

**e-ASIA Joint Research Program (e-ASIA JRP)**  
**Joint Research Project in the field of “Disaster Risk Reduction and Management”**

Within the framework of the e-ASIA Joint Research Program (e-ASIA JRP)\*<sup>1</sup>, the following 2 collaborative projects were selected in the field of “Disaster Risk Reduction and Management” with the approval of the e-ASIA Board. 6 organizations from 6 countries participated in this joint call for proposals\*<sup>2</sup>.

**“Development of Information Gathering and Utilization Systems using small UAV for Disaster Risk Assessment, Monitoring and Response”** to be conducted jointly by:

Japan: Hiroshi Inoue, Principal Senior Researcher, National Research Institute for Earth Science and Disaster Prevention (NIED)

Philippines: Bartolome C. Bautista, Deputy Director, Philippine Institute of Volcanology and Seismology (PHIVOLCS)

Indonesia: Haryadi Pernama, Director, Indonesian Institute of Sciences (LIPI)

Thailand: Wutthiphat Covanich, Researcher, National Electronics and Computer Technology Center (NECTEC),

Vietnam: Bui Quang Hung, Director, Vietnam National University-University of Engineering and Technology

This collaborative research aims to develop and optimize a system for gathering low-altitude aerial photos using small UAV (drone), and an information management system to utilize the data to strengthen disaster risk assessment, monitoring and response in Asian countries.

**“Monitoring and prediction of extreme weather using lightning detection network and micro-satellites”** to be conducted jointly by:

Japan: Yukihiro Takahashi, Professor, Hokkaido University

Indonesia: Sidik Mulyono, Researcher, Indonesia Agency for the Assessment and Application of Technology (BPPT)

Philippines: Joel J. Marciano, Acting Director, Department of Science and Technology - Advanced Science and Technology Institute (DOST-ASTI)

The goal of this project is to establish the methodology to monitor and predict extreme weather, such as torrential rainfall and/or typhoon, based on the observation with a ground-based lightning detection network and micro-satellites.

A total of 10 proposals were submitted in response to the joint call. Based on the peer review results, the participating funding organizations jointly decided on the two successful projects to select for funding. Support to the projects will continue for three years.

\*1 The e-ASIA Joint Research Program (e-ASIA JRP)

Through the acceleration of science and technology research exchange and collaboration in the East Asian region, the e-ASIA Joint Research Program (e-ASIA JRP) aims to strengthen research and development capabilities towards resolution of shared challenges across the region, including those associated with environmental protection, natural disaster mitigation and prevention of infectious diseases.

As part of that objective, the e-ASIA JRP is intended to support collaborative research implemented among 3 or more of its member countries. Through the implementation of joint research among participating countries in agreed fields of research, it is the goal of the e-ASIA JRP to contribute to economic and human resource development, as well as the resolution of various challenges in the region.

e-ASIA JRP's homepage: <http://www.the-easia.org/jrp/>

\*2 The list of organizations participating in the joint call for proposals:

- Ministry of Research, Technology and Higher Education (RISTEKDIKTI), Indonesia  
RISTEKDIKTI, formed in 2014 as a result of merger from the Directorate General of Higher Education and Ministry of Research and Technology, is the Indonesian Ministry whose functions include policy making and implementation in the field of research and technology to advance nations capability in innovation; coordinating and synchronizing policy implementation in the field of research and technology; and promoting higher education in Indonesia.

RISTEKDIKTI's homepage: <http://international.ristekdikti.go.id/>

- Japan Science and Technology Agency (JST), Japan  
JST is one of the core institutions responsible for the implementation of science and technology policy in Japan, including the government's Science and Technology Basic Plan. From knowledge creation—the wellspring of innovation—to ensuring that the fruits of research are shared with society and Japan's citizens, JST undertakes its mission in a comprehensive manner. JST also works to provide a sound infrastructure of science and technology information and raise awareness and understanding of science and technology-related issues in Japan.

JST's homepage : <http://www.jst.go.jp/EN/index.html>

- Department of Science and Technology (DOST), the Philippines  
DOST supports, directs and coordinates all scientific and technological activities in the Philippines. DOST encourages greater private sector participation in research and development, and formulates policies, programs and projects to support national development towards achieving technological self-reliance for the Philippines.

DOST's homepage: <http://www.dost.gov.ph/>

- National Science and Technology Development Agency (NSTDA), Thailand  
 NSTDA was created by the Science and Technology Development Act of 1991 and officially commenced its operations in 1992. It was founded with the explicit aim to conduct, support, coordinate, and promote efforts in scientific and technological development between the public and the private sectors towards maximizing benefit for national development.  
 NSTDA's homepage: <http://www.nstda.or.th/eng/>
- Russian Foundation of Basic Research (RFBR), Russia  
 The Russian Foundation for Basic Research takes significant place in system of the organization of Russian science. Now the RFBR is the not only existing structure, but also the new system of the relations covering all aspects of scientific community life. The RFBR supports the most active scientific and technical potential of the country, provides scientists of Russia with financial support, realizes competitive funding mechanisms for scientific researches on the basis of expert estimates.  
 RFBR's homepage: <http://www.rfbr.ru/rffi/eng>
- Ministry of Science and Technology (MOST), Vietnam  
 MOST is a governmental agency which performs the function of state management of science and technology, covering: scientific and technological activities; development of scientific and technological potential; intellectual property; standardization, measurement and quality control; atomic energy, radiation and nuclear safety; and state management of public services in the domains under its management in accordance with law.  
 MOST's homepage: <http://www.most.gov.vn/Desktop.aspx/Home-EN/>

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