrity of the electoral process” by the use of AI, generative AI, LLMs or any such other algorithm³⁵. This advisory was later withdrawn and requirements for companies to register their AI or LLM before deployment were also dropped.³⁶

There is no doubt AI will transform society, and there is a big need to safeguard against improper use. However, at the same time everybody should pay heed to the words of wisdom uttered by Yoshua Bengio, Professor of Computer Science at the University of Montreal in Canada and founder of Mila-Quebec Artificial Intelligence Institute, in an interview. He said: “To safeguard the public, governments need to take seriously a wide range of possible scenarios identified by experts and adopt regulatory frameworks at national and international level. Regulations should always prioritize public safety and be agile to adapt to AI’s rapid evolution (principles-based regulations that set high-level goals are a great way to achieve this). Given AI’s global nature, international coordination is also essential to establish common standards, regulatory fragmentation and put international treaties in place.”³⁷

CONCLUSION

The extraordinary growth of artificial intelligence in almost every walk of life of humans is amazing. It raises hopes of economic and societal betterment among the people in general. However, AI technology is in an embryonic stage and is steadily evolving day by day. But in the meantime, it has been subjected to misuse of various dimensions-ranging from financial, social and political, and worst of all, ethical. Already a large number of people have succumbed to dreadful consequences of cyberbullying, cyber fraud, and other cyber-crimes which often lead to loss of prestige, finances and image of the person involved. In many cases, the social stigma, thus attached, has prompted the victims to commit suicide. Further, continuous erosion of ethical values in application of AI is breaching the trust of the people in the existing system. Keeping in view this alarming situation, there is an urgent need to make proper and robust laws to regulate AI governance. It will go a long way in ensuring the safety of the people and creating the right atmosphere to reap the benefits of AI technology. In the Indian context, the entry of deepfakes and cyber frauds along with cyberbullying etc³⁸. have sent strong signals of a futuristic scenario. Since India is fast developing into a top-order economy of the world, the increasing role of AI cannot be undermined. But there should not be further delay in making adequate laws like the European Union, to protect the citizens and the business class alike. Only sending advisories to concerned institutions will not help the cause of AI-related growth³⁹. It will require far greater collaboration between industry, governments and technology experts. For this to achieve, the government of the day will have to show sufficient intent and resolve. Time has come to enact laws to regulate AI in the interest of all, including public, industry, trade and commerce, and the institutions.

³⁵ Ministry of Electronics and Information Technology (MeitY). (2024). *Advisories on Artificial Intelligence and Deepfake Regulation*.

³⁶ Aashish Aryan, MeitY Revising Voluntary Ethics Code for AI Firms, The Economic Times, Nov 18, 2024.

³⁷ Kanika Saxena with Yoshua Bengio, ‘We Need to Achieve Both Innovation & Safety in AI’, The Economic Times, Jan 5, 2025.

³⁸ Competition Commission of India, *Market Study on Artificial Intelligence and Competition* (2021).

³⁹ Ministry of Electronics and Information Technology, *AI and Deepfake Advisories* (2024).