Terms of Reference:
Information Management System Developer for the Ridge to Reef Project

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About this document

This document specifies the terms of reference for information systems developer for the Ridge to Reef (R2R) Project. This terms of reference is to procure the services of an expert to develop an information system for effective data management. The expert is to be referred to as "Information Management System Developer" within this document.

Background and Objectives

The Ridge to Reef Project is a National Environment service implemented project, in partnership with the Ministry of Marine Resources (MMR), Ministry of Agriculture (MOA) and Cook Islands Tourism Corporation (CITC). The overall objective of the project is to build national and local capacities and actions to ensure effective conservation of biodiversity, food security and livelihoods and the enhancement of ecosystem functions that contribute to food security and livelihoods within the Cook Islands Marine Park (CIMP).

This Ridge to Reef Project looks to approach biodiversity conservation in multiple approaches such a policy strengthening, capacity building and information technology.

Under Activity 1.3.6 "Strengthen knowledge management systems for Ridge to Reef approaches and for protected areas", this clearly specifies the need for a integrated, centralised, simple to use, information management system which project partners and other key stakeholder can contribute to and information can be made readily available for all to use[1].

An essential component to strengthening conservation initiatives in the Cook Islands is having reliable and easily accessed information base of Ridge to Reef completed activities, captured data, assessment reports, management plans, maps and links to related information sources relating to the outputs of the project. This system identifies fragmented information (among project partners and within Ministries/Agencies) and difficulty to access and/or no centralised system.

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[1] United Nations Development Programme. (2013). *Conserving biodiversity and enhancing ecosystem functions through a "Ridge to Reef" approach in the Cook Islands.* UNDP (pg 63- 64).

The overall objective of the information system developer is to develop an effective system that can be utilised to manage and provide a simple avenue of sharing/using data. An information system will enable information to be centralised as well as be easily and readily available for informed descision- making. An information system specifically for the Ridge to Reef (R2R) project will provide a central system whereby information can be regularly updated, stored, displayed, retrieved and shared.

The Outcomes of the Database developer is to;

- Develop an Information system for more efficient information storage, where information can be stored, saved, displayed, easily retrieved and readily accessible to aid and support informed decision-making;
- Centralised storage system to minimise the information loss and integration of related information;
- Multimedia information formats to be stored within the system;
- Easy process for information dissemination;
- Training to be provided for ministry staff for sustained maintenance and use of the system;

Scope of Work

The consultant shall consider the following indicative stages and Outputs:

No.	Output/:	Tasks/ Key deliverables:	Timeline:
Stage 1	Assessment and Gap Analysis.	Assess Ridge to Reef frameworks and flows for information management in order to identify existing gaps and options for implementation. 1) Consult with R2R project partners and stakeholders on information storage systems. Scope information management arrangements to assess how different stakeholders and institutions produce data and information, how is it stored, current databases, identify who is responsible for it, and arrangements, procedures, and coordination for maintenance, use and data sharing; 2) Based on this assessment, identify gaps and weaknesses in information management that need to be addressed. 3) Identify feasible options for information management systems and procedures including advantages/disadvantages of each option, full costs to run the system; keeping in mind internet charges, hardware and software purchases and any other associated expenses. 4) Deliver a report on the assessment and gap analysis with IMS Options	3 Weeks

No.	Output/:	Tasks/ Key deliverables:	Timeline:

Stage 2	Database development and complete R2R consultations with project partners and stakeholders.	Develop a database/ management system that provides the effective and efficient data management. Complete the relevant consultation and collect information with project partners
		
		1) Work with NES to select appropriate IMS option/s for implementation.
		
		2) Collect information on R2R project activities and other related materials from R2R partner's e.g data and field surveys, copies of reports, photos, video and other information.
		
		3) Develop a database/ information management system for R2R data, media and other resources.
		
		   a. Work closely with R2R project partners on developing standardised information fields for the database/ information systems
		
		   b. For data storage, incorporate a search tool, include new data entry, descriptions of information, storage of various data formats, download/ copying data capabilities, links to other related resource bases.
		
		4) Provide a progress report on the completion of the database.
			5 Weeks

Stage 3	Training on efficient and effective use of the information and database system.	Complete an IMS user manual and a training workshop to stakeholders and project partners. 1) Produce a user manual/ guide for the efficient and effective use and maintenance of the IMS as well as how to edit the IMS to include new data. 2) Conduct a training workshop to train R2R project stakeholders on use and maintenance of the IMS as well as best practices for information management. 3) Provide a project completion report.	2 Weeks

Methodology

An outline of proposed methodology should be included in the proposal by the supplier in response to this Terms of Reference. The successful applicant will be required to abide by the Cook Islands Government Public Sector Code of Conduct in particular to carry out their duties in a professional, transparent, participatory and culturally appropriate way. In addition, they must also operate in accordance with all Cook Islands law, regulations and procedures, particularly the:

- Cook Islands Government Financial Policy and Procedures Manual
- Te Tarai Vaka project management cycle.
- The Cook Islands Environment Act 2003
- The Cook Islands Official information Act 2008

Team Composition

Role	Knowledge , skills and experience
Local consultant	Develop own methodology for the achievement of the outputs and key deliverables
National Environment Service (NES)	Implementing Agency/ project partner with fiduciary responsibility to donor, information source and potential host of the information system.
Ministry of Marine Resources (MMR)	Implementing partner of project (information source and contributor to information system
Ministry of Agriculture (MOA)	Implementing partner of project and information source.
Cook Islands Tourism Corporation (CITC)	Implementing partner of project and information source.
Office of the Prime minister (OPM) Information communication technology (ICT) office	Government network focal point, (potential) host of the system.
House of Ariki	Implementing partner of project (information source and contribute to information system.
Marae Moana Office	Implementing partner of project (information source and contribute to information system.

Performance Standards

The consultant is expected to have a broad understanding of the Cook Islands Government centralised network hosted at the ICT division at the OPM. Be familiar with the difficulties outer islands have with access and provide sound advice on effective and sustainable use of the system to all within the Cook Islands.

A clear understanding on how best to achieve the key deliverables, provide clear and simple advice on what this information system is intended to be for the ridge to reef project, stakeholders and communities. Be experience in consultation meetings with ministries, government workers and stakeholders.

- Clear and simple advice on system requirement, equipment and other relevant costs. .

- Completing of meetings and minutes with R2R project staff with project partners (NES, MMR, MOA and Cook Islands Tourism Corporation (CITC)).

- Reports to be completed and presented to the implementing office reviewing the information captured and how best to complete outputs and advice of partner engagement.

Expected Deliverables

The consultant is expected to deliver the following key outputs before the end of the assignment

- A report based on the findings of the assessment of Ridge to Reef frameworks and flows for information management in order to identify existing gaps and options for implementation.
- Fully functional R2R Database/Information Management System (IMS), in line with the option selected by the R2R Project, populated with existing R2R information and data.
- A user's manual for use, editing and maintenance of the R2R IMS.
- Delivery of a training workshop for R2R partner ministries/ stakeholders. Note the costs of running this workshop shall be separate from the costs for this consultancy.

All submitted reports will be reviewed by the NES project team which will include the Project Coordinator and Project Officer before stages are accepted as completed.

Relevant reports/documentation

- UNDP Project Document "Conserving biodiversity and enhancing ecosystem functions through a "Ridge to Reef" approach in the Cook Islands."

Other related activities and/or donor engagements

- UNDP Project Document "Conserving biodiversity and enhancing ecosystem functions through a "Ridge to Reef" approach in the Cook Islands."

Governance and management

The National Environment services (NES) will be primary implementing agency that will monitor and facilitate tasks to be completed by the 'Information system developer' and the partnering agencies/ ministries including Ministry of Marine Resources, Ministry of Agriculture, Cook Islands Tourism will be involved in a secondary role as information contributors or as otherwise determined.

Expected Competencies

It is expected that the successful contractor will have the following key competencies:

- Tertiary qualifications in Database development/ Information management or equivalent;
- Fluent in English (oral and written) is a requirement, fluency in Cook Island Maori is a bonus;
- Proven experience in developing a database/ information system;
- Proven experience in designing web based applications with key focus of information sharing.
- Comprehensive understanding of the database systems associated equipment;
- Provide sound advice to the key steps in developing an efficient and effective system;
- Good understanding on the current Cook Island Government information/ communication technologies and current challenges being faced;
- Experience in running successful training workshops and working in close partnership with all stakeholders involved;
- Approach the work with energy and positivity and to demonstrate an openness to change and to manage complexities;

Appendix 1:

United Nations Development Programme. (2013). *Conserving biodiversity and enhancing ecosystem functions through a "Ridge to Reef" approach in the Cook Islands.* UNDP *(Pages 62 and 63).*

Activity 1.3.6 - Strengthen Knowledge Management Systems for Ridge to Reef approaches and for Protected Areas

In addition, the project will support the establishment and management of databases and other information systems for Protected Natural Areas in the Cook Islands, designed to support information sharing so that institutions and persons responsible for the management of wildlife sanctuaries, forest and marine reserves, CCAs and Ra'ui sites can share information, best practices and resources in managing these sites and planning for and implementing island-wide interventions that can benefit multiple sites. The information resources will include: information on relevant laws, regulations, policies, management plans and authorities; the consolidation of existing mapping and GIS information, and any additional data developed under activities 1.2.1 and 2.1.1. Much of the information will be incorporated into the Disaster Risk Management Data Portal, which has been designated as the national hub for information and data relevant to natural resources and environment; the R2R project will ensure that information related to protected areas (and biodiversity) is appropriately incorporated into this larger system, and made available to stakeholders. The project also will make sure that national information is shared with and incorporates regional information, in the scope of the regional R2R programme (see activity 1.3.5) *(Page 62 and 63 of the project document).*

Annex 1:

Concept of the Information Management System (IMS) information flow