MEMORANDUM OF UNDERSTANDING BETWEEN THE U. S. GEOLOGICAL SURVEY OF THE DEPARTMENT OF THE INTERIOR OF THE UNITED STATES OF AMERICA AND THE GEO-INFORMATICS AND SPACE TECHNOLOGY DEVELOPMENT AGENCY OF THE MINISTRY OF SCIENCE AND TECHNOLOGY OF THAILAND CONCERNING SCIENTIFIC AND TECHNICAL COOPERATION IN THE EARTH SCIENCES

ARTICLE I. SCOPE AND OBJECTIVES

1. The U. S. Geological Survey of the Department of the Interior of the United States of America (hereinafter "USGS") and the Geo-Informatics and Space Technology Development Agency of the Ministry of Science and Technology of Thailand (hereinafter "GISTDA") hereby agree to pursue scientific and technical cooperation in the earth sciences in accordance with this Memorandum of Understanding (hereinafter "Memorandum").

2. The purpose of this Memorandum is to provide a framework for the exchange of scientific and technical knowledge between the USGS and GISTDA (hereinafter "Party" or "Parties") in the field of the earth sciences, and to increase the scientific and technical capabilities of both Parties.

3. The Parties shall encourage and facilitate, where appropriate, the development of direct contacts and cooperation among government agencies, universities, research centers, institutions, private sector companies, and other entities of the two countries.

Each Party may, with the consent of the other Party and to the extent permitted by the laws and policies of each Party's government, invite other government entities or agencies of the United States and Thailand, and other entities, including scientists, technical experts, governmental agencies, and institutions of third countries or international organizations, to participate in activities undertaken pursuant to this Memorandum, subject to such terms and conditions as the Parties may specify.

ARTICLE II. COOPERATIVE ACTIVITIES

1. Forms of cooperation under this Memorandum may consist of exchanges of technical information; visits; participation in training courses, conferences and symposia; the exchange of professional geoscientists in areas of mutual interest; and any other cooperation research consistent with programs of the Parties. Specific areas of cooperation may include, but are not limited to, such areas of mutual interest as:

A. Earth-science investigations, including hazards, resources, and the environment;

B. Biology, biological investigations, and technical developments;

C. Geographic and geospatial analysis and investigations;

D. Water resources and other hydrologic investigations; and

E. Information systems.

2. Activities under this Memorandum shall be undertaken in accordance with the laws, regulations, and procedures of each country of the Parties.

ARTICLE III. AVAILABILITY OF RESOURCES

Cooperative activities under this Memorandum shall be subject to the availability of personnel, resources, and funds. This Memorandum shall not be construed to obligate any particular expenditure or commitment of resources or personnel. In accordance with Article IX below, the Parties shall agree in writing upon specific Project Annexes before the commencement of any activity pursuant to this Memorandum.

ARTICLE IV. FEE AND TAX EXEMPTION

In accordance with its laws and regulations, each Party shall work toward obtaining, on behalf of the other Party, relief from taxes, fees, customs duties, and other charges (excluding fees for specific services rendered) levied with respect to:

A. All transfer, ownership, construction, renovation or maintenance of facilities or property by or on behalf of the other Party to implement this Memorandum.

B. The import, purchase, ownership, use or disposition (including export) of goods and services by or on behalf of the other Party in support of activities under this Memorandum.

ARTICLE V. INTELLECTUAL PROPERTY

Provisions for the protection and allocation of intellectual property created or furnished in the course of cooperative activities under this Memorandum shall be governed by Annex I, which forms an integral part of this Memorandum.

ARTICLE VI. SECURITY OBLIGATIONS

Provisions for the protection of classified information and unclassified export-controlled information and equipment are set forth in Annex II, which forms an integral part of this Memorandum.

ARTICLE VII. DISCLAIMER

Information transmitted by one Party to the other Party under this Memorandum shall be accurate to the best knowledge and belief of the transmitting Party, but the transmitting Party does not warrant the suitability of the information transmitted for any particular use or application by the receiving Party or by any third Party.

ARTICLE VIII. PLANNING AND REVIEW OF ACTIVITIES

Each Party shall designate a principal representative who, at such times as are mutually agreed upon by the Parties, shall meet to review the activities under this Memorandum and develop proposals for future activities, as appropriate.

ARTICLE IX. PROJECT ANNEXES

Any activity carried out under this Memorandum shall be agreed upon in advance by the Parties in writing. Whenever more than the exchange of technical information or visits of individuals is contemplated, such activity shall be described in an agreed Project Annex to this Memorandum, which shall set forth, in terms appropriate to the activity, a work plan, staffing requirements, cost estimates, funding sources, and other undertakings, obligations, or conditions not included in this Memorandum. In case of any inconsistency between the terms of this Memorandum and the terms of a Project Annex, the terms of this Memorandum shall control.

ARTICLE X. ENTRY INTO FORCE AND TERMINATION

This Memorandum shall enter into force upon the signature of both Parties and remain in force until terminated at any time by either Party upon (180) days prior written notice to the other Party. Unless otherwise agreed, the termination of this Memorandum shall not affect the validity or duration of projects under this Memorandum that are initiated prior to such termination.

DONE at Reston, Virginia, in duplicate, in the English language.

FOR THE U.S. GEOLOGICAL SURVEY
OF THE DEPARTMENT OF THE INTERIOR
OF THE UNITED STATES OF AMERICA:

Signature

P. Patrick Leahy
Name

Acting Director
Title

Oct. 28, 2005
Date

FOR THE GEO-INFORMATICS AND
SPACE TECHNOLOGY DEVELOPMENT
AGENCY OF THE MINISTRY OF
SCIENCE AND TECHNOLOGY
OF THAILAND:

Signature

Thongchai Charuppat
Name

Director
Title

Oct. 28, 2005
Date

I certify that this is a true copy of the original Memorandum of Understanding.

Dee Dee Poole
International Program Specialist
Geology, U.S. Geological Survey

November 10, 2005

ANNEX I

Intellectual Property Rights

I. General Obligation

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Memorandum and relevant Project Annexes. 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 Memorandum, except as otherwise specifically agreed by the Parties or their designees.

B. For purposes of this Memorandum, "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 Memorandum, disputes concerning intellectual property arising under this Memorandum 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 the United Nations Commission on International Trade Law (UNCITRAL) shall govern.

E. Termination or expiration of this Memorandum 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 Memorandum. 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 inventions 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 Memorandum, 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 Memorandum. 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 Memorandum, 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 Memorandum 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 Project Annexes. Export-controlled information shall be marked to identify it as export-controlled and identify any restrictions on further use or transfer.