

KR-01.0000

MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE U.S. GEOLOGICAL SURVEY  
OF THE  
DEPARTMENT OF THE INTERIOR  
OF THE  
UNITED STATES OF AMERICA  
AND THE  
MINISTRY OF COMMUNICATIONS, TRANSPORT,  
AND TOURISM DEVELOPMENT  
OF THE  
REPUBLIC OF KIRIBATI  
CONCERNING  
SCIENTIFIC AND TECHNICAL COOPERATION  
IN THE EARTH SCIENCES ON  
GLOBAL SEISMIC DATA ACQUISITION

ARTICLE I. PURPOSE

1. The U.S. Geological Survey of the Department of the Interior of the United States of America (hereinafter "USGS") and the Ministry of Communications, Transport, and Tourism Development of the Republic of Kiribati (hereinafter "MCTTD") hereby agree to pursue scientific and technical cooperation in the earth sciences in accordance with this Memorandum of Understanding (hereinafter "Memorandum").

2. Forms of cooperation under this Memorandum may consist of exchanges of technical information, visits, participation in training courses, conferences and symposia, and the exchange of professional geoscientists in areas of earth-science investigations, including hazards, resources and the environment.

3. Specifically, the USGS and the MCTTD (hereinafter "Party" or "Parties") hereby agree to cooperate in the installation and operation of seismological equipment, communications infrastructure, and the exchange of seismological data and related scientific results.

ARTICLE II. BACKGROUND

1. To better understand and mitigate the effects of earthquakes and tsunamis, both Parties recognize the usefulness of the exchange of seismological data in the accurate reporting of earthquake occurrences, in the assessments of earthquake hazards, in general seismological research, and in other applications.

2. The USGS is participating in the development of a new Global Seismograph Network (GSN) that makes use of modern seismological equipment and establishes procedures for the international exchange of seismological data. This effort is carried out in the United States in cooperation with the Incorporated Research Institutions for Seismology (IRIS) supported by the United States National Science Foundation (hereinafter "NSF"), and with the cooperation of seismological facilities and institutions worldwide. Data from USGS and IRIS networks are shared in real time with the National Oceanic and Atmospheric Administration (NOAA) Pacific Tsunami Warning Center (PTWC) through cooperative agreements in data communications and shared infrastructure. The GSN activities of IRIS and the USGS are also coordinated with the International Federation of Digital Seismograph Networks (FDSN).

### ARTICLE III. SCOPE AND OBJECTIVES

1. The general scope of this Memorandum is cooperation between the Parties in the exchange of seismological data, information, and scientific results. Initially, this Memorandum covers three seismograph stations, but other stations may be added in the future, if mutually agreed.

2. Specific Objectives of this Cooperation:

A. The installation, operation, and maintenance of GSN equipment at suitable sites on Kiritimati, Tarawa (Betio), and Kanton islands;

B. The establishment and implementation of real-time data exchange procedures between these sites and the USGS GSN Data Collection Center, through the PTWC; and

C. The installation, operation, and maintenance of very small aperture terminals (VSAT) for communication of seismic data, with parallel voice and Internet capability, on Tarawa, Kanton, and Kiritimati.

### ARTICLE IV. IMPLEMENTATION, RESPONSIBILITIES, AND OTHER CONSIDERATIONS

1. The implementing body on behalf of the USGS shall be the Albuquerque Seismological Laboratory (hereinafter "ASL"). The implementing body on behalf of Kiribati will be the Meteorology Division of MCTTD (hereinafter "Met. Div.").

2. Responsibilities of the USGS/ASL:

A. To provide to the Met. Div., equipment for three modern, digital seismograph stations designated as IRIS Type II and the same as that installed or being installed at more than 100 GSN sites worldwide;

B. To provide all equipment for satellite communications links between the two seismic stations on Kanton and Tarawa, and the PTWC in Honolulu, Hawaii, including RJ8 and RJ11 interfaces and one telephone at each site; and to provide all equipment for a satellite communications link (seismic data only) between the seismic station on Kiritimati and the PTWC;

C. To provide all new or repaired parts necessary to keep the stations and their communications systems in operating condition. Because this maintenance requires exchanging new or repaired modules for old ones, title to all components will remain with the NSF until termination of this project. All items imported for the project will be removed from Kiribati when no longer needed, unless some agency of the Government of Kiribati specifically requests that they be donated to some responsible group;

D. To install the IRIS Type II equipment, with participation of representatives of the Met. Div., at sites on Kiritimati, Tarawa, and Kanton islands, mutually agreed to by both Parties;

E. To provide on-site training in the operation and maintenance of the equipment for up to three persons designated by the Met. Div. at each site;

F. To provide all operating supplies for the equipment, including: digital recording media, recording paper, mailing cartons and labels, and operational forms; and to pay for electricity consumed at the prevailing electric utility rates;

G. To send qualified USGS personnel or representatives to the sites for routine maintenance and calibration visits, in collaboration with competent representatives of the Met. Div.;

H. To provide access to the data from the sites for use by local seismologists;

I. To provide to the Met. Div. access to data from GSN and other sites worldwide through routine procedures established by the FDSN; and

J. To provide opportunities for building capacity within the Kiribati Government through exchanges of technical information, visits, participation in training courses, conferences and symposia, and the exchange of professional geoscientists in areas of earth-science investigations, including hazards, resources and the environment.

3. Responsibilities of the MCTTD/Met. Div.:

A. To obtain any necessary permits for the USGS to prepare instrumentation vaults or boreholes for the seismic sensors at the sites;

B. To help the USGS find contractors to do the required work at the sites;

C. To help the USGS obtain any other permits as may be required, e.g. licenses for satellite communications and telemetry of data between the seismic stations and the PTWC;

D. To help the USGS find facilities for the suitable installation and operation of the GSN recording equipment at the sites, mutually agreed to by the Parties, including electrical power and an operating environment that is dry and has means of temperature control;

E. To secure the customs- and duty-free importation of station equipment and supplies, within the laws of Kiribati;

F. To provide qualified personnel for the operation and maintenance of the equipment;

G. To routinely send through established procedures original, unmodified digital recording media containing data from the provided equipment;

H. To assist the USGS to obtain any permits or licenses required by the Republic of Kiribati for the operation of local telemetry and satellite communications of data and telephone calls between the seismic stations and the PTWC;

I. To provide any additional telephone equipment for its own use;

J. To purchase telephone and Internet services for its own use, including installation and monthly local and long distance service, as it may desire.

4. Other Considerations:

A. The Met. Div. and local researchers are free to use data recorded by the seismic equipment for their own purposes; the USGS will assist in this usage to the extent possible. Information produced at these sites will be fully and freely available in real time without restrictions.

B. The USGS National Earthquake Information Center shall endeavor to establish communication with the Met. Div. and to exchange data on large earthquakes worldwide soon after they occur.

5. Force Majeure: If any Party to this Memorandum or if any of the implementing bodies is rendered unable, because of force majeure, to perform its responsibilities under Article IV of this

Memorandum, the responsibilities will be suspended during the period of the continuance of such inability. The term "force majeure" means civil war, civil disturbances, natural disasters, strikes, and other similar events not caused by or within the control of the United States Government (or any of its agencies) or the Kiribati Government (or any of its agencies). In the event of suspension of duties because of force majeure, the USGS and the MCTTD will consult and endeavor jointly to resolve any attendant difficulties, including the possibility of either completing or terminating the project.

6. Applicable Laws and Jurisdiction: The cooperation covered under this Memorandum is subject to the applicable laws and regulations of the Governments of each Party.

#### ARTICLE V. 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:

1. All transfer, ownership, construction, renovation or maintenance of facilities or property by or on behalf of the other Party to implement this Memorandum.
2. 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.
3. Personal property of personnel of the other Party or entities of that Party implementing provisions of this Memorandum.

In the event that any such taxes, fees, customs duties, or other charges are nonetheless levied on such activities, facilities, property, equipment and related goods or services, such taxes, fees and customs duties shall be borne by the levying Party.

#### ARTICLE VI. INTELLECTUAL PROPERTY AND SECURITY OBLIGATIONS

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 of this Memorandum. Provisions for the protection of classified information and unclassified export-controlled information and equipment are set forth in Annex II 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 applications 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 with the other representative 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. AVAILABILITY OF RESOURCES, ENTRY INTO FORCE, AND TERMINATION

1. Activities under this Memorandum are subject to the availability of personnel and appropriated funds.
2. This Memorandum shall enter into force upon signature by both Parties and shall remain in force until terminated by either Party ninety (90) days prior written notice to terminate 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 have been initiated prior to such termination.

Done at Suva, Fiji, in duplicate, in the English language.

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

FOR THE MINISTRY OF  
COMMUNICATIONS, TRANSPORT,  
AND TOURISM DEVELOPMENT  
OF THE REPUBLIC OF KIRIBATI:

  
Signature

  
Signature

Larry M. Dinger  
Name

Reteta Nikuata-Rimon  
Name

United States Ambassador to the Republic of  
Kiribati  
Title

Kiribati High Commissioner to the Republic  
of the Fiji Islands  
Title

Thursday, February 23, 2006  
Date

Thursday, February 23, 2006  
Date

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

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

4/11/06

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. 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 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 Agreement. 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 IIIA 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 a right 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 either Party believes that a particular project is likely to lead to or has led to the creation of intellectual property not protected by the laws of the other Party, the Parties shall immediately hold discussions to determine the allocation of rights to the intellectual property. If an agreement cannot be reached within three months of the date of the initiation of the discussions, cooperation on the project in question shall be terminated at the request of either Party. 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 Agreement, 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 Information

Both Parties agree that no information or equipment requiring protection in the interest of national defense or foreign relations of either party 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 undertaken pursuant to this Memorandum, it shall be brought immediately to the attention of the appropriate officials and the Parties shall consult concerning the need for and level of appropriate protection to be accorded such information or equipment.

#### II. Technology Transfer

The transfer of export-controlled information or equipment between the Parties shall be in accordance with the relevant laws and regulations of each Party to prevent the unauthorized transfer or retransfer of such information or equipment provided or produced under this Memorandum. 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.