

First batch of project application guidelines for National Key R&D Program – the "Intergovernmental International Science and Technology Innovation Cooperation" program in 2023

1. Overall goals

In 2023, this special program will continue to support various international science and technology innovation cooperation and exchange projects carried out under the framework of relevant intergovernmental agreements signed between China and other countries, regions, international organizations, and multilateral mechanism. These projects cover scientific, technological, and engineering issues of common concern at the level of intergovernmental scientific and technological cooperation and issues related to addressing major global challenges through scientific and technological innovation cooperation.

2. Research areas and directions

After consultation and agreement by relevant partners, the first batch of projects in 2023 will include 15 research directions. Supporting scientific and technological cooperation with 14 countries, regions, international organizations, and multilateral cooperation mechanisms, and plan to support about 138 projects, with a total estimated budget of 496 million yuan. The implementation period of each project is generally 2~3 years (subject to the specific requirements listed in the guide). There are no sub-topics under each research direction (except for direction 1.4).

The specific guidelines and requirements are as follows:

1.1 Joint laboratory cooperation projects between China and European countries

Research Directions: Environment (including climate change and carbon neutrality), Health, Agriculture, Food and Biotechnology, Basic Science, Aerospace, Artificial Intelligence, Advanced Materials, Smart City, Production Technology (including Intelligent Manufacturing), Clean Technology, Information and Communication Technology, etc

Number of projects to be supported: 10.

Total proposed support funds: 30 million yuan.

Other requirements:

- (1). The cooperation countries are limited to the United Kingdom, France, Italy, Spain, Belgium, and the project application name format is "China + Cooperation Country Abbreviation + Research Field + Joint Laboratory".
- (2) The project is for joint laboratories established before January 1, 2022; When applying, the cooperation agreement for the joint laboratory signed by the supporting organizations of the laboratories of both parties should be provided (the signature date of the agreement must be earlier than January 1, 2022, and only 1 project can be applied for 1 joint laboratory cooperation agreement); The leading or participating organization must be a signatory in the cooperation agreement for the joint construction of the joint laboratory.
- (3) The project implementation period is 3 years.
- (4) The applicant should provide official documents from foreign government departments (such as government departments responsible for scientific and technological innovation in other countries, national scientific research centers or scientific research and innovation institutions, embassies in China, etc.) that have provided funding, materials and other support for the joint laboratory.
- (5) Each project should specify two tasks and corresponding assessment indicators in the proposal: First, substantive scientific research cooperation tasks. Second, the task of building the joint laboratory. Each project should meet the following basic assessment indicators: granted with more than 3 patents (except for basic research projects), organize more than 2 high-level international academic exchange activities with more than 50 attendees, and train more than 5 young scholars (under 40 years old). At the same time, the applicant should fill in and submit the EU-China Joint Laboratory cooperation plan for the next 3 years when applying.
- (6) The cooperation agreement signed by the Chinese and foreign partners on the declared project should be provided when applying.

1.2 Sino-Italian intergovernmental scientific and technological cooperation projects

Research Directions: Agriculture and Food Science; artificial intelligence for cultural heritage;

Astrophysics and Physics; Green energy-related research; Biomedicine.

The number of projects to be supported: 10.
Total proposed support funds: 20 million yuan.

1.3 Intergovernmental Science and Technology Cooperation Projects between China and Spain

Research Directions:

1. Smart cities;
2. Manufacturing technology, including intelligent manufacturing;
3. Biomedical and medical technology, including medical devices, biotechnology applications or pharmaceutical technologies that can respond to global epidemic diseases;
4. clean technologies, including environmental, renewable energy or water treatment technologies;
5. Modern agriculture, including fisheries technology, food processing and food safety;
6. Advanced materials, excluding materials that cause environmental damage from raw materials to their recycling stage.

The number of projects to be supported: No more than 20.

Total proposed support funds: 60 million yuan.

1.4 China-EU Intergovernmental Science and Technology Cooperation Project (1) EU-China Research and Innovation Flagship Cooperation Program

Research Directions I: Food, Agriculture and Biotechnology (FAB).

Topic I: Optimizing manure use in the management chain to reduce greenhouse gas emissions and the spread of nutrients or pollutants into the environment.

Topic II: Achieving multiple ecosystem services and enhancing integrated forest management of biodiversity.

The number of projects to be supported by direction 1: No more than 2 (1 project per topic).

Total of proposed support funds: 70 million yuan.

Research Directions 2: Climate Change and Biodiversity (CCB).

Topic 1: EU-China cooperation on data and model development and pathway simulation for global climate governance and carbon neutrality, with a focus on

decarbonisation, energy efficiency and socio-economic impacts of the transition to net zero.

Theme 2: Assessing the carbon sequestration capacity and storage stability of marine ecosystems, and measuring the impact of human activities on the management, restoration and increase of ocean carbon sinks.

The number of projects to be supported for direction 2: no more than 4 (Topic 1 plans to support 2~ 3 projects, with a total fund of 30 million yuan; Topic 2 plans to support 1 project with a total fund of 30 million yuan).

Total of proposed support funds: 60 million yuan.

1.5 China-EU Intergovernmental Science and Technology Cooperation Project (II) General research and innovation cooperation projects of the China-EU Science and Technology Innovation Cooperation Joint Funding Mechanism

Research Directions: food, agriculture, and biotechnology and related research fields; Climate change and biodiversity and related research fields.

The number of projects to be supported: about 10 projects.

Total of proposed support funds: about 30 million yuan.

1.6 Intergovernmental scientific and technological cooperation projects between China and Finland

Field:

- (1) the field of intelligent green energy
- (2) Smart green travel
- (3) the field of intelligent green industry
- (4) Health and aging science and technology.

Number of projects to be supported: no more than 15.

Total proposed support funds: 60 million yuan.

Other requirements:

- (1) The project participants shall include at least one Chinese unit and one Finnish unit.

(Finland requires the enterprise to take the lead; for other requirements, please refer to Finland's guide), and submit the application materials to the domestic project solicitation department respectively, and the unilateral application is invalid.

(2) Encourage Industry-University-Research to cooperate and encourage a number of enterprises to jointly declare.

(3) The Chinese enterprises participating in the project shall provide at least the same amount as the government funding.

The matching capital contribution (see Finland's guide for relevant requirements).

(4) The partners of China and Finland should complement each other's advantages, be equal and mutually beneficial, and all parties to the project should invest.

The input power should be basically balanced.

(5) The partners of China and Finland shall specify the responsibilities of all parties involved in the cooperation and

Division of labor, and sign a clear intellectual property agreement.

(6) In principle, the implementation period of the project shall not exceed 3 years, and the personnel of both parties in the project are encouraged.

Cooperation and communication.

(7) The reporting units of China and Finland should fill in and submit the bilateral cooperation form at the same time, as shown in

Link: https://service.most.gov.cn/kjjh_tztg_all/zn/20211020.html.

(8) Finnish Guide Website: <https://www.businessfinland.fi/>

1.7 China-Austrian Intergovernmental Industry-University-Research Cooperation Project

Field:

1. Green buildings and building energy efficiency.

2. About carbon neutrality, circular economy (including manufacturing) and circular capital in urban environment

Sustainable urban technology of source management.

3. Sustainable transportation in the context of urban environment.

Number of projects to be supported: about 4.

Total funding to be supported: 10 million yuan.

Other requirements:

(1) Encourage enterprises and scientific research units to jointly declare; There is at least one enterprise in the Chinese reporting unit, and the enterprise should provide matching capital contribution at least equal to the government subsidy it receives; There is at least one enterprise in the Austrian reporting unit, and the corresponding funds are matched according to Austrian requirements (see Austrian guide); On this basis, other scientific research institutions are welcome to declare jointly.

(2) The partners of China and Austria should cooperate on the basis of equality and mutual benefit, and the investment and workload of both sides should be basically balanced.

(3) Chinese and Austrian partners must sign a clear intellectual property agreement before applying.

(4) In principle, the implementation period of the project shall not exceed 3 years, and personnel exchanges and cooperation between China and Austria are encouraged and arranged in the project.

(5) Both parties to the project cooperation shall submit application materials to the project solicitation department of their own country, and the unilaterally declared project is invalid; The application contents of both parties should be consistent; The competent department of Austria is the Austrian Federal Ministry of Climate Protection, Environment, Energy, Transport, Innovation and Technology. The contact person is Anita Hipfinger, and the email address is Anita.Hipfinger@ffg.at.

1.8 Intergovernmental scientific and technological cooperation projects between China and Germany

Field: Hydrogen energy and fuel cell vehicle.

Number of projects to be supported: 5.

Total funding to be supported: 20 million yuan.

Other requirements:

(1) The above-mentioned 1 to 3 are three detailed fields and their corresponding research contents. Each submitted project should select one direction for research, and the project research contents should cover all the research contents in that direction.

(2) In order to encourage the combination of Industry-University-Research and China, the Sino-German cooperation project adopts the "2+2" cooperation mode, that is, both China and Germany have at least one scientific research institution and one enterprise, and in principle, the enterprise should provide matching capital at least equal to the government subsidy it receives.

(3) Sino-German cooperative units shall sign the agreement or letter of intent and other project cooperation documents within the validity period, and the participating units of both sides shall specify their contribution, division of labor and distribution of intellectual property rights in cooperative research and development.

(4) Both parties to the project cooperation need to submit application materials to their own project solicitation departments, and the unilateral application of the project is invalid.

(5) The project implementation period is 2 ~ 3 years.

(6) German contact person: Jaqueline May Ives, email: JaquelineMay.Ives@now-gmbh.de; -gmbh.de; Adam Mutwil, email: adam.mutwil@bmvi.bund.de

1.9 Joint research project between China and Israeli governments

Field:

1. Medical research, including prevention and treatment of infectious diseases through vaccine and drug development.
2. Water technology, including seawater desalination, drinking water purification, etc.

Number of projects to be supported: 10.

Total funding to be supported: 20 million yuan.

Other requirements:

(1) Both parties to the project cooperation shall submit their declarations to the project solicitation department in their own countries.

Materials, unilaterally declared items are invalid.

(2) The project lead unit must be a scientific research institution or university in China or Israel,

Enterprises can only be project participants.

(3) The project implementation period is 2 years.

(4) Israeli contact person: Mrs. Yehudith Nathan, email address: yehudith@most.gov.il.

2.0 Joint intergovernmental research project between China and South Korea

Fields: biotechnology, information and communication, renewable energy, medical medicine,

Aerospace and climate change (adaptation).

Number of projects to be supported: 6.

Total funding to be supported: 6,000,000 yuan.

Other requirements:

(1) The two partners of the project shall submit their declarations to the project solicitation departments of their own countries.

Materials, unilaterally declared items are invalid.

(2) The project implementation period shall not exceed 3 years.

(3) Korean contact person: SangHa Woo, Korea Research Foundation, Tel: +82 2 360 5702, e-mail: woosh@nrf.re.kr

2.1 China-Korea Intergovernmental Joint Research Project on Energy Technology

Direction: clean thermoelectric technology based on fine particulate matter (particulate matter) treatment (including carbon capture, utilization and storage technology, safety of power generation facilities and gas safety), renewable Energy (including hydrogen energy and fuel cell technology).

Number of projects to be supported: 2.

Total proposed support funds: 15 million yuan.

Other requirements:

- (1) The project leading unit must be an enterprise.
- (2) The two partners of the project shall submit their declarations to the project solicitation departments of their respective countries.

Materials, unilaterally declared items are invalid.

- (3) The project implementation period shall not exceed 3 years.
- (4) Korean contact person: Taehong Sung, Energy Planning and Evaluation Institute, Tel:+82 2 3469 8435, e-mail address: thsung@ketep.re.kr

2.2 Joint intergovernmental research project between China and South Africa

Field:

1. Information and communication (artificial intelligence, big data, cloud computing, advanced manufacturing, modern mining and information and communication technologies related to the improvement of unit management capabilities);
2. Biotechnology (the application of biotechnology in modern agriculture and medical health);
3. Energy innovation (focusing on new and renewable energy);
4. Space science and technology (navigation satellite, radio astronomy, remote sensing);

5. Marine science.

Number of projects to be supported: 15.

Total support funds: 30 million yuan.

Other requirements: the project implementation period should not exceed 2 years in principle; Both partners of the project

The application materials shall be submitted to the project solicitation department in the country respectively, and the unilaterally declared project is invalid.

2.3 Flagship Project of Joint Intergovernmental Research between China and South Africa

Field: Hydrogen energy.

Number of projects to be supported: 1.

Total funding to be supported: RMB 3,000,000.

Other requirements: the project implementation period should not exceed 2 years in principle; The application materials shall be submitted to the project solicitation department in the country respectively, and the unilaterally submitted project is invalid.

2.4 Joint research project between China and Argentina

Field:

1. Research on key technologies of green and efficient modification of plant protein and development of functional products;
2. Technological innovation of food (cheese, meat, fruit, etc.) processing and postpartum impairment and development of new products;
3. Application of nano-microcapsule technology and biosynthesis technology in food field;
4. Food safety and quality evaluation: authenticity evaluation and identification technology research and quality evaluation of high value-added characteristic agricultural products.

Number of projects to be supported: 4.

Total funding to be supported: 2,000,000 yuan.

Other requirements:

(1) The project implementation period is 2 years.

(2) The project cooperation units of both parties shall submit application materials to the institutions designated by their own science and technology departments respectively, and the unilaterally declared projects are invalid; The project leader, participants, project name, research content, work plan and expected results in the application materials of both parties should be consistent.

(3) The project cooperation units of both parties shall sign a cooperation agreement to specify the implementation terms in detail, including the list of cooperation activities, the responsibilities of the project execution unit, and intellectual property regulations, etc.

(4) Encourage enterprises to participate, giving priority to supporting joint research and development in Industry-University-Research.

(5) Contact information of Argentine Ministry of Science and Technology Innovation: convocatoriasinternaciona

les@mincyt.gob.ar.

2.5 China-Russian Intergovernmental Science and Technology Cooperation Project

Fields: Information and communication technology (artificial intelligence, Internet of Things, digital technology, etc.),

Low-carbon technology (carbon capture, carbon sequestration, energy-saving technology, etc.), medicine and biotechnology (new infectious disease prevention and control technologies such as vaccine and drug research in Covid-19), new materials (nanotechnology, etc.), rational utilization of natural resources and environmental protection, agricultural technology, food science, new transportation system, modern machinery manufacturing, and marine research.

Number of projects to be supported: no more than 20.

Total proposed support funds: 60 million yuan.

Other requirements: the project implementation period shall not exceed 2 years;

Both parties to the project need to submit application materials to their own project collection departments, and the unilateral application of the project is invalid;

Russian contact: Anastasia Zadorina, Tel: +7 495 660 34 29, Email: zadorina@mniop.ru