DPLUS052
Darwin Plus: Overseas Territories Environment and Climate Fund
Project Application Form

Submit by **2359 GMT Monday 21 September 2015**

Please read the Guidance Notes before completing this form.
Information to be extracted to the database is highlighted blue. Blank cells may render your application ineligible

Basic Data

1. Project Title (max 10 words)	**Mapping St Helena's Biodiversity and Natural Environment**		
2. UK OT(s) involved	St Helena Island, and Falkland Islands and Ascension Island	**Letter of support from OT government attached?**	Yes
3. Start Date:	1st April 2016		
4. End Date:	31st March 2018		
5. Duration of project (no longer than 24 months)	24 months		

Summary of Costs	**2016/17**	**2017/18**	**Total**
6. Budget requested from Darwin	**£136,109**	**£76,026**	**£212,135**
7. Total value of matched funding	**£76,080**	**£60,185**	**£136,365**
8. Total Project Budget (all funders)	**£212,189**	**£136,211**	**£348,400**
9. Names of Co-funders	St Helena Government Environment and Natural Resources Directorate (ENRD), St Helena Government Air Access, South Atlantic Environment Research Institute (SAERI), St Helena National Trust (SHNT), Connect Saint Helena Ltd, St Helena Nature Conservation Group (SNCG), Aberystwyth University		

10. Name, address and contact details of lead applicant organisation (responsible for delivering outputs, reporting and managing funds)*	Environment and Natural Resources Directorate, St Helena Government, St Helena, South Atlantic Ocean, STHL 1ZZ

* Notification of results will be by email to the Project Leader named in Question 12

11. Type of organisation of Lead applicant. Place an x in the relevant box.													
OT GOVT	X	UK GOVT		UK NGO		Local NGO		International NGO		Commercial Company		Other (e.g. Academic)	

12. Partners in project. Please provide details of the partners in this project and provide a CV for the individuals listed. You may copy and paste this table if necessary

Details	**Project Leader**	**Project Leader**	**Project Partner 1**
Surname	Henry	Cherrett	Medcalf
Forename(s)	Derek	Samantha	Katie
Post held	Deputy Director	Environmental Data & GIS Manager	Environment Director
Institution (if different to above)	ENRD, St. Helena Government	ENRD, St. Helena Government	Environment Systems
Department	EMD	EMD	n/a
Telephone/Skype			
Email			
Details	**Project Partner 2**	**Project Partner 3**	
Surname	Scullion	Marengo	
Forename(s)	John	iLaria	
Post held	Senior Lecturer – Soil Science	Project Manager – GIS Specialist	
Institution (if different to above)	Aberystwyth University	South Atlantic Environment Research Institute	
Department	Institute of Biological, Environmental and Rural Sciences IBERS	IMS-GIS Data Centre	
Telephone/Skype			
Email			

13. Has your organisation been awarded Darwin Initiative funding before (for the purposes of this question, being a partner does not count**)? If yes, please provide details of the most recent awards (up to 6 examples).**

Reference No	**Project Leader**	**Title**
DPLUS039	Elizabeth Clingham & Gerald Benjamin	Sustainable development and management of St Helena's fisheries and marine tourism.
DPLUS029	Lourens Malan	Securing St Helena's rare cloud forest trees and associated invertebrates
DPLUS020	Isabel Peters	St. Helena baseline assessment: A foundation for effective environmental management
DPLUS024	Shayla Ellick	Darwin Fellowship – MRes Carbon sequestration in community forests, St Helena
DPLUS018	Dr Judith Brown	Taxonomic and conservation status of Oceanodroma storm petrels in the South Atlantic

14. If your answer to Q13 was No, provide details of 3 contracts previously held by your institution that demonstrate your credibility as an implementing organisation. These contracts should have been held in the last 5 years and be of a similar size to the grant requested in this application. (If your answer to Q13 was Yes, you may delete these boxes, but please leave Q14)

15. Key Project personnel

Please identify the key project personnel on this project, their role and what % of their time they will be working on the project. Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. Please include more rows where necessary.

Name (First name, surname)	Role	Organisation	% time on project	1 page CV or job description attached?
Derek Henry	Project Leader	St Helena Government	5%	YES
Samantha Cherrett	Project Leader	St Helena Government	100%	YES
Katie Medcalf	Project Partner	Environment Systems	10%	YES
Johanna Breyer	Project Staff	Environment Systems	15%	YES
John Scullion	Project Partner	University of Aberystwyth	7.3%	YES
Andrew Detheridge	Project Staff	University of Aberystwyth	25%	YES
iLaria Marengo	Project Partner	South Atlantic Environment Research Institute	5%	YES

Project Details

16. Project Outcome Statement: Describe what the project aims to achieve and what will change as a result. (30 words max). You can copy and paste from Q26.

Production of St Helena's most comprehensive environment maps showing the functioning of habitats and soils; creating an accessible digital system to utilise RS for now and future ecosystem services monitoring.

17. Background: (What is the current situation and the problem that the project will address? How will it address this problem? What key OT Government priorities and themes will it address? (200 words max)

St Helena has a rugged volcanic landscape with tropical climate and varied topography. The islands vegetation consists of lush green interior, encompassed by agricultural land, scrub and coastward dry barren areas and is home to one third of the UK overseas territories endemic species. Since visitors first arrived, the islands sensitive ecosystems have been modified and exploited resulting in the loss of endemic species and fragmentation of habitats. It is increasingly threatened by the effects of climate change, tourism development pressures and invasive species. The opening of the island's first airport in 2016 and its aims to become more self-sufficient require careful land management whilst restoring habitats and protecting rare species.

Accurate island-wide detailed vegetation and soil mapping and derived datasets are urgently required to help understand biodiversity, species (particularly endemic) geographic distribution, protect and restore native habitats, control invasive species, aid sustainable agriculture, land resource planning and water resource management.

Existing data comprises of 35-year old maps, localised and targeted data collection, disparate datasets and historical paper reports. Establishing a 'living map' for the island, using remote sensing, field based surveying and a recently acquired terrain model, will provide a detailed broader geographic baseline facilitating future updates.

18. Methodology: Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc). Give details of any innovative techniques or methods. (500 words max)

The project will comprise of the following stages;

Acquisition and processing of satellite imagery;
Due to the terrain and difficult access, accurately field surveying the entire island is unfeasible; use of multi-spectral (8-band) remotely sensed imagery provides a practical solution for creating initial land cover, vegetation and soil classifications. WorldView2, LANDSAT 8, Sentinel 1 and 2 imagery will be used to create initial classifications and supported by field investigation and existing data. Environment Systems and Aberystwyth University would lead the image analysis, supported by SAERI and SHG.

Collation of existing and historical spatial data
Recent work with St Helena's environmental and geospatial data has resulted in a good understanding of what relevant information already exists in SHG departments and local organisations; metadata is held by SAERI's regional information management system. Historical soil and vegetation data and aerial imagery from 1989 (including infra-red imagery) plus new data identified (including a 1m DEM and historical soils data held at ANRD) will be assessed for value and processed in accordance with requirements of the IMS-GIS Data Centre before incorporation into preliminary maps with a wider environmental services remit.

Ground-truthing; collection of additional data
Following the creation of preliminary maps, a period of ground-truthing will take place by the project team, field workers and local ecologists. Field survey techniques training in November 2015 undertaken via Ascension Island Government's Terrestrial Ecosystem Mapping project (DPLUS038) will have taught key skills to two participants from St Helena. Several project stakeholders have pledged time from their field workers and ecologists to assist with ground-truthing, where practical, in frequently visited locations.

Representatives from Environment Systems and Aberystwyth University will travel to St Helena for initial ground-truthing and data collection, including training local field workers where necessary. Additionally, several existing and on-going projects (including DPLUS029, DPLUS020 and DPLUS024) collect data which would be incorporated into this project.

The results from the ground-truthing will be fed back into the preliminary maps to refine and improve image classification to generate a more accurate series of maps.

Training and workshops
Project staff, stakeholders, and AIG will benefit from the following training and workshops, included in order to meet the requirements of the project;

- Field survey techniques (on Ascension Island)
- Species identification for vegetation mapping
- Soil sampling and analysis for soil mapping
- Imagery familiarisation workshop
- Using data for ecosystem service analysis

Training and workshops will be given on;

- Field survey techniques; key aspects passed to local stakeholders.
- GPS for field surveying; best practice for data collection
- On-going monitoring system development using RS and GIS analysis to access a 'living map'

- Modelling of ecosystem services; using data for enhancement

Outputs; development of applications for future use

Final outputs will be a series of static maps plus numerous geo-referenced layers built into a 'living map' of St Helena, to which all stakeholders would have access. Specific focus will be on mapping, modelling and developing management tools for control of invasive species, water retention in vegetation and soils, soil quality and potential for habitat restoration and conservation.

19. How does this project:

a) Deliver against the priority issues identified in the assessment criteria
b) Demonstrate technical excellence in its delivery
c) Demonstrate a clear pathway to impact in the OT(s)
(500 words max)

Policy Priorities

This project contributes to five of the priority issues identified:

- Dealing with invasive alien species
- Developing approaches to deal with the effects of climate change
- Developing tools to value ecosystem services to inform sustainable development policies
- Developing ecosystem-based initiatives for the conservation and sustainable use of the terrestrial environment
- Developing data systems on biodiversity to help develop policies and management plans

Contribution to strategic objectives; the outputs of this project will;

- Contribute to commitments under multilateral environmental agreements; CITES, CMS, CBD
- Support and contribute to the goals of the 'St. Helena Sustainable Development Plan 2014-2017' including Strategic Objectives 5.3, 8.1 and 8.2.
- Support and contribute to the goals of the 'St. Helena National Environmental Management Plan (NEMP) 2012-2022; *'Safeguard St. Helena's environment…for future generations through effective environmental management including through improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity.'*
- Support and contribute to the goals of the proposed 'Environmental Protection Ordinance'
- Support the goals of the 'Sustainable Economic Development Plan 2012/13-2021/22'
- Contribute to St. Helena achieving principle 4 of the Convention on Biological Diversity to recognise that *'potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context'*
- Contribute to St. Helena's national commitments 2, 3 and 7 under the Environment Charter.
- Contribute to and support the activities in national public, private and voluntary sector organisations.

Technical Excellence

Project planning and risk management; the primary goals of the project are clear achievable outputs of factual maps and baseline data, using the expertise of organisations that have successfully implemented similar projects and seen benefits from the results. The goals are to create data that can underpin evidence-based decisions across a wide range of subjects that rely on accurate and concise environmental data and natural environment data. Potential risks for the project have been identified and alternatives put forward to ensure that project targets and key outputs can be achieved. See Sections 18 and 26.

Monitoring and evaluation; the project management will be overseen by SHG and include regular progress reporting. See Section 29.

Value for Money: The project provides considerable value for money compared to alternative options for

achieving similar goals on an island-wide basis. This project meets multiple needs of several stakeholders with different requirements. Further outputs that can be derived via remote sensing mean that the imagery alone has further monetary value. See Section 31.

Impact

Institutional Capacity; the partners in this project collectively bring together the technical and management skills expertise required for the successful implementation of the mapping exercise, ensuring the outputs are to a high standard. See Section 21.

Contribution to environmental goods and services; Outputs from the project will have most use as tools for local decision-making and planning, with the added benefit of the process and development tools contributing to work undertaken on other South Atlantic UKOTs. See Section 26.

Sustainability; The project will create a physical product and tools for ensuring future data use and development. See Section 27.

20. Who are the **stakeholders** for this project and how have they been consulted (include local or host government support/engagement where relevant)? Briefly describe what support they will provide and how the project will engage with them. (250 words max)

The St Helena Government is the primary stakeholder in this project, responsible for its management. It is recognised that the immediate outputs and potential future outputs support work on the key focus areas within strategic and departmental plans.

Within the Environment and Natural Resources Directorate (ENRD), both the Environmental Management Division (EMD) and Agricultural and Natural Resources Division (ANRD) will input into and benefit from the outputs of this project and are fully supportive of it. EMD's interest is to use the data for monitoring habitat change, habitat quality, invasive species and supporting Environmental Impact Assessments. ANRD's interest lies in data for management of invasive species and soil quality.

The Landscape and Ecological Mitigation Programme (LEMP) within the Air Access Department are interested in soil quality data and restoration of habitats as they are involved in a large scale replanting programme as part of the airport development project. They have pledged field based knowledge from their ecologist, for ground-truthing.

The St Helena National Trust and the St Helena Nature Conservation Group are interested in species mapping and are involved in several species conservation projects; they have pledged time for ground-truthing.

Connect St Helena Ltd are interested in soil and vegetation data that can contribute to water security particularly in inaccessible areas.

SAERI and Ascension Island Government will benefit from this project through training and workshop opportunities. AIG's current mapping project will advise this project and SAERI will be involved with capacity building, development of monitoring systems and curate data outputs.

21. Institutional Capacity: Describe the implementing organisation's capacity (and that of partner organisations where relevant) to deliver the project.
(500 words max)

St Helena Government, Environmental and Natural Resources Directorate (**ENRD)**

ENRD is responsible for environmental management for St. Helena Government. In-kind staff time will be provided by EMD, ANRD, GIS and other administrative departments.

Project lead, Samantha Cherrett, has been employed by ENRD to work solely on SAERI's data management project until early 2016, as well as building capacity for environmental mapping within EMD. The data management project has also resulted in her liaising with SHNT, Connect and Air Access to build comprehensive collection of GIS data. She has worked closely with the GIS Department, including on a current national mapping project to update 25-year old topographical island maps.

ENRD has employees directly involved in conservation, species management, land and habitat management and data collection; it has field workers and specialists who can contribute to ground-truthing and species identification as well as a wealth of current, planned and historical scientific and monitoring data. The GIS department have staff that can assist with field data collection and ground truthing.

Environment Systems Ltd.

Environment Systems is a leading environmental and geographic intelligence consultancy. Backed by regular research activity and cross-sector collaboration they leverage earth observation and mapping expertise, to help government and businesses understand and better manage our environment. They deliver solutions across environmental, agricultural and land sectors specialising in an ecosystem approach to baselining and characterisation, mapping and monitoring. They then facilitate the application of this evidence base to current policy and are at the forefront of developments in Geographic Information intelligence gathering and experts in the field of ecosystems services mapping and modelling.

IBERS-AU

An internationally-recognised research centre providing research on global challenges such as food security, bioenergy, sustainability and climate change impacts. Over £55 million has been received from EU/RCUK funds over the past 5 years. IBERS conduct research on genes and molecules, whole organisms and the environment. It is the largest UK land-based Institute; in the Research Excellence Framework (REF) 78% of research was world-leading or internationally excellent; 76% was judged to have outstanding societal and economic impacts. The Institute has particular expertise in land use-soil interactions and links to environmental services/ecosystem function. IBERS follows RCUK protocols for project management.

South Atlantic Environmental Research Institute (SAERI)

SAERI is a Falkland Islands initiative. It aspires to increase and coordinate the volume and impact of environmental research in the South Atlantic by establishing world-class research platforms in each of the SAOTs from the equator to the ice in the Antarctic. SAERI research activities cover a variety of disciplines: marine and terrestrial biology and ecology, geology, oceanography, climatology, geographic information systems (GIS). Within SAERI, the Information Management System (IMS) and GIS data centre was born with the intention of establishing a data strategy for collating, curating and managing existing and future data (environmental and otherwise) in a consistent way across the entire SA region. The GIS data centre aims at building local GIS capacity, skills and knowledge by providing training and courses in open source GIS software and by supporting individual projects.

APPLICANTS SEEKING £100,000 OR OVER SHOULD PROCEED TO QUESTION 26

22. Expected Outputs

23. Expected change: How will each of the outputs contribute to the overall outcome of the project? (100 words max)

24. Main Activities

25. Risks

APPLICANTS SEEKING LESS THAN £100,000 YOU MAY SKIP QUESTION 26

26. LOGICAL FRAMEWORK

Darwin Plus projects will be required to report against their progress towards their expected outputs and outcome if funded. This section sets out the expected outputs and outcome of your project, how you expect to measure progress against these and how we can verify this.

Project summary	**Measurable Indicators**	**Means of verification**	**Important Assumptions**
Impact: To create robust data and systems to support the long term strategic planning, development and adaptation of St Helena's public, private and voluntary sectors for environmental and climate change management.			
Outcome: Production of St Helena's most comprehensive environment maps showing the functioning of habitats and soils; creating an accessible digital system to utilise RS for now and future ecosystem services monitoring; develop transferable skills, produce factual maps, concise baseline data and adaptable tools that are used for decision making, informing policy and combined to solve existing and future problems faced locally.	0.1 Imagery acquired for use and combined with existing harvested data. 0.2 Field methodologies, mapping methods and classifications designed, understood and implemented. On-going strategy developed. 0.3 Training completed for minimum of a one training or workshop session for at least one participant per stakeholder organisation. Skills for surveying and analysis acquired. 0.4 Surveying completed for soils and habitat. Final summary reports for each created. 0.5 Final non-editable and paper maps produced. Digital layers produced. Reporting by consultants. 0.6 Living maps and subject specific tools, maps and data layers created. Specific for invasive species control, habitat management, land	0.1 Recent imagery purchased, available for use, metadata submitted to IMS-GIS Data Centre. Methodologies circulated. 0.2 Documentation finalised, circulated and agreed by project partners. 0.3 Training manuals produced. Training verified by participation statistics 0.4 Metadata for reports and spatial data submitted to IMS-GIS Data Centre. 0.5 Metadata for final 'static' products submitted to IMS-GIS Data Centre. Reports circulated. 0.6 Stakeholder organisations successfully use these tools for decision making	Suitable imagery is available and licence restrictions do not hinder project aims. Stakeholder organisations continue project involvement.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	management and water resource management are utilised by stakeholders.		
Outputs: **1**. Satellite imagery sourced and processed resulting in preliminary habitat and soil maps, supported by existing collated geospatial data	1.1 Acquisition of suitable satellite imagery, within budget 1.2 Processed imagery used to produce a preliminary habitat and soils map. 1.3 Collated soils, habitat and species data from assessment of existing data held on island. Assessed for usefulness to identify potential additional field work. 1.4 Classifications and field surveys designed for habitat map	1.1 Imagery provided to SHG 1.2 Preliminary maps provided to SHG and stakeholders by Environment Systems and Aberystwyth University 1.3 Suitable soils, habitat and species data provided to Aberystwyth University and Environment Systems by SHG, including habitat surveys, 2015 1m DEM, 1989 imagery, soil reports, vegetation reports, and other relevant data. 1.4 Classifications agreed by project team and stakeholders involved in long term use.	Suitable cloud-free satellite imagery can be purchased within budget. There is a low risk of the imagery being unsuitable or costly; options have already been investigated by Environment Systems and two WorldView 2 images identified. Additional free imagery has been sourced and only one of the WorldView 2 images could be used should costs escalate. Existing data identified at early stages is suitable and does not require additional field work for ground truthing and sampling. A contingency of local consultancy and field work has been included, should this happen. Medium risk of existing soils map is comprehensive enough and cannot be improved upon although it is expected that this will not be the case. Focus will shift to transferring the historical data to a format upon which it can be used for this project, check the spatial accuracy and develop soils services maps based on existing map after validation whilst substituting with additional soil

Project summary	Measurable Indicators	Means of verification	Important Assumptions
			samples and analysis to measure relevant parameters.
2. Habitat and soil maps ground truthed and refined with field data and local expertise	2.1 Practical field work for vegetation and soils ground truthing in areas of uncertainty involving project team where necessary. Supplementary soil analysis. Preliminary map refined. 2.2 SHG and available field based staff in stakeholder organisations complete field work for ground truthing and collate all existing data required to fill data gaps.	2.1 Days in the field catalogued and collected data incorporated into preliminary map. Data gaps identified for additional field work. Analysis of collected data. On island publicity. 2.2 Days in the field catalogued and collected data incorporated into maps. Samples sent to partner organisations if required	A low risk that field based staff in partner organisations are fail to or unable to assist at key times. A contingency for local consultancy and field work has been included, should this happen, however stakeholders have proven historical working relationships and have pledged in-kind time.
3. Workshops held on remote sensing techniques, field techniques and monitoring systems creation	3.1 SHG and available field based staff in stakeholder organisations attend workshops and training sessions on field techniques required for successful ground truthing prior to start of surveying for data gaps. 3.2 Training session on remote sensing techniques 3.3 Monitoring systems developed and training session delivered	3.1 Attendance certificates issued. Feedback gathered for hosts. 3.2 Attendance certificates issued. Feedback gathered for hosts. 3.3 Monitoring systems in place for training. Attendance certificates issued. Feedback gathered for hosts. On island publicity.	Travel costs for off island trainers and trainees is a huge uncertainty at present and the most fluid aspect of the budget, due to the unknown cost of flights from Feb 2016 and potential accommodation and other on-island costs in 2017-2018 after air access. A contingency has been included to allow for increases in costs.
4. Development of final maps and specific management tools informed by the baseline data	4.1 Creation of final maps and integration with regional data management system. Reporting by consultants. 4.2 Creation of 'living map' comprising geospatial data 4.3 Tools for management of invasive species, water resources,	4.1 Metadata provided to IMS-GIS Data Centre. Reports circulated. 4.2 Creation of map incorporating historical and current data as a basis upon which to add additional data in the future 4.3 Creation of project environment and training with stakeholders	Low risk that the outputs are not comprehensive enough to fulfil the needs of the department. The key needs of the stakeholders has been discussed to try to identify the most useful information and the development of the living map will allow more data to be added in the future to fill any gaps that might exist

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	agricultural management habitat conservation and restoration created	involved in each specific aspect. On island publicity.	

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

1.1 Sourcing of suitable satellite imagery

1.2 Processing of imagery to produce preliminary maps

1.3 Review of data held in IMS-GIS Data Centre. Visit to SHG archives and department offices to search for other historical non-digital data. Create digital versions of useful data.

2.1 Field surveys for vegetation and habitat mapping. Field surveys for soil sample collections.

2.2 Field surveys habitats, vegetation and soils for remaining data outstanding.

3.1 Ground truthing training and workshops for data collection occur

3.2 Remote sensing training and workshops occur

3.3 Creation of monitoring systems

4.1 Preliminary maps updated with survey data to produce final maps

4.2 Digital data combined into 'living map'

4.3 Development of subject specific tools for individual stakeholders

27. Sustainability: How will the project ensure benefits are sustained after the project has come to a close? If the project requires on-going maintenance or monitoring, who will do this? (200 words max)

The development of methodologies and strategies will be designed to be adaptable and replicable for future projects where new satellite imagery is acquired. The skills and tools developed during training and workshop sessions can be used for future projects, without similar costs being incurred. The technical skills developed both on-island and in the other South Atlantic UKOTs, will help local organisations become less reliant on external companies; this will include field, GIS and opens source software skills.

The project will result in accessible habitat and soils maps plus associated ecological and environmental spatial data layers for adaptable development and planning. The outputs will be made available to stakeholders, local and international bodies for planning, monitoring and research projects. The original remote sensing base data will be stored and made accessible for additional analysis for other areas including geology and shallow water marine environment.

Locally, the outputs will provide a factual pre-airport baseline snapshot in time upon which to model changes to the islands natural environment and their effects. Information created can be used as a basis for future environmental, sustainability and ecosystem services projects and provide a base upon which strategic decisions by government and private sector can be made.

28. Open access: All outputs from Darwin Plus projects should be made available on-line and free to users whenever possible. Please outline how you will achieve this. (200 words max)

Outputs and systems developed for the project will use free open source software (e.g. QGIS) for access, to avoid costly and restricted use, additional software training, or limit the number of end users. All digital data will be curated and managed according to the data management guidance that the IMS GIS (Information Management System, Geographic Information system) data centre at SAERI has been providing in the last two years, with support from the St Helena GIS department.

The IMS-GIS data centre has built a comprehensive and standardised information system across the UK Overseas Territories in the South Atlantic. This provides an integrated information network where data can be easily discovered and accessed. Metadata collection is also part of the management system and all data will be centrally maintained and secured on the dedicated GIS server.

Local and international users of the data centre will be able to search the metadata records online via the SAERI website and request any of the digital data, along with any other available and relevant island data. Access to St Helena's GIS data via this route is actively promoted via news outlets, websites and social media, raising awareness of data access in the South Atlantic.

29. Monitoring & Evaluation: How will the project be monitored and who will be responsible? Will there be any independent assessment of progress and impact? When will this take place, and by whom? (250 words max)

The project will be implemented as a partnership between SHG, Environment Systems, Aberystwyth University and SAERI all of whom have managed successful projects previously. A Memorandum of Understanding between organisations and partners will document the obligations of all parties for successful and timely delivery of this project.

EMD will be responsible for the budget and project monitoring of deliverables against agreed timeframes and will oversee project elements undertaken from partner organisations. Samantha Cherrett will take the lead for SHG for reporting and day-to-day project management and development, in addition to providing on-island support and data harvesting to support other project partners requirements and ultimate goals.

Environment Systems will carry out the technical remote sensing analysis and GIS work and lead training in accordance with specifications, reporting requirements and deadlines for specific elements contractually agreed with SHG. IBERS-AU will liaise with Environment Systems in generating environmental services soil maps based on field observations and soil analyses. IBERS-AU is a signatory to RCUK systems for project management and data security and will follow these protocols during this project. Both IBERS and Environment Systems have successfully collaborated on previous projects.

Conference call facilities will be utilised at regular bimonthly intervals and at key project milestones for project partners to report progress to the project lead, identify any potential issues, impacts and solutions as early as possible. Regular summary reports will be submitted to the SHG and six-monthly and final reports will be submitted to Darwin by Project Leaders in accordance with reporting requirements.

The project completion report is after the project is over and is linked to the final payment.

30. Financial controls: Please demonstrate your capacity to manage the level of funds you are requesting. (Who is responsible for managing the funds? What experience do they have? What arrangements are in place for auditing expenditure?)

All project funding will be routed through the EMD accounts section which operates under audited SHG accounting procedures.

All monies will be placed into a designated account and have a designated financial officer to ensure finances/budgets are monitored.

The Project lead will have an overview of the entire project and will regularly monitor the budget. Items purchased in the host country will be bought through the SHG procurement process which has strict guidelines for ensuring value for money and transparency. An independent auditor will audit expenditure.

EMD already has experience of successfully managing projects totalling £1.7 million in 2014/15 along with core budget.

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. If you are requesting over £100,000 from Darwin Plus, you must complete the full spreadsheet.

31. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget. (200 words max)

This project has been designed and costed based on financial best practice. SHG's experience of managing funded projects means that costs have been assessed as being realistic, with contingency for areas of risk, namely consultancy and travel. AIG have advised on costings based on experience from project DPLUS038.

Key budget/value considerations include;

- Allocation for suitable high-resolution imagery is unavoidable; the imagery can contribute to other projects beyond this one.
- A review of historical data will enhance its use and value.
- Generous in-kinds support ensures field surveying costs can be kept low.
- Allocation for consultancy fees for ES and AU is essential due to the technical skills required. Costs provided are based on comparison of similar sized projects worldwide.
- The training provided will reduce reliance on consultants in the future
- Generous in-kinds support means that field surveying costs can be kept low.

At present, travel and accommodation is expensive and unfortunately we do not know costs for future flights from the UK to St Helena or the effects of air access on accommodation and living costs for visitors from 2016. Following discussions with SHG and tourism, a sensible contingency has been built in to any aspect of the budget involving travel.

32. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended work plan for your project

	Activity	No of Months	Year 1												Year 2											
			A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Output 1	Satellite imagery sourced and processed resulting in preliminary habitat and soil maps, supported by existing collated geospatial data	-	■	■	■								■	■												
1.1	Acquisition of suitable satellite imagery, within budget	0.5	X																							
1.2	Processed imagery used to produce a preliminary habitat and soils map.	2-3	X	X	X																					
1.3	Collated soils, habitat and species data from assessment of existing data held on island. Assessed for usefulness to identify potential additional field work.	3	X	X	X								X	X												
1.4	Classifications and field surveys designed for habitat map	1-2		X	X																					
Output 2	Habitat and soil maps ground truthed and refined with field data and local expertise	-			■	■	■	■	■	■	■	■														
2.1	Practical field work for vegetation and soils ground truthing in areas of uncertainty involving project team where necessary. Supplementary soil analysis. Preliminary map refined.	2			X	X	X																			
2.2	SHG and available field based staff in stakeholder organisations complete field work for ground truthing and collate all existing data required to fill data gaps.	4-6					X	X	X	X	X	X														
Output 3	Workshops held on remote sensing techniques, field techniques and monitoring systems creation	-			■	■									■	■				■	■				■	■
3.1	SHG and available field based staff in stakeholder organisations attend workshops and training sessions on field techniques required for successful ground truthing prior to start of surveying for data gaps.	0.5			X	X																				

3.2	Training session on remote sensing techniques	0.25			X	X																			
3.3	Monitoring systems developed and training session delivered	1.5													X	X				X	X				X	X
Output 4	Development of final maps and specific management tools informed by the baseline data	-																								
4.1	Creation of final maps and integration with regional data management system. Reporting by consultants.	3-4													X	X	X	X								
4.2	Creation of ‘living map’ comprising geospatial data	2-3																	X	X	X					
4.3	Tools for management of invasive species, water resources, agricultural management habitat conservation and restoration created	5																				X	X	X	X	X

CERTIFICATION

On behalf of the ~~trustees/~~company* of (*delete as appropriate)

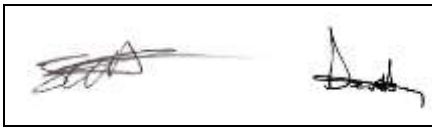
ENVIRONMENTAL MANAGEMENT DIVISSION (WITHIN THE ENVIRONMENT AND NATURAL RESOURCES DIRECTORATE)

I apply for a grant of **£212,135.00** (Two Hundred, Twelve Thousand, One Hundred and Thirty Five Pounds) in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful. (*This form should be signed by an individual authorised by the lead institution to submit applications and sign contracts on their behalf.)*

- I enclose CVs for key project personnel and letters of support.
- I enclose the most recent 2 years of signed and audited/independently verified accounts.

Name (block capitals)	SAMANTHA CHERRETT DEREK HENRY
Position in the organisation	ENVIRONMENTAL DATA & GIS MANAGER DEPUTY DIRECTOR

Signed  **Date:** 21/09/15

If this section is incomplete the entire application will be rejected. You must provide a real (not typed) signature. You may include a pdf of the signature page for security reasons if you wish. Please write PDF in the signature section above if you do so.

Application Checklist for submission

	Check
Have you **read the Guidance Notes**?	X
Have you **checked the Darwin Plus website** immediately prior to submission to ensure there are no late updates?	X
Have you provided **actual start and end dates** for your project?	X
Have you provided your **budget based on UK government financial years** i.e. 1 April – 31 March and in GBP?	X
Have you checked that your **budget is complete**, correctly adds up and that you have included the correct final total on the top page of the application?	X
Has your application been **signed by a suitably authorised individual**? (clear electronic or scanned signatures are acceptable in the email)	X
Have you included a **1 page CV for all the key project personnel**?	X
Have you included a **letter of support from the applicant organisation, main partner(s) organisations and the relevant OT Government**?	X
Have you included a **copy of the last 2 years' annual report and accounts** for the lead organisation?	X

Once you have answered the questions above, please submit the application, not later than midnight **2359 GMT Monday 21 September 2015** to Darwin-Applications@ltsi.co.uk using the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (e.g. whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of Darwin Plus. Application form data will also be held by contractors dealing with Darwin Plus monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (i.e. name, contact details and location of project work) on the Darwin Initiative and Defra/FCO/DFID websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Governor's Offices outside the UK, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.