

# MEMORANDUM OF UNDERSTANDING

CONCERNING THE CO-OPERATION BETWEEN THE MEMBERS OF THE PROJECT MANAGEMENT GROUP OF THE DEFRA FUNDED DARWIN PLUS PROJECT “**SOIL MAP AND ONLINE DATABASE AS CLIMATE CHANGE MITIGATION TOOLS**” TO FACILITATE THE DELIVERY OF THE PROJECT

*[final version 08/11/18]*



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## *Introduction*

RECOGNISING the value of co-operation, collaboration and mentorship to the Project Manager by providing expertise, advice and oversight.

WELCOMING the collaboration of partners and stakeholders in the project.

DESIRING the highest standards and systems of project delivery.

ACKNOWLEDGING the need for the highest standard of research outputs and project delivery.

WISHING TO:

- a) reinforce the working relationship between the participants;
- b) establish a framework for co-operation for the delivery of the project.

CONSIDERING the requirements and commitments arising from the project.

The participants to this Memorandum have reached the following understanding

**Paragraph 1**  
*Definitions*

For the purposes of this Memorandum:

“Memorandum” means this Memorandum of Understanding

“Participant” means the SAERI and the Project Partners Group formed to support the delivery of the DPLUS083 project “Soil map and online database as climate change mitigation tools” (the “Project”).

“Research Agreement” means the separate agreement between a Project Partner and SAERI which contains the specific operational and financial terms of that Project Partner’s participation in the project.

**Paragraph 2**  
*Participation, effect and duration*

- a) This Memorandum comes into effect on the date it has been signed by all Participants.
- b) This Memorandum will continue in effect between each participant until September 2020.
- c) A Partner may withdraw from the Memorandum by giving three months written notice to all other Partners.
- d) Notice served under paragraph c) will not terminate the Memorandum. In the event that notice is given, the Memorandum will continue in effect amongst the other Participants and the withdrawal of a Participant does not remove contractual obligations defined under Research Agreements.
- d) The remaining Participants will consult to determine how any outstanding matters will be dealt with.

**Paragraph 3**  
*Scope of activity*

The purpose of this Memorandum is to:

- a) define the areas of co-operation within the Participants;
- b) outline mutual principles of collaboration between the Participants
- c) acknowledge what is stated by the Falkland Islands Data Policy

**Paragraph 4**  
*Areas of co-operation*

The Participants of this Memorandum will work together to explore the possibility of implementing the following for their joint benefit:

- a) delivering the project in a spirit of team work and according to the Work Packages, timelines and budget specified in the Grant Award DPLUS083.
- b) disseminating the final results through publications (including scientific papers) and making them openly available to the wide public.
- c) adopting good practices of data and information sharing and providing material (methodology and models) which will be shared between Participants.
- d) working actively to facilitate capacity building in the Falkland Islands on the main DPLUS083 areas of interest.
- e) raising awareness and promoting the project on the Falklands within the project stakeholders and internationally
- f) explore opportunities that might emerge throughout the DPLUS083 project and that can add advantages to the project, both currently and in the future.

### **Paragraph 5**

#### *Principles of collaboration*

- a) **South Atlantic Environmental Research Institute (SAERI)** will lead and deliver the project according to the Grant Award DPLUS083 and provide regular updates to the Project Management Group.
- b) **James Hutton Institute (JHI)** will provide expertise in Remote Sensing and Digital Soil mapping methods (based on machine learning) to link soil types to tones, colours and landscape elements. Additionally JHI will provide appropriate Earth Observation techniques (e.g. vegetation and soil moisture indices) to support the identification and quantification of peatlands and eroded areas according to their hydrological status, mineral or organic composition and terrain driving factors. JHI will also help in giving practical training sessions on soil identification techniques to the SAERI project manager.
- c) **UK Falkland Islands Trust (UKFIT)** will contribute with specialist advice on practical application of sustainable farming system based on over 40 years of experience in agricultural and environmental research in the Falkland Islands. UKFIT will also facilitate the collaboration with the local habitat restoration officer and the government land manager advisor by conveying the information on soils, peatland and erosion into concrete solutions and recommendations for land management.
- d) **Falkland Islands Government (FIG)** will provide the technical support for the laboratory analyses by assisting the SAERI project manager in accessing the laboratory and associated equipment located at the Department of Agriculture in Stanley. Additionally, assistance will be provided also on routine lab analyses and ensuring that soil samples are stored adequately and prepared for export according to standards. FIG will also provide support through the Research Permitting process.
- e) **Natural History Museum (NHM)** will lead on the identification of the microbiological communities in soils and on the description of their functions in relation to the environment. NHM will also provide an expert technician who will lead on the DNA analyses of soil microorganisms

since it has a state-of-the-art molecular laboratory including Illumina Miseq sequencing platform. NHM will also be involved in workshop events in the Falklands, directed to SAERI project manager and interested stakeholders

f) **University of Magallanes (UMAG)** will provide technical expertise and support on understanding the results from the laboratory analyses and how to integrate them to the physical and microbial characterisation of soils. UMAG will support SAERI project manager to translate the lab analyses results into practical and feasible land management solutions and recommendations. In addition, UMAG will provide support during the soil campaign by sending to the Falkland Islands an experienced soil surveyor.

g) **Centre for Ecology and Hydrology (CEH)** will help in advice on best techniques for identifying and quantifying peatlands, their depth, status, carbon content. CEH will also advice on how to convey the quantitative results into sustaining and supporting land management best practice and climate change policies.

### **Paragraph 6**

#### *Framework for information sharing, data management and data publication*

The Participants should be aware that the Falkland Islands Data Policy, which is available on request, requires that everyone carrying out research in the Falklands liaise with the IMS-GIS Data Centre Manager in order to provide to the Data Centre both metadata (documenting the data collected or derived throughout the research activity) and data.

The metadata are prepared by the Participants using the ISO19115 Standard provided by the IMS-GIS Data Centre Manager. Participants should submit metadata and data in their final version three weeks ahead the official conclusion of the project in order to allow the metadata and data to be published online on the metadata catalogue and through a customised webGIS service.

Participants agree to share among each other all project-relevant data which have been collected or derived throughout the project. A data sharing service, which is hosted on a remote server and password protected, will be made available to all Participants by the IMS-GIS Data Centre Manager.

### **Paragraph 7**

#### *Financial provisions*

Each Participant will bear the cost of discharging its respective responsibilities under this Memorandum including travel and subsistence of its own personnel or third party collaborators other than those detailed under separate project delivery Research Agreements with Project Partners.

Co-operative activities under this Memorandum will be subject to the availability of personnel, funds and other necessary resources. This Memorandum will not be construed to commit any Participant to any particular expenditure, resources or personnel.

### **Paragraph 8**

*Public information and data*

The Darwin Plus Initiative requires the outcomes of the project to be publicly available, hence the Participants will co-ordinate with the IMS-GIS Data Centre Manager the release of public information relevant to the activities performed under this Memorandum who will strive to update both data and information as frequently as possible.

To ensure that information and data are transparently distributed among all Participants, project stakeholders and the wider public, the DPLUS083 will have a specific webpage hosted on the SAERI website and a customised webGIS service where the outcomes of the project and the spatial data will be disseminated and available online.

**Paragraph 9**  
*Settlement of disputes*

Whilst the Participants wish to signal their support for the project and this Memorandum, this Memorandum is not intended to be legally binding on the Participants. Participants will make their best efforts to assure that any dispute about the interpretation or application of the Memorandum or arising as a consequence of the Memorandum will be resolved by consultation between the Participants on behalf of any institution.

**Paragraph 10**  
*Amendment*

This Memorandum may be amended at any time by written consent of all the participants.

**Signature of agreement**



Name of Participant	Date of signature	Date of participation	Details for service of notice
 Juan Oyarzo Rector University of Magallanes	July 2020	April 2018 to October 2020	Avenida Bulnes 01855, Punta Arenas, Chile <a href="mailto:rectoria@umag.cl">rectoria@umag.cl</a>

Name of Participant	Date of signature	Date of participation	Details for service of notice
SAERI, Teresa Bowers 	July 2020	April 2018 to October 2020	Stanley Cottage North, Ross Road, Stanley, Falkland Islands, FIQQ 1ZZ