Translation

The following plan outlines China's priorities for "military-civil fusion" in the years 2016-2020. The plan aims to reduce existing stovepipes between the military and civilian innovation ecosystems in China. The Chinese term "military-civil fusion" refers to the mutually reinforcing two-way flow of technology and other resources between the military and civilian sectors.

Title
The "13th Five-Year" Special Plan for S&T Military-Civil Fusion Development
"十三五"科技军民融合发展专项规划

Author
PRC Ministry of Science and Technology (MOST; 科技部)

Source
MOST website, August 24, 2017.

The Chinese source text is available online at:
https://web.archive.org/web/20200531235848/http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2017/201708/W020170824580027341808.doc

Translation Date	**Translator**	**Editor**
June 10, 2020	Etcetera Language Group, Inc.	Ben Murphy, CSET Translation Lead

The "13th Five-Year" Special Plan for S&T Military-Civil Fusion Development

According to the strategic deployments of the Party Central Committee, the State Council, and the Central Military Commission, and in order to fully implement the military-civil fusion (军民融合) development strategy in the field of science and technology (S&T), this Plan has been prepared based on the *Outline of the 13th Five-Year Plan*[1] *for National Economic and Social Development of the People's Republic of China*, *Outline of the National Innovation-Driven Development Strategy*,[2] *Opinions of the CPC Central Committee, State Council, and Central Military Commission on the Integrated Development of Economic Construction and National Defense Construction*, *"13th Five-Year" National S&T Innovation Plan, State Council and Central Military Commission "13th Five-Year" Plan for Integrated Development of Economic Construction and National Defense Construction*, and *Outline of the "13th Five-Year" Plan for Military Construction and Development*.

[1] Translator's note: China's 13th Five-Year Plan (第十三个五年规划; "十三五") is in effect for the years 2016-2020. Spin-off plans of the 13th Five-Year Plan, such as this one on military-civil fusion, provide additional details on China's economic policies for specific industries or sectors during the 2016-2020 timeframe.
[2] Translator's note: For an English translation of this document, see: https://cset.georgetown.edu/wp-content/uploads/t0076_innovation_driven_development_strategy_EN.pdf.

I. Current Circumstances and Requirements

Positioned at the intersection of the national innovation-driven development strategy, military-civil fusion development strategy, and the strategy of building a strong military through reform (改革强军战略), S&T military-civil fusion is the strategic deployment of the Party Central Committee for the development of S&T innovation, a major measure to improve the level of national defense and military modernization construction, and a powerful engine to promote S&T innovation and economic development.

During the period of the 12th Five-Year Plan,[3] according to the overall deployments of the Party Central Committee, the State Council, and the Central Military Commission concerning military-civil fusion and S&T innovation, China built and improved its weapons and equipment research and production system through the ideas of military-civil integration (军民结合) and embedding the military sector in the civilian sector (寓军于民). China vigorously promoted the construction of an integrated military-civil research equipment sharing platform, increased the openness of military-civil S&T resources and the mutual transfer of dual-use technologies between military and civilian institutions, and initially established a military-civil fusion S&T innovation system for national defense. Since the 18th Party Congress,[4] the military-civil fusion development strategy has been thoroughly implemented in the S&T field. China has engaged in active exploration and bold innovation, the awareness of S&T military-civil fusion has gradually increased, the environment for fusion is becoming more robust every day, and the practice of fusion is constantly being enriched. In Zhongguancun, China (Mianyang) Science and Technology City, and other national independent innovation demonstration areas and regions, a number of vehicles and platforms have been established, such as collaborative innovation research institutes for military-civil fusion, dual-use technology innovation bases, and military-civil fusion technology parks. These areas also explored and established military-civil and cross-department innovation models for S&T military-civil fusion. Joint military-civil breakthroughs have led to the successful implementation of a number of major military-civil fusion projects in the S&T field, including manned spaceflight and lunar exploration projects, the BeiDou Navigation Satellite System, high-resolution earth observation systems, the Tianhe-2 supercomputer, the Kuaizhou (快舟) satellite launch system, and Quantum Experiments at Space Scale (QUESS; Micius; 量子通信卫星). Innovative entities such as universities, scientific research institutes, high-tech enterprises, and military industrial groups actively practice S&T military-civil fusion and have achieved good results. The environmental conditions for the development of S&T military-civil fusion have been continuously improved and the *Law of the People's Republic of China on Promoting the Commercialization of Scientific and Technological Achievements* (《中华人民共和国促进科技成果转化法》) has been revised to comprehensively implement the National Defense Intellectual Property Strategy, providing strong support for the development of technological innovation and industrialization for military-civil fusion.

At the same time, we must soberly realize that China still faces some problems in the development of S&T military-civil fusion, which are primarily apparent in the following areas:

[3] Translator's note: The 12th Five-Year Plan was in effect from 2011 to 2015.

[4] Translator's note: Xi Jinping became the top leader of the Communist Party of China (CPC) immediately following the 18th Party Congress in 2012.

There is not yet a sufficient recognition of the characteristics, laws, and essential requirements of S&T military-civil fusion; S&T military-civil fusion lacks top-level design and macro-level coordination, lacks coordination and linkages among the departments responsible for organization and management and those responsible for work and operations, and lacks a collaborative innovation system for S&T military-civil fusion; China lacks effective connections between S&T military-civil fusion planning and basic resource sharing, the evaluation criteria to promote the two-way transfer and commercialization of achievements are not clear, the incentives are insufficient, the channels of connection are not smooth, the overall benefits and potential of S&T military-civil fusion have yet to be tapped, and the collaborative innovation capabilities of S&T military-civil fusion need to be strengthened; and a policy system for S&T military-civil fusion has not yet been established and the institutional environment involving S&T military-civil fusion needs to be optimized.

The period of the 13th Five-Year Plan is a critical stage in the transition of Chinese military-civil fusion from preliminary fusion to in-depth fusion. The development of S&T military-civil fusion will face unprecedented opportunities and challenges during this period. With the rapid progress of a new round of scientific and technological revolutions, industrial transformations, and military revolutions (军事革命) sweeping the world, military technology and civil technology are becoming more and more deeply intertwined and integrated, with increasing cross-penetration and compatibility. The development of S&T military-civil fusion is an inevitable choice in order to conform to global trends and patterns. S&T military-civil fusion is a basic requirement for the implementation of national strategic arrangements and a major embodiment of national strategic arrangements in the S&T field. It is a clear key task for comprehensively deepening S&T structural reform as well as national defense and military reform. It is also a fundamental requirement for further stimulating the vitality of institutions and mechanisms in order to realize the integration of a rich country and a strong military and promote innovative development for both the country and the military. In the next five years, China's economic development will enter a new normal characterized by a changing speed, structural optimization, and a change in economic drivers. As the revolution in military affairs with Chinese characteristics (中国特色军事变革) continues to deepen, the gap between China's national defense construction and the world’s major military powers is gradually narrowing. To promote national economic construction, implement the overall national security concept, and safeguard national security and strategic interests, there is an urgent need to establish a complete, unified, efficient, and open system for military-civil collaborative innovation in S&T, promote breakthroughs in S&T innovation, seek advantages in military S&T, cultivate strategic emerging industries, improve our military strength for national defense, and assist economic construction and national defense construction.

II. Overall Philosophy

(i) Guiding Ideology

Fully implement the spirit of the 18th Party Congress and its Third, Fourth, Fifth, and Sixth Plenums, take Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, the important thinking of the "Three Represents," and the scientific development concept as the guide, thoroughly implement the spirit of General Secretary Xi Jinping's series of important speeches,

conscientiously implement the overall national security concept, adhere to the "Five in One"[5] overall layout and the "Four Comprehensivelys"[6] strategic layout, firmly establish and implement concepts of innovative, coordinated, environmentally friendly, open, and shared development, adhere to the guidelines of the innovation-driven development strategy and the military-civil fusion development strategy, strengthen organizational leadership, continuously deepen reforms, improve the institutions and mechanisms for S&T military-civil fusion, improve the policy system, strengthen the construction of innovation capabilities for S&T military-civil fusion, promote the coordination of resources for S&T innovation, create innovative fusion development models, open up channels for in-depth military-civil fusion, promote in-depth S&T military-civil fusion, and provide strategic support for the coordinated, balanced, and compatible development of national security, economic construction, national defense, and military construction.

(ii) Basic Principles

Strategically oriented development of fusion: Focus on the innovation-driven and military-civil fusion national strategies, firmly establish China's leading position in the development of S&T military-civil fusion, establish and improve the leadership system and organizational structure, strengthen overall coordination, create an engine for in-depth S&T military-civil fusion, and promote the integrated development of economic construction and national defense construction.

Systemic promotion driven by requirements: Facing the major needs of national security, economic development, national defense, and military construction, clarify the main directions of efforts and breakthrough points in S&T military-civil fusion, systemically deploy key tasks for the development of S&T military-civil fusion, strengthen pilot demonstrations and influential driving forces, and systematically promote various military-civil fusion efforts in the S&T field.

Lay a strong foundation through joint R&D: Aim at a new round of scientific and technological revolutions, industrial changes, and military revolutions, coordinate military and civilian scientific research capabilities and innovation resources, pursue breakthroughs through the joint efforts of the military and local governments (军地联合攻关), strengthen research on basic cutting-edge and key dual-use technology, form an end-to-end and integrated scientific research layout, and improve military-civil collaborative innovation capabilities in the S&T field.

Reform, innovation, and two-way transfer: Deepen S&T systems reforms and national defense and military reforms, create innovative management models, focus on the use of market techniques to enhance the vitality of military-civilian fusion in S&T, give full play to the role of various types of innovative entities, strengthen the protection and application of intellectual property rights, and promote the two-way transfer and application of military and civilian scientific and technological achievements.

(iii) Development Goals

[5] Translator's note: The "Five in One" ("五位一体") refers to economic, political, cultural, social, and ecological civilization (生态文明) development.

[6] Translator's note: The "Four Comprehensivelys" ("四个全面") are: (1) comprehensively build a well-off society in an all-round way; (2) comprehensively deepen reform; (3) comprehensively govern the country according to law; and (4) comprehensively govern the party strictly.

By 2020, basically form a military-civil S&T collaborative innovation system to promote the formation of a comprehensive, multidisciplinary, and efficient development layout for S&T military-civil fusion.

----Make breakthroughs in the institutions and mechanisms for S&T military-civil fusion. Basically establish unified leadership organization and management institutions and efficient and orderly work and operation mechanisms, increase the maturity of the institutions and mechanisms for military-civil S&T collaborative innovation, link military-civil S&T planning in an orderly manner, and more efficiently allocate resources.

----Significantly improve the leading role played by S&T military-civil fusion. Make S&T military-civil fusion an important driving force for in-depth military-civil fusion, greatly increase military-civil S&T collaborative innovation capabilities, make major breakthroughs through military-civil collaboration in important fields, significantly enhance S&T mobilization capabilities, effectively promote the construction and development of resource sharing systems in basic fields, an advanced national defense S&T industrial system with Chinese characteristics, a military personnel talent training system, an army personnel support and socialization system (军队保障社会化体系), and a national defense mobilization system.

——Achieve two-way open sharing of basic S&T resources between military and civilian institutions. Integrate and connect the S&T resources of the state and the military, create an overall layout for major military-civil scientific research infrastructure and laboratories that allows for two-way openness and efficient use, adopt compatible and universal standards for both military and civilian institutions, and allow for the sharing of basic S&T resources between military and civilian institutions.

----Achieve outstanding success in the two-way transformation and application of military and civilian S&T achievements (军民科技成果双向转化). Build a national military-civil technological achievements public service platform and a number of military-civil technology trading centers, set up smooth and efficient communication channels for military-civil S&T achievement exchanges to double the transformation efficiency, achieve outstanding results in the two-way transformation of military and civilian S&T achievements, and basically form a military-civil S&T achievement transformation system.

----Improve S&T innovation talent mechanisms. Basically establish a two-way exchange mechanism for S&T innovation talent and an international cooperation mechanism, improve the evaluation and incentive mechanisms for S&T innovation talents and joint training mechanisms, rationalize the scale and structure of S&T-intensive national defense reserve forces, guide the establishment of a number of new think tanks for S&T military-civil fusion, and form a new layout to facilitate the emergence and flowering of S&T innovation talents.

----Implement pilot projects for S&T military-civil fusion that have significant demonstrative effects. Establish a number of military-civil fusion and integrated industry-academia-research collaborative innovation platforms and new scientific research institutions, implement pilot policy systems for S&T military-civil fusion, explore the establishment of new models of financial services for S&T military-civil fusion, promote innovation in S&T military-civil fusion policy systems, organization management, and operation models, and form a new trend of

healthy development for S&T military-civil fusion through "a reasonable layout and driven by the influence of a group of individual institutions" (“布局合理、以点带面、辐射带动”).

----Establish a basically complete policy and institutional system for S&T military-civil fusion. Basically build a policy and institutional system for military-civil fusion with complete systems, linked support, and effective incentives, issue a series of supporting policies to promote S&T military-civil fusion in terms of fiscal spending, prices, investment, financing, and S&T awards, promote the further optimization of the policy and institutional environment for military-civil fusion, and facilitate the flow of innovative elements for S&T military-civil fusion.

III. Key Tasks

(i) Strengthen the Macro Coordination of S&T Military-Civil Fusion

1. Improve the institutions and mechanisms for S&T military-civil fusion

Improve the environment and conditions for military-civil S&T collaborative innovation and realize efficient interaction between the central and local governments and the military and local governments for the purpose of collaborative S&T innovation. Establish and improve S&T collaborative innovation organization management systems. Under the overall guidance of the Central Commission for Military-Civil Fusion Development, strengthen the top-level design and organizational coordination of work advancing S&T military-civil fusion. Explore the establishment of a new mechanism for military-civil S&T collaboration and innovation, improve the rules and regulations for joint meetings, briefings, task-based interaction, and coordinated consultations, establish an implementation mechanism for joint validation of plans and programs (规划计划联合论证), and implement a military-civil joint validation mechanism for major scientific and technological projects.

2. Promote coordinated and connected planning

Strengthen the connections between the national defense S&T innovation development planning and national S&T innovation planning and gradually promote the realization of the coordinated allocation and management of military and civilian S&T planning resources. Strengthen the coordination and linkage between the central and local governments in support of S&T plans, optimize the orientation and focus of the allocation of strategic S&T resources, adjust the layout of regional S&T development, and form regional S&T innovation and mobilization capabilities that feature distinctive features, abundant reserves, and a complete process.

(ii) Enhance the Construction of Military-Civil Collaborative Innovation Capabilities in S&T

3. Coordinate and lay out basic research and cutting-edge technology research

Strengthen the original innovation and system layout of military-civil collaboration and make collaborative breakthroughs in basic research and cutting-edge technology research. Set up a special fund for military-civil fusion of basic research, focus on supporting basic national defense research projects, promote the transformation of civilian basic research achievements into military applications, establish and improve military-civil fusion mechanisms for basic research, and promote the overall allocation and management of military and civilian basic S&T research planning resources. In intelligent unmanned vehicles, biological crossover technology,

advanced electronics, quantum technology, future networks, advanced energy, new materials, advanced manufacturing, and other fields, focus on the development of forward-looking, pioneering, exploratory, and disruptive technologies to seize the commanding heights in international competition. Explore innovations in management institutions and mechanisms, promote the military application of advanced civilian science and technology, and accelerate the transformation of cutting-edge technologies into real combat capabilities and drivers of transformation in the national economy.

4. Implement key special projects for S&T military-civil fusion

According to the requirements of the end-to-end design and integrated organization and implementation for national key R&D plans, deploy and implement a number of key military-civil dual-use projects in the fields of electronic information, space remote sensing, new materials, advanced manufacturing, energy, transportation, biology, marine science, modern agriculture, and public safety. In accordance with the philosophy of joint demonstration, joint support, joint organization, and collaborative innovation, launch the implementation of key special projects for S&T military-civil fusion, carry out collaborative military-civil scientific and technological R&D, and promote the two-way transformation and application of military and civilian scientific and technological achievements. Strengthen the guiding role of military requirements and coordinated and collaborative guidance on key special projects for S&T military-civil fusion, actively promote coordinated military-civil breakthroughs, and accelerate the generation of new productivity and combat effectiveness from scientific and technological achievements.

5. Implement major national science and technology projects

Strengthen the two-way transfer and transformation of the achievements of major special projects for military-civil fusion, such as "core electronic components, high-end general-use chips, and foundational software products" (“核高基”), broadband mobile communications, major new drug creation, the prevention and control of major infectious diseases, integrated circuit equipment, high-resolution earth observation systems, manned spaceflight, and lunar exploration projects. Facing toward 2030 and with a strategic high-tech layout centered on deep sea, deep land, deep space, deep blue, and other fields, strengthen top-level connections, effectively allow the military and local governments to play their roles, and actively promote the demonstration and implementation of a new round of major military-civil fusion projects in the S&T field, such as space to ground information networks, quantum communication and quantum computing, brain science, and brain-inspired research.

(iii) Promote the Coordinated Sharing of S&T Innovation Resources

6. Strengthen S&T platform co-construction and joint use

Coordinate the layout and construction of major military-civil joint-use scientific research bases and infrastructure, adopt major scientific and technological tasks as the main avenue of military-civil collaborative breakthroughs, establish sharing and joint-use mechanisms for various S&T infrastructure such as laboratories, test facilities, large scientific installations, and scientific instrument centers, and promote independent R&D of major military and civilian scientific instruments and equipment and the open sharing of scientific research platforms. Focus on national strategic needs, jointly build national laboratories, actively promote the

construction of national key laboratories, national engineering research centers, and national clinical medical research centers through military-civil co-construction, and continue to raise the overall level of scientific research conditions. Formulate management methods for the sharing of resources between state key laboratories and national defense S&T key laboratories and between the military and major military test facilities and national key S&T infrastructure and publish an open catalog.

7. Promote the interconnectivity and sharing of military and civilian S&T infrastructure resources

Formulate technical standards and specifications for military-civil compatibility and military-civil general use, actively promote the adoption of advanced and applicable civilian standards for military equipment and facilities, transform advanced and applicable military standards into civilian standards, promote the universalization of military-civilian standards, and establish long-term mechanisms for standardized military-civil fusion. Strengthen the construction of general military-civil metrology (计量) infrastructure, promote the unification of military and civilian metrology standards, improve traceability systems for quantitative value transmission, improve metrology testing capabilities, and strengthen metrology support capabilities. Strengthen the sharing of S&T information resources and S&T intelligence and strengthen the coordination and linkages between national S&T report systems and the national defense S&T report systems.

(iv) Deepen the Two-way Transformation of Military and Civilian S&T Achievements

8. Promote the construction of mutual transformation systems for military and civilian S&T achievements

Establish public service platforms for national military-civil technological achievements, publish information about military and civilian S&T achievements, strengthen the exchange of military and civilian S&T achievements and the interconnectivity of technical information, and provide services such as military-civil S&T achievement evaluations, information searches, and policy consulting. Establish a trading center for national military-civil dual-use technology and support the work involved in achievement transformation, such as technology trading, S&T financing, and innovation services. Support scientific research institutes, colleges, and universities in establishing S&T achievement transformation institutions, improve the work mechanisms of S&T achievement transformation, optimize the workflows of S&T achievement transformation, and improve the S&T achievement transformation system. Comprehensively improve modern S&T achievement transformation service platforms.

9. Promote the implementation of the intellectual property strategy

Strengthen the orientation of distribution systems to the value of knowledge and promote the reasonable sharing of the benefits of the transformation of innovative achievements Improve national public service platforms for intellectual property operations, encourage the construction of regional intellectual property service platforms with military-civil fusion characteristics, and form intellectual property operation and service capabilities for the sharing of military-civil S&T innovation resources. Position intellectual property as an element that guarantees scientific research, production, procurement, and services, improve cost accounting methods, guide the use of intellectual property from the civilian field in national defense and

military construction, and encourage the transformation of national defense intellectual property into applications in the civilian field.

(v) Launch Pilot Projects and Demonstrations

10. Establish military-civil S&T collaborative innovation platforms

Relying on national independent innovation demonstration zones, national high-tech industrial development zones, and national military-civil fusion innovation demonstration zones, build a number of strategic and comprehensive military-civil S&T collaborative innovation platforms in regions and key fields where there are both military and civilian needs, a good foundation for cooperation, a developed military industry, a high density of innovation resources, and distinctive characteristics for military-civil fusion. Lead and organize the implementation of comprehensive demonstrations of S&T military-civil fusion, implement tasks such as policy system pilot projects for S&T military-civil fusion, coordinated military-civil S&T research and development, integration and sharing of basic military and civilian S&T resources, transfer and transformation demonstrations of typical achievements, S&T financial support, and innovation and entrepreneurship ecosystem construction, and promote the formation of a complete military-civil S&T collaborative innovation system.

11. Encourage the establishment of new scientific research institutions for military-civil fusion

Relying on universities, research institutes, and professional institutions, guide and promote the construction of a number of new scientific research institutions in key areas of military-civil fusion, carry out cutting-edge technology and disruptive technology R&D, military-civil S&T achievement transformation, and industry incubation, create innovative management models, coordinate S&T resources, and serve the major needs of national defense construction and economic development. Encourage small and medium-sized enterprises, scientific research institutes, colleges, and universities to engage in multi-party collaboration, build military-civil fusion makerspaces, S&T enterprise incubators, high-tech parks, technological innovation alliances, and other institutions, and carry out military-civil S&T collaborative innovation. Encourage cooperation with internationally renowned scientific research institutions, establish R&D institutions overseas, build a number of international cooperation platforms such as joint research centers, technology transfer centers, technology demonstration and promotion bases, and S&T parks with countries with innovative advantages in related fields, and create innovative development models for military-civil fusion.

12. Explore financial service models for S&T military-civil fusion

Give full play to the important role of financial innovation in assisting S&T military-civil fusion, encourage the national independent innovation demonstration zones, China (Mianyang) Science and Technology City, and other regions to explore the development of mechanisms to integrate military-civil fusion and finance, vigorously encourage various financial institutions to launch financial services and products for S&T military-civil fusion, and carry out innovation and pilot projects for financial service models for S&T military-civil fusion. Set up a military-civil S&T achievement transformation sub-fund under the National Fund for Technology Transfer and

Commercialization. Guide financial institutions and social capital[7] in participating in military-civil S&T collaborative innovation and establish a comprehensive, diversified, and differentiated financing model for S&T military-civil fusion for the entire process from experimental research, pilot testing, to production.

(vi) Strengthen the Construction of Innovative Teams

13. Improve the mechanisms for training and use of military and civilian innovative talent

Strengthen the joint military-civil training of S&T innovation talent, create innovative talent management for military-civil fusion, promote the exchange of military and civilian talents, and accelerate the orderly two-way flow of talent. Encourage various types of outstanding talents to participate in S&T innovation for national defense, establish talent, technology, and achievement transformation and linking mechanisms for the military and local governments, improve professional title assessment, post management, and examination and evaluation systems suited to the characteristics of military-civil S&T achievement transformation. Strengthen the introduction of high-level talent from China and abroad, gather high-end talent engaged in cutting-edge S&T research, and cultivate an expert team for the innovation and development of S&T military-civil fusion.

14. Establish new think tanks for S&T military-civil fusion

Actively promote the construction of new high-level think tanks for S&T military-civil fusion, study the development trends in S&T military-civil fusion in China and abroad, carry out strategic research and situation assessments, make predictions and forecasts, and provide consultation services and advice to provide a theoretical foundation and decision-making basis for S&T military-civil fusion strategies, planning, and policies. Strengthen connections and cooperation with foreign think tanks with advantages in the field of S&T military-civil fusion, establish exchange and cooperation mechanisms, and carry out international cooperative research to provide theoretical, policy, and strategic support for in-depth S&T military-civil fusion.

(vii) Improve Policy and Institutional Systems

15. Strengthen institutional construction for S&T military-civil fusion

Continue to promote the construction of relevant institutions for S&T military-civil fusion in order to meet the requirements for complete systems, linked support, and effective incentives. Actively participate in the demonstration of the content of S&T military-civil fusion in the construction of national military-civil fusion legislation and accelerate the introduction of systems for the transformation and application of national defense S&T achievements and the development of S&T military-civil fusion. Establish and improve the declassification systems, national defense intellectual property systems, and other systems for national defense S&T

[7] Translator's note: The Chinese term 社会资本, translated literally as "social capital," and its synonym 社会资金 "social funding," refer to any source of funding outside of government budget outlays. These terms encompass investment by private individuals and private institutions. However, investment from state-funded entities such as state-owned enterprises (SOEs), including state-run banks, also falls under the umbrella of "social capital" or "social funding."

achievements and break down the barriers that restrict the development of S&T military-civil fusion.

16. Improve the policy environment for S&T military-civil fusion

Strengthen policy guidance in areas such as guidance, incentives, support, and compensation and implement policies concerning fiscal spending, prices, investment, and financing to promote the development of S&T military-civil fusion. Improve S&T reward policies, establish original achievement traceability mechanisms, and formulate incentive policies for basic research. Encourage all types of innovative entities to participate in the development of S&T military-civil fusion and adjust and optimize policies related to market access for "private sector participation in the military sector" (“民参军”), linkage with requirements, and information release. Enhance the implementation of policies such as additional deductions for research and development expenses, tax incentives for high-tech enterprises, and accelerated depreciation of fixed assets. Open and share military facilities with the civilian sector, with negotiations conducted by the various entities in accordance with market mechanisms.

IV. Safeguards

(i) Strengthen Organizational Leadership

Military and local government S&T departments shall jointly lead the organization and implementation of this plan. Based on this plan, military and local government S&T departments shall establish a plan implementation mechanism for collaborative progress. In accordance with actual conditions, they shall strengthen the deployment of work related to S&T military-civil fusion by the various departments and localities. They shall properly align with the overall ideas and primary goals of this plan and properly break down major tasks into specific tasks and implement them. Military and local government S&T departments shall strengthen propaganda on and implementation of the Plan, do a good job in coordination services and implementation guidance, and fully mobilize the enthusiasm and initiative of all sectors of society to participate. They shall maximize consensus and mobilize all parties to promote the smooth implementation of the plan.

(ii) Strengthen Planning and Coordination Management

Military and local government S&T departments may prepare corresponding plans for S&T military-civil fusion based on this plan and better support and align themselves with this plan. Improve work consultation, communication, and coordination mechanisms between military and local government departments and central and local governments and strengthen the organic connections between different plans. Strengthen the link between annual plans and this plan and ensure that the tasks set out in this plan are implemented.

(iii) Establish S&T Investment Systems

Strengthen the connection between central government investment and the needs of S&T military-civil fusion development and guide local governments to increase investment in S&T military-civil fusion. Create innovate methods for government investment in S&T, strengthen the coordination and cooperation of fiscal funds and financial instruments, encourage qualified localities to comprehensively use various methods such as risk compensation and loans with

discounted interests rates, give full play to the amplification effect of government funds, promote the establishment of venture capital funds directed by social capital, guide financial funds and private capital (民间资本) into the field of S&T military-civil fusion, and improve diversified, multi-channel, and multi-level S&T investment systems.

(iv) Strengthen Strategic Research

Focus on carrying out strategic research on the development of S&T military-civil fusion, strengthen research on development strategies, major theories, system design, and institutional mechanisms of S&T military-civil fusion, establish theoretical and methodological systems for in-depth S&T military-civil fusion, and carry out assessments of the S&T military-civil fusion development situation and research on mid-to-long-term development strategies for S&T military-civil fusion to provide strong support for strategic decision-making and management in the field of S&T military-civil fusion.

(v) Coordinated Supervision and Assessment

Establish and improve the S&T plan monitoring and evaluation system and dynamic adjustment mechanisms and carry out dynamic monitoring and evaluation of plan implementation. Carry out mid-term evaluation and final evaluation of the implementation of the plan and perform a comprehensive evaluation of the effects of plan implementation to provide a basis for plan adjustment and formulation of plans in the next round. Establish a system for the division of labor and responsibilities, enhance the supervision of plan implementation, policy implementation, and project construction, and strengthen the regulation, guidance, and restraint provided by the plan.