

## Germany: Call for Proposals

### „International Disaster and Risk Management – IKARIM“

The German Federal Ministry of Education and Research (BMBF) has announced the IKARIM - Call for Proposals within the "Research for civil security 2012-2017" framework programme on October 6<sup>th</sup>, 2017

#### Background

Natural phenomena such as earthquakes, floods, landslides, storms, droughts, but also technical hazards threaten millions of people and cause tremendous economic damage all over the world. At the international level, agreements have been made to better handle the social, economic and environmental effects of these events. Triggered by the United Nations, the "Sendai Framework for Disaster Risk Reduction" (SFDRR) Action Plan was adopted in 2015. The International Strategy for Disaster Reduction (UNISDR) is aimed at the priorities of this action until 2030.

Civil security is one of the priority tasks and prerequisite for future life quality and value creation in Germany. The Government's "Research for Civil Security" program specifically addresses disaster and risk prevention and Germany has extensive experience in application-oriented security research.

IKARIM's goal is to strengthen Germany's contribution to achieve the Sendai goals and to tackle global challenges by R&D-co-operation with both emerging and developed countries. IKARIM addresses demand-driven R & D co-operations with selected African and Asian countries. The goal is to jointly develop and implement innovative and application-oriented solutions in the fields of disaster prevention, disaster management and restoration. The aim is to strengthen the resilience of the partnering countries against natural and technical risks.

#### Subject of funding

The IKARIM grant aims to transfer know-how and to form international partnerships for disaster risk management. The focus is on innovative, application-oriented co-operation projects that contribute to population protection, disaster prevention and the protection of critical infrastructures as well as the development of early warning systems in selected african and asian countries. Experts of both Germany and the respective country are requested co-operate within the collaborative projects. The goal is to develop solutions for specific national challenges making use of relevant experiences of German security research. The collaborative projects are to be carried out jointly by science, business and practitioners. Cross-border inter- and trans-disciplinary cooperation is expected.

Project proposals must go well beyond the current state of science and technology as well as existing implementations in the partnering countries. They must have clear advantages over existing solutions.

Funding of definition projects (see below) as a preparatory measure upfront to an R & D project is possible and recommended.

**Note:** Only german institutions, universities and companies are eligible for application and direct funding.

#### Co-operation regions

The focus of this grant is on the following selected african and asian countries:

- Egypt, Ethiopia, Ghana, Cameroon, Madagascar, South Africa, Tunisia,

- Bangladesh, India, Indonesia, Iran, Japan, Myanmar, Philippines, Singapore, South Korea, Vietnam.

### **Research topics**

The following topics are of particular relevance for research co-operation:

#### a) Disaster prevention and coping

- concepts for major damage situations, including aspects such of evacuation, emergency planing, mass incidents of injured persons,
- supply concepts for the population,
- concepts for specifically vulnerable populations,
- increasing resilience of the population e. g. by providing information, creating risk awareness, and increasing self-sufficiency
- concepts of involving population and volunteers in disaster preparedness and management,
- protection and enhancement of the resilience of critical infrastructures, prioritization of critical services,
- innovative early warning including remote sensing and geological sensing,
- data management and information systems for disaster prevention,
- analysis of partnering countries´ disaster prevention systems, concepts for improving cooperation between relevant stakeholders,
- development of prediction and risk models, potential disaster scenarios and indicators, including the use of globally available information from surveying and measurement data as well as past damage events,
- risk analyses with regard to cascading effects, urbanization, regional, local and seasonal conditions, vulnerability monitoring of specifically endangered areas, social and cultural aspects,
- contributions to the international compatibility of rescue and security systems,
- group-specific risk and crisis communication.

#### b) Disaster management and restoration

- Information and decision-support systems for operation assessment, task communication and coordination, cross-organizational networking and cooperation,
- fast and comprehensive situation awareness (satellite, air and ground based),
- technical operation support e. g. by means of autonomous rescue systems, sensors for locating and rescue of missing persons, access control, detection of hazard substances,
- logistical support (e. g. mobility and supply of operational forces),
- resource management and control,
- protective and technically supportive equipment for operational forces,
- alert and crisis communication with the population and experts including the use of modern IT such as social networks or mobile devices,
- Prevention of spreading of infectious diseases,
- concepts for reconstruction after disasters,
- insurability and risk transfer,
- analysis of current and past disaster events, including best practice evaluations for the improvement of future disaster preparedness.

Components for qualification and education in the respective country are also desirable as part of the R & D projects. The following topics may be subject to funding:

- qualification measures for end-users, concepts for training and education of relevant stakeholders, including authorities, emergency personnel and operators of infrastructures,
- vocational training according to the German dual qualification model,
- concepts of academic education such as integrated graduate and postgraduate qualification provided that they are specifically tailored to the context of the respective research project.

### **Definition projects**

Funding of six-month definition projects is intended as a preparatory measure upfront to the R & D projects. They may comprise exploratory measures, feasibility and requirement analyzes, investigations of country-specific conditions, identification of suitable cooperation partners etc.

The maximum support for a definition project is € 60,000. Applications have to be submitted until

December 15<sup>th</sup>, 2017.

Contact:

Dr. Anja Köhler  
phone: +49 2 28/3821 1428  
E-Mail: [anja.koehler@dlr.de](mailto:anja.koehler@dlr.de)  
International Office of the BMBF  
Deutsches Zentrum für Luft- und Raumfahrt  
Funding Agency of the DLR  
Heinrich-Konen-Straße 1  
53227 Bonn

### **R & D projects**

R & D projects will follow up the definition phase and represent the focus of the IKARIM funding measure. They should not exceed three years.

Valid proposals for R & D projects are to be submitted until

December 15<sup>th</sup>, 2018

Contact:

Dr. Leif Brand  
phone: +49 2 11/62 14-5 16  
fax: +49 2 11/62 14-97 516  
E-Mail: [brand@vdi.de](mailto:brand@vdi.de)  
VDI-Technologiezentrum GmbH  
Funding Agency of the BMBF for Research for Civil Security  
VDI-Platz 1  
40468 Düsseldorf

### **Implementation projects**

An implementation phase with a duration of up to two years may follow successful R & D projects. A prospect to an according subsequent implementation project is desired with the application for an R & D project.

For detailed information see: <https://www.bmbf.de/foerderungen/bekanntmachung-1416.html>