

# Regulations on Artificial Intelligence (AI): Decoding China's Approach and How India Can Learn From China

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## Abstract

The rapid advancement of Artificial Intelligence (AI) in China has led to the implementation of significant regulatory efforts, including regulations on Recommendation Algorithms, Deep Synthesis, and Generative AI. These regulations aim to address issues, such as discrimination, transparency in content generation, and accuracy in AI outputs. China's approach to AI regulations is guided by the New Generational AI Development Plan of 2017, emphasizing technology-driven innovation, socialist principles, market dominance, and open-source collaboration. The country's strategic roadmap focuses on achieving leadership in AI development, aligning with global trends, and fostering innovation through policy reforms and ethical frameworks. In comparison, India's fragmented frameworks illustrate a lack of an organized governance system. By adopting principles from China's regulations, such as developing comprehensive legislations, establishing centralized authorities, and mandating transparency and user control measures, India can ensure the responsible advancement of AI technologies and address the emerging ethical, legal, and social challenges.

**Keywords:** [AI Governance, China's AI Regulations, Misinformation Mitigation, Generative AI Policies, Regulatory Framework, Responsible AI Development]

## Abbreviations

AGI	:	Artificial general Intelligence
AI	:	Artificial Intelligence
ANI	:	Artificial Narrow Intelligence
ANN	:	Advanced Neural Networks
ASI	:	Artificial Super Intelligence
CAC	:	Cyber-Space Administration of China
CAGR	:	Compound Annual Growth Rate
CCP	:	Chinese Communist Party
CNN	:	Convolutional Neural Network
DSR	:	Deepfake Synthesis Regulation
GAN	:	Generative Adversarial Networks
GPS	:	Geo Positioning System
GPT	:	Generative Pre-trained Transformer
IDC	:	International Data Corporation

IRDAI :	Insurance Regulatory Development Authority of India
ML :	Machine Learning
MOST :	Ministry of Science and Technology
PIP :	Personal Information Protection
RBI :	Reserve Bank of India
RNN :	Recurrent Neural Networks
VAE :	Variational Auto-Encoders

## 1. Introduction

The substantial development in technological progress observed on a global scale are largely attributed to Artificial Intelligence (AI). AI denotes the capability of a computerized system or machinery under computer control to perform tasks, traditionally associated with human intelligence<sup>1</sup>. These tasks encompass functions like logical reasoning, understanding, and problem-solving. Prominent instances of AI integration into everyday life includes virtual assistants such as Amazon's Alexa and Apple's Siri, GPS navigation systems, self-driving vehicles like those pioneered by Tesla, and Generative AI tools such as OpenAI's ChatGPT and Microsoft's Copilot<sup>2</sup>.

In contemporary world, Artificial Intelligence (AI) is categorized into three principal types, described by their operational scope: Narrow AI, General AI, and Super AI. Narrow AI, also known as Artificial Narrow Intelligence (ANI)<sup>3</sup>, denotes systems that possess the capacity to execute specific tasks designated by the programming. Currently, ANI stands as the sole manifestation of AI realized in practical applications. Illustrative instances of Narrow AI encompass Digital Assistants, Self-Driving Vehicles, and Recommendation Algorithms. Despite Their commendable efficacy within predetermined domains, Narrow AI frameworks exhibit limitation. While proficient in precise analysis of extensive datasets, discerning patterns, and rendering data-informed decisions, they lack in abstract reasoning capabilities, contextual comprehension beyond programmed bounds, and emotional intelligence. The Spectrum of their learning is constrained by predefined parameters dictated by their algorithms and the corpus of training data.

Artificial General Intelligence (AGI)<sup>4</sup>, also known as Strong AI, embodies a category of intelligent machines, adept at performing tasks at a level commensurate with human capabilities, thereby possessing a cognitive prowess akin to humans. In the world of computer science, AGI signifies an intelligent entity, equipped with extensive knowledge and cognitive computing abilities. Despite being a topic of significant discussion, authentic AGI implementations, remain elusive and primarily relegated to the area of speculative conjecture within contemporary literature. The Conceptual framework of AI systems, parallels human intelligence, although potentially transcending human capacities owing to their capability for accessing and processing vast datasets with remarkable velocity.

Super AI or Artificial Super Intelligence (ASI)<sup>5</sup>, an advanced form of Artificial Intelligence (AI), is a theoretical framework positing the development of software-based systems endowed with cognitive

<sup>1</sup> Artificial Intelligence (2024), Britannica, <https://www.britannica.com/technology/artificial-intelligence>

<sup>2</sup> What is Artificial Intelligence? IBM, <https://www.ibm.com/topics/artificial-intelligence>

<sup>3</sup> Narrow AI Definition, Deep AI, <https://deepai.org/machine-learning-glossary-and-terms/narrow-ai#:~:text=Narrow%20AI%2C%20also%20known%20as,AI%20is%20limited%20in%20scope.>

<sup>4</sup> Artificial General Intelligence, Tech Target, <https://www.techtarget.com/searchenterpriseai/definition/artificial-general-intelligence-AGI>

<sup>5</sup> What is Artificial Super Intelligence, IBM, <https://www.ibm.com/topics/artificial-superintelligence>

capabilities exceeding those of humans. This speculative concept pertains to AI architecture demonstrating superior cognitive functions and advanced reasoning abilities beyond the scope of human intellect.

Generative Artificial Intelligence (Generative AI)<sup>6</sup> stands at an intermediary juncture between Narrow and General AI frameworks, showcasing the ability to create novel and distinctive content spanning diverse mediums including audio, code, images, text, and videos. Significant progress in this field marks a pivotal transformation in our approaches to content generation methodologies.

The emerging field of Generative Artificial Intelligence is dedicated to creating various forms of content, including text, images, designs, synthetic data, and Deepfakes. This technological frontier shows significant promise in creative domains and problem-solving tasks by autonomously producing novel outputs<sup>7</sup>. Central to the operation of Generative AI are Advanced Neural Network (ANN)<sup>8</sup> techniques, particularly transformers, Generative Adversarial Networks (GANs)<sup>9</sup>, and Variational Auto Encoders (VAE)<sup>10</sup>. Conversely, alternative AI methodologies utilize different Neural Network architecture, such as Convolutional Neural Networks (CNN)<sup>11</sup>, Recurrent Neural Networks (RNN)<sup>12</sup>, and Reinforcement Learning Algorithms (RLA)<sup>13</sup>.

Generative Artificial Intelligence commonly initiates its operations by introducing ‘Prompts’ and facilitating user or data driven inputs to steer the generation of content. This iterative methodology fosters the exploration of diverse content iterations. According to findings from a survey conducted by McKinsey and Co<sup>14</sup>, approximately one-third of the respondents reported utilizing Generative AI tools for the business operations. Goldman Sachs research<sup>15</sup>, suggests Generative AI holds the capacity to catalyze a 7% growth in global GDP, equivalent to nearly \$7 trillion, within the forthcoming decade.

## 1.1 Issues

Everything has its pros and cons, Generative AI too, poses a lot of danger in its usage. Concerns have been shown about the misuse of these platforms along with credibility of the data generated on them. Some of these issues are; breach of privacy and security, misinformation, and Deepfakes, distribution of harmful content, copyright, infringement, and plagiarism.

**Breach of Privacy and Security:** Generative AI systems have revolutionized content creation by leveraging extensive training data to generate novel output. However, the utilization of such platforms necessitates careful consideration to prevent inadvertent exposure of sensitive personal information to potential threats. Inherent capacity of these systems to ingest and process vast datasets poses a significant risk of breach, potentially compromising both the user’s data and even the underlying training data through

<sup>6</sup> What is Generative AI, McKinsey & Co, <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai>

<sup>7</sup> What is generative AI? Everything you need to know, Tech Target, <https://www.techtarget.com/searchenterpriseai/definition/generative-AI#:~:text=Generative%20AI%20focuses%20on%20creating,many%20types%20of%20new%20outputs.>

<sup>8</sup> Advanced (Neural Networks), IBM, <https://www.ibm.com/docs/en/spss-modeler/18.4.0?topic=networks-advanced-neural>

<sup>9</sup> Generative Adversarial Networks (GANs), Tech target, <https://www.techtarget.com/searchenterpriseai/definition/generative-adversarial-network-GAN>

<sup>10</sup> Variational Autoencoders (VAE), Tech Target, <https://www.techtarget.com/searchenterpriseai/definition/variational-autoencoder-VAE>

<sup>11</sup> Convolutional Neural Networks (CNN), IBM, <https://www.ibm.com/topics/convolutional-neural-networks>

<sup>12</sup> What are Recurrent Neural Networks (RNN), IBM, <https://www.ibm.com/topics/recurrent-neural-networks>

<sup>13</sup> Reinforcement Learning Algorithms (RLA), Geeks for Geeks, <https://www.geeksforgeeks.org/what-is-reinforcement-learning/>

<sup>14</sup> “The State of AI in 2023: Generative AI’s breakout year”, McKinsey & Co, 2023, <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year>

<sup>15</sup> Goldman Sachs, “Generative AI could raise global GDP by 7%”, 2023, <https://www.goldmansachs.com/intelligence/pages/generative-ai-could-raise-global-gdp-by-7-percent.html>

sophisticated exfiltration attacks<sup>16</sup>. Online platforms such as ChatGPT collect user data including browser type, IP address, and potentially sensitive information entered post transaction, with the possibility of de-identification<sup>17</sup>. However, these platforms lack transparency, as evidenced by the absence of detailed information regarding data storage and processing in OpenAI's privacy policy.

**Misinformation and Deepfakes:** The emergence of Generative Artificial Intelligence (AI) technology has introduced a concerning phenomenon where malicious actors exploited these tools to propagate misinformation, a practice known as Deepfake dissemination. Recent instances involving actors, Rashmika Mandanna<sup>18</sup>, Katrina Kaif<sup>19</sup>, Ranveer Singh, and Amir Khan<sup>20</sup> exemplify the detrimental impact of Deepfakes AI videos, which are disseminated across social media platforms. Deepfakes constitute deceptive audiovisual content, where in an individual's facial features and/or voice are seamlessly superimposed onto another person, with the explicit aim of defaming, harming, or deceiving both the targeted individual and wider audience.

Instances abound wherein videos depicting mark Zuckerberg admitting to the possession of vast amounts of personal data from billions of individuals, or recordings purportedly featuring Barack Obama disparaging Donald Trump, have proliferated across online platforms. Despite the apparent authenticity of such content, often it is difficult to discern that it has been generated through Artificial Intelligence (AI) technology. Nevertheless, these deceptive videos achieve widespread circulation, inflicting harm by disseminating misinformation and exacerbating, societal discord.

**Distribution of Harmful Content:** Generative AI platforms have increasingly become a means in creation and dissemination of harmful content, facilitating avenues through which individual can engage in acts of coercion, harm, or defamation against others. This phenomenon encompasses a spectrum of negative behaviors, including cyberbullying, harassment, and exploitation, manifested diverse forms of content circulated on social media platforms.

**Copyright Infringement:** Generative AI systems, drawing from vast datasets source from the internet, introduce a significant concern wherein generated content may inadvertently contain copyrighted material present in training data. Subsequently, the origin of such content becomes obscure, potentially leading to copyright violations. The current Copyright law of India<sup>21</sup> designates the original human author as rightful copyright holder, it fails to acknowledge AI as an author or copyright owner. As it, there is a pressing need for clear and comprehensive guidelines to address this evolving landscape.

**Plagiarism:** In light of contemporary technological advancements, it is appropriate to acknowledge that platforms such as ChatGPT produce textual outputs that inherently bear resemblance to human-generated content. Consequently, in instances where individuals present AI-generated materials as original works, it raises ethical concerns such as plagiarism, as the underlying data utilized to train the platform originates from pre-existing sources authored by others.

<sup>16</sup> Data Exfiltration, IBM, <https://www.ibm.com/topics/data-exfiltration>

<sup>17</sup> Privacy Policy, OpenAI, <https://openai.com/policies/privacy-policy>

<sup>18</sup> Probe over Rashmika Mandanna's DEEPFAKE video gains momentum, Delhi Police writes to Meta for URL", *Times of India*, Nov 13, 2023.

<sup>19</sup> "From Katrina Kaif to Rashmika Mandanna: Celebs who have become victims of deepfake", *First Post*, <https://www.firstpost.com/entertainment/from-katrina-kaif-to-rashmika-mandanna-celebs-who-have-become-victims-of-deepfake-13362082.html>

<sup>20</sup> "Deepfakes of Aamir Khan and Ranveer Singh raise worries over AI misuse in Lok Sabha election 2024" *Hindustan Times*, Apr 22, 2024

<sup>21</sup> The Copyright Act, 1957, Acts of Parliament, (Act No 8 of 1957)

## 2. Generative AI Guidelines in China

In recent years, China has risen as a prominent influencer in the advancement and governance of Artificial Intelligence (AI), driven by substantial governmental funding, a dynamic technological environment, and ambitious, national directives. The increasing significance of China in AI advancement and oversight can be designated through several pivotal dimensions<sup>22</sup>:

**Government Support and Investment:** The Chinese government has identified Artificial Intelligence (AI) as a crucial technology within its national development strategies. Notably, initiatives like the “*New Generational Artificial Intelligence (AI) Development Plan*”<sup>23</sup> articulate ambitious objectives for the advancement, research, and application of AI. China's dedication to this field is evident in its projected investment growth, which is expected to experience a compound annual growth rate (CAGR) of 86.2% from 2022 to 2027, as per a recent report from International Data Corporation (IDC)<sup>24</sup>. This underscores the nation's robust prospects in the high-tech sector. Through concerted governmental efforts aimed at accelerating high quality development, China is poised to substantially increase its share of Global AI investment, with Generative AI expenditure forecasted to account for 33% of worldwide investment by 2027, a significant rise from 4.6% in 2022. The estimated investment in Generative AI is expected to reach \$13 billion by the specified year, according to the report's findings.

**Thriving Tech Ecosystem:** China's robust, technological landscape is distinguished by a rich reservoir of proficient workforce, prominent tech enterprises, and burgeoning start-ups. Key industry players, such as Alibaba, Tencent, and Baidu are deeply entrenched in advancing AI research and application, spanning facial recognition, natural language processing, and autonomous vehicles. Notably, China holds a competitive position with many Western counterparts in the global AI race. Given AI's reliance on extensive data, the Chinese Communist party's governance model, characterized by ‘socialism with Chinese characteristics’, provides mechanisms for accumulating extensive data sets<sup>25</sup>. Consequently, entities with affiliations to the Chinese government possess a strategic advantage, leveraging state-gathered data to bolster commercial pursuits.

**AI Regulation and Governance:** China has acknowledged the necessity of instituting a regulatory framework to oversee the ethical advancement and implementation of AI technologies. In response, the Chinese government has implemented guidelines and standards, geared towards fostering accountable, AI practices, tackling issues related to data confidentiality, algorithmic transparency, and ethical considerations. Moreover, regulatory endeavors have been initiated to govern AI applications, especially in critical domains like surveillance and facial recognition, aiming to strike a harmonious equilibrium between Technological progression and societal and ethical deliberations<sup>26</sup>.

**International Collaboration and Competition:** The increasing prominence of China in the field of Artificial Intelligence (AI) development has precipitated a surge in international collaborations and competition within the global landscape. Through active engagement and partnerships and knowledge sharing initiatives with other nations, academia, and industry stakeholders, China endeavors to propel AI

<sup>22</sup> The AI Development in China, eToc, <https://ecommercetochina.com/the-ai-development-in-china/>

<sup>23</sup> “Full Translation: China’s ‘New Generation Artificial Intelligence Development Plan’ (2017)” Stanford University, <https://digichina.stanford.edu/work/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/>

<sup>24</sup> “IDC: China's GenAI sector investment surges”, IDC <https://www.ecns.cn/business/2024-03-29/detail-ihcyfhe2569816.shtml>

<sup>25</sup> “Ahead of the curve: Chinese tech dominance”, ORF, <https://www.orfonline.org/expert-speak/ahead-of-the-curve-chinese-tech-dominance>

<sup>26</sup> “AI Governance in China: Strategies, Initiatives, and Key Considerations”, Bird & Bird, <https://www.twobirds.com/en/insights/2024/china/ai-governance-in-china-strategies-initiatives-and-key-considerations#:~:text=Enacted%20in%202022%2C%20the%20Shanghai.and%20promote%20industrial%20parks%20where>

research and innovation forward. However, this rising influence has elicited concerns among certain countries regarding issues such as technology transfer, safeguarding intellectual property rights, and political ramifications. Consequently, discussions have ensued regarding strategies in effectively managing the dynamics of international competition and cooperation in AI. Traditionally acclaimed for its technological supremacy on the global stage, the United States finds itself confronted with a formidable challenger in China, whose rapid ascent is bolstered by its expensive domestic market and flourishing tech industry<sup>27</sup>.

The expanding influence of China in the realm of AI development and regulation underscore its dedication to leveraging AI as a pivotal catalyst for economic expansion, technological innovation, and societal advancement. Nevertheless, as AI progresses, persistent endeavors, aimed at confronting ethical, legal, and societal ramifications will prove imperative in molding the conscientious and enduring advancement of AI, both within China and on a global scale.

### 3. AI Regulations in China

In China, significant regulatory efforts, concerning algorithms and AI have been implemented, notably including the ‘2021 Regulations on Recommendation Algorithms’, The ‘2022 Rules for Deep Synthesis (Synthetically Generated Content)’, and the ‘2023 Rules on Generative AI’. While aiming at information control as a primary objective, these regulations encompass various provisions of significance<sup>28</sup>. For instance, the regulations governing Recommendation Algorithms address issues such as preventing excessive price discrimination and safeguarding the rights of workers impacted by algorithmic scheduling practices. Similarly, the regulations pertaining to Deep Synthesis mandate the prominent leveling of synthetically generated content for transparency purposes. Moreover, the regulations on Generative AI imposed stringent requirements, necessitating, both training data and model outputs be deemed “true and accurate”, a condition that may pose substantial challenges, particularly for AI chat bots. Furthermore, all three regulations mandate developers to submit filings to China's algorithm registry, a governmental repository, newly established to gather comprehensive data on algorithm training processes, along with requiring them to undergo self-assessment.

#### 3.1 Development of AI Regulations in China

##### 3.1.1 New Generation AI Development Plan (2017)<sup>29</sup>:

The swift advancement of Artificial Intelligence (AI) is poised to significantly transform human society and daily existence, ruling profound global implications. Recognizing the imperative to capitalize on this vital strategic opportunity for AI development, and to establish China pioneering position in this domain, there is a concerted effort to expedite the nation's trajectory towards becoming an innovative powerhouse in science and technology, aligning with the directives from Chinese communist party central committee and the state Council. This plan delineates the strategic roadmap in pursuit of these objectives.

##### Basic principles:

- To align with the global trajectory of AI development, the document aims to adopt a technology

<sup>27</sup> *Id* at note 25

<sup>28</sup> “China’s AI Regulations and How They Get Made”, Carnegie Endowment for International Peace, <https://carnegieendowment.org/2023/07/10/china-s-ai-regulations-and-how-they-get-made-pub-90117>

<sup>29</sup> Article 2, China’s ‘New Generation Artificial Intelligence Development Plan’ (2017), English translation: <https://digichina.stanford.edu/work/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/>

driven approach. It prioritizes forward looking research and development initiatives, which includes innovations in required areas, especially to attain a preeminent leadership status.

- In crafting a customized system strategy, the document aims to utilize the socialist framework and its inherent strength is necessary. This strategy concentrates on putting effort in significant undertakings while it seamlessly amalgamates projects, facilities, and talent pools. Furthermore, it aims to amplify innovative capabilities and catalyze collaborative efforts towards instituting policy reforms.
- The market dominant approach from this document advocates for adherence to market principles, prioritizing the practical applications of technology, and empowering companies to lead in technology, advancements and commercial standards. It emphasizes expediting the commercialization of AI technology and enhancing competitiveness through optimizing government roles in planning, policy support, regulation, and the establishment of an ethical framework.
- The document encourages open-source collaboration, and promotes joint innovation across various sectors, such as industry, academia, research, and production. Additionally, it fosters integration between civil and military entities and optimizes global AI research and resource allocation.

### **3.1.2 Governance Principle for New Generational AI (2019)<sup>30</sup>:**

The evolution of global AI development has entered a novel stage, characterized by the integration across diverse domains, collaboration between humans and machines, and emergence of Artificial Intelligence (AI), leading to significant societal transformations. To nurture its sustainable progression, this document prioritizes the following principles of cooperation and collective efforts:

- AI development should prioritize human well-being, ethics, and societal progress, while ensuring security and human rights.
- AI should be guided with fairness and justice, mitigating bias and discrimination at all stages.
- AI should promote eco-friendly practices, inclusive growth, and equitable access to resources.
- To protect personal privacy, AI requires strict standards across data handling processes.
- To enhance transparency, reliability, and security are crucial for AI systems.
- All stakeholders in AI must adhere to social responsibility, legal frameworks, and ethical guidelines.
- Cross disciplinary collaboration is vital for global air development and governance.
- Agile governance is essential to balance AI innovation with risk management and societal benefits.

### **3.1.3 Outline for Establishing Rule-of-Law-Based Society (2020-2025)<sup>31</sup>:**

The inaugural policy document released by the Chinese Communist party (CCP) delineates an extensive inventory of societal and legal concerns necessitating resolutions before the culmination of 2025. Notably this document marks CCP's initial endeavor to advocate for interventions, targeting recommendation algorithms and deepfake technologies.

This policy document represents a significant step by the CCP, marking the first instance where specific measures are proposed to tackle social and legal challenges, particularly in relation to recommendation algorithms and deepfake technologies, before the year 2025.

<sup>30</sup> Governance Principles for New Generational AI Principles (2019), English translation : <https://digichina.stanford.edu/work/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/>

<sup>31</sup> Outline for Establishing a Rule-of-Law-Based Society (2020–2025), 2020, English translation : <https://www.chinalawtranslate.com/en/highlights-of-the-outline-for-constructing-a-rule-of-law-based-society/>

### **3.1.4 Guiding Opinions on Strengthening Overall Governance of Internet Information, Services, Algorithms (2021)<sup>32</sup>:**

The document focuses on enhancing legislation and regulations governing online information services, refining protocols for the oversight of internet, information, services, investigating, and formatting protocols for managing the creditworthiness of severely trustworthy entities in the realm of internet, information, services, and diving, and refining standards and management protocols pertaining to emerging technologies within specific domains of new media operations, including online broadcasts, personal media, community question, answer platforms, algorithmic, recommendations, and defect technologies.

### **3.1.5 Ethical Norms for New Generation AI (2021)<sup>33</sup>:**

Ethical Norms for New Generational Artificial Intelligence, issued by the National New Generation Artificial Intelligence Governance specialist committee, aims to embed ethical considerations across entire life cycle of Artificial Intelligence (AI). Its principal goal is to provide ethical guidelines to individuals, organizations, and related entities involved in AI related activities.

The development of the Ethical Norms underwent a meticulous process involving extensive investigation, focused drafting, and thorough consultation to address ethical concerns across various societal domains, including privacy, bias, discrimination, and fairness. These concerns were comprehensively discussed within the framework by establishing of general principles, specific guidelines for particular activities, and frameworks for organizational and operational implementation. The Ethical Norms Framework outlines six core, ethical imperatives: *Enhancing Human Well-Being, Advocating for Fairness and Equality, Safeguarding Privacy and Security, Ensuring Control and Reliability, Reinforcing Accountability, And Promoting Ethical Cultivation*. Additionally, it describes eighteen specific ethical requirements concerning management, research and development, procurement, deployment, and other relevant aspects of Artificial Intelligence (AI).

### **3.1.6 Provisions on Management of Algorithmic Recommendations and Internet Information Services (2021)<sup>34</sup>:**

The Cyber Security Administration of China (CAC) on December 31, 2021, implemented the Internet Information Service Algorithm Recommendation Management Regulations, and established a comprehensive framework for overseeing recommendation algorithms. These regulations mark a significant advancement in promoting transparency and user empowerment within algorithmic process. Notably, they require the disclosure of algorithmic functionalities and granting users increased control over the utilization of their data by algorithmic operators. Furthermore, the regulations extend beyond protecting user rights to mandate compliance with an ethical code aimed at cultivating a positive online environment and mitigating the dissemination of objectionable or illegal content.

### **3.1.7 Opinions on Strengthening the Ethical Governance of Science and Technology (2021)<sup>35</sup>:**

2021 preliminary regulation introduced by the Ministry of Science and Technology (MOST) highlights

<sup>32</sup> Guiding Opinions on Strengthening Overall Governance of Internet Information Service Algorithms, 2021, English translation : <https://digichina.stanford.edu/work/translation-guiding-opinions-on-strengthening-overall-governance-of-internet-information-service-algorithms/>

<sup>33</sup> Ethical Norms for New Generation AI, 2021, English Translation : <https://cset.georgetown.edu/publication/ethical-norms-for-new-generation-artificial-intelligence-released/>

<sup>34</sup> Provisions on the Management of Algorithmic Recommendations in Internet Information Services, 2021, English Translation : <https://www.chinalawtranslate.com/en/algorithms/>

<sup>35</sup> Opinions on Strengthening the Ethical Governance of Science and Technology, 2022



the necessity of robust internal ethical framework and governance protocols with side technological enterprises. With the focus on AI in conjunction with life, sciences and medicine, the document outlines areas subject to increased scrutiny. This initiative reflects a proactive stance towards ensuring responsible innovation and mitigating potential ethical issues in AI development. Through prioritizing the establishment of comprehensive, ethical guidelines and governance mechanisms, the regulation aims to cultivate a culture of ethical behavior and accountability within the scientific and technological community, thereby addressing emerging ethical challenges in these pivotal fields.

### **3.1.8 Provisions on The Administration of Deep Synthesis Internet Information Services (2022)<sup>36</sup>:**

In January 2023, the Deepfakes synthesis regulation (DSR), aimed at overseeing the dissemination and creation of defect media. DSR extends its jurisdiction to all entities involved in deep content, operation, including platform providers, and affiliated support services. This regulatory framework seeks to address concerns surrounding the proliferation of fabricated content, imposing strict guidelines to ensure responsible usage and mitigate potential societal harm. By mandating compliance across the spectrum of Deepfakes related activities, DSR represents a significant step in safeguarding against the adverse effects of synthetic media in the digital landscape.

The regulation is based on four basic structures:

- *Data security*: ensuring compliance with Personal Information Protection (PIP) regulations, particularly regarding sensitive personal information, and developing a strong data protection framework, especially for minors.
- *Transparency*: establishing procedures and standards to identify an address, erroneous or deceptive content, implementing platform, governance, protocols, and greeting a content authentication system.
- *Content management*: implementing effective mechanisms to detect and report, miss information and counterfeit content to relevant authorities, and promptly removing such content from online platforms.
- *Technical security*: integrating mechanisms for regulating and continuously monitoring algorithms within modern systems to enhance technical security.

Article 11<sup>37</sup> of the regulation states that providers of Deep Synthesis Services must develop and implement mechanisms to counter misinformation. In cases where their services are found to have been utilized for creation, reproduction, dissemination, or transmission of false information, they are required to promptly take corrective actions, maintain relevant records, and report such incidents to internet information, authorities, and pertinent regulatory bodies.

As per Article 12<sup>38</sup>, providers of Deep Synthesis Services are mandated to establish accessible platforms for user grievances, public complaints, and notifications, along with disclosing the procedures for their resolution and stipulated time frame for responses. These entities are required to promptly receive and address such matters, providing timely feedback on the resolution status.

In compliance with Article 13<sup>39</sup>, online application marketplaces and similar platforms are mandated to afford safety management obligations, including prerelease evaluations, regular supervision, and emergency protocols. They are required to assess the security of comprehensive synthesis services, adhere to regulatory filings, and address any violations promptly. Measures such as withholding products from

<sup>36</sup> Provisions on the Administration of Deep Synthesis Internet Information Services, 2022, English Translation : <https://www.chinalawtranslate.com/en/deep-synthesis/>

<sup>37</sup> Article 11, Provisions on the Administration of Deep Synthesis Internet Information Services, 2022

<sup>38</sup> Article 12, Provisions on the Administration of Deep Synthesis Internet Information Services, 2022

<sup>39</sup> Article 13, Provisions on the Administration of Deep Synthesis Internet Information Services, 2022

the market, issuing warnings, suspending services, or discontinuing offerings must be taken if state regulations are breached.

### 3.1.9 Measures for Management of Generative Artificial Intelligence Services (2023)<sup>40</sup>:

China has implemented new AI regulations, effective as of August 15, 2023. The regulatory framework concerning Generative AI reflects a proactive stance emphasizing control. These regulations extend to all Generative AI services, encompassing textual, visual, and audio content within China<sup>41</sup>.

In compliance with directives issued by Cyberspace Administration Of China (CAC), regulations mandate that any entity or organization within China, engaging in the provision of generative Artificial Intelligence (AI) services must align with the principles outlined in the “core socialist values” as reported by the Times of India<sup>42</sup>.

The regulations additionally prohibit corporations from producing material that challenges the legitimacy or influence of governmental institutions, tarnish the reputation of the nation, weakens national cohesion, and societal stability, advocates for terrorism, or influences aggression.

According to Article 16<sup>43</sup> of the Generative AI regulations, additional departments have been incorporated to fortify the oversight of Generative AI services. These competent authorities consist of entities such as departments of the CAC, National Development and Reform Commission, Ministry of Education, Ministry of Science and Technology, Ministry of Industry and Information Technology, Ministry of Public Security, National Radio and Television Administration, National Press and Publication Administration of People's Republic of China, among others.

The primary objective of Generative AI measures is to facilitate the responsible advancement and consistent utilization of generated AI technologies. This entails upholding national security, safeguarding public welfare, and ensuring the protection of rights of individuals, entities, and organizations following relevant Chinese legislation such as personal information protection law.

## 4. Conclusion and Suggestions

China's groundbreaking implementation of regulations, targeting Generative AI models, a new era and global AI governance. Spearheaded by the cyberspace administration of China (CAC) and jointly published by seven Chinese regulators, these regulations represent the world's earliest and most comprehensive efforts to control the proliferation of Generative AI tools, including prominent examples like OpenAI's ChatGPT<sup>44</sup>. Despite the potential economic challenges posed by a firm regulatory approach, China remains steadfast in its commitment to mitigating harm to individuals, ensuring social stability, and securing international regulatory leadership in the long-term<sup>45</sup>.

China has implemented a comprehensive regulatory framework to govern the development and use of AI technologies, with a focus on ensuring alignment with the country's “core socialist values” and safeguarding national security and public welfare. The key elements of China's AI regulations include:

<sup>40</sup> Measures for the Management of Generative Artificial Intelligence Services, 2023, English Translation : <https://digichina.stanford.edu/work/translation-measures-for-the-management-of-generative-artificial-intelligence-services-draft-for-comment-april-2023/>

<sup>41</sup> Article 2, Measures for the Management of Generative Artificial Intelligence Services, 2023

<sup>42</sup> Explained: China's new AI rules and how will it affect online content, *Times of India* (Aug 2, 2023)

<sup>43</sup> Article 16, Measures for the Management of Generative Artificial Intelligence Services, 2023

<sup>44</sup> ChatGPT, OpenAI, <https://chat.openai.com/>

<sup>45</sup> David Dollar, Yiping Huang, And Yang Yao, Global Clout, Domestic Fragility, IMF, : <https://www.imf.org/external/pubs/ft/fandd/2021/06/the-future-of-china-dollar-huang-yao.htm>

- Mandatory disclosure of Algorithmic functionalities and increased use control over data usage by AI operators<sup>46</sup>.
- Strict requirements for AI systems to produce “true and accurate” outputs, posing challenges for chatbots and other Generative AI<sup>47</sup>.
- Establishment of an algorithm registry to monitor AI training processes<sup>48</sup>.
- Provisions to counter Misinformation and Deepfakes, including mandates for content authentication and grievance redressal mechanism<sup>49</sup>.
- Oversight by multiple governmental agencies to enforce compliance with regulations.
- Restrictions on AI content that challenges the legitimacy of Government Institutions or social stability.

In comparison India’s approach to AI governance has been more fragmented, with various ministries and agencies issuing guidelines and advisories, but lacking a cohesive, overarching regulatory framework. Some of the key AI-related regulations and guidelines in India include:

- Niti Aayog released the “*Responsible AI for All*”<sup>50</sup> framework in 2021-22, which outlines principles and guidelines for ethical development and deployment of AI systems. The document aims to mitigate risks and ensure positive impact of AI on every individual and community.
- Niti Aayog published the “*National Strategy on Artificial Intelligence (NSAI)*”<sup>51</sup> in 2018 which provides a roadmap for AI adoption and highlights the need for regulatory frameworks.
- Reserve Bank of India (RBI), released guidelines<sup>52</sup> in 2024, to keep checks and balances in the banking sector to avoid issues related with AI, including but not limited to Biases, transparency, and privacy.
- Insurance Regulatory and Development Authority of India (IRDAI), issued guidelines<sup>53</sup> for the insurance sector to regulate the use of AI and Machine Learning (ML).

Key areas where India can adopt principles from China’s Regulations:

- Developing comprehensive legislation to govern AI ecosystem, covering algorithms, data, content, and security.
- Establishing a centralized authority to coordinate AI regulation and enforcement across different sectors.
- Mandating transparency and user control measures for AI systems, similar to China’s *Regulations on Recommendation Algorithms*.
- Implementing robust mechanisms to mitigate the dissemination of misinformation and Deepfakes.
- Aligning AI development with National priorities and values, while balancing innovation and societal impact.

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<sup>46</sup> *Ibid* at Note 34

<sup>47</sup> *Ibid* at Note 40

<sup>48</sup> *Ibid* at Note 34

<sup>49</sup> *Ibid* at Note 36

<sup>50</sup> Responsible AI for All, Niti Aayog, <https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf>

<sup>51</sup> National Strategy for AI (NSAI), Niti Aayog, <https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf>

<sup>52</sup> Bulletin, RBI, [https://m.rbi.org.in/scripts/BS\\_ViewBulletin.aspx?Id=22389#:~:text=First%2C%20with%20the%20increasing%20use,checks%20and%20balances%20in%20place.](https://m.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=22389#:~:text=First%2C%20with%20the%20increasing%20use,checks%20and%20balances%20in%20place.)

<sup>53</sup> Insurtech Working Group Findings Recommendations, IRDAI, <file:///C:/Users/Lenovo/Downloads/Report%20on%20InsurTech%20-Working%20Group%20Findings%20&%20Recommendations.pdf>

By adopting a more proactive and coordinated approach to AI governance, drawing insights from China's regulatory development and experience, India can ensure the responsible advancement of AI technologies and address emerging ethical, legal, and social challenges.

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