

PROCEDURES FOR ENVIRONMENTAL SCIENTIFIC RESEARCH IN THE KIRIBATI

INTRODUCTION

These procedures are intended to assist and facilitate environmental scientists, research vessel operators, and administrators of oceanographic institutions on the process of obtaining consent for access to waters for environmental scientific research to be conducted or implemented in Kiribati.

The procedures and annex 1 have been extracted from the *Law of the Sea, Marine Scientific Research, a guide to the implementation of the relevant provisions on the United Nations Convention and the Law of the Sea*, where Coastal states are entitled to exercise control over MSR conducted by foreign institution in offshore areas up to the outer limits of their exclusive economic zone (200 nautical miles) or continental shelf beyond that limit.

The procedure is also in line with the Wildlife Conservation Ordinance of the Kiribati Government, section 9, sub-section 1, which states that "Prohibition of possession of fully and partially protected birds and other animals and wild turtles, etc., is unlawfully acquired"

Coastal states, in the exercise of their jurisdiction, under article 246 of Part XIII of the United Nations Convention on the Law of the Sea requires MSR in the exclusive economic zone and on the continental shelf to be conducted with the consent of the coastal state

All applications and enquiries should be sent to the Ministry of Environment, Lands and Agricultural Development at Bikenibeu, Tarawa, Kiribati. Contact fax number 686 28334 or contact the Environment and Conservation Division (ECD) at email address putat@environment.gov.ki, Or taouear@environment.gov.ki

Administrative Costs

A committee known as the Environment Scientific Research Committee (ESRC) whose main objective is to ensure that the maximum benefits are derived from any environmental research conducted in Kiribati, will be screening all applications. The committee is comprised of different Government bodies responsible for environmental scientific researches. The Secretariat for the Committee is the Ministry of Environment, Lands and Agriculture Development.

The administrative cost is a non – refundable fee for the administrative costs involved in the processing of the application. The amount involved is USD200 and should be paid to: **beneficiary account** – 269007, **beneficiary name** – Government of Kiribati (No 4 Account), **Bank beneficiary name** – ANZ Bank (Kiribati) Ltd , **Swift #** - BKIRKIKI All fees should be paid free and clear of any deductions or withholdings whatsoever by Telegraphic transfer to the Bank of Kiribati Ltd. The researching institution or state(s) shall advise the said ECD by fax or email of the payment reference.

The administrative fee shall not be subject to refund under any circumstances.

CONSENT REQUIREMENTS

Planning

It is useful, during the early planning stages of a research project, which involves fieldwork in areas under the jurisdiction of Kiribati, for the researching states and

scientific institution involved in the research to consult the Ministry of Environment, Lands and Agriculture Development, Tarawa, Kiribati.

How to submit the request for consent

All requests for consent for researches involving environmental resources from National Institutions should have their Governments support. International organizations will be exempted from this requirement. Formal channel of submission will be through the Ministry of Environment, Land and Agriculture Development, Bikenibeu, Tarawa, Kiribati.

When to submit the request for the Consent

Article 248 of Part XIII of the United Nations Convention on the Law of the Sea requires the researching state or competent international organization to request for consent to conduct ESR in the Kiribati exclusive economic zone or on its continental shelf to be submitted at least six months in advance of the expecting starting date of the research. The starting date of the research project is defined as the first day of the actual fieldwork in the research area under the jurisdiction of the respective coastal state.

What information to be provided

Article 248 of Part XIII of the United Nations Convention on the Law of the Sea lists the information to be provided when submitting a request for consent to conduct ESR in the Kiribati exclusive economic zone or on its continental shelf. The information consists of a full description of:

- (a) nature and objectives of the project;
- (b) method and means to be used, including name, tonnage, type and class of vessels and a description of scientific equipment;
- (c) species of biological resources to be involved and the quantities/number of species/specimens to be collected;
- (d) methods for collection, sampling or evaluation;
- (e) methods for storage or transportation of any biological samples involved;
- (f) conditions and requirements concerning any environmental impact assessment, monitoring or management plans that may be needed or established;
- (g) terms of reference of the researcher or team involved;
- (h) precise geographical areas in which the project is to be conducted;
- (i) expected date of first appearance and final departure of the research vessels, or deployment of the equipment and its removal, as appropriate;
- (j) name of the sponsoring institution, its director, and the person in charge of the project;
- (k) extent to which it is considered that the coastal state should be able to participate or to be represented in the project;
- (l) benefits to Kiribati.

A standard form for this purpose is attached as Annex1.

Request for further Information

According to article 252 of Part XIII of the United Nations Convention on the Law of the Sea, subparagraph (c), Kiribati like any other coastal state is entitled, within four months of the receipt of a request for consent, to require supplementary information relevant to conditions under article 249 and the information provided for under article 248 of UNCLOS, respectively.

Discretionary powers to withhold consent

Kiribati, like any other coastal states shall, in normal circumstances, grant their consent for ESR projects by other states or competent international organizations in their exclusive economic zone or on their continental shelf to be carried out in accordance with the United Nations Convention on the Law of the Sea exclusively for peaceful purposes

and in order to increase scientific knowledge of the marine environment for the benefit of all mankind. Kiribati may however in its discretion withhold its consent to the conduct of a ESR project by another state or competent international organization in its exclusive economic zone or on its continental shelf if that project, including but not limited to the following:

- a) is of direct significance for the exploration and exploitation of natural resources, whether living or non-living;
- b) involves drilling into the continental shelf, the use of explosives or the introduction of harmful substances into the marine environment;
- c) involves the construction, operation or use of artificial islands, installations and structures referred to in articles 60 and 80; and
- d) contains information communicated pursuant to article 248 regarding the nature and objectives of the project which is inaccurate or if the researching state or competent international organization has outstanding obligations to Kiribati from a prior research project.

CONDUCT DURING THE RESEARCH CRUISE

Participation by the coastal state

Article 249 of Part XIII of the United Nations Convention on the Law of the Sea, paragraph 1 (a), requires the researching state or competent international organization to ensure the right of the coastal state, if it so desires, to participate or to be represented in the marine scientific project, especially on board research vessels and other craft or scientific research installations, when practicable, without payment of any remuneration to the scientists of the coastal state and without obligation to contribute towards the costs of the project. In light of the said article, Kiribati wishes to request the researching state or international organization to allow the participation of its scientists and or observers, including payment of return airfares by the most direct route and stipend to and back from the research cruises.

Duty to inform the coastal state of major changes in the research program

Article 249 of Part XIII of the United Nations Convention on the Law of the Sea, paragraph 1 (f), requires the researching state and competent international organizations to inform the Kiribati authorities immediately of “any major change” in the research program.

Suspension or cessation of research activities

Article 253 of Part XIII of the United Nations Convention on the Law of the Sea provides Kiribati with the right to suspend environmental or marine research activities in progress either if they are not being conducted in accordance with the information communicated according to article 248, upon which the consent of Kiribati was based, or if the researching state or international organization fails to comply with the provisions of article 249 concerning the rights of the Kiribati with respect to the research project.

Port calls

Article 255 of Part XIII of the United Nations Convention on the Law of the Sea requires the Kiribati to facilitate, subject to the provisions of their laws and regulations, access to their harbors and to provide assistance for research vessels. Researchers are encouraged to enlist the assistance of shipping agents when planning port calls. The vessel is required to pay the necessary dues when calling in any port in Kiribati.

RIGHTS AND OBLIGATIONS AFTER THE RESEARCH CRUISE

Provision of preliminary and final results

Article 249 of Part XIII of the United Nations Convention on the Law of the Sea, paragraph 1 (b), requires the researching state or competent international organization to provide Kiribati, at its request, with preliminary reports as soon as practicable, and with the final results and conclusions after the completion of the research. Ten hard copies and one electronic copy of the report should be provided to the Ministry of Environment Lands and Agriculture Development, Bikenibeu, Tarawa, Kiribati.

Researching institution or state should periodically report to Kiribati for equipment that are deployed or installed in her waters.

The researching state should hold a workshop in Kiribati upon completion of the findings to present to the relevant officials on the findings of the research and its benefits to Kiribati. This would be a good public awareness campaign for the project and for future proposed cruises.

Access to data and samples

Article 249 of Part XIII of the United Nations Convention on the Law of the Sea, paragraph 1 (c) requires the researching state or international organization to undertake to provide access to Kiribati, at its request, to all data, including digital copies and magnetic tapes and samples derived from the research project and likewise to furnish it with data which may be copied and samples which may be divided without detriment to their scientific value. All data should be sent to the Ministry of Environment, Lands and Agriculture Development, Bikenibeu, Tarawa, Kiribati.

Annex 2 is a recommended data format for data submission.

Assessment of data, samples and research results

Article 249 of Part XIII of the United Nations Convention on the Law of the Sea paragraph 1 (d) requires the researching state or competent international organization, if requested, to provide the Kiribati with an assessment of data, samples and research results and to provide assistance in their assessment or interpretation.

Fulfillment of Obligations

It is advisable for a researching state or competent international organization expressly to inform Kiribati, after final results and conclusions of a research project have been provided to it, that all obligations related to a specific research project have in its opinion have been fulfilled.

STANDARD FORM A*

APPLICATION FOR CONSENT TO CONDUCT ENVIRONMENT OR MARINE SCIENTIFIC RESEARCH IN
AREAS UNDER NATIONAL JURISDICTION OF
THE REPUBLIC OF KIRIBATI

Date:

1. General information

1.1 Cruise name and/or Cruise number: _____

1.2 Sponsoring institution:

Name: _____

Address: _____

Name of director: _____

1.3 Scientist in charge of the project:

Name: _____

Address: _____

Telephone: _____

Telex: _____

Facsimile: _____

Email: _____

1.4 Scientist(s) from.....(name of coastal state)
involved in the planning of the Project:

Name(s): _____

Address: _____

1.5 Submitting officer:

Name and address: _____

Country: _____

Telephone: _____

Telex: _____ Fax: _____ Email: _____

2. Description of project (Attach additional pages as necessary)

2.1 Nature and objectives of the project:

2.2 Relevant previous or future research

cruises:

2.3 Previously published research data relating to the
project:

2.4 Benefits research to Kiribati – describe (Attach additional pages as necessary)

3. Methods and means to be used

3.1 Particulars of vessel:

Name:

Nationality:

Owner: _____
Operator: _____
Overall length: _____
Maximum draught: _____
Net tonnage: _____
Gross tonnage: _____
Propulsion: _____
Cruising speed: _____ Maximum speed: _____
Call sign: N/A _____
Method and capability of communication (including telex,
frequencies): _____

Name of master: _____
Number of crew: _____
Number of scientists on board: _____

3.2 Aircraft or other craft to be used in the project: _____

3. Methods and means to be used continued

3.3 Particulars of methods and scientific instruments:

Types of samples and data	Methods to be used	
Rainwater		
Seawater		
Collection of beach rocks		

3.4 Indicate whether harmful substances will be used: _____

3.5 Indicate whether drilling will be carried out: _____

3.6 Indicate whether explosives will be used: _____

3.7 Indicate whether sample or specimen (living or non living) will be taken away from the country: _____

4. Installations and equipment

Details of installations and equipment (dates of laying, servicing, recovery; exact locations and depth):

5. Geographical areas

5.1 Indicate geographical areas in which the project is to be conducted (with reference in latitude and longitude)

5.2 Attach chart(s) at an appropriate scale showing the geographical areas of the intended work and, as far as practicable, the positions of intended stations, the tracks of survey lines, and the locations of installations and equipment.

6. Dates

6.1 Expected dates of first entry into and final departure from the research area of the research vessel: _____

6.2 Indicate if multiple entry is expected: _____

7. Port calls

7.1 Dates and names of intended ports of call in : (name of coastal state):

7. Port Calls continued.

7.2 Any special logistical requirements at ports of call: _____

7.3 Name/Address/Telephone of shipping agent (if available): _____

8. Participation

8.1 Extent to which (name of coastal state) will be enabled to participate or to be represented in the research project:

8.2 Proposed dates and ports for embarkation/disembarkation: _____

9. Access to data, samples and research results

9.1 Expected dates of submission of data to SOPAC on non-living resources; to Kiribati ECD/Fisheries Division for living resources of preliminary reports which should include the expected dates of submission of the final results:

9.2 Proposed means for access by ECD/Fisheries to data and samples:

9.3 Proposed means to provide Environment/Fisheries with assessment of data, samples and research results or provide assistance in their assessment or interpretation:

9.4 Proposed means of making research results internationally available:

*This form is intended for research projects undertaken by states or institutions. International organizations undertaking or sponsoring research projects under article 247 of the United Nations Convention on the Law of the Sea are not required to submit an application for consent, but it is advisable that they use a similar form for the purpose of notification of the project to the coastal state concerned. This form is to be used for all research undertaken in the exclusive economic zone or on the continental shelf; for research undertaken in internal waters, the territorial sea or archipelagic waters, additional information may be required by the coastal state concerned. From: UN GUIDE

RECOMMENDED FORMAT FOR DATA SUBMISSION

1 Introduction.

The following document defines the recommended formats for the exchange of data between the secretariat and other organizations. The document is divided in three parts:

1. Media and formats
2. Official Data Formats
3. Other data formats for exchange

The first part describes the media and physical formats employed for data storage, the second the official or recommended formats while the third part describes the data formats that SOPAC secretariat can read or export to, but none of these formats are used for data storage inside the secretariat. It is therefore recommended to provide data in the formats defined in the second part unless it is absolutely impossible by the third party. In the case where none of the formats described are suitable, please contact us directly before supplying any data.

Media and formats

The following media and formats are specified in the order of preference. All sizes are native size without any compression scheme,

DVD-ROM

Size: 12 GB

Format: DVD standard

Comments: This is to become the preferred format as soon as the technology will allow the creation of DVD-R. DVD-Ram medium is currently being evaluated.

CD-ROM or CD-R

Size: 650 MB

Format: iso9660 or Joliet

Comments: This is the preferred format. It can contain up to 650MB of data. The CD-ROM can be in the iso9660 or Joliet format for support of long file names.

ZIP disk

Size: 120 MB

Format: PC-Format

Comments: Easiest format to transfer files between computers. ZIP disk and drives are now widely used.

Floppy disk

Size: 1.44 MB

Format: PC-Format

Comments: This medium is not recommended for Pacific Island Countries due to mould and fungus growth on the media after several months. Floppy disks should be Teflon coated to maximise useful lifetime..

Exabyte tape

Size: 2 GB or 5 GB (High Density)

Format: Unix tar format, native NT tape backup format, ArcServe 6.5 format.

Comments: No hardware compression or password-protected sessions should be used. DAT and Exabyte are equally preferred.

DAT tape

Sizes: 2 GB (DDS), 4GB (DDS2), 12 GB (DDS3)

Format: Unix tar format, native NT tape backup format, Arcserve 6.5 format.

Comments: No hardware compression or password-protected sessions should be used. DAT and Exabyte are equally preferred.

QIC 150

Sizes: 150 MB

Format: Unix tar format

Comments: This media is not recommended for new data exchange, it is only for backward compatibility with older systems.

Reel

Sizes: 650 bpi or 1200 bpi

Format: Unix dd format

Comments: Lower densities such as 300 bpi are not read by our drive. This media is not recommended for new data exchange, it is only for backward compatibility with older systems.

Official Data Formats

The following formats are classified by data type.

GIS Vector

Format: MapInfo Native format

Additional information to supply: Datum (7 parameters) and projection parameters.

Comments: Preferred format for data storage. MapInfo was the only available low cost GIS software when it was chosen.

GIS Raster

Format: ERDASS imagine img

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: Raster software is not as convenient and low cost as MapInfo, therefore ERDASS imagine is the recommended application for processing raster data before converting data to GIS backdrop or final GIS vector data. In addition, some raster data can be used in MapInfo through the Vertical Mapper add-in.

Satellite or Aerial photo

Format: ERDASS imagine img, TIFF

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: ERDASS is used to rectify and correct satellite and aerial photo. Rectified TIFF images can be used for backdrop display.

Digital Terrain Model

Format: XYZ ASCII delimited

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: The data should not be gridded but simply filtered for errors. Such data is recommended over gridded data as it leaves the operator the choice of grid step.

Bathymetry and Imagery non gridded

Format: XYZ ASCII delimited

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: The data should not be gridded but simply filtered for errors. Such data is recommended over gridded data as it leaves the operator the choice of grid step. Imagery should be slope corrected as well as other correction.

Multi-beam bathymetry or imagery raw data

Format: xtf

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: Format developed by TRITON which is now widely accepted.

DTM/Bathymetry or other Gridded data

Format: Vertical Mapper, XYZ ASCII delimited

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: Gridded data is not convenient as the resolution is already fixed but it may be the only format available

Seismic

Format: SEG-Y

Additional information to supply: track lines

Comments: SEG-Y is a common recognised format, particular care should be taken in the writing of SEG-Y headers for greater compatibility.

Ship track, magnetism, gravity

Format: MGD77

Additional information to supply: Datum (7 parameters) and projection parameters

Comments: This format is widely used by the US National Data Centre to collect research vessels activities.

GPS rover data

Format: NMEA format

Additional information to supply: equipment and accuracy

Comments: none

GPS base station data

Format: RTM format

Additional information to supply: equipment and accuracy

Comments: none

CTD

Format: Any

Comments: No format is currently recommended. Format should be provided for interpretation.

Weather data

Format: Any

Comments: No format is currently recommended. Format should be provided for interpretation.

Wave data

Format: Any

Comments: No format is currently recommended. Format should be provided for interpretation.

Document

Format: Microsoft Word, PageMaker

Additional information to supply: version

Comments: Use of styles is highly recommended as well as embedded images rather than OLE documents. For PageMaker all linked documents must be supplied.

Presentation

Format: Microsoft Power Point

Additional information to supply: version

Comments: none

Spreadsheet

Format: Microsoft Excel

Additional information to supply: version

Comments: none

Database

Format: Microsoft Access, Dbase, ASCII delimited (Tab)

Additional information to supply: version

Comments: no format is particularly recommended as most of the SOPAC databases are being transferred to Microsoft SQL Server.

Other data formats for exchange

These formats are for the exchange of data. SOPAC can read and write to these formats when no other format is supported or available.

Image

Format: TIFF, JPEG, GIF, Bitmap

Comments: Particular attention should be given to format that perform less compression such as JPEG.

Raster

Format: DXF, shapefile, ARC-Info export format

Comments: DXF does not contain any attribute data and is not suitable for GIS but only for mapping. ArcInfo data is not readable unless converted in the ArcInfo export format. For all these formats the datum (7 parameters) and projection parameters must be supplied.

Document

Format: WordPerfect, RTF, ASCII, PDF, HTML

Comments: All major formats can be read, however conversion between formats may lose the pagination. Acrobat PDF is mainly used for export.

Spreadsheet

Format: Paradox, Lotus

Comments: All major formats can be read.

Data from Research Vessels

The following data must be provided when sensors are installed:

1. Bathymetry and Imagery raw data
2. Bathymetry and Imagery non gridded
3. Ship track, magnetism, gravity
4. Seismic
5. Other non gridded data
6. CTD
7. Weather Data