



SPREP

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The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures.



MEMORANDUM OF UNDERSTANDING (MOU)

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between

Kiribati Meteorological Service (KMS)

and

The Secretariat of the Pacific Regional Environment Programme (SPREP)

(together, "the Parties")

KMS is of the Government of the Kiribati institution responsible for monitoring the state of the atmosphere in Kiribati as well as issuing weather and climate information to safeguard the lives and properties of the people of *iKiribati*. The KMS is a function of the office of the President (*Te Beretitenti*).

SPREP is a regional, intergovernmental organisation comprising 26 members consisting of 21 Pacific Island Countries and Territories and five developed countries with direct interests in the Pacific region. The purposes of SPREP are to promote co-operation in the Pacific region and to provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generations.

Definitions

"Financial Year" means the financial year 1st April to 31st March.

"GCOS" means Global Climate Observing System.

"GSN" means GCOS Global Surface Network.

"GUAN" means GCOS Global Upper Air Network.

"MetService" means Meteorological Service of New Zealand Ltd.

"KMS" means Kiribati Meteorological Service, Office of *Te Beretitenti* (President), Government of Kiribati.

"Parties" means SPREP and KMS.

"PF" means the UK Met Office Pacific Fund.

"Services" means the services broadly defined in clause 1.3 and specifically defined in Appendix I of this Agreement.

"SPREP" means the Secretariat of the Pacific Regional Environment Programme

"WMO" means the World Meteorological Organisation

Whereas SPREP and KMS have mutual interests in relation to the management and operations of the Tarawa Global Upper Air Network (GUAN) programme and the continuous monitoring of the atmosphere to ensure adequate atmospheric data is collected to strengthen the GUAN and contributing vital meteorological data to global institutions of which information are processed for the safety of the people of Kiribati, the Pacific region and around the world.

The Parties have reached the following understandings:

1. Objectives

- 1.1. This Memorandum of Understanding (MOU) is to provide a framework of co-operation between SPREP and KMS to ensure timely, efficient and safe operations of the Tarawa GUAN programme.
- 1.2. Within this framework the Parties will consult in an effort to collaborate on the activities they identify as requiring implementation.

2. Collaborative Activities

2.1. Background

- 2.1.1. This Agreement regarding Services funded out of the PF is between SPREP and KMS, referred to as the Parties in this Agreement.
- 2.1.2. Monies from the PF are used for authorised supporting activities to manage and operate the Tarawa GUAN station in Kiribati.

2.2. Description of Services

- 2.2.1. SPREP, on behalf of the Met Office United Kingdom, agrees to engage KMS to provide the Services specified in **Appendix I : Description of Services** and **Appendix II : World Meteorological Organization 'Best practices' for GUAN stations** of this Agreement.
- 2.2.2. SPREP may from time to time request KMS to provide additional services to the Services required under this Agreement. Both Parties shall agree in writing to the provision of such additional services and the charges for such additional services prior to those services being provided.

3. Operational Provisions

3.1. Financial Arrangements

3.1.1. *Management:* SPREP and Ministry of Finance & Economic Development of the Government of Kiribati, in consultation with KMS, will manage the finances under this Agreement, in accordance with SPREP and Government of Kiribati's financial policies and procedures.

3.1.2. *Payment to KMS:* SPREP will issue a Telegraphic Transfer (TT) of monies to the Kiribati Government No. 4 A/C on a quarterly basis per financial year (1 April to 31 March), based on the following payment schedule:

- a) AUD5,135, Quarter 1 (April).
- b) AUD5,135, Quarter 2 (July).
- c) AUD5,135, Quarter 3 (October).
- d) AUD5,135, Quarter 4 (January).

All payments made by SPREP to the Kiribati Government No.4 A/C shall be made in cleared funds to the Account as follows:

Bank: ANZ Bank of Kiribati

Branch: Tarawa

Account Name: Kiribati Government Account Number 4

Account No.: 269007

Swift address: BKIRKIKI

3.1.3. The expenses to be paid out of the Kiribati Government No.4 A/C are detailed in Table Below:

Table 1: Tarawa GUAN Station budget (\$Aus)/financial year

Expense Item	Amount (\$Aus)
Management & staffing (Salaries and Allowances)	10,040
Occupancy - building rent	200
Occupancy – electricity (Hydrogen Building)	1,000
Office maintenance - furniture	5,000
Office – misc. (stationery, printing, etc.)	200
General Admin	200
Communications - postage	100
Communications – emails, tolls	2,500
Air conditioner ops	1,300
TOTAL	20,540

3.1.4. Where this Agreement terminates for any reason during the term of the Agreement, KMS shall cease work agreed to under Appendix I of this Agreement. SPREP shall pay KMS for Services already provided but outstanding at the termination date.

3.1.5. KMS will provide SPREP with monthly and quarterly progress reports summarising activities carried out on site and expenditures incurred during each month/quarter. The progress reports should reach the Pacific Meteorological Desk Partnership at SPREP no later than 3rd day of each month

4. Warranties

4.1. KMS warrants that it has not relied on any representation made by SPREP which has not been expressly stated in this Agreement or upon any descriptions contained in any document including any publicity material produced by SPREP.

4.2. If there are implied into this Agreement any terms or conditions, liability of which it cannot be excluded, SPREP liability arising for breach of such a term or condition is limited, and at SPREP absolute discretion.

4.3. Subject to clause 4.2, any Services which would otherwise be implied in this Agreement, are hereby excluded.

5. Intellectual Property

5.1. All observations from Tarawa GUAN station shall be freely transmitted through the WMO Global Telecommunication System (GTS), in line with WMO guidelines for GOS and GCOS stations.

5.2. All intellectual property rights arising in and part of the Services supplied by KMS under this Agreement shall belong to SPREP and KMS. This includes (without limitation) any equipment, the interfaces, presentations, concepts and manuals associated with some of the equipment procured under this Agreement.

5.3. The ownership of any amendments, alterations, revisions, modifications, abridgements or expansions made to any equipment, software or Services by any person associated with the Tarawa GUAN programme shall also vest in SPREP and KMS.

6. Indemnity

6.1. KMS shall indemnify SPREP against any loss, damage, liability, cost or expense in connection with or arising out of any claim by any third party against SPREP as a result of the fault or negligence of KMS staff or any of its contractors or agents in the performance or non-performance of this Agreement or non-compliance with it as the case may be.

7. Limitation of Liability

7.1. SPREP shall under no circumstances be liable under the law of tort, contract or otherwise, for any indirect or consequential loss or damage, however caused, arising out of, or in connection with, the performance or non-performance of this Agreement.

8. Assignment

8.1. No Party may assign or be relieved of its rights or obligations under this Agreement without the prior consent in writing of the other Party, which consent shall not be unreasonably withheld.

9. Force Majeure

9.1. Neither Party shall be liable for any delay in meeting, or failure to meet, its obligations under this Agreement to the extent that such delay or failure is caused by any event outside its reasonable control (including, without limitation, any delay or failure caused by any act or omission of the other Party). If a Party is prevented from meeting its obligations under this Agreement due to circumstances outside its reasonable control, it shall immediately notify the other Party of the circumstances and any alternative means for performance of the obligation and consult with the other Party as to the means, and use its best endeavours, to minimise the effects of its inability to perform its obligations under this Agreement.

10. SPREP Obligations and Rights

10.1. The following are the obligations and rights of SPREP. SPREP will;

- provide details of the required authorised Services from KMS (see Appendix 1 for details);
- manage and oversee the overall implementation of this Agreement;
- respond to any queries from KMS as soon as possible but not later than 15 days after the enquiry is received;
- liaise with Met Office UK, MetService and relevant partners regarding the management and operation of this Agreement;

11. KMS Obligations and Rights

11.1. The following are the obligations and rights of KMS. KMS will;

- provide the required Services specify in Appendix 1 in a timely, cost-effective and efficient manner;
- respond to any queries from SPREP as soon as possible but not later than 5 days after the enquiry is received;
- be responsible for ensuring that value for money is achieved in meeting its obligations under this Agreement;
- be entitled to recover any proper external costs of delivering the Services directly from SPREP. A tax invoice will be supplied to SPREP for any recovery sought, after prior agreement with SPREP.
- Provide quarterly reports to SPREP to the Financial and Operation of the Stations

12. Staffing

12.1 KMS shall provide all the necessary and appropriate staffing to meet its obligations under this Agreement.

13. Sub-contractors

13.1 No part of this work under this Agreement shall be sub-contracted by KMS without the express agreement of SPREP. Any such sub-contract shall indemnify SPREP against any employment liabilities that incurred.

14. Ownership of equipment

14.1. Equipment procured and or purchased by SPREP under the PF and with other funds, for use in Tarawa GUAN station shall become the property of KMS. Full ownership of equipment shall be granted once the equipment is received and satisfactorily installed.

15. Acknowledgement of Parties

15.1. Unless there are exceptional reasons for the funding sources not to be acknowledged, KMS undertakes to acknowledge the contribution of SPREP and Met Office UK and where appropriate on equipment and related Services procured under the Agreement.

16. Amendments

16.1. Amendments may be made to this Agreement with the mutual agreement in writing of the Parties.

17. Disputes

17.1. In the event of a dispute relating to this Agreement, both Parties shall endeavour to resolve all disputes by direct negotiation where possible. Any dispute that cannot be resolved by mutual agreement within 21 days shall be resolved by such person nominated by the Parties acting as an expert and not as an arbitrator. The decision of such an expert shall be final and binding.

18. Confidentiality

18.1. The Parties shall keep confidential the terms and conditions of this Agreement and the appendices hereto and any information contained therein or associated with the negotiation and provision of the Services subject to any disclosure required by law. This clause shall survive termination of this Agreement.

19. General

19.1. Each Party to this Agreement acknowledges that it is in all respects independent of the other Party and that it does not have the authority to make statements or other representations on behalf of the other Party.

19.2. If either Party fails to exercise any right or remedy under this Agreement or delays in doing so, such failure or delay shall not operate as a waiver by that Party of that right or remedy or of any other right or remedy under this Agreement.

19.3. If any provision in this Agreement is held to be invalid or unenforceable, such invalidity shall not affect the validity or enforceability of the remaining provisions of this Agreement.

19.4. This Agreement may be signed in counterparts, email or by facsimile. Once a counterpart has been signed by each Party, each counterpart shall be deemed as valid and binding on the Party that signed it as if it had been signed by both Parties.

19.5. All notices under this Agreement shall be in writing and shall be delivered by hand or sent by courier, fast post (or its equivalent), email or facsimile to the address set out below or to such other address as the addressee may notify in writing from time to time.

<p>Kiribati Meteorological Service</p> <p>Betio, Tarawa P.O Box 486 Republic of Kiribati</p> <p>Tel : + (686) 26459 Fax: + (686) 26511 e-mail: uenetat@gmail.com</p>	<p>Secretariat of the Pacific Regional Environment Programme</p> <p>Vailima P.O Box 240 Apia Samoa</p> <p>Tel: + (685) 21929 Fax: +(685) 20231 e-mail: netatuap@sprep.org</p>
<p><u>Attention:</u> Ueneta Toorua , Acting Director</p>	<p><u>Attention:</u> Dr Netatua Pelesikoti, Director, Climate Change Division</p>

19.6. Each Party shall pay its own costs in connection with the preparation, signing and enforcement of this Agreement.

4. Annexes

1. SPREP, on behalf of the Met Office United Kingdom, agrees to engage KMS to provide the Services specified in **Appendix I : Description of Services** and **Appendix II : World Meteorological Organization 'Best practices' for GUAN stations** of this Agreement.
2. Such Annex shall form an integral part of this MOU and, unless expressly provided otherwise, a reference to this MOU includes a reference to any such Annex.

5. Duration, entry into force, amendments and termination

1. This Memorandum will come into force on the date the date the last party signs and will continue for five (5) years, unless terminated under the provisions stipulated below.
 - 1.1 SPREP reserves the right to terminate this Agreement, upon one month's written notice to KMS, inter-alia in the following circumstances.
 - If the PF MoU between SPREP and Met Office UK is terminated;
 - For failure to provide the Services required under Appendix I of this Agreement;
 - For material breach by KMS of any of the terms of this Agreement;
 - By reason of force majeure.

- 1.2 Upon termination of this Agreement, SPREP retains the right to recover any monies given to KMS for the purposes of the provision of the required Services which cannot be accounted for.
 - 1.3 Until the date on which termination takes effect, KMS shall continue to provide the Services required under Appendix I of this Agreement.
 - 1.4 Termination of this Agreement under clause 9 shall be without prejudice to other rights and remedies of the Parties arising out of any default which occurs before the termination, and shall be without prejudice to any claim for monies payable as at the date of termination or in respect of work done or liabilities incurred before the termination.
2. This MOU may be amended by agreement in writing between the Parties.
 3. Either Party may terminate this MOU by giving three months' written notice to the other.

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Mr. David Sheppard
Director General
SPREP

Date: 12.1.15



Mr. Ueneta Toorua
Acting Director
Kiribati Meteorological Services

Date: 02/02/15

ANNEX 1

Description of Services

KMS will undertake the following tasks:

i. Technical Support

- Daily operation and maintenance of the Tarawa GUAN station. Standard Operating Procedures (SOPs) provided by Met Service's Observations & Engineering (O&E) staff shall be followed by KMS staff operating the Tarawa GUAN station.
- Daily operation and maintenance of communication systems used with radiosonde ground system tools, test equipment, manual and spares.
- Monthly review of Upper Air Log and compared them to those received at GCOS monitoring centres.
- Monthly quality control and review of alignment and accuracy of upper air soundings.
- Training of relevant staff assigned to operate and maintain the station.
- Prepare basic training manuals and guidance documents on operation and maintenance of station.
- Develop a standard trouble shooting and technical assistance response system.
- Establish a national maintenance spares pool within KMS for component systems that require routine replacement.
- Provide immediate procurement of any technical spares, as required, in accordance with operational requirements for Tarawa.
- Review condition and status of GUAN equipment (e.g. hydrogen generator and storage system, digicora, balloon fining operation site, etc.) and recommend appropriate follow up actions to repair or restorer any of the worn out equipment to SPREP.
- Review operational safety procedures and safety conformity of GUAN programme.

ii. Secretariat, Reporting and Logistical

- Monthly preparation of CLIMAT TEMP reports.
- Prepare a monthly inventory and tracking system of equipment, expendables/consumables and expected resupply. Send the inventory to SPREP by the end of each month.
- Prepare monthly and quarterly reports on services delivered on a monthly (quarterly) basis to SPREP
- Assist Metservice engineers during their remote assistance and in-country visits (e.g. emergency and routine visits) of facilities to diagnose faults.
- Other additional services that may be required.

ANNEX 2

World Meteorological Organization 'Best Practices' for GUAN stations (Manual on the Global Observing System,

WMO-No. 544, 2.10.4.9)

(Page <http://www.wmo.int/pages/prog/gcos/Publications/gcos-73.pdf>)

- Long-term continuity should be provided for each GUAN station. This requires the provision of the necessary resources, including well-trained staff, and keeping changes of location to a minimum.
- Changes of bias caused by changes in instrumentation should be evaluated by a sufficient overlapping period of observation (perhaps, as much as a year) or by making use of the results of instrument intercomparisons made at designated test sites.
- Soundings should preferably be made twice a day and should reach as high as possible, noting the GCOS requirements for ascents up to a height of 5 hPa. Because climate data are needed in the stratosphere to monitor changes in the atmospheric circulation, composition and chemistry, every effort should be made to maintain soundings regularly up to a level as high as possible noting the above GCOS requirement.
- CLIMAT TEMP data should be provided in an accurate and timely manner. CLIMAT TEMP reports should be transmitted by the fifth day of the month but not later than the eighth day of the month.
- Rigorous quality control should be exercised at each GUAN site. Periodic calibration, validation and maintenance of the equipment should be carried out to maintain the quality of the observations.
- Basic checks should be made before each sounding to ensure accurate data. Checks should also be made during and at the end of each sounding to assure corrections of incomplete soundings or errors before transmission.
- Back-up radiosondes should be released in cases of failure in order to maintain the record from the GUAN station.
- Detailed metadata should be provided. The batch identifier on the radiosondes should be logged for each flight, so that faulty batches can be identified and the data amended or eliminated from the climate records if necessary. Up-to-date records of metadata in a standard format should be provided to the GUAN Archive so that shifts in the data will not be mistaken for climate change. The metadata should include detailed information about the station such as location, elevation, operating instruments and their changes over time. Changes to operating and correction procedures should also be recorded. Both the corrected and uncorrected upper-air observation should be archived. Climate change studies require extremely high stability in the systematic errors of the radiosonde measurements.