

**Federal Ministry of Education and Research of the Federal Republic of Germany
and Korean Ministry of Trade, Industry and Energy**

Call for Proposals 2018

**German – Korean Academia-Industry International Collaboration Program
on Robotics (2+2)**

Terms and Conditions

Proposal Submission Period:

Thursday 1, February 2018 to Monday 30, April 2018

1 Aim and purpose of funding

The Federal Ministry of Education and Research (BMBF) and the Ministry of Trade, Industry and Energy are supporting joint projects through strategic project support measures in order to promote cooperation between the Federal Republic of Germany and the Republic of Korea. The measure is aimed at promoting joint research projects of mutual interest and thus contributing to intensified scientific and technological cooperation (STC) between Germany and Korea.

Specifically, funding will be provided for cooperation between representatives of German and Korean industry and science in the form of “2+2 projects” in the fields of Service Robotics/Robotics. “2+2 projects” is deemed to mean research and development (R&D) projects involving at least one German and one Korean research-performing industrial partner and at least one German and one Korean research institution. The funding is intended to create the basis for a lasting R&D innovation partnership.

2 Object of funding

Funding will be provided for research projects in the fields of robotics that involve international cooperation between Germany and Korea and address one or more of the following priority areas in line with the funding purpose described above:

- Nursing robot, Elderly care robot
- Robot therapist
- Social robot with artificial emotion and intelligence
- Collaborative robot (including disaster service robots)

The projects will be expected to have great practical relevance and to produce insights and exploitable research results which lead to new technologies, products and/or services. Upon completion, the projects should attain a technology readiness level (TRL) of 4 to 7.

TRL 1: Observation and description of the functional principle

TRL 2: Description of the application of a technology

TRL 3: Evidence of a technology's capacity to function (proof of concept)

TRL 4: Experimental set-up in a laboratory

TRL 5: Experimental set-up in the relevant environment

TRL 6: Prototype in the relevant environment

TRL 7: Prototype in the operational environment

TRL 8: Qualified system with evidence of the capacity to function in the field of application

TRL 9: Qualified system with evidence of the successful application

The benefits for Germany and Korea should be clearly identifiable and strategies for implementing the research findings in industry and society should be set out.

3 Funding recipients

German side:

Applications may be submitted by universities, non-university research institutions and other institutions contributing to research as well as commercial companies which have a plant or branch in Germany at the time of payment of the grant – particularly small and medium-sized enterprises (SMEs) as defined by the European Commission at http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm – which fulfil the funding purpose and requirements. Research institutions which receive joint basic funding from the Federal Government and/or the *Länder* can only be granted project funding supplementary to their basic funding to cover additional project-related expenditure or costs under certain preconditions.

Korean side:

Korean company, university, research institute, and medical institution (refer to Article 2 of the 「Common Operational Regulation for Industrial Technology Innovation Programs」 for the definition of these terms) are eligible to apply. Korean companies in a consortium, whether as lead organisation or participating organisation, must be one that has been in operation for one year or more since its establishment (based on Business Registration Certificate) and that has a company-affiliated research institute as of the deadline of submission.

4 Special prerequisites for funding

A prerequisite for funding is that projects include the participation of at least one German commercial company/industrial partner with a German research institution/university as well as one Korean industrial partner with a Korean research institution/university ("2+2 projects").

Projects proposed for funding under this call should document their potential for longer-term sustainable cooperation between Germany and Korea.

Additional information for collaborative projects:

The terms of cooperation between the partners in a collaborative project must be set out in a written cooperation agreement. Before a funding decision on a collaborative project is taken, the cooperation partners must prove that they have reached a basic agreement.

Funding recipients are obliged to participate in possible evaluation measures and to provide any information needed to assess the success of the funding measure.

5 Type, scope and rates of funding

German side

Funding will be awarded as project grants usually amounting to 150,000 Euros per collaborative project and year usually for a maximum period of 36 months.

The basis for calculating the grants for universities, non-university research institutions and similar institutions is the eligible project-related expenditure (in the case of the Helmholtz Centres and the Fraunhofer Gesellschaft [FhG] the eligible project-related costs) which can be individually funded up to a maximum of 100 percent.

In the case of research projects at higher education institutions (public and private) and teaching hospitals (irrespective of the legal form), a flat-rate grant amounting to 20% of total expenditure will be awarded in addition to the eligible expenditure.

Grants for commercial companies will be calculated on the basis of the eligible project-related costs, up to 50% of which can, as a rule, be covered by government grants, depending on the project's relevance to application. The calculation of the respective rate of funding must take account of the provisions governing de minimis aid and the General Block Exemption Regulation (GBER). The GBER allows various additional payments for small and medium-sized enterprises (SMEs) which could in some circumstances lead to a higher rate of funding.

Korean side:

Funding will be awarded as project grants usually amounting to 200 million KRW per collaborative project and per year usually for a maximum period of 36 months.

Project funding is comprised of government contributions and civilian dues (cash and in-kind). The amount of government contributions will vary depending on the type of executing organizations and project in accordance with Article 24 (Funding criteria) and Article 25

(Civilian dues) of the Common Operational Regulations for the Industrial Technology Innovation Programs.

A party that participates in a project shall carry out its project using the government contributions allocated to it, and for-profit organizations shall individual bear the cash portion of civilian dues.

Classification	Share of government contributions in executing organization's project budget	Share of cash in executing organization's civilian dues
Large company	33% or less	60% or more
Mid-tier company	50% or less	50% or more
SME	67% or less	40% or more
Other	100% or less	To be borne if necessary

5.3 Form of financing

Funding will be awarded in the form of non-repayable grants.

5.4 Expenditure/costs eligible for funding

Partners should follow their national relevant regulations.

6 Other terms and conditions

Funding recipients are expected to ensure open access if they publish the results of the research project in a scientific journal.

This can be done through publication in an electronic journal which is accessible to the public free of charge.

If the results are initially published in a way which does not provide the public with free electronic access, the article must be made publicly available free of charge by electronic means following an embargo period where appropriate (secondary publication). Embargo periods for secondary publication must not exceed 12 months.

The BMBF and the MOTIE expressly welcome secondary open access publication of scientific monographs resulting from the project.

7-Procedure

7.1 Involvement of a project management agency, application documents, other documents and use of the electronic application system

The BMBF has currently entrusted the following project management organization with implementing the funding measure:

DLR Project Management Agency
European and International Cooperation
Heinrich-Konen-Strasse 1
53227 Bonn, Germany
Web: <http://www.internationales-buero.de>

Contact persons:

Contact for scientific questions:

Dr. Sabine Puch
Phone: +49 228/38 21-1423
Fax: +49 228/38 21-1444
E-mail: Sabine.Puch@dlr.de

Contact for administrative questions:

Birgit Ehrenberg
Phone: +49 228/38 21-1471
Fax: +49 228/38 21-1444
E-mail: Birgit.Ehrenberg@dlr.de

The Korean partners must submit corresponding applications to the Korea Institute for Advancement of Technology (KIAT), Korea. (KIAT). A similar Korean call will be announced by KIAT with the same submission deadline.

Contact for Korean researchers:

Somie Yoon

Korea Institute for Advancement of Technology (KIAT)
Global Strategy Planning Team / Principal Researcher
135-513, 5th Fl., Korea Technology Center 305
Teheranno Kangnam-Gu, Korea
Phone: +82 (0)2 6009 3181
Email : ssomie81@kiat.or.kr
Website: www.kiat.or.kr

Applicants are recommended to contact the project management agency for advice on applications. The agency will provide further information and details.

7.2. Submission and selection of project outlines

Germany

The application procedure takes place in two phases.

Applicants must use the 'PT-Outline' electronic tool for drafting project outlines and the 'easy-Online' electronic application system for drafting formal proposals.

In the first phase, project outlines must be submitted to the project management agency in written and/or electronic form

by 30 April 2018 at the latest using the PT-Outline (project outlining) tool (<https://secure.pt-dlr.de/ptoutline/app/2u2KOR2017>).

It may not be possible to consider project outlines received after the above date.

Korea

Every Korean company should submit full application for funding in Korean language when they file all of documents. In Korea, the participants will have to submit a formal national application through KIAT Project Advanced Smart System (<https://www.k-pass.kr>) by the deadline above.

Partners will be instructed in detail by DLR and KIAT how to apply for funding.