

Translation



The following revised guidelines, issued by the PRC Ministry of Science and Technology in September 2020 on the basis of previous guidelines from August 2019, describe a process by which Chinese cities can apply to establish "national new generation AI innovation and development pilot zones." These zones will be located in cities that already possess robust AI infrastructure such as top universities, national labs, and leading tech companies. The guidelines state that China will create roughly 20 AI pilot zones by 2023.

Title

Notice of the Ministry of Science and Technology on the Publication of the Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work (Revised Version)

科技部关于印发《国家新一代人工智能创新发展试验区建设工作指引(修订版)》的通知

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Chinese Ministry of Science and Technology (MOST; 科学技术部; 科技部)

Source

MOST website. The Guidelines are dated September 29, 2020, were promulgated on October 29, 2020, and were uploaded to MOST's website on December 24, 2020.

The Chinese source text is available online at:

https://most.gov.cn/xxgk/xinxifenlei/fdzdgknr/fgzc/gfxwj/gfxwj2020/202012/t20201224_171987.html

An archived version of the Chinese source text is available online at: <https://perma.cc/K27Q-ZWHN>

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Notice of the Ministry of Science and Technology on the Publication of the Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work (Revised Version)

¹ This translation is adapted by Kevin Wei from a translation of the original (2019) version of the Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work produced by Etcetera Language Group, Inc. for CSET in 2020. That translation is available online at:

<https://cset.georgetown.edu/publication/guidelines-for-national-new-generation-artificial-intelligence-innovation-and-development-pilot-zone-construction-work/>.

To science and technology departments (committees and bureaus) in provinces, autonomous regions, and centrally administered municipalities, and to the planning units of the cities under them, and to the Science and Technology Bureau of the Xinjiang Production and Construction Corps:

In order to fully implement the spirit of General Secretary Xi Jinping's important instructions and comments on artificial intelligence (AI), push national new generation artificial intelligence innovation and development pilot zones to focus on solving major problems in AI science and technology (S&T) and AI commercialization, to strengthen substantive development (内涵式发展), to build a sound ecosystem conducive to the development of AI, create new generation AI innovation development prototypes, [the Ministry of Science and Technology (MOST)] has made revisions to the Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work. These revised guidelines are hereby issued. Please implement the relevant work in accordance with local conditions.

These guidelines are effective beginning from the date of issuance, and the original Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work² are nullified at the same time.

This notice is issued for this purpose.

MOST

September 29, 2020

(This document to be actively publicized)

Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work (Revised Version)

These guidelines are formulated to fully implement the spirit of General Secretary Xi Jinping's important instructions and comments on AI, accelerate the implementation of the deployment requirements of the State Council Notice on the Issuance of the New

² Translator's note: CSET's English translation of the original (August 29, 2019) Guidelines for National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Work is available online at:

<https://cset.georgetown.edu/publication/guidelines-for-national-new-generation-artificial-intelligence-innovation-and-development-pilot-zone-construction-work/>.

Generation Artificial Intelligence Development Plan³ (State Council Document [2017] No. 35), further clarify the overall requirements, key tasks, application conditions, construction procedures, and safeguard measures of the national new generation AI innovation and development pilot zones, and to orderly promote the construction of national new generation AI innovation and development pilot zones, and promote the construction of such pilot zones in an orderly manner.

I. Overall Requirements

(1) Construction Philosophy (建设思路)

National New Generation Artificial Intelligence Innovation and Development Pilot Zones (hereinafter referred to as Pilot Zones) are areas where AI technology demonstrations, policy tests, and social experiments are carried out to promote the development of AI innovation through new attempts and by playing a leading role. The construction of Pilot Zones takes as its primary focus the promotion of the in-depth integration of AI and economic and social development and takes as its orientation the solving of major problems in AI S&T and AI commercialization. In this process, we will develop innovative institutional mechanisms; deepen industry-academia-research institute-user (产学研用) integration; promote the gathering together of S&T, industry, and finance; build a sound ecosystem conducive to the development of AI; comprehensively improve AI innovation and capabilities; create a number of new generation AI innovation development prototypes; explore new paths for the construction of a smart society (智能社会); accumulate experience that can be replicated and scaled; lead the healthy development of AI nationwide; and support the modernization of the national governance system and governance capacity.

(2) Construction Principles

Application-driven: Adapt to the characteristics and trends of AI development, deepen the integration of the innovation chain, production chain, and funding chain; vigorously promote the application of AI in the economic and social fields; and promote the iterative upgrade of AI technologies and systems through large-scale applications.

³ Translator's note: An English translation of the New Generation Artificial Intelligence Development Plan is available online at: <https://www.newamerica.org/cybersecurity-initiative/digichina/blog/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/>.

Local stakeholders: Give full play to the mainstay role of local institutions in the construction of Pilot Zones, focus on cities with a good foundation for the development of AI, make bold explorations in promoting the development and application of AI, and launch a number of major measures to effectively promote local economic and social development.

Pioneering policies: Pilot Zones shall play a pioneering role in the development of AI systems, policies, regulations, and standards, promote the coordination of innovation policies with industrial and social policies, strengthen policy reserves, and form a more complete policy system.

Unique characteristics: Combine local economic and social conditions with the basic conditions for the development of AI to form unique experiences, practices, and development models for the in-depth integration of AI and economic and social development and governance in the intelligence age (智能时代).

(3) Construction Goals

By 2023, we will set up about 20 Pilot Zones, produce a number of major and original S&T research achievements, innovate a number of effective policy tools, form a number of typical models for the in-depth integration of AI and economic and social development, accumulate a number of replicable and scalable experiences and practices, and create a group of AI innovation hubs that play major leading roles.

(4) Overall Layout

Serve and support national and regional development strategies: Focus on major regional development strategies such as the coordinated development of Beijing, Tianjin, and Hebei, the development of the Yangtze River Economic Belt, the construction of the Guangdong-Hong Kong-Macau Greater Bay Area, the integrated development of the Yangtze River Delta, and the Chengdu-Chongqing Economic Circle; take into account the coordinated development of the eastern, central, western, and northeastern regions; and promote AI as an important leading force for regional development.

Use cities as the primary vehicles of construction: Rely on cities with rich AI innovation resources and strong development foundations, explore new models of AI to empower urban economies, optimize urban governance, and lead high-quality development. Select several counties that have a good foundation for the application of AI and

explore new models of AI to lead the counties' economic development and support rural revitalization strategies.

II. Key Tasks

(1) Carry out demonstrations of AI technology research and development (R&D) and applications to explore new paths to promote the in-depth integration of AI and economic and social development. Grasp the cutting-edge trends in AI technology and the requirements for increasing industry competitiveness; increase the strength of the basic theory of AI, cutting-edge technologies, and key and core technologies (关键核心技术). Focus on the urgent needs of local economic development and the improvement of people's livelihoods; carry out AI technology R&D and applications demonstrations in the fields of manufacturing, agriculture, logistics, finance, commerce, home (家居), medical care, education, government affairs, transportation, environmental protection, security, urban management, care for the elderly and disabled, housekeeping services, and other fields; promote the integrated applications of AI with 5G, the industrial internet, blockchain, etc.; expand the application scenarios of AI; accelerate the in-depth integration of AI and the real economy; and promote the widespread application of AI to society and to people's livelihoods.

(2) Carry out AI-based policy experiments to create an institutional environment conducive to AI innovation and development. Carry out policy-based trials centered on data openness and protection, the application of research achievements, intellectual property, security management, ethical norms, talent recruitment and training, finance and taxation, social security, and international cooperation, explore the establishment of institutional mechanisms that support original innovation in AI, form a policy framework and system of regulations and standards adapted to the development of AI, and create a sound environment for AI scientific research, technology development, product innovation, industrial development, and social applications.

(3) Carry out AI-based social experiments to explore new methods and new techniques of governance in the intelligence age. Launch long-term and interdisciplinary empirical research; continuously observe, keep scientific records, and comprehensively analyze the comprehensive impact of AI at the individual, organizational, societal, and other dimensions. Strengthen the theory of social experimentation, methods, and the accumulation of data; precisely identify AI challenges; grasp the rules of social evolution in the AI age; and increase the level of precision and scientificness (科学化) of governance in the intelligence age.

(4) Promote the construction of AI infrastructure to improve the conditions for the development of AI innovation. Strengthen the construction of telecommunications networks, big data centers, computing centers, and other intelligentized (智能化) infrastructure; improve the degree of intelligentization of traditional infrastructure; and form a high-quality infrastructure system that supports the widespread application of new generation AI. Build AI R&D bases and open innovation platforms, promote the secure and orderly release (开放) of public data (公共数据), and substantially decrease computing costs.

III. Application Conditions

The construction of Pilot Zones is primarily based on municipalities, sub-provincial cities, and prefecture-level cities. Cities that intend to apply to construct a Pilot Zone shall meet the following requirements.

(1) Wealth of Scientific Education Resources. Applicants shall possess institutions of higher education with AI academies or research institutes, high-level R&D institutions that conduct research in basic AI or key technology fields, and a number of high-level AI innovation teams.

(2) Strong Industrial Foundation. In principle, the applicant shall be a city with a National Independent Innovation Demonstration Zone (国家自主创新示范区) or a China National High-Tech Industrial Development Zone (国家高新区) and one that has clearly indicated the development of AI as a key industry direction, where the core AI industry exceeds 5 billion yuan Renminbi (RMB) in scale and AI-adjacent industries exceed 20 billion RMB in scale.

(3) Sound Infrastructure. The applicant shall possess rich data resources, relevant data platforms, big data centers, and cloud computing centers and well-developed network infrastructure including mobile communications, the Internet of Things (IoT), and the industrial internet. Priority is given to cities that have deployed national new generation AI open innovation platforms.

(4) Clear Support Measures. The local government shall attach great importance to the development of AI and has issued development plans or implementation opinions concerning AI, has clear policy measures for the development of AI, and provides support for talent, funding, programs, bases, and other aspects.

Certain counties with obvious advantages in the AI industry, robust intelligent infrastructure, outstanding application scenarios, strong technology R&D, and strong capabilities in converting achievements into practical applications (成果转化) can also apply to build national new generation artificial intelligence innovation and development pilot zones.

IV. Construction Procedures

(1) Recommendation and Application. Cities that meet the above application conditions and are willing to build a Pilot Zone shall draft a National New Generation Artificial Intelligence Innovation and Development Pilot Zone Construction Plan based on their specific infrastructure and conditions. The construction plan shall include basic conditions, construction ideas, construction goals, construction content, and safeguard measures. The construction plan shall be reviewed by the local government of the province (or autonomous region, or municipality) and then be submitted to MOST.

(2) Comprehensive Proof of Concept. MOST shall organize experts to carry out a comprehensive proof of concept of the construction plan of the Pilot Zone. The group of experts shall primarily include experts from the National New Generation Artificial Intelligence Strategic Advisory Committee (国家新一代人工智能战略咨询委员会) and the National New Generation Artificial Intelligence Governance Specialist Committee (国家新一代人工智能治理专业委员会) as well as AI technology experts and policy experts from universities, research institutes, and enterprises.

(3) Start of Construction. MOST shall consider the proof-of-concept comments and the overall layout of Pilot Zone construction. For places that meet the construction conditions and provide a sophisticated construction plan, MOST shall support the start of Pilot Zone construction according to the relevant procedures and announce this decision publicly.

(4) Operational Management. The local government shall proceed with the relevant work in accordance with the Pilot Zone construction plan. Before the end of December of each year, the local government shall formulate an annual work summary report for the Pilot Zone to be submitted to MOST after review by the relevant science and technology department of the province (or autonomous region, or municipality). MOST shall assess and evaluate the construction of the Pilot Zone in due course.

(5) Demonstration and Promotion. Drawing on its experiences, the Pilot Zone shall propose a number of policy measures and practices that can be promoted for

application elsewhere. MOST shall summarize and refine such information and offer it as an example to be followed nationwide.

V. Assurance Measures

(1) Organizational Assurance. MOST shall give full play to the coordinating role of the New Generation Artificial Intelligence Development Plan Promotion Office (新一代人工智能发展规划推进办公室) and cooperate with relevant departments to strengthen the system layout, coordinate promotion, and provide policy guidance for Pilot Zone construction. The government of the province (or autonomous region, or municipality) of the Pilot Zone shall effectively strengthen their organizational leadership and work guidance for the Pilot Zone construction.

(2) Support Channels. MOST shall support the construction of Pilot Zones through policies and resources, guide the accumulation of various resources towards the Pilot Zones, and promote the collaboration and coordination between Pilot Zones. Local governments shall increase capital investment in Pilot Zone construction, design appropriate policies for Pilot Zone construction, and actively guide enterprises and social forces in participating in the construction of the Pilot Zone.

(3) Propaganda Guidance. Interpret policies to strengthen the construction of Pilot Zones; promptly propagandize and popularize new progress, new results, and new breakthroughs made in the construction of the Pilot Zones; construct exchange platforms; hold regular seminars; strengthen interactive sharing (互动分享); summarize experience and practice; and create a beneficial environment for AI innovation and development throughout society.