



Sneak Preview: First Draft of Russia's AI Strategy

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The final version of Russia's national **artificial**-intelligence strategy isn't due until next month, but a draft prepared by the country's largest bank appears to focus on science, academia, and healthcare. It also outlines a regulatory framework for AI development.

In May, Russian President Vladimir Putin ordered Sberbank, one of the main proponents of using AI in the financial industry, to pull together the various ideas floated for accelerating the country's development and application of artificial intelligence.

Now various Russian news outlets and tech-oriented websites have covered a draft sent to Putin for review this summer. The draft, which appears to track with the AI "roadmap" released last year by the ministries of defense, education and science and the Academy of Sciences, asks for government funding to create research centers, laboratories, and specialized training programs, as well as measures to stimulate AI research and development.

To spur private-sector investment in AI projects, the strategy proposes new tax incentives and tools for forming and implementing public-private partnerships.

To help society absorb and navigate the new challenges of AI, the strategy says that legal and ethical rules should be created to govern "the interaction of an individual with AI"; determine "the distribution of responsibility between owners, developers, and suppliers of data for damage caused using AI systems"; and clarify "the regulation of the circulation of results of intellectual activity using AI."

In the scientific community, the strategy calls for:

- A new methodology for calculating a researcher's contribution to scientific development.
- Financing researchers via contests and competitions.
- Laying legal foundations for creating and running industrial and academic centers for interdisciplinary applied research.
- More Russian-published articles on AI research.
- Transparent methods for research and computer modeling.
- National standards for testing, certifying, and confirming compliance for AI systems.

Data rules

To help gather and manage the enormous amounts of data needed to train AI systems, the draft strategy calls for:

- Creating online repositories to collect, store, and process scientific data, including for training AI algorithms.
- Encouraging private companies and individuals to publish their data on such platforms.
- Verifying the authors and editors of such data, and so increase its reliability.
- Writing regulations to describe how and when researchers and users can access to government-collected data.
- Providing Russian citizens with tools to manage their personal data and anonymize personal data posted in the public domain.

Hardware and software development

The strategy says Russia must develop AI-ready microprocessors that run faster and use less electricity. The country needs to foster fundamental research into new computing architectures by giving developers preferential access to microelectronic components and subsidizing the production of prototype chips.

It also calls for:

- An online platform to help Russian and foreign researchers collaborate.
- Simplifying the licensing of intellectual rights to AI development software.
- The construction of centers for collective AI solutions testing.

Education

To improve Russian schools and universities, the strategy calls for using AI to track students' progress. At least half of Russian schools, it says, should use AI to customize each child's education — chatbots to help administrators understand students' educational requests; automated testing to check progress and spot gifted children. But first, legal barriers that block the flow of relevant personal information must be lowered, and regulations developed to stimulate these changes. Indeed, there are already plans underway in Russia to use AI to monitor student performance to raise graduation rates.

To stimulate the education of AI specialists in particular, the strategy calls for:

- A training system in data analysis at universities.
- A unified AI open learning platform for all educational levels.
- A secondary AI vocational education system.

It also seeks to organize the retraining of specialists to support the AI push by:

- Requiring universities to offer a free second master's degree in AI data analysis.
- Training engineers to allow the creation of domestic AI hardware.
- Helping teachers to popularize the use of modern technologies.

And once these new AI experts are created, the strategy says, efforts should be made to keep them in Russia — in particular, they should “earn income compatible to the top ten countries” where AI and other hi-tech development is taking place.

Healthcare

Besides education, the strategy envisions putting AI to work in the healthcare sector, where it might be used to conduct preventive examinations and to minimize defects and errors in diagnostic and invasive procedures. AI tools will be integrated into the Russian Unified State Health Information System. A national data bio-bank will be available for big data analysis at the federal level, federal districts and the country as a whole. As with education, AI will be used to customize each patient's medical care. But first, the strategy warns, “it is necessary to determine the legal status of AI technologies, solve the issues of ownership and rules for using biomedical data.”

Conclusion

Some of these proposals may seem overly optimistic. They presuppose not just the right formula of technological development and quick implementation, but a ready acceptance by the country's population that AI will play a growing role in their lives. The draft strategy likewise assumes bureaucratic competence, that the relevant Russian federal and regional ministries and departments will facilitate its smooth introduction. It rather optimistically envisions collaboration among the academic and state-supported projects already working on different aspects of AI.

Moreover, the strategy may not even be clearly describing what it seeks to accomplish. Researchers at the Russian Academy of Sciences say the document contains an incorrect formulation of “artificial intelligence,” unclear definitions of “data exchange,” and imprecise directives for training teachers in AI.

The strategy is also largely mute on the private sector's role in national AI plans, certainly compared to the U.S. AI strategy. That makes Russia's effort a definitive “top-down” push, with Russian state-run and state-affiliated institutions taking center stage. There are signs that this may be partially corrected — the Russian Direct Investment Fund, a state-run investor, announced a plan with the Russian government to invest in domestic companies developing AI.

Questions remain about whether the civilian work will cross over to the Russian military, and vice versa.

Finally, funding all these proposals and ideas may not be an easy task, even with the relatively large sum that has been allocated to the effort by the Kremlin.

Given all of the above, it is clear that Russia's development of AI is going to be a protracted and multiyear process – and perhaps a difficult one. Equally evident, however, is that Russia fully intends to compete in this realm with the United States, China and the European Union.