

Memorandum of Understanding
between the
Government of the Republic of Indonesia
and the
Government of the United States of America
on
**General Cooperation in Science and
Technology**
for
**Natural Hazard Assessment, Analysis,
Warning, Preparedness, and Mitigation**

Preamble

The Government of the Republic of Indonesia (Indonesia), and the Government of the United States of America (United States) hereinafter referred to as the "Parties":

Recognize the importance of scientific and technical cooperation to understand, observe, and monitor climate, oceanography, meteorology, hydrology, seismology, volcanology, coastal zone changes, and the natural hazards associated with these disciplines;

Recognize the importance of promoting a closer working relationship to address environmental and social issues of common concern that are associated with climate, oceanography, meteorology, hydrology, seismology, volcanology, and coastal zone changes;

Recognize that to reduce loss of life, economic disruption, destruction of communities, and damage to the environment from natural hazards and disasters, end-to-end multi-hazard warning and mitigation systems must address the technology, structure, and the culture of assessment, warning, communication, preparedness, mitigation, and community resilience;

Understand that such cooperation has mutual benefits for both countries in the conduct of scientific and technical investigation and development and discharge of operational responsibilities, and can benefit the international community;

Note that both Parties are members of the Intergovernmental Oceanographic Commission (IOC), the World Meteorological Organization (WMO), and the United Nations Economic, Social, and Cultural Organization (UNESCO) with common interests in climate, oceanography, meteorology, hydrology, seismology, volcanology, and coastal zone management and the natural hazards associated with these disciplines; and

Note that the Parties have made mutual commitments to support development of the Indian Ocean Tsunami Warning and Mitigation System (IOTWS) and the activities of the Global Earth Observation System of Systems (GEOSS) in a manner that builds on and strengthens the existing global observational and multi-hazard warning systems, especially

the Indian Ocean Tsunami Warning and Mitigation System.

Therefore, pursuant to the prevailing laws and regulations in their respective countries, the Parties have reached an understanding as follows:

I. Purpose of Memorandum

- 1) The purpose of this Memorandum of Understanding (MOU) is to facilitate the Parties' coordination of activities in climate, oceanography, meteorology, hydrology, geology, including seismology and volcanology, coastal zone changes, and the natural hazards associated with these disciplines; and end-to-end multi-hazard warning systems. This MOU will facilitate exchange of scientific resources, personnel, and technical knowledge for mutual benefit that will support the purposes of this MOU for the Parties.
- 2) The Parties specifically acknowledge that this MOU does not constitute an obligation of funds. Nothing in this MOU shall be construed as superseding or interfering in any way with other agreements or contracts entered into between the Parties, or any component thereof, either prior to or subsequent to the signing of this MOU.
- 3) This MOU and its Implementing Arrangements (see Section IV) will support the Parties' efforts to: understand, observe, monitor, analyze, and predict multi-hazards processes and multi-hazard events; improve multi-hazard early warning systems; promote preparedness, mitigation, and community resilience to reduce the impact of multi-hazard events on lives, economies, communities, and the environment; support regional efforts to detect, analyze, and warn of multi-hazard events, including tsunamis; and enhance the GEOSS. Other cooperation cooperative efforts of mutual interest to the Parties related to climate, oceanography, meteorology, hydrology, geology, including seismology and , volcanology, coastal zone changes, and the natural hazards associated with these disciplines may be undertaken pursuant to the MOU.

II. Scope of Cooperative Activities

Cooperative activities are specific projects undertaken by the Parties. Activities may include the following:

- 1) Scientific investigation and research that improves the understanding and analysis of climate, oceanography, meteorology, hydrology, geology, including seismology, and volcanology, coastal zone changes, and hazards associated with these disciplines, including observations and monitoring and support for observational and monitoring networks;
- 2) Activities that promote climate analysis and forecasts;
- 3) Activities that support meteorological analysis and forecasts;
- 4) Activities that advance and sustain multi-hazard detection, analysis, warning, preparedness, and mitigation systems that save lives and reduce impacts from multi-hazards events, including tsunamis, on societies and natural systems;
- 5) Activities that support the improvement of hydrological forecasts and services such as flood forecasting and warning systems development;
- 6) Activities to advance seismic event analysis;
- 7) Activities to advance monitoring, analysis and understanding of crustal deformation and volcanic eruptions and hazards;
- 8) Activities to promote community resilience to natural hazards, minimize impacts from natural disasters, and accelerate post-disaster recovery;
- 9) Studies and activities that support operational data collection, data sharing, compilation, and processing;
- 10) Activities that allow the collaborative and mutual exchange of scientific and technical expertise for the enhancement of mutual project objectives;

- 11) Activities that support one or more international objectives as identified in international fora in which the Parties participate that are consistent with the purposes of this MOU; and,
- 12) Other activities that support and advance the purposes of this MOU as agreed by the Parties.

III. Responsibilities of the Parties

- 1) The Parties are responsible for coordinating and engaging with specific organizational entities in their own countries, as appropriate and necessary, for the completion of the tasks designated pursuant to this MOU.
- 2) Each Party is to provide staff, facilities, and other support necessary for implementation of projects as mutually determined by the Parties. Such support will be subject to the availability of personnel and appropriated funds and will be in accordance with the laws and regulations of the contributing Party's country.
- 3) Each Party shall facilitate, in accordance with its laws and regulations, entry into and exit from its territory of appropriate personnel, scientific specimens and equipment of the other Party, including field survey parties, engaged in or used in projects and programs, including maritime research cruises, under this MOU.
- 4) Exemption and relief from taxes, including value-added taxes and customs duties, in relation to the implementation of a project pursuant to this MOU will be provided in terms set forth in relevant implementing arrangements, consistent with the laws and regulations of both countries.
- 5) Funding and other assistance from the United States to Indonesia under this MOU may be provided to Indonesia's government agencies directly, or to third parties in the form of contracts, grants, cooperative agreements, and other mechanisms. Such third parties may include, but are not limited to, universities, commercial

entities, international and national non-governmental organizations, and international private voluntary organizations, as appropriate. The Parties will coordinate regarding the selection of any such third parties.

- 6) The Government of the Republic of Indonesia will co-finance cooperative activities under this MOU in accordance with its laws and regulations and as described in Implementing Arrangements.
- 7) Each Party, in conjunction with appropriate ministries and offices of the respective government, shall facilitate, as appropriate and in accordance with its laws, regulations and policies, prompt and efficient approval of access of persons of the other Party, participating in cooperative activities under this MOU, to its relevant geographic areas, institutions, data, materials, and individual scientists, specialists and researchers as needed to carry out those activities. Any activities conducted by persons of one Party in another Party's geographical areas shall be accompanied by the relevant officials of the latter at the option of the Party in whose geographical areas the activities will take place.

IV. Implementing Arrangements

- 1) The Parties shall encourage and facilitate, where appropriate, the development of direct contacts and cooperation between government agencies, universities, research centers, institutions, private sector companies and other entities of the two countries.
- 2) The Government agencies and designated entities of the Parties may conclude under this MOU Implementing Arrangements as annexes under this MOU, as appropriate, in areas of climate, oceanography, meteorology, hydrology, geology, including seismology and volcanology, coastal zone changes, and the natural hazards associated with these disciplines. These Implementing Arrangements shall cover, as appropriate, topics of cooperation, procedures for transfer and use of materials, equipment and funds, and other relevant issues.

- 3) Periodic reports will be submitted to the Executive Agents (see Section V) of the Parties or their designees as specified in Implementing Arrangements. Such reports should outline future activity areas, represent proceedings of working groups, seminars or meetings, and document the progress and results of a particular project or program.
- 4) Responsibilities for the payment of costs of the cooperative activities authorized by this MOU shall be decided by mutual agreement on a case-by-case basis, consistent with the responsibilities of the Parties set forth in Section III, above, and with each Party's rules on reimbursement. Reimbursable financial arrangements, when deemed appropriate to carry out specific projects; will be described in the Implementing Arrangements agreed to under this MOU.

V. Coordination of Cooperative Activities

- 1) Each Party hereby designates an Executive Agent responsible for the coordination and facilitation of cooperative activities under this MOU:
 - For the Government of the Republic of Indonesia: The State Ministry of Research and Technology of the Republic of Indonesia Office of Assistant to the Deputy Minister for Science and Technology Needs.
 - For the Government of the United States of America: The U.S. Department of State Office of Science and Technology Cooperation.
- 2) The Executive Agents of the Parties shall discuss and review, on a regular basis, the implementation of this MOU, including matters of importance in the field of natural hazards assessment, warning, and mitigation and policy matters related to the overall science and technology relationship of the Parties.

VI. Scientific and Technical Information and Dissemination of Data

- 1) Distribution of information will be through customary channels and in accordance with the normal procedures of the Parties.

- 2) The supplier of scientific and technical information will make take appropriate measures to ensure that the best scientific information will be transferred and/or exchanged. The application or use of any information exchanged or transferred under this MOU will be the responsibility of the recipient. The supplier does not guarantee the suitability of such information for any particular application.
- 3) All operational observational data collected as a result of activities under this MOU that are part of the IOTWS, Indonesian Tsunami Early Warning System, or other natural hazard event detection, analysis, warning, and warning dissemination system will be available openly and freely in real time through the WMO Global Telecommunications System (GTS), the Global Seismic Network (GSN), or other dissemination systems as agreed to by the Parties. Distribution and dissemination of such data will be made in accordance with standards and protocols adopted by the IOC's Intergovernmental Coordination Group for the IOTWS, as appropriate.

VII. Third Parties' Participation

- 1) The Parties may, by mutual consent, request the participation of third parties in implementing and financing programs and projects carried out under this MOU.
- 2) The Parties shall support the participation of scientific and research organizations, enterprises, and other entities concerned from the two countries in international scientific and technological activities.
- 3) Scientists, experts, and institutions from third party countries may be invited to participate in the activities conducted under this MOU upon the mutual consent of the Parties.

VIII. Intellectual Property

- 1) The treatment of intellectual property created or furnished in the course of cooperative activities under this MOU is provided for in Annex I.

- 2) The treatment of security arrangements for sensitive information or equipment transferred under this MOU is provided for in Annex II, which shall apply to all activities conducted under the auspices of the MOU unless agreed otherwise by the Parties in writing.
- 3) These Annexes I and II shall be an integral part of this MOU.

IX. Non-Exclusivity

Nothing in this MOU shall restrict the Parties from engaging in similar or related agreements and activities with entities not part of this MOU.

X. Temporarily Suspension

Each Party reserves the right for reasons of national security, public order or public health to suspend temporarily either in whole or in part the implementation of this MOU. Such suspension shall take effect immediately after notification has been given to the other Party through diplomatic channels.

XI. Limitation of Personnel

- 1) Without any prejudices to any applicable privileges and immunities, all persons engaged in activities related to this MOU shall respect political independence, sovereignty, and territorial integrity of the host country, shall have a duty not to interfere in the internal affairs of the host country, and will avoid any activities inconsistent with the purposes and objectives of this MOU;
- 2) Persons who enjoy privileges and immunities provided by international agreement or by the relevant laws and regulations of the host country have the duty to respect the laws and regulations of the host country.

XII. Settlement of Disputes

Any disputes regarding interpretation or implementation of this MOU or its associated Implementing Arrangements will be resolved through consultations and negotiations by the

Parties amicably and in a spirit of cooperation.

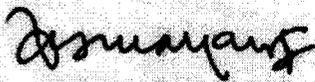
XIII. Entry Into Force, Duration, Amendment and Termination

- 1) This MOU shall enter into force on the date on upon signature by both Parties and shall remain in force for a period of five (5) years. It may be amended, or This MOU may be extended for further five-year periods, by written agreement of the Parties.
- 2) This MOU may be amended by mutual written agreement of the Parties.
- 3) This MOU may be terminated at any time by either Party upon three (3) months' written notice to the other Party.
- 4) Termination of this MOU shall not affect the implementation of any cooperative activity carried out under the MOU and not completed upon termination of the AgreementMOU, unless otherwise agreed to by the Parties.

In witness whereof, the undersigned, being duly authorized by their respective governments, have signed this MOU.

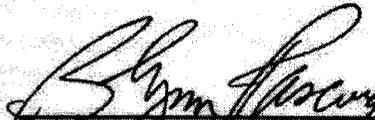
DONE in duplicate in the English language at Jakarta on this twentieth day of November, two thousand and six.

FOR THE GOVERNMENT OF THE
REPUBLIC OF INDONESIA:



KUSMAYANTO KADIMAN
State Minister for Research and
Technology

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:



B. LYNN PASCOE
U.S. Ambassador to the Republic of
Indonesia

ANNEX I
Intellectual Property Rights

I. General Obligation

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this MOU and relevant Implementing Arrangements. Rights to such intellectual property shall be allocated as provided in this Annex.

II. Scope

- A. This Annex is applicable to all cooperative activities undertaken pursuant to this MOU, except as otherwise specifically agreed by the Parties or their designees.
- B. For purposes of this MOU, "intellectual property" shall mean the subject matter listed in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967, and may include other subject matter as agreed by the Parties.
- C. Each Party shall ensure, through contracts or other legal means with its own participants, if necessary, that the other Party can obtain the rights to intellectual property allocated in accordance with this Annex. This Annex does not otherwise alter or prejudice the allocation between a Party and its nationals, which shall be determined by that Party's laws and practices.
- D. Except as otherwise provided in this MOU, disputes concerning intellectual property arising under this MOU shall be resolved through discussions between the concerned participating institutions, or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of United Nations Commission on International Trade Law (UNCITRAL) shall govern.

- E. Termination or expiration of this MOU shall not affect rights or obligations under this Annex.**

III. Allocation of Rights

- A. Each Party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports, and books directly arising from cooperation under this MOU. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named.**
- B. Rights to all forms of intellectual property, other than those rights described in paragraph III.A above, shall be allocated as follows:**
- 1. Visiting researchers shall receive rights, awards, bonuses and royalties in accordance with the policies of the host institution.**
 - 2. (a) Any intellectual property created by persons employed or sponsored by one Party under cooperative activities other than those covered by paragraph III.B(1) shall be owned by that Party. Intellectual property created by persons employed or sponsored by both Parties shall be jointly owned by the Parties. In addition, each creator shall be entitled to awards, bonuses and royalties in accordance with the policies of the institution employing or sponsoring that person.**
 - (b) Unless otherwise agreed in an implementing or other arrangement, each Party shall have within its territory all rights to exploit or license intellectual property created in the course of the cooperative activities.**
 - (c) The rights of a Party outside its territory shall be determined by mutual agreement considering the relative contributions of the Parties and their participants to the cooperative activities, the degree of commitment in obtaining legal protection and licensing of the intellectual property and such**

other factors deemed appropriate.

- (d) Notwithstanding paragraphs III.B(2)(a) and (b) above, if a particular project has led to the creation of intellectual property protected by the laws of one Party but not the other, the Party whose laws provide for this type of protection shall be entitled to all rights to exploit or license intellectual property worldwide although creators of intellectual property shall nonetheless be entitled to awards, bonuses and royalties as provided in paragraph III.B(2)(a).
- (e) For each invention made under any cooperative activity, the Party employing or sponsoring the inventor(s) shall disclose the invention promptly to the other Party together with any documentation and information necessary to enable the other Party to establish any rights to which it may be entitled. Either Party may ask the other Party in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting its rights in the invention. Unless otherwise agreed in writing, the delay shall not exceed a period of six months from the date of disclosure by the inventing Party to the other Party.

IV. Business Confidential Information

In the event that information identified in a timely fashion as business-confidential is furnished or created under this MOU, each Party and its participants shall protect such information in accordance with applicable laws, regulations, and administrative practices. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, and the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.

ANNEX II

Security Obligations

I. Protection of Sensitive Technology

Both Parties agree that no information or equipment requiring protection in the interest of national defense or foreign relations and classified in accordance with its applicable national laws and regulations shall be provided under this MOU. In the event that information or equipment which is known or believed to require such protection is identified in the course of cooperative activities pursuant to this MOU, it shall be brought immediately to the attention of the appropriate officials and the Parties shall consult to identify appropriate security measures to be agreed upon by the Parties in writing and applied to this information and equipment and shall, if appropriate, amend this MOU to incorporate such measures.

II. Technology Transfer

The transfer of unclassified export-controlled information or equipment between the Parties shall be in accordance with the relevant laws and regulations of each Party. If either Party deems it necessary, detailed provisions for the prevention of unauthorized transfer or retransfer of such information or equipment shall be incorporated into the contracts or Implementing Arrangements. Export controlled information shall be marked to identify it as export controlled and identify any restrictions on further use or transfer.