Notice of the Ministry of Science and Technology on Application Guidelines for the 2nd Batch of Projects for year 2019 under the "Intergovernmental Science and Technology Innovation (STI) Cooperation Special Programme" of National Key R&D Programme¹

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 relevant requirements laid out for the National Key R&D Programme (NKP), the Application Guidelines for the 2nd batch of projects for year 2019 are hereby published under the NKP Inter-governmental Science and Technology Innovation Cooperation Special Programme. 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 Guidelines. No tasks (or topics) to be established within projects, proposals should be submitted as projects covering all the indicators provided in the Guidelines. Project application entities should nominate one researcher as Principal Investigator.
- 2. Evaluation of proposals for NKP projects will be conducted in two stages including preapplications and formal applications. Detailed procedures are as follows:
 - In line with relevant requirements provided in the Guidelines, 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 guideline 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 applications, and eliminate exaggerations, inaccuracies 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 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 external 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.
 - Applicants notified by CSTEC of defense reviews shall fill up and submit full proposals via the National S&T Information System within the duration of 30 days.

¹ Unofficial translation for reference only, please refer to the website of MOST for call details: <u>http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2019/201909/t20190930</u> 149079.htm

 CSTEC will organise administrative checks and defense reviews for full proposals. Principal Investigators of project applications will give defense presentations through web video. Projects will be selected based on the results of expert review taking into account external 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 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, strategic industrial technology innovation alliances and pilot alliances of S&T services will recommend their member entities. 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 30 September 2018, with competent R&D capacities, solid foundation for international cooperation, and sound operational management. State organs 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 punishment 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 1959, with at least 6 months of working time dedicated to proposed projects.
- 3. Principal investigators should in principle be the proposers of the main research ideas of the proposed projects and the scientists who lead practical research activities. Public service staff (including those undertaking S&T programme administration functions) in central and local state organs cannot apply for projects.
- 4. Principal Investigators can only submit for one project. Principal Investigators of ongoing projects (including tasks or topics) under the National Key Basic Research Programme (973 Programme, including Large Science Projects), National High Tech R&D Programme (863 Programme), National S&T Support Programme, National International S&T Cooperation Programme, National Large Science Facility Project, and sectorial non-profit research projects (all referred to as "Programmes prior to reform") as well as 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.

The total numbers of projects applied for and ongoing projects undertaken by project backbone participants under the Programmes prior to reform, 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 Programmes prior to reform, 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 period, principal investigators and project backbone participants of ongoing projects (including tasks or topics) of the National key R&D Programmes cannot lead or participate in the applications for new projects under the National Key R&D Programmes after withdrawing from the project R&D teams.

Ongoing projects (including tasks or topics) with implementation durations (including those renewed) until 30 June 2020 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 plans or application guidelines of the current year cannot apply for projects under the 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 Chinese mainland employers, while employees under non-full recruitment conditions should provide valid recruitment documentation issued by both employers, which should be submitted together with the hard copies of project pre-applications.
- 7. In principle, once project proposals are received, applicant entities and principal investigators cannot be changed.
- 8. Detailed application requirements are provided in the project application guidelines.

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

IV Specific application methods

1. Online submission. Applicant entities are requested to fill up and submit applications online via the National S&T Information System Public Service Platform. CSTEC will organise administrative checks and project reviews on the basis of the application forms submitted online. Templates of pre-application forms and annexes can be downloaded from the National S&T Information System Public Service Platform.

Online submission of pre-applications will be open from 28 October 08:00 to 27 November 2019 16:00. Applicants that pass 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.

National S&T Information System Public Service Platform: <u>http://service.most.gov.cn</u>

For technical assistance: Tel: 010-58882999; Email: program@istic.ac.cn

2. Recommending organisation: Recommending entities are requested to send the recommendation letters with official stamps (in two hard copies) and the lists of recommended projects (in two hard copies) to the Institute of Scientific and Technical Information of China by postal services before 29 November 2019 (date of delivery prevails). List of recommended projects should be printed directly from the system.

Mail address: Room 170, Institute of Scientific and Technical Information of China, No. 15 Fuxing Road, Haidian District, Beijing 100038

Tel: 010. 58882171

3. Inquiries on documentation delivery: Applicants are required to send pre-application forms with official stamps (in two hard copies) to CSTEC by postal service before 29 November 2019 (date of delivery prevails). Pre-application forms should be printed directly from the system.

Mail address: Room 600, No. 54 Sanlihe Road, Xicheng District, Beijing 100045 Tel: 010-68598010

Annex:

Application Guidelines for the 2nd Batch of Projects for year 2019 under the "Intergovernmental Science and Technology Innovation (STI) Cooperation Special Programme" of the National Key R&D Programme Annex:

Application Guidelines for the 2nd Batch of Projects for year 2019 under the "Inter-governmental Science and Technology Innovation (STI) Cooperation Special Programme" of National Key R&D 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, areas, number of projects to be funded and budget to be allocated as provided in the Application Guidelines. The second call of 2019 will support S&T cooperation with 25 countries, regions, international organisations and multilateral cooperation mechanisms. About 317 projects will be supported with a total national allocated budget of RMB 770 million, duration per project being 2 to 3 years.

Cooperation with	Areas	Number of projects to be funded	Budget to be allocated (RMB)
US	Agriculture; environmental sciences; pharmaceuticals and health; energy; transport; life sciences; applied physics and earth sciences	65	180 million
New Zealand	Food sciences; health and biomedical sciences; environmental sciences	3	5 million
Canada	Agricultural food and biological products; health and life sciences; clean technology; environmental technology and plastic contamination	5	5.5 million
Canada (Québec)	Environment and sustainable development; health; ICT, in particular green ICT and health ICT	6	8 million
ROK	Energy technology; industrial applied technology	7	27.5 million
Mongolia	Agriculture and animal husbandry; logistics and cross-border e-commerce; water resources and environmental protection; comprehensive utilisation of mineral resources; biomedicine	10	15 million
Egypt	Renewable energies; water; food and agriculture; health; ICT	10	13 million
South Africa	Joint research projects: New materials and advanced manufacturing technology; ICT and artificial intelligence; environment and sustainable management of natural resources, green technology; health and agro-biotechnology; traditional medicine; mining and metallurgy; space science and astronomy	15	22.5 million
	Joint research flagship project: biotechnology	1	3 million
Japan	New materials; ICT; Life sciences (including biotechnology)	30	90 million
Japan (JICA)	Environment (including energy); medical care	10	30 million
Thailand	Agriculture; STI policies; energy; public health; ICT; sustainable development issues of common concern	10	10 million
Vietnam	Biotechnology; climate change; advanced materials	4	8 million
Israel	No limit	10	20 million
EU	New generation information network; intelligent and green manufacturing; safe, clean and efficient energy; advanced, effective, safe and convenient health technologies; marine	20	60 million

² Unofficial translation summary based on the Application Guidelines for reference only, please refer to the website of MOST for details of the call notice and application guidelines: <u>http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2019/201909/t20190930_149079.htm</u>

	equipment; space; new materials; large scientific research infrastructures; public security		
Spain	Advanced materials	6	18 million
Austria	High-building energy efficiency; waste disposal; water treatment	3	10 million
Germany	Climate change; impact of climate change in sensitive areas; climate change/adaptation to extreme incidents and air pollution prevention and treatment under climate change	5	15 million
UK	Smart farms STI cooperation projects	10	50 million
Finland	IoT factories; pharmaceutical science; smart and flexible energy; intelligent transport;	10	20 million
Poland	ICT; energy; environment; material sciences	6-7	4 million per project
Bulgaria	Sustainable agriculture, food and biotechnology; ICT; health and biomedicine	3	1 million per project
Serbia	ICT; agriculture; medical science and pharmaceuticals; energy; food; environment technology; cross disciplines of the above six areas	6	1.4 million per project
Slovenia	Biomedicine; Material technology; Karst research	3	1 million per project
Uzbekistan	Cell and molecular biology; medical genetics and ecophysiology; energy efficiency automation system; materials and construction materials; food and food processing technique; renewable energies; geology; astronomy; pharmaceutics	20	13 million
Macao	Electronics information; biomedicine; energy saving and environmental protection; new materials; space and aviation; marine science	10	16 million
Taiwan	R&D on technologies for structural quake proof, resistance and reduction	5-10	10 million
GEO	Earth observation data services and open sharing; earth observation data technology; earth observation in Asia and Oceania regions (AOGEO); comprehensive application research on earth observation	15	80 million

Research and innovation cooperation projects under the EU-China CFM

Areas:

- New generation information network 5G communication technology, optical communication technology, CPU technology, Internet-ofthings technology, virtual reality technology, quantum computing, big data technology
- 2. 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
- 3. Safe, clean and efficient energy Clean coal utilisation technology, marine wind power technology, smart grid technology, hydrogen fuel cell technology, nuclear energy utilisation and nuclear decommissioning technology
- 4. Advanced, effective, safe and convenient health technologies Bio-pharmaceuticals, precision medicine, high performance medical devices, prevention and treatment of major infectious diseases, antibiotic resistance, regenerative medicine, medical big data, medical robots, aging services technology, traditional Chinese medicines
- 5. Marine equipment Marine engineering equipment and high-tech ships, deep-sea oil and gas, natural gas hydrates, deep-sea operation
- 6. 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)

7. 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

- 8. Large scientific research facilities
- 9. Public security Disaster warning and treatment, food and pharmaceutical safety inspection

Number of projects to be funded: around 20 Fund to be allocated: RMB 60 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 Programme 2019. Projects under other annual Work Programmes are not covered by this call for proposals;

Unofficial translation for reference

- 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. If the Chinese participants are enterprises, the participating Chinese enterprises should provide matching funds at an amount at least equivalent to the government funds to be allocated.
- 6. 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;
- 7. The project implementation period should in principal not exceed three years;
- 8. Please refer to Work Programmes 2018-2020 in specific areas for detailed EU project arrangement: <u>https://ec.europa.eu/programmes/horizon2020/en/what-work-programme;</u> The corresponding Horizon 2020 calls for proposals for the above nine priority areas can be referred at: <u>https://cloud.189.cn/t/RJVzEbNfqeie</u> (the list is for reference only, areas other than those listed can also apply if in line with the nine areas mentioned above); The overall arrangement of the EU-China co-funding mechanism for research and innovation: <u>http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_china_en.pdf</u>; The Frequently Asked Questions in relation to the EU-China co-funding mechanism for research and innovation: <u>http://ec.europa.eu/research/iscp/pdf/most_faq_cfm_en.pdf</u>; EU contact: Delegation-China-Scitech@eeas. europa.eu

Application Guidelines for the 2nd Batch of Projects for year 2019 under the "Inter-governmental Science and Technology Innovation (STI) Cooperation Special Programme" of National Key R&D Programme

Administrative Check Requirements³

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 of an application entity 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 1959 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 nonfull recruitment conditions should provide valid recruitment documentations issued by both employers, which should be submitted together with the hard copies of project proposals.
 - 3) Principal Investigators can only submit for one project. Principal Investigators of ongoing projects (including tasks or topics) under the National Key Basic Research Programme (973 Programme, including Large Science Projects), National High Tech R&D Programme (863 Programme), National S&T Support Programme, National International S&T Cooperation Programme, National Large Science Facility Project, and sectorial non-profit research projects (all referred to as "Programmes prior to reform") as well as National Major S&T Projects, National Key R&D Programmes and STI 2030 Major Projects cannot lead project applications.

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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.

- 4) Members of Advisory Committee cannot apply for projects. Experts that participated in the formulation of Special Programme implementation plans or application guidelines of the current year cannot apply for projects under the Special Programme.
- 5) Good integrity status, no records of severe research dishonesty under punishment nor relevant social credit "black list" records.
- 6) Public service staff (including those undertaking S&T programme administration functions) in central and local state organs 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. State organs cannot lead or participate in applications.
 - 2) The time of registration should be prior to 30 September 2018.
 - 3) Good integrity status, no records of severe research dishonesty under punishment nor relevant social credit "black list" records.
- 4. Other administrative check requirements defined by this Special Programme should be referred to in the specific guidelines for relevant countries (regions, international organisations).

Persons in charge of administrative checks: Lin Xiyan, Xin Bingqing