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Shaping Artificial Intelligence Regulatory Model: International and Domestic Experience

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Abstract

The article contains an analysis of AI regulatory models in Russia and other countries. The authors discuss key regulatory trends, principles and mechanisms with a special focus on balancing the incentives for technological development and the minimization of Al-related risks. The attention is centered on three principal approaches: "soft law", experimental legal regimes (ELR) and technical regulation. The methodology of research covers a comparative legal analysis of Al-related strategic documents and legislative initiatives such as the national strategies approved by the U.S., China, India, United Kingdom, Germany and Canada, as well as regulations and codes of conduct. The authors also explore domestic experience including the 2030 National Al Development Strategy and the Al Code of Conduct as well as the use of ELR under the Federal Law "On Experimental Legal Regimes for Digital Innovation in the Russian Federation". The main conclusions can be summed up as follows. A vast majority of countries including Russian Federation has opted for "soft law" (codes of conduct, declarations) that provides a flexible regulation by avoiding excessive administrative barriers. Experimental legal regimes are crucial for validating Al applications by allowing to test technologies in a controlled environment. In Russia ELR are widely used in transportation, health and logistics. Technical regulation including

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standardization is helpful to foster security and confidence in Al. The article notes widespread development of national and international standards in this field. Special regulation (along the lines of the European Union Al Act) still has not become widespread. A draft law based on the risk-oriented approach is currently discussed in Russia. The authors of the article argue for the gradual, iterative development of legal framework for Al to avoid rigid regulatory barriers emerging too prematurely. They also note the importance of international cooperation and adaptation of the best practices to shape an efficient regulatory system.



artificial intelligence; technology; principles; statutory regulation; strategy; experimental legal regime; soft law; technical regulation.

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Background

The development of artificial intelligence (hereinafter AI) for use in various spheres of social life is a major factor of modern economic progress. The tasks to introduce and promote AI technologies have been defined in strategic governmental documents in many countries including Russia.

Rapid development and penetration of AI in different spheres of government and society have not only positive effects but also downsides. An important issue in this regard is to provide adequate legal mechanisms to regulate social relations associated with AI design, its development and implementation [Bourcier D., 2001: 853]; [Talapina E.V., 2020: 27].

On one hand, countries should provide the environment and incentives for AI development and, on other hand, minimize risks associated with the use of these technologies. Thus, there is a need for regulatory balance.

Moreover, regulation should be responsive to rapid AI progress and envisage tools for integrating new technologies into community life swiftly and seamlessly.

Since regulation governing AI is still emerging in a majority of countries, AI development strategies and plans prevail. It is of interest to analyze their content in comparison with domestic regulation.

1. Domestic and International Approached to AI Regulation

In 2016, the United States has approved a National AI R&D Strategic Plan for human-AI collaboration and long-term investments to ensure security and to address ethical, legal and societal implications¹. In 2023, the plan was updated with a focus on AI-related R&D.

In 2017, China has passed a New Generation AI Development Plan to regulate AI introduction², with AI recognized as crucial for the development of national research and technology. The plan contains strategic objectives for introducing AI in health care, smart cities, national defense and agriculture, with China poised to achieve global leadership in AI by 2030.

In 2018, India has approved an AI Development Strategy in prioritizing five key areas for AI introduction: health care, education, agriculture, infrastructure (including smart cities) and transportation.

The 10-year National AI Strategy in force in the United Kingdom (passed in December 2022)³ describes key actions to assess long-term risks associated with AI. The strategy aims to unlock AI power for innovative economy, create more jobs, improve the infrastructure and business environment. While being of general nature, the document outlines AI development vectors.

In 2018, Germany has approved a federal level AI Strategy⁴ to boost the national competitiveness in this field and make sure that AI is used in the interest of society by observing statutory provisions, ethical standards and cultural values. Currently, the relevant strategies have been passed at the regional level in 5 out of 16 federal lands (states)⁵. The

¹ National AI R&D Strategic Plan: 2023 Update //Available at: https://bidenwhitehouse.archives.gov/wp-content/uploads/2023/05/National-Artificial-Intelligence-Research-and-Development-Strategic-Plan-2023-Update.pdf (accessed: 29.04.2025)

² Available at: https://flia.org/wp-content/uploads/2017/07/A-New-Generation-of-Artificial-Intelligence-Development-Plan-1.pdf (accessed: 29.04.2025)

³ Available at: https://www.gov.uk/government/publications/national-ai-strategy/national-ai-strategy-html-version (accessed: 04.04.2025)

⁴ Artificial Intelligence Strategy of the German Federal Government // Avai lable at: https://www.ki-strategie-deutschland.de/files/downloads/Fortschreibung_KI-Strategie_engl.pdf. (accessed: 04.04.2025)

⁵ OECD Artificial Intelligence Review of Germany.

German AI standardization roadmap approved in 2020 specifies the stages of AI standardization to promote more competitive research and to create an enabling environment for AI innovations. The roadmap's effective version⁶ covers both the main sectors, first of all are health care, transport, energy, environment, financial services, industrial automation, and fundamental issues including AI classification, security, certification, socio-technical systems and ethics. Moreover, the document defines the main AI-related terms, covers a total of 116 standardization needs and contains 5 regulatory priorities: uniform normative approach to AI standardization including the adoption of a framework regulation; harmonizing the national legislation with European law; AI security requirements; flexible AI regulation; and minimizing the risks of AI misuse.

In 2017, Canada has passed a Pan-Canadian AI Strategy. To implement it, the Federal Government has appointed in May 2019 the AI Advisory Board to include the representatives of high-tech businesses and AI application developers.

Thus, the above countries regulate AI by establishing uniform principles for AI implementation, prioritizing specific sectors and specifying national objectives for the development of promising technologies.

In Russia, the main high-level document to identify AI development vectors and parameters is the 2030 National AI Development Strategy approved by Presidential Decree No. 490 of 10 October 2019 (hereinafter "Strategy"). At the strategic level, a comprehensive, decentralized regulatory system is envisaged as a logical step since no single federal framework law could currently regulate multiple AI technologies while artificial drafting of such a law would hold back technological development.

The Strategy also sets the task of creating favorable regulatory environment for AI design, development and use, something that requires to maximize informal, flexible and generally accepted regulation. Another crucial vector is avoidance of administrative barriers and a focus on the best international regulatory practices. The introduction of ethical standards for AI is also in focus. Such a comprehensive regulatory approach will generally put the principle of collaboration between man and AI technologies at the heart of regulation.

Balanced regulation is supposed to maintain a balance between protection of human rights and liberties, personal and national security, on

⁶ Available at: https://www.dke.de/resource/blob/2008010/11faae856d d4332e5a5c62f3447fd06f/nr-ki-deutsch---download-data.pdf (accessed: 05.04.2025)

the one hand, and AI development incentives, on the other hand; regulation should not slow down the pace of development and implementation of new technologies.

The abundance of provisions (principles) and high-level regulatory focus do not mean that the Strategy is devoid of crucial practical importance: provisions are regularly updated while the reference to specific AI technologies means explicit recognition of their status by the government, something that allows their authors to qualify for public support, preferential tax regimes, etc.

In furtherance of the Strategy, the Federal Government has approved the 2024 Regulatory Development Concept Note for AI and Robotics, Resolution No. 2129-r of 19 August 2020 (hereinafter Concept Note). While both the Concept Note and the Strategy serve a general purpose, the former is more focused on security of AI applications, the need to harness AI for higher economic growth, security and living standards. As a crucial conceptual aspect, the Concept Note argues for an incentivizing regulatory regime and non-acceptability of using AI for regulatory restrictions in the future.

Thus, the discussed documents assume cautious and consistent application of rules and provisions, and "cascading" regulation via interrelated instruments updatable on a regular basis.

Overall, Russia's current AI regulatory system exhibits the following trends:

"soft law" used as a regulatory mechanism for the institution in question;

expanded use of experimental legal regimes;

progressing technical regulation of artificial intelligence.

2. Ethics and "Soft Regulation" of Artificial Intelligence

Alternatives to statutory regulation become crucial for striking a regulatory balance to avoid excessive government intervention into AI usage scenarios.

One such alternative appeared to be ethical standards that regulate the relations between human person and AI. Moreover, ethical standards should prioritize human-centric approach, with human security, wellbeing and avoidance of harm at its core. Internationally, ethical standards are a major component of AI regulation. In 2021, China has issued ethical guidelines for AI use in China that require researchers to make sure that AI technologies are consistent with universal human values, are under human control and do not put public security at risk⁷. The UK's Centre for Data Ethics and Innovation drafts recommendations for safe, ethical and innovative implementation of AI applications⁸.

Unlike statutory provisions, ethical standards are advisory and make part of the so-called "soft law" [Kashkin S. Yu., 2021: 193].

Using "soft law" in AI is objectively necessary at this stage [Antonova L.I., Korneva K.A., 2022: 37], because it allows the government to identify the overall development vector that organizations can use to establish rules and requirements through their bylaws.

It is worth noting the basis for soft law in artificial intelligence in Russia was laid back in 2021 with the passing of the AI Code of Conduct⁹.

The Code is an advisory document, and its provisions could be updated and complemented for specific AI fields, actors, etc¹⁰.

The Code has six core principles of AI development and implementation:

- 1. Human rights are the main AI development priority. Human rights and liberties should constitute a supreme and undisputed value, with AI to consistently observe the humanistic approach and contribute to human development. AI cannot challenge human will, deprive man of a choice, contribute to negative implications for man. AI actors should be aware of and consistently abide by AI regulation. Discrimination of any kind is prohibited in respect of AI use, with the risks of human right violation to be assessed before AI is introduced.
- 2. Responsible AI introduction meaning, in particular, the introduction of an AI-related risk management system (incorporating relevant evaluation standards and methodologies), the possibility to forecast and

⁷ Available at: https://cset.georgetown.edu/ (accessed: 20.03.2025)

⁸ Available at: https://www.gov.uk/government/organisations/centre-for-data-ethics-and-innovation. (accessed: 05.04.2025)

⁹ Available at: URL: https://ethics.a-ai.ru/ (accessed: 20.03.2025)

¹⁰ As defined by the Code, AI actors mean parties to relations associated with AI (AI system developers, manufacturers, operators, experts, customers, persons associated with regulatory impact on the field etc.).

avoid negative AI implications, rule out any intentional harm through AI use, ensure transparency and openness of AI applications (man should be always aware of the contact with AI technologies). Responsible AI introduction equally assumes information security and protection, voluntary certification, and a possibility to identify and timely highlight AI that has evolved into "strong" systems.

- 3. Since man is always responsible for AI implications, AI should be put under control and man held liable (AI should never make any managerial decisions or moral choices).
 - 4. AI mechanisms should be harnessed for maximum public benefit.
- 5. AI development should avoid unfair competition, maintaim transparency of information on AI technologies (including a uniform system of measurements), improve skills and collaboration of AI developers for higher security, quality and availability of technologies.
- 6. A crucial principle is provision of credible and open information on AI technologies being introduced including their security, potential and AI-related risks that may arise.

While the Code is voluntary to abide by, its adoption can result in normative benefits (if it is a precondition for government support for AI development and introduction). Moreover, AI actors can use specific provisions of the Code to draft bylaws and documents, and to shape the conditions for cooperation with different counterparties.

The Implementation Commission, established in 2022, monitors the Code's performance and compliance with its provisions. The Code is currently adopted by 335 business entities, by 21 federal and regional level agencies, and by 50 international parties¹¹.

In addition to the Code, two declarations were approved in Russia under "soft" regulation: on responsible generative AI¹² and on responsible exports of AI technologies and associated software¹³. Both ones contain ethical principles and standards of conduct with regard to AI development and use.

¹¹ Available at: URL: https://ethics.a-ai.ru/#actors (accessed: 05.04.2025)

¹² Available at: URL: https://ethics.a-ai.ru/assets/ethics_files/2024/03/13/GenAi_Declaration_Ai_Alliance_Russia_FpNJ2Lc_82yB8pD.pdf (accessed: 05.04.2025)

¹³ Available at: URL: https://ethics.a-ai.ru/assets/ethics_files/2024/04/24/ Декларация_об_ответственном_экспорте_ИИ_cH11Lzg.pdf (accessed: 05.04.2025)

Also, the guidelines for general purpose robots were drafted to provide general ethical principles and recommendations aimed at ensuring compliance throughout the process of developing general purpose robots and associated technologies¹⁴.

A soft regulatory approach is also observed internationally. Thus, in March 2023, the United Kingdom has published a White paper entitled "A pro-innovation approach to AI regulation" that contained the general regulatory principles while providing considerable room for the respective regulators to adapt these principles to specific fields such as transportation or financial markets.

The United States have approved an order on maintaining American leadership in AI¹⁶ whereby the Office of Science and Technology Policy has published a draft memo on AI applications¹⁷ that contained a list of conditions for public agencies to decide how to regulate AI, if at all (principles of openness, transparency, engagement, regulatory flexibility etc.). The memo assumes that not all aspects of AI usage are subject to regulation. Upon review of a specific AI application, a public agency can determine that the present-day rules are adequate, or that the benefits of new regulation do not justify its costs now or in the foreseeable future. In such a case, the agency may want to abstain from action or, alternatively, to come up with non-regulatory approaches that can be feasible to address the risk inherent in AI applications.

It is worth noting that in an AI regulation system "ethics has a potential of a full-fledged regulator of social relationships, along with standardization and law" [Ibragimov R.S., Suragina E.D., Churilova D.Y., 2021: 89]. This observation is especially relevant at this stage since ethics, in regulating social relationships, can underpin a regulatory framework while at the same time acting as a regulator in its own right to exclude the risk of excessive government intervention and to avoid barriers to technological development.

¹⁴ Available at: URL: https://ethics.a-ai.ru/assets/ethics_files/2024/12/12/2_ Руководящие_принципы_в_сфере_роботов_общего_назначения.pdf (accessed: 05.04.2025)

Available at: https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper (accessed: 05.04.2025)

¹⁶ Available at: https://trumpwhitehouse.archives.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/(accessed: 05.04.2025)

¹⁷ Available at: https://niso.org/niso-io/2020/02/memo-drafted-federal-omb-innovation-and-use-ai (accessed: 10.04.2025)

Meanwhile, one has to accept an argument advanced by some authors that "the government, by adopting the AI Code of Conduct, has already opted for a "soft" regulatory model in concert with AI companies, large corporations, major universities and the banking sector" [Arzamasov Yu. G., 2023: 138] as traditional regulation is emerging in addition to the "soft" model, only to set the stage for the use of AI technologies without explicitly mentioning them.

Thus, Article 10.2-2 of the Federal Law No. 149-FZ "On Information, Information Technologies and Information Security" of 27 July 2006¹⁸ stipulates the conditions for collection and provision of data to analyze Internet users' preferences where AI technologies can be harnessed to perform such analysis.

According to experts, "traditional regulation can contain some components [of the soft law] where ethical principles are incorporated into the legal language and thus made binding through governmental enforcement" [Popova A.V., 2021: 91], as seen in experimental legal regimes.

3. Al Validation Mechanisms as a Basis of New Regulation

Experimental legal regimes (ELR) serve as a mechanism for validating AI-enabled products to facilitate their introduction in Russia under Federal Law No. 258-FZ "On Experimental Legal Regimes for Digital Innovations in the Russian Federation" of 31 July 2020 ("Law No. 258").

It is worth noting that the ELR mechanism is used across many jurisdictions: while in the U.S. regulatory sandboxes are observed in specific states, Canada uses them to introduce AI in health care and securities markets; India in the financial sector (processing payments and credit requests, and fighting financial fraud) and health care (health insurance); while China has 16 pilot AI development zones¹⁹ for validating

¹⁸ Has obtained force by Federal Law No. 408-FZ "On Amending the Federal Law "On Information, Information Technologies and Information Protection" of 31 July 2023 // SPS Consultant Plus.

¹⁹ Notice of the Ministry of Science and Technology on the Issuance of the Guidelines for the Construction of National New Generation Artificial Intelligence Innovation and Development Pilot Zone (Revised Version) // Available at: URL: https://www.most.gov.cn/xxgk/xinxifenlei/fdzdgknr/fgzc/gfxwj/gfxwj2020/202012/t20201224_171987.html. (accessed: 21.04.2025)

institutional regulatory decisions before they are subsequently upscaled. The United Kingdom applies a flexible approach, with AI regulatory sandboxes launched by the agencies themselves. The country has experimental platforms to support specific projects of introducing AI for various purposes: financial literacy, psychiatric aid, etc. Other experimental legal regimes apply to AI used in air travel and transportation. A focus on promoting regulatory sandboxes for AI applications is also made in a draft framework law on AI implementation currently in progress in the UK.

In Russia, a list of mechanisms and technologies subject to ELR legislation is established by Federal Government Resolution No. 1750 of 28 October 2020 and includes AI and neural technologies (machine learning, computer vision, language models and speech recognition, neural prosthetics etc.), big data processing, quantum computing and manufacturing technologies, robotics, augmented reality, distributed ledger systems etc., for a total of 10 types and about 50 sub-types of AI-related technologies.

Of 16 ELRs under way in Russia, 13 ones concern unmanned vehicles including the use of highly automated vehicles²⁰ (HAV), in particular, as part of the Unmanned Logistical Corridor initiative in the Neva Highway (M-11)²¹ and federal regions²²; and technologies for collecting data on individual diagnoses and health as part of the Personal Health Assistant socioeconomic initiative²³.

²⁰ Government Resolution No. 309 "On Introducing Experimental Legal Regime for Digital Innovations and Approving the Experimental Legal Regime Programme for Digital Innovations in Highly Automated Vehicles" of 09 March 2022 // SPS Consultant Plus.

²¹ Government Resolution No. 1849 "On Introducing Experimental Legal Regime for Digital Innovations and Approving the Experimental Legal Regime Programme for Digital Innovations in Highly Automated Vehicles: Unmanned Logistical Corridor Initiative in the Neva General Purpose Federal Highway (M-11)" of 17 October 2022 //SPS Consultant Plus.

²² Government Resolution No. 2495 "On Introducing Experimental Legal Regime for Digital Innovations and Approving the Experimental Legal Regime Programme for Digital Innovations in Highly Automated Vehicles in the Territory of Specific Federal Regions" of 29 December 2022 (as amended on 28 April 2023) // SPS Consultant Plus.

²³ Government Resolution No. 2276 "On Introducing Experimental Legal Regime for Digital Innovations and Approving the Experimental Legal Regime Programme for Digital Innovations in Health Care: Use of Technologies for Collecting and Processing Data on Individual Diagnoses and Health in Implementing the Personal Health Assistant Initiative for Socioeconomic Development of Russia" of 09 December 2022 // SPS Consultant Plus.

Federal Law No. 123-FZ of 24 April 2020 envisages AI-related ELR for the City of Moscow. This region-specific approach is found with other federal nations. Thus, specific regulatory sandboxes for AI apply to Arizona²⁴, Utah and Wyoming in the United States. There are also examples of regulatory sandboxes applicable to specific sectors: a Digital Health Sandbox Program is underway in Massachusetts to harness AI for making clinical simulations, collecting data and improving safety of surgical interventions²⁵.

Promoting ELR as an institution is crucial in the context of AI technologies introduced under "soft law" as the primary regulatory model since ELR allows to disregard specific provisions standing in the way of innovations and thus to avoid the risk of non-compliance and legal liability.

Over the last few years, Law No. 258 has absorbed important legal novelties that allowed to expand the use of ELR in the field of AI technologies, improve safety of the parties involved, reduce the risks and assess ELR performance.

The law also applies to intellectual property assets ("IPA") produced through the use of AI, as well as to liability insurance of natural and legal persons for the harm resulting from ELR (Federal Law No. 169-FZ of 08 July 2024). Pursuant to Article 14, Law No. 258, a party under ELR must now maintain a register of IPA including assets created through the use of AI.

A major innovation in Law No. 258 is new Article 18.1 providing for a procedure to investigate the harm caused by AI to persons and entities under ELR. In particular, it is envisaged to set up a commission to look into the circumstances that caused such harm.

The procedure for the commission to set up, proceed and issue its opinions is approved by Ministry of Economic Development Order No. 752 of 26 November 2024.

Federal Law No. 331-FZ "On Amending Specific Regulations of the Russian Federation Following the Adoption of the Federal Law "On Experimental Legal Regimes for Digital Innovations" has added part 8 to Article 36.1, Federal Law No. 323-FZ "On the Principles of Protect-

²⁴ House Bill 2434 // Available at: URL: https://www.azleg.gov/legtext/53leg/2R/laws/0044.pdf (accessed: 21.04.2025)

²⁵ Available at: URL: https://hitconsultant.net/2019/04/25/digital-health-sand-box-program/ (accessed: 29.04.2025)

ing Public Health in the Russian Federation" whereby the requirements to the ethics committee and the expert council set up by a public agency shall not apply in case of AI-assisted health care under ELR.

Further expansion of ELR is necessary to promote AI regulation including to remove legal and administrative barriers since harnessing AI as a substitute for conventional technologies involves a high degree of innovation, only to result in possible negative implications in absence of a balanced position, comprehensive risk assessment and validated options.

A number of legal novelties in Russia address the issues of AI used as part of specific ELR. In particular, Federal Law No. 152-FZ "On Personal Data" of 27 July 2006 has come to include Article 13.1²⁶ that details anonymized personal data processing in identifying and providing access to specific data structures.

4. Technical Regulation for Al

Standardization is "a crucial factor of Russia's modernization, technological and socioeconomic development, including the capabilities of its national defense".

One can accept a view that "a whole range of issues related to harnessing AI technologies and marketing AI-enabled outcomes (or the associated rights arising with specific agents) may be addressed by standards" [Kharitonova Y. S., Savina V. S., 2020: 537, 542].

Technical regulation holds a special place among regulatory tools for AI, with Russia having adopted and implemented a number of state standards for AI despite the technology's relative novelty. These include both individual standards to address both specific aspects of AI use across sectors (such as GOST R 70250-2022. AI systems for road vehicles), and also generalized, universally applicable standards (for instance, GOST R 59276-2020. AI systems. Credential assurance methods. General provisions)²⁷.

²⁶ Went into force by Federal Law No. 233-FZ "On Amending the Federal Law "On Personal Data" and the Federal Law "On Experimental Regulation to Enable the Development and Introduction of AI Technologies in a Federal Territory (Federal City of Moscow) and on Amending Articles 6 and 10 of the Federal Law "On Personal Data" of 08 August 2024 // SPS Consultant Plus.

²⁷ SPS Consultant Plus.

Since the associated standardization system is only emerging, some national standards are tentative and time-bound, with a whole set of tentative standards being adopted, for instance, in civil aviation (PNST 783-2022. AI for navigation systems of civil aircraft. General requirements; PNST 787-2022. AI for navigation systems of civil aircraft, etc.). Upon expiry of a three-year effective term and once validated for practical use, the said tentative national standards are likely to be updated to the level of permanent standards.

As for the latest national standards, the following standards approved in 2024 by Rosstandard orders to take effect in 2025 and deserve be noted: GOST R ISO/IEEC 20547-3-2024. Information technologies. Big data reference architecture. Part 3. Reference architecture (approved by Rosstandard order No. 1541-st of 28 October 2024); GOST R 71562-2024. AI-enabled measuring tools. Metrological support. General reguirements (approved by Rosstandard order No. 1526-st of 28 October 2024); GOST R ISO/IEEC 24029-2-2024. AI. Neural network robustness evaluation. Part 2. Methodology of formal methods (approved by Rosstandard order No. 1542-st of 28 October 2024); GOST R ISO/ IEEC 42001-2024. Information technologies. AI. Control system (approved by Rosstandard order No. 1549-st of 28 October 2024), GOST R 71750-2024. AI-enabled technologies for road construction equipment. Terms and definitions (approved by Rosstandard order No. 1546-st of 28 October 2024); GOST R 71751-2024. AI-enabled technologies for road construction equipment. Usage scenarios (approved by Rosstandard order No 1547-st of 28 October 2024), etc.

These standards give an idea how the standardization system for AI is taking shape. Thus, GOST R ISO/IEEC 20547-3-2024 provides a generalized reference structure for big data to describe the relevant components, processes and systems for standardized design. The standard relies on and takes into account international standards indicating that the national AI standardization system generally follows in the wake of international practice. Such approach is important in the sense that the Russian standardization system is often used as a reference for standards designed by the EEU and other intergovernmental associations involving Russia and, therefore, indirectly impacts AI institutional development elsewhere. Overall, both domestic experience and international sources are used to draft and adopt sector-specific standards: for instance, the aforementioned GOST R 71750-2024, in describing terms and definitions for implementing AI in road construction equipment, relies on domestic experience while GOST R 71751-2024 accounts for international sources

and the experience of harnessing AI to control traffic of road construction equipment. GOST R ISO/IEEC 24029-2-2024 is essentially based on an adapted translation of ISO/IEEC 24029-2:2023 international standard. Thus, in borrowing, adapting and building on what is available elsewhere, national standards allow to upgrade AI's current regulatory regime in such a way that national efforts are in step with the best international practices.

Undoubtedly, the national AI standardization system is ever improving. With ongoing standardization of AI-enabled technologies, international collaboration for developing relevant standards will allow in future to put in place a comprehensive system to regulate the development and introduction of AI applications and their legal effects. To establish a universal standardization system, a technical committee for AI standardization was set up (Rosstandard order No. 1732 of 25 July 2019).

5. Special Regulation for Al

In 2024, the UN has passed resolutions on safe and trustworthy AI systems for sustainable development²⁸ and on promoting international cooperation to enhance AI potential²⁹ (aiming to reduce barriers for AI development and provide access to technologies and knowledge), while the Council of Europe has adopted the Framework Convention on AI, human rights, democracy and the rule of law"³⁰ (containing the basic principles, risk-oriented approach to AI implementation and remedies against AI-related implications including possible moratoria on specific AI applications). In 2024, the CIS developed and conceptually approved a draft framework law for harnessing AI to improve living standards and security and to boost socioeconomic development.

With the exception of the EU's supranational regulation, most countries have no specific regulation for AI at the moment.

The EU's Artificial Intelligence Act³¹ passed by the European Parliament on 14 June 2023 is to be gradually applied to different AI system

²⁸ Available at: URL: https://digitallibrary.un.org/record/4040897?ln=ru&v=pdf (accessed: 21.04.2025)

²⁹ Available at: URL: https://digitallibrary.un.org/record/4053245?v=pdf&ln=en (accessed: 21.04.2025)

³⁰ Available at: URL: https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence (accessed: 11.04.2025)

³¹ Available at: URL: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri= CELEX%3A52021PC0206 (accessed: 21.04.2025)

types: 6 months for prohibited systems, 12 months for general systems, 24 and 36 months for high-risk systems depending on the risk level. In regulating the terms of AI marketing and operation, the AI Act aims to ensure security and legal certainty, and provides for AI control rules and support policies for AI application developers. A major feature of the AI Act is risk-oriented approach to AI systems whereby the extent of regulatory rigor will depend on potential risk and the criteria of unacceptable risk where an AI application will be prohibited and cannot be used (for instance, social scoring, behavior manipulation, etc.). Along with the right to self-regulation for low-risk systems, the AI Act provides for at least one experimental legal regime ("regulatory sandbox") for AI in each of the EU's national jurisdictions in order to ensure more premarketing control and testing for AI systems.

While the United States currently have no AI framework act, there are draft laws to regulate AI including machine learning, prohibition of face recognition, etc.

A number of drafts on AI and data (AIDA)³², protection of personal data and confidentiality are tabled and under discussion in Canada now. The AIDA act purports to establish AI-enabled regulation of international and domestic trade and envisages measures to avoid illegal use of AI technologies, reduce the underlying risks and provide for liability.

There is no special regulation of AI in Russia. Providing for such regulation at the current stage is a matter of academic debate. A number of authors argue that it is crucial to establish the overarching principles of AI implementation now, with the requirements to technologies to be established through bylaws [Sucharev A.N., 2021: 18]; [Minbaleev A.V., 2022: 1098].

An affirmative answer to this question brings forth the following dilemma: "will amendments to the effective regulations suffice or will special law applicable to specific AI aspects be needed or else a codification instrument to govern digital technologies, AI, technological innovations etc.?" [Popova A.V., 2021: 90].

It is worth noting a draft AI regulation is currently discussed in Russia to provide for a risk-oriented approach and introduce new rules for AI developers and operators. The draft was developed within the framework of the 2030 National AI Development Strategy by a working

³² Available at: URL: https://www.parl.ca/DocumentViewer/en/44-1/bill/C-27/first-reading (accessed: 21.04.2025)

group that included legal scholars, experts and representatives of the IT market³³.

In particular, the draft law is to define a number of concepts such as artificial intelligence, AI technology, AI system; introduce AI system marking requirements; and to classify AI systems by the level of potential risk. This risk-oriented model is supposed to prohibit the development and operation of AI systems associated with unacceptable risk — that is, creating a security threat for individuals, society and government — and violating fundamental human and civil rights and liberties.

Moreover, the draft law defines liability for the harm caused to life, health or property of those involved in the development and operation of AI systems, as well as mandatory liability insurance for operators of high-risk AI systems.

Specific solutions are also proposed with regard to copyright associated with AI-created intellectual property assets. To identify the holder of copyright to such IP assets, it is needed to determine to what extent human creative contribution was essential. Where human contribution was essential, the exclusive right should go to the person in question, otherwise the exclusive right will be held by the AI system operator.

Conclusion

Thus, AI regulation in Russia currently follows in the wake of international trends. The prevailing documents are AI development plans and strategies which determine the main vectors of progress of both technologies themselves and the underlying regulation.

Moreover, Russia, like most countries of the world community, does not have any special regulation of relationships involved in AI design, development and application. In this regard, one cannot accept a point of view that a new institution [Kosykh A.A., 2021: 161]; [Polyakova T.A., Kamalova G.G., 2021: 135] or a new branch of law is already emerging in Russia for artificial intelligence [Mishina N.V., 2020: 64]. Such assessment would be a premature one.

As a general trend, it has been accepted internationally that there is no need for statutory regulation of all aspects of AI use since this would create unnecessary barriers.

³³ Available at: URL: https://www.rbc.ru/technology_and_media/11/04/2025/67f7dc399a79477fdd97bf30?ysclid=ma1a3t4rm5885753225 (accessed: 21.04.2025)

This makes the case for the so-called "soft law" as a substitute for traditional statutory regulation. The same model is used in Russia where a number of advisory documents were approved including the AI Code of Conduct; the latter continues to be approved by both businesses and public agencies.

Apart from "soft law", Russia is pursuing standardization including for safe introduction of AI technologies.

An equally important regulatory mechanism is the emergence of ELR which allow to test AI development and introduction outside the originally established administrative barriers and cumbersome requirements provided that the necessary level of security is observed.

Since AI technologies rapidly permeate many spheres of life, the state as a regulator should respond accordingly.

In this regard, countries make a special emphasis on risks and safety of AI applications, as well as on the resulting liability. Russia is no exception, with a risk-oriented approach underpinning draft regulations that are currently discussed.

Parameters and development stages of regulation are a matter of discussion in doctrinal literature, with a search for balance between statutory, technical and ethical aspects accepted as an optimal condition. It would be also potentially useful to establish a procedure for self-regulation of AI technologies with monitoring as a follow-up [Ibragimov R.S., Suragina E.D., Churilova D.Y., 2021: 91].

The authors of the article presented believe that while public regulation for AI should be introduced in a phased, iterational way, there is no need to artificially fast-track an institution or branch of law.

In addition, one cannot design a system for statutory regulation of "things whose operating principles are not fully understood" [Baturin Yu.M., Polubinskaya S.V., 2022: 152]: regulatory mechanisms will not be strong and purposeful ones unless the potential of AI technologies is made clear.

The approving of relevant regulations should be justified, with provisions of the AI Strategy and the Regulatory Development Concept Note on the avoidance of excessive legal regulation to be adhered to.

The problem of AI regulation continues to be a challenging one from the point of view of methodology, legal technique and practice. Where a legal framework is required to account for security and ethical risks, regulation should be flexible enough for the adopted approach to keep pace with the current trends in view of rapid progress of AI technologies because a failure to do so may negatively impact upon the technological, information and innovative development of different business segments given the role of AI for national security, technological sovereignty and leadership in the field.

↓ References

- 1. Antonova L.I., Korneva K.A. (2022) On Soft Law and Self-Regulation in the Codes of Ethics for Artificial Intelligence. *Knowledge*, vol. 4, pp. 34–38 (in Russ.)
- 2. Arzamasov Yu. G. (2023) Optimal Model of Legal Regulation in the Field of Artificial Intelligence. *Vestnik Voronezhskogo gosydarstvennogo universiteta. Pravo*=Bulletin of Voronezh State University. Law, no. 2, pp. 133–148 (in Russ.)
- 3. Baturin Yu. M., Polubinskaya S.V. (2022) Artificial Intelligence: Legal Status or Legal Regime? *Gosudarstvo i pravo=State and Law*, no. 10, pp. 141–154. DOI: 10.31857/S102694520022606-7 (in Russ.)
- 4. Bourcier D. (2001) De L'intelligence Artificielle a la Personne Virtuelle: Émérgence D'une Entité Juridique? *Droit et société*, vol. 3, pp. 847–871.
- 5. Ibragimov R.S., Suragina E.D., Churilova D.Y. (2021) Ethics and Al Regulation. *Zakon*=Law, vol. 8, pp. 85–95 (in Russ.)
- 6. Kashkin S. Y. (2021) *The Philosophical, Moral and Ethical Foundations of Soft Law as The Initial Stage of Legal Regulation of Artificial Intelligence.* Moscow: Prospekt, pp. 184–198 (in Russ.)
- 7. Khabrieva T.Y., Chernogor N.N. (2018) The Law in the Conditions of Digital Reality. *Zhurnal rossiyskogo prava*=Journal of Russian Law, no. 1, pp. 85–102 (in Russ.)
- 8. Kharitonova Y.S., Savina V.S. (2020) Artificial Intelligence Technology and Law: Challenges of Our Time. *Vestnik Permskogo gosudarstvnnogo universiteta. Juridicheskie nauki*=Perm State University Herald. Juridical Sciences, vol. 49, pp. 524–549. DOI: 10.17072/1995-4190-2020-49-524-549 (in Russ.)
- 9. Kosykh A.A. (2021) The Artificial Intelligence Law in Law System: Branch of Law or Law Institution? *Vestnik Vladimirskogo gosudarstvennogo juridicheskogo instituta*=Bulletin of Vladimir State Law Institute, vol. 1, pp. 159–164 (in Russ.)
- 10. Minbaleev A.V. (2022) The Concept of "Artificial Intelligence" in Law. *Vestnik Udmurtskogo gosudarstvennogo universiteta*. *Seria Ekonomika i pravo*=Bulletin of Udmurt State University. Series Economics and Law, vol. 6, pp. 1094–1099 (in Russ.)
- 11. Mishina N.V. (2020) Artificial Intelligence Law as a New Area of Legal Regulation or a New Branch of Law. *Evraziyskiy souiz ychenykh*=Eurasian Union of Scientists, vol. 5, pp. 62–65 (in Russ.)
- 12. Polyakova T.A., Kamalova G.G. (2021) «Law of Artificial Intelligence» and its Place in the System of Information Law. *Pravovoe gosudarstvo: theoria i praktika*=The Rule of Law State: Theory and Practice, no. 33, pp. 133–145 (in Russ.)

- 13. Popova A.V. (2021) Soft Law as a Structural Part of the Complex Branch of Russian Legislation in the Field of Legal Regulation of Artificial Intelligence. *Zhurnal Moskovsogo gosudarstvennyogo pedagogisheskogo unuversiteta. Ekonomiseskie issledovania*=Moscow State Pedagogical University Journal of Economic Studies, no. 4, pp. 86–93 (in Russ.)
- 14. Sucharev A.N. (2021) Prospects of Legal Regulation of the Use of Artificial Intelligence in the Russian Federation. *Vestnik Tverskogo gosudarstvennogo universiteta. Yuridicheskie nauki*=Tver State University Herald. Juridical Sciences, no. 3, pp. 13–21 (in Russ.)
- 15. Talapina E.V. (2020) Algorithms and Artificial Intelligence in the Human Rights Context. *Zhurnal rossiyskogo prava*=Journal of Russian Law, no. 10, pp. 25–39. DOI: 10.12737/jrl.2020.118 (in Russ.)

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