

**Notice of the Ministry of Science and Technology on
Issuing the Application Guide for the First Batch of Projects 2021 of the ‘Inter-
governmental Science and Technology Innovation (STI) Cooperation Special Programme’
of the National Key R&D Programme¹**

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In accordance with the overall arrangements of the Reform of the National S&T Funding Programmes of the State Council (Guo Fa [2014] No. 64), and the relevant requirements laid out for the National Key R&D Programme (NKP), the Application Guide for the first batch of projects 2021 of the NKP Inter-governmental Science and Technology Innovation Cooperation Special Programme is issued. Please organise project applications based on the requirements set out in the Guidelines. Relevant issues are notified as the following.

I. Procedures of project applications

1. Applicants will submit proposals in the forms of projects in line with the research areas provided in the Guide. No tasks (or topics) to be established under projects, proposals should be submitted as projects covering all the indicators provided in the Guide. Project application entities should nominate one researcher as Principal Investigator.
2. Evaluation of proposals for NKP projects will be conducted in two stages including pre-applications and formal applications. Detailed procedures are as follows:
 - In line with relevant requirements provided in the Guide, applicants shall fill up and submit the pre-application forms via the portal of National S&T Information System. The pre-application within the limit of about 3000 characters should provide detailed explanations on the objectives and indicators of the proposed projects, brief introduction on the innovative ideas, technology roadmaps and basis of research, and attach relevant annexes as requested. The duration from the date of guide publication to the deadline of pre-application submission shall not be less than 50 days.
 - Applicant entities should sign joint application agreements with all participating entities with indication on dates of signature. Application entities should sign commitment letters of integrity with Principal Investigators. Project applicants and all participating entities should fulfil the requirements set forth in the Several Opinions on Further Strengthening Scientific Research Integrity, reinforce checks on application material, and eliminate exaggerations, misrepresentations and falsifications.
 - Recommending entities should strengthen checks on the project applications to be recommended and submit projects at their recommendation timely via the portal of National S&T Information System.
 - After receipt of project pre-applications, China S&T Exchange Centre (CSTEC) will organise administrative checks and the first round of review. No proposal defense by Principal Investigators is requested for the first round of review. Based on the results of expert review and consultation, 3 to 4 times of the number of projects to be funded will be selected for the next stage of review. Review results will be notified to those applications that fail to enter the next stage review.

¹ Unofficial translation for reference only, please refer to the website of MOST for call details:
https://service.most.gov.cn/kjih_tztg_all/20200930/3578.html

- Applicants notified by CSTECH of defense reviews shall fill up and submit full proposals via the National S&T Information System within the duration of 30 days.
- CSTECH will organise administrative checks and defense reviews for full proposals. Principal Investigators will give defense presentations through web video. Projects will be selected based on the results of expert review and consultations.

II Recommending entities

1. S&T departments and bureaus of relevant administrations of the State Council;
2. S&T administrations of provinces, autonomous regions, municipalities and cities;
3. Industrial associations transformed from industrial administrations;
4. Strategic industrial technology innovation alliances of A type listed as pilots by Ministry of Science and Technology (MOST), and pilots of S&T service alliances listed by MOST and Ministry of Finance

Recommending entities should propose application proposals within their mandates and business scope, and should be responsible for the authenticity of the recommended projects. Relevant administrations of the State Council will recommend those entities of their professional affiliates. Industrial associations and pilots of strategic industrial technology innovation alliances and alliances of S&T services will recommend their members. Provincial S&T administrations recommend entities within their administrative scope. The list of recommending entities is published at the National S&T Information System Public Service Platform.

III Application eligibility requirements

1. Lead applicants and participating entities should be research institutes, universities and enterprises registered in Chinese mainland with independent legal person status before 31 August 2019, with competent R&D capacities, solid foundation for international cooperation, and sound operational management. Government agencies cannot lead or participate in applications.

Project lead applicants, participating entities and project team members should have good integrity status, and have no records of severe research dishonesty under penalty enforcement nor relevant social credit "black list" records.

The proposal should be recommended by one recommending entity only and should not be submitted through multiple or duplicate channels.

2. Principal investigators should hold senior professional titles or PhD degrees, born after 1 January 1960, with at least 6 months of working time dedicated to the proposed projects.
3. Principal investigators should in principle be the proposers of the main research ideas and the scientists who lead practical research activities of the proposed projects. Public service staff (including those undertaking S&T programme administration functions) in central and local government agencies cannot apply for projects.
4. Principal Investigators can only submit one proposal. Principal Investigators of ongoing projects (including tasks or topics) under the National Major S&T Projects, National Key R&D Programmes and STI 2030 Major Projects cannot lead project applications. Principal Investigators of ongoing projects (excluding leaders for tasks or topics) under the National Key R&D Programmes and STI 2030 Major Projects cannot participate in project applications either.

Principal Investigators and key project team members can lead or participate in one project only under this Programme.

Projects with a central government fund budget not exceeding 4 million yuan under the Inter-governmental STI Cooperation Special Programme will not be checked for duplicate with other special programme projects (topics).

The total numbers of projects applied for and ongoing projects undertaken by Principal Investigators and key project team members under the National Major S&T Projects, National Key R&D Programmes, or STI 2030 Major Projects should not exceed two. Principal Investigators of ongoing projects (including tasks or topics) under the National Major S&T Projects, National Key R&D Programmes or STI 2030 Major Projects, should not withdraw from projects (including tasks or topics) currently undertaken due to applications for projects under the National Key R&D Programmes. In principle, during the project implementation, after withdrawal from the project team, principal investigators and key members of ongoing projects (including tasks or topics) of the National Major S&T Projects, National Key R&D Programmes, and STI 2030 Major Projects, cannot lead or participate in the applications for new projects under the National Key R&D Programmes.

Ongoing projects (including tasks or topics) with implementation durations (including those extended) until 30 June 2021 are not covered by the project number limit.

5. Members of Advisory Committee cannot apply for projects. Experts that participated in the formulation of the Special Programme implementation plan or application guide of the current year cannot apply for projects under this Special Programme.
6. Scientists of foreign nationalities recruited by Chinese mainland entities and scientists from Hong Kong, Macao and Taiwan can be Principal Investigators. Employees under full recruitment conditions should provide valid full recruitment documentation issued by the Chinese mainland employers, while employees under part-time recruitment conditions should provide valid recruitment documentation issued by both employers, which should be submitted in the pre-applications.
7. In principle, once project proposals are received, applicant entities and principal investigators cannot be changed.
8. Project cooperation content and modalities should comply with relevant laws and regulations as well as scientific research ethics rules of China and the countries (regions, international organisations) of cooperation partners. For the cooperation activities that need prior approvals, for example those involving human genetic resources or germplasm resources, application entities must fulfil relevant examination and approval procedures beforehand in accordance with relevant laws and regulations. Projects can be launched only when all necessary procedures are completed.
9. Detailed application requirements are provided in the project application guide.

Before submitting proposals, applicants can search for information on the ongoing projects (including tasks or topics) undertaken by relevant researchers in the National Major S&T Projects, National Key R&D Programmes, or STI 2030 Major Projects, via the National S&T Information System Public Services Platform so as to avoid duplicate applications.

IV Specific application methods

1. Online submission. Paperless application. Applicant entities should strictly follow the national and local epidemic prevention and control requirements, create innovative ways of work, make full use of video conferences, and online office platforms to form research teams, and minimise gatherings. Proposals should be filled up and submitted at the National S&T Information System Public Service Platform (<http://service.most.gov.cn>). CSTEC will organise administrative checks and project reviews on the basis of the application forms submitted online. Annexes requested in the submissions should be scanned and uploaded. If unable to do so due to the epidemic, applicants should provide and upload scans of explanatory notes. CSTEC shall notify the applicants to provide later taking into consideration of the situation.

Online submission of pre-applications will be open from 12 October 08:00 to 27 November 16:00 2020. Applicants that pass the first round reviews will fill up full proposals as per request and submit online via the National S&T Information System. Specific timing and relevant requirements will be notified separately.

2. Recommending organisations are requested to confirm recommended projects and upload scans of the recommendation letters with official stamps via the National S&T Information System before 4 December 16:00 2020.
3. For technical inquires:
010-58882999 (operator); program@istic.ac.cn
4. Inquiries on Inter-governmental STI Cooperation Programme: 010-68598010; zfy@cstec.org.cn

Annex:

Application Guide for the First Batch of Projects 2021 of the Inter-governmental Science and Technology Innovation (STI) Cooperation Special Programme (Administrative Check Requirements)

Annex:**Application Guide for the First Batch of Projects 2021 of the Inter-governmental Science and Technology Innovation (STI) Cooperation Special Programme****A Summary for Reference²**

The list below is a summary of the projects called under the application guidelines, with indication of the countries / regions / international organisations / multilateral cooperation mechanisms, areas, number of projects to be funded and budget to be allocated. The call will support S&T cooperation with 18 countries, regions, international organisations and multilateral cooperation mechanisms including the EU. About 255 projects will be supported with a total national allocated budget of RMB 750 million, duration per project being 2 to 3 years.

Cooperation with	Areas	Number of projects to be funded	Budget to be allocated (RMB)
US	Joint energy research centre cooperation project: Improve energy efficiency of medium to heavy-duty trucks	1	45 million
New Zealand	S&T cooperation projects: Food science, health and biomedicine, environment science	3	5 million
Israel	Joint R&D of industrial technologies: No limit. Encourage joint R&D of technologies in COVID-19 vaccines, medicines, public health and epidemic prevention and control	10	20 million
	Joint research: 1. Medical instruments; 2. Research on the adaptability of agriculture to climate change	10	20 million
Japan	Inter-governmental S&T joint committee: New materials, information and communication, life science (including biotechnology)	30	90 million
	MOST-JICA Joint research projects: Environment (including energy), medical treatment, disaster reduction and prevention	10	30 million
ROK	Large joint research projects by industries, universities and research institutes: biotechnology, information and communication	2	18 million
	Joint research projects: biotechnology, information and communication, renewable energies, medical treatment and medicine, aerospace, climate change (adaptability)	6	6 million
	Joint research projects on industrial application technologies: future display technology, electric/hydrogen vehicles, smart home, next-generation semi-conductor, high-tech materials, artificial intelligence, big data, biological health	5	12.5 million
	Joint research projects on energy technology: clean thermoelectric technology based on fine particles (particulates) (including carbon capture, utilisation and storage technology; safety of power generation	2	15 million

² Unofficial translation summary for reference only, please refer to the website of MOST for details of the call notice and application guide:

https://service.most.gov.cn/kjih_tztg_all/20200930/3578.html

	facilities; gas safety), renewable energies (including hydrogen and fuel cell technology)		
Mongolia	Joint research projects: agriculture and animal husbandry, logistics system and cross-border e-commerce, water resource environmental protection, comprehensive utilisation of mineral resources, biomedicine	12	18 million
South Africa	Joint research projects: 1. Intelligent manufacturing; 2. Educational technology (application of ICT in education) 3. Clean energy 4. Transport	15	30 million
	Joint research flagship projects: Traditional medicine	1	3 million
Egypt	Joint research projects 1. Renewable energy 2. Water 3. Food and agriculture 4. Health 5. Information and communication	10	20 million
Arabian countries	Joint laboratory cooperation projects: Modern agriculture, information and communication, population health, artificial intelligence, advanced manufacturing, energy, transport, environment, resources, ocean, new materials, aerospace, disaster prevention and reduction	10	35 million
Singapore	Join research projects: Joint R&D of vaccines, therapies, and detection and diagnostic technologies for infectious diseases (including novel coronavirus pneumonia)	4	10 million
EU ³	Research and innovation cooperation projects under the co-funding mechanism (CFM): 1. Food, agriculture and biotechnologies 2. Environment (including but not limited to sustainable urbanisation, climate change etc.) 3. Transport 4. Aviation 5. New-generation information network 6. intelligent and green manufacturing 7. safe, clean and efficient modern energy 8. advanced, effective, safe and convenient health technology 9. marine equipment 10. space 11. new materials 12. large scientific research infrastructures 13. public security	30	90 million
Spain	S&T cooperation projects: 1. Smart cities 2. Production technology, including intelligent manufacturing 3. Biomedicine and health technology, including medical equipment, biotechnology applications or pharmaceutical technology that can solve global epidemics 4. Clean technology, including technologies related to environment, renewable energy, or water treatment	15	45 million

³ Please see further details in the following section

	<ul style="list-style-type: none"> 5. Modern agriculture, including fishery technology, food processing and food safety 6. Advanced materials 		
Belgium and South Africa	<p>Joint call for research cooperation projects: The interaction of biodiversity, climate change and health</p>	4	5 million
Belgium (Wallonia)	<p>S&T cooperation projects:</p> <ul style="list-style-type: none"> 1. Biotechnology (with a focus on research cooperation in the fields related to the fight against the novel coronavirus pneumonia epidemic) 2. ICT and microelectronics 3. Aerospace 4. Material science and nanotechnology 5. Agricultural science 	10	10 million
Austria	<p>Joint research projects:</p> <ul style="list-style-type: none"> 1. Medicine and health research (including traditional Chinese medicine) (with a focus on research cooperation in the fields related to the fight against the novel coronavirus pneumonia epidemic) 2. Quantum information 3. Information and communication technology 4. Intelligent manufacturing 5. Renewable energy and low-carbon technology 6. Food, agriculture and biotechnologies 7. Environment, smart cities and sustainable urbanisation 	15	30 million
Finland	<p>S&T cooperation projects:</p> <ul style="list-style-type: none"> 1. Energy, including but not limited to smart grid, energy clean production technology, highly efficient production process of resources and energy 2. Health, including but not limited to data and analysis, epidemiology and pandemic related research, life sciences 3. Smart travel, including but not limited to travel service (Maas), transport solutions in smart cities, transport system integration in smart cities 4. Sustainable manufacturing, including but not limited to process optimisation method and production technology, energy efficiency measurement and evaluation methods, new service-oriented business model and sustainable manufacturing ecology based on the full life cycle of the product 	<p>5 (energy); 10 (health, smart travel, sustainable manufacturing)</p>	<p>25 million (energy); 30 million (health, smart travel, sustainable manufacturing)</p>
Germany	<p>Smart manufacturing S&T cooperation projects:</p> <ul style="list-style-type: none"> 1. Smart product service and support system for intelligent manufacturing (industry4.0) 2. Research on multinational interoperability rules for network collaborative manufacturing 3. Energy and resource efficiency improvement for the sustainable development of the manufacturing industry 	4	32 million
	<p>Electric vehicle cooperation projects:</p> <ul style="list-style-type: none"> 1. Research on the safety and economy of pure electric vehicles and key components based on operating data 2. Research on the development strategies and specifications of electric vehicles (pure electric 	5 to 8	25 million

	and hydrogen fuel cells) under large-scale applications 3. Research on the construction of fuel cell vehicles and hydrogen refuelling stations		
	Antibiotic resistance S&T cooperation projects: The generation, spread, control and reduction of antibiotic resistance	4	16 million
Hungary	Joint research projects: 1. Public health (including infectious diseases) 2. Neuroscience 3. Artificial intelligence 4. Physics	4	6 million
GEO	Earth observation data service, comprehensive earth observation in Asia and Oceania, benchmarking of key tasks in GEO's ten-year strategic planning, research on comprehensive application of earth observation	15	60 million

China-EU STI cooperation under the co-funding mechanism (CFM)

Cooperation agreement: Administrative Arrangement between the Directorate General for Research and Innovation and the Ministry of Science and Technology of China on a Co-funding Mechanism for the period 2018-2020 to support Collaborative Research and Innovation Projects under Joint Flagship Initiatives and other areas

Areas:

1. Agriculture, food and biotechnology
2. Environment (including but not limited to sustainable urbanisation, climate change etc.)
3. Transport
4. Aviation
5. New generation information network
5G communication technology, optical communication technology, CPU, Internet-of-things, virtual reality technology, quantum computing, big data
6. Intelligent and green manufacturing
High-end numerical control machine tools and intelligent robot, electric power equipment, next generation semiconductor, additive manufacturing, new energy equipment, micro-nano manufacturing, gas turbine
7. Safe, clean and efficient energy
Clean coal utilisation, marine wind power, smart grid, hydrogen fuel cell technology, nuclear energy utilisation and nuclear decommissioning technology
8. Advanced, effective, safe and convenient health technologies
Bio-pharmaceuticals, precision medicine, high performance medical devices, prevention and treatment of major infectious diseases (including S&T response to Covid-19), antibiotic resistance, regenerative medicine, medical big data, medical robots, aging services technology, traditional Chinese medicines
9. Marine equipment
Marine engineering equipment and high-tech ships, deep-sea oil and gas, natural gas hydrate, deep-sea operation
10. Space

Space equipment, space science and technology, satellite application technology (small satellite and load technology), remote sensing (deep-space exploration, satellite imaging, atmospheric observation, lunar-based observation)

11. New materials

Graphene technology, nanomaterials, high performance structure and composite materials, advanced semiconductor materials, advanced light alloy materials, advanced functional and intelligent materials, catalytic materials

12. Large scientific research facilities

13. Public security:

Disaster warning and treatment, food and pharmaceutical safety testing

Number of projects to be funded: 30

Fund to be allocated: RMB 90 million

Other requirements

1. EU-China Co-Funding Mechanism for STI cooperation aims to support Chinese participation in Horizon 2020 in the priority areas;
2. Applicants should have submitted joint applications with their European partners under the EU's Horizon 2020 Work Programmes 2018, 2019 and 2020. Projects under other annual Work Programmes are not covered by this call for proposals;
3. Each individual Horizon 2020 project should correspond to an individual Chinese project application. Several Chinese participants in the same Horizon 2020 project should designate one lead applicant through consultations to submit one Chinese proposal. Chinese applicants should be full partners in Horizon 2020 projects, i.e. listed in the Horizon 2020 project "participants";
4. Chinese and European participants should conduct mutually beneficial scientific research and innovation collaboration that complements their advantages;
5. Chinese applicants should submit a copy of their Horizon 2020 project proposal in English and the Chinese translation of project budget and the research content by the Chinese participants, and should ensure that the Horizon 2020 project overall budget includes the budget of Chinese participants, the budget included in the proposals submitted to MOST by the Chinese participants shall not exceed that included in the Horizon 2020 project, and the research content should include the part by the Chinese participants in the English proposals;
6. The project implementation period should in general be two to three years;
7. Please refer to Work Programmes 2018-2020 in specific areas for detailed EU project arrangement: <https://ec.europa.eu/programmes/horizon2020/en/what-work-programme>;

The overall arrangement of the EU-China co-funding mechanism for research and innovation: http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_china_en.pdf;

The Frequently Asked Questions in relation to the EU-China co-funding mechanism for research and innovation:

https://eeas.europa.eu/sites/eeas/files/questions_answers_on_eu-china_co-funding_mechanism_for_research_and_innovation_cooperation_0.pdf

EU contact: Delegation-China-Scitech@eeas.europa.eu

Administrative Check Requirements⁴

Project proposals should meet the following administrative check requirements.

1. Recommendation procedures and application forms
 - 1) Recommendation letters should be issued by the recommending entities defined in the guidelines in due time as indicated.
 - 2) The proposal should be recommended by one recommending entity and should not be submitted through multiple or duplicate channels.
 - 3) The content in project proposals (including pre-applications and full proposals, same for the following) should be in line with the areas provided in the guidelines.
 - 4) Project proposals and annexes should be filled up in complete by following the template provided.
2. Eligibility conditions of applicants
 - 1) Principal investigators should be born after 1 January 1960 and should hold senior professional titles or PhD degrees.
 - 2) Scientists of foreign nationalities recruited by Chinese mainland entities and scientists from Hong Kong, Macao and Taiwan can be Principal Investigators. Employees under full recruitment conditions should provide valid full recruitment documentations issued by Chinese mainland employers, while employees under part-time recruitment conditions should provide valid recruitment documentations issued by both employers, which should be submitted in project pre-applications.
 - 3) Principal Investigators can only submit for one project. Principal Investigators of ongoing projects (including tasks or topics) under the National Major S&T Projects, National Key R&D Programmes and STI 2030 Major Projects cannot lead project applications. Principal Investigators of ongoing projects (excluding leaders of tasks or topics) under the National Key R&D Programmes and STI 2030 Major Projects cannot participate in project applications either. Principal Investigator and key project members can lead or participate in one project only under this Programme.
 - 4) Members of Advisory Committee cannot apply for projects. Experts that participated in the formulation of Special Programme implementation plans or application guide of the current year cannot apply for projects under the Programme.
 - 5) Good integrity status, no records of severe research dishonesty under penalty enforcement nor relevant social credit "black list" records.

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https://service.most.gov.cn/kjih_tztg_all/20200930/3578.html

- 6) Public service staff (including those undertaking S&T programme administration functions) in central and local government agencies cannot apply for projects.
3. Eligibility conditions of application entities
 - 1) Legal person entities such as research institutes, universities and enterprises registered in Chinese mainland. Government agencies cannot lead or participate in applications.
 - 2) The time of registration should be prior to 31 August 2019.
 - 3) Good integrity status, no records of severe research dishonesty under penalty enforcement nor relevant social credit "black list" records.
 4. Please refer to other specific requirements on other administrative check details defined in this Programme for the specific countries (regions, international organisations).

Persons in charge of administrative checks: Yu Sha, Xin Bingqing