DPLUS039

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

Submit by Monday 4 August 2014

Please read the Guidance Notes before completing this form

Information to be extracted to the database is highlighted in blue

Basic Data

1. Project Title (max 10 words)	**Sustainable development and management of St Helena's fisheries and marine tourism**
2. UK OT(s) involved	St. Helena Island, Ascension Island and the Falkland Islands
3. Start Date:	1st April 2015
4. End Date:	31st March 2017
5. Duration of project (no longer than 24 months)	24 months

Summary of Costs	**2015/16**	**2016/17**	**Total**
6. Budget requested from Darwin	**£149,867**	**£120,870**	**£270,737**
7. Total value of matched funding	**£99,231**	**£91,391**	**£190,622**
8. Total Project Budget (all funders)	**£249,098**	**£212,261**	**£461,359**
9. Names of Co-funders	St. Helena Government, Ascension Island Government, South Atlantic Research Institute, Georgia Aquarium, Mote Marine Laboratory and the Falkland Islands Fisheries Department.		

10. Lead applicant organisation (responsible for delivering outputs, reporting and managing funds)	Environment and Natural Resources Directorate
11. Project Leader name	Elizabeth Clingham & Gerald Benjamin
12. Email address	
13. Postal address	St. Helena Island, SAO, STHL 1ZZ.
14. Contact details: Phone/Fax/Skype	

* Notification of results will be by email to the Project Leader in Question 11

15. 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)	

16. Principals in project. Please identify and provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more personnel or more than 2 project partners.

Details	**Project Leader**	**Project Partner 1**	**Project Partner 2**
Surname	**Clingham & Benjamin**	**Weber**	**Fletcher**
Forename(s)	**Elizabeth & Gerald**	**Nicola**	**Stephen**
Post held	**Marine Conservation Officer and Senior Fisheries Officer**	**Conservation Manager**	**Director, Centre for Marine and Coastal Policy Research.** **Associate Professor, Sustainable Management of Marine and Coastal Systems**
Institution (if different to above)	**ENRD**	**Ascension Island Government**	**Plymouth University**
Department	**Marine & Fisheries**	**Conservation Department**	**Centre for Marine and Coastal Policy Research**
Telephone/Skype			
Email			
Details	**Project Partner 3**	**Project Partner 4**	**Project Partner 5**
Surname	**Brickle**	**Dove**	**Hueter**
Forename(s)	**Paul**	**Alistair**	**Robert**
Post held	**Director**	**Director of Research and Conservation**	**Associate Vice President for Research &** **Director of the Center for Shark Research**
Institution (if different to above)	**South Atlantic Environmental Research Group (SAERI)**	**Georgia Aquarium**	**Mote Marine Laboratory & Perry W. Gilbert Chair in Shark Research**
Department		**Georgia Aquarium Research Center**	**Directorate of Marine Biology and Conservation**
Telephone/Skype			
Email			

17. 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**
DPLUS020	**Isabel Peters**	**St. Helena baseline assessment: A foundation for effective environmental management**
DPLUS018	**Dr Judith Brown**	**Taxonomic and conservation status of Oceanodroma storm petrels in the South Atlantic**

DPLUS024	**Shayla Ellick**	**Darwin Fellowship – MRes Carbon sequestration in community forests, St Helena**
DPLUS029	**Lourens Malan**	**Securing St Helena's rare cloud forest trees and associated invertebrates**

18. If your answer to Q17 was No, provide details of 3 contracts previously held by your institution that demonstrate your credibility as an implementing organisation. These contacts 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 Q17 was Yes, you may delete these boxes, but please leave Q18)

Project Details

19. Project Outcome Statement: Describe what the project aims to achieve and what will change as a result. (50 words max)

The project aims to assess the ecological and socio-economic basis of St. Helena's fisheries and tourism industries in order to identify appropriate management measures to ensure their sustainable future in the face of increased pressure dictated by economic growth.

20. 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)

With increase pressure on fisheries it is imperative to gather and analyse fisheries data and develop the skill set of the local marine section staff to ensure long term sustainable management. How native and migratory species cope with increased human exploitation and interaction is also unknown.

This project will facilitate establishment of protocols for baseline and long-term fisheries monitoring and stock assessments, marine fauna monitoring (whale sharks, marlin & cetaceans), tourism management and compliance. Data gathered will be utilised in evidence based decision making and management.

St. Helena has globally significant marine biodiversity, including the charismatic whale shark, which until now has been protected by its isolation and limited access. A key evidence gap is our understanding of the relationship between marine conservation, marine management measures and the social and economic benefits generated by fisheries and tourism; areas which have been identified as key economic sectors to drive the islands economic development. Through a tailored marine ecosystem services assessment, the relationship between the management of the marine ecosystem and the social and economic benefits generated will be modelled. Scenario analysis in collaboration with local stakeholders will identify beneficial marine planning and management measures to inform future sustainable development.

21. 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)

<u>The project will be delivered through three complimentary work programmes:</u>

<u>Fisheries Science</u>

To ensure the sustainability of the project training will form a key component, building the knowledge and practical skill set of local marine section staff within the territory. This will be done through collaboration with experts from the Ascension Conservation Department (DPLUS021), SAERI and training support from the Falklands Fisheries Department (please see letter of support). Training will include fisheries biology studies (ageing, reproduction and diet work) on commercial inshore and offshore species as well as developing skills required to work and collect samples as an observer on-board fishing vessels.

A fisheries scientist will collate and assess historical local catch and effort data (as submitted to ICCAT) and length weight data collected to date. They will review temporal and spatial changes in abundance of

species in the inshore and offshore fishery utilising historic catch and effort data in conjunction with environmental data; they will conduct geospatial analyses to examine inter- and intra-annual distribution of species' abundance; examine the potential for predictive models based on environmental data given through the GEOEYE fish finding software; conduct a by-catch risk assessment utilising existing and new data, and carry out assessment of the catch benefits (including impact on bycatch) of any different types of fishing trialled (eg greensticking/ longlining/ deployment of FAD's). Data will be collected by observer deployments at sea; deployment of PAT tags (tuna and marlin to study their migration, behaviour and distribution) and mechanical tags. A reporting system will be established within inshore fisheries.

Marine tourism

Marine tourism management strategies have been formulated however they are just being initiated and compliance has not yet been monitored. Alongside a media campaign it is proposed to combine species specific sampling, data collection and compliance monitoring by collaborating with local marine tour operators so that they become involved in the whole process. In an effort to encourage them to adopt a green, eco-friendly approach to their businesses and an acceptance to management change they will be involved in:

- collecting data from whale sharks (sex, size abundance and photos) for submission to Eco-ocean database, PSAT tagging and collection of genetic samples. Cetacean photography to establish abundance and individuality.
- deploying mechanical tags to support tag and release regimes and fisheries science dataset.
- Recording of marine species interactions in dedicated logbooks.

It is also proposed to encourage tour operator participation in exposure visits and conferences to countries already practising good marine management.

Marine ecosystem services assessment

Tailored ecosystem services assessments will be undertaken to model the relationship between ecosystem functions, ecosystem services, and the value of the social and economic benefits arising from fisheries and tourism. Through participatory scenario analysis with local stakeholders, potential marine management measures will be applied to the ecosystem services model to determine their effectiveness at protecting ecosystem functions whilst generating social and economic benefits. A training programme will be delivered to generate institutional capacity in ecosystem service assessment to support marine management and planning.

22. 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)

Priority issues:

- Contribution to commitments under multilateral environmental agreements. **CMS for Appendix I species**, **CBD and CITES**
- Contribution to St. Helena's National Goal 3 of the St Helena Sustainable Development Plan, *'Effective management of the environment'*
- Contribution to St Helena's Natural Environment Management Plan**,** *'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.'*
- Contracting party to ICCAT, St Helena implements management measures consistent with the

recommendations of the Organisation where appropriate.

- Contributions to national commitments. The project will help SHG to meet commitments under the Environment Charter.
- Contribution to St Helena's draft Fisheries Management Policy, in particular Objective 1: Sustainable Use and Conservation
- Contribution 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'*

The project is being driven from within the South Atlantic UKOTs as a partnership between SHG, SAERI and Plymouth University with additional input from AIG, FIG, Georgia Aquarium research section and Mote Marine Laboratory. There is considerable local support from the local fishing community and the local marine tour operators.

Impact:

Individuals and institutions with large amounts of experience and expertise in conducting high quality marine, fisheries and conservation science and in social economic assessments have formed a partnership to deliver this project.

The project will deliver a baseline for assessing economic and social changes in the marine environment firmly set on a science foundation needed for effective fisheries and marine tourism management. Fishing is an important recreational and commercial activity on St. Helena, so evidence-based decision-making will contribute significantly towards sustainable local economic development.

The project will establish St. Helena's fisheries science and stock assessment framework and build on marine tourism management. It will leave a significant legacy in terms of local capacity, data management systems and national governance to be sustained long after the project.

Technical excellence:

Through this project fisheries and marine tourism practises will be developed and implemented so that decisions are evidence based. Working with specialists from other OT's and Plymouth University will ensure technical expertise is passed to on island staff and ensures long term sustainability through improved monitoring and licensing regimes. Assessing the social and economic benefits arising from fisheries and tourism will ensure marine planning and management measures will be beneficial both for the marine ecosystem and the community.

The experience of managing the Darwin project 19-031 have allowed this project budget, targets and work plan to be based on realistic costs, timeframe and achievability. Although travel costs to St Helena are expensive, this is justifiable as training of local permanent staff ensures longevity of skill set obtained. The significant matched funding contributed by project partners ensures collaboration and excellent value for money against total project cost.

23. 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)

SHG and the islands community, including conservation bodies, recreational and commercial fishers and those involved in marine tourism businesses are the key stakeholders in this project. The main stakeholders were informed of the project via stakeholder meetings and email correspondence, discussing the benefits this project will bring to them and the island. Feedback from this correspondence subsequently helped in the formulation of this bid.

There will be joint project management between the fisheries regulatory and marine conservation section

of SHG. The project will employ a fisheries scientist who will lead on stock assessment and fisheries management and who will lead in liaising with the local fishing community. SAERI will lend considerable experience in marine and fisheries science to train, mentor and support project staff through working relationships with AIG and Falkland fisheries.

Marine tourism compliance and data collection of species specific data and project logistics will be led by the marine conservation section working in close collaboration with the marine tourism operators. Georgia Aquarium and Mote Marine Laboratory as world leading organisations will offer expertise and support in areas of whale shark research, data collection and analysis.

Project staff will work closely with the Fisheries Task Group an organisation which represents all interests in the development of commercial fishing on St. Helena. This group is involved in key decision making relating to fisheries and enforcement.

Plymouth University will conduct the social economic assessment, spending time on St Helena to work with local stakeholders and to train local staff.

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

Environmental and Natural Resources Directorate (**ENRD)**

ENRD is responsible for environmental management for St. Helena Government. In kind staff time will be provided by:

- Four Marine Conservation Staff
- Senior Fisheries Officer
- Administrative, IT, HR and logistical infrastructure

Marine conservation
This section leads through creation and implementation of policy and regulation, and provides advice, underpinned by clear, transparent, evidence-based research.

Fisheries
This section leads on fisheries management and regulation. Key tasks include: policy development, vessel licensing; collection, collation and analysis of data in respect of local and foreign vessels and the submission of statistics to international RFMO's (e.g. ICCAT and FAO) and local bodies.

South Atlantic Environmental Research Institute (SAERI)

SAERI is a Falkland Islands initiative. It aspires to be a world renowned, well branded environmental research institute. SAERI has the infrastructure and capacity to conduct environmental research throughout the South Atlantic from the equator to the Antarctic. SAERI's director is an established marine scientist with many years' experience managing and co-ordinating multi institutional research projects. SAERI has expertise in marine biodiversity, fisheries, GIS and geospatial statistics, marine spatial planning and the evaluation of ecosystems services. It also has a wide network of collaborating intuitions from which to draw expertise.

Plymouth University

The Centre for Marine and Coastal Policy Research conducts applied research on human impacts on the marine environment and their social and economic root causes in order to formulate effective policies for sustainable marine development. The Centre has a strong track record of applied research in the fields of marine ecosystem services assessment and marine planning. It is currently leading the EU-funded €4.7m VALMER project which is undertaking ecosystem services assessments in the English Channel in order to inform its future management (www.valmer.eu). The Centre has 30 staff including marine

ecologists, economists and marine planning specialists

Ascension Island Government (AIG)
The Conservation Department has established itself as the authority on Ascension Island's biodiversity, with core programmes in terrestrial and marine research and conservation. In 2014, the Marine and Fisheries Unit of the Conservation Department was established with funding from the Darwin Initiative, with the aim of substantially increasing Ascension Island's marine biodiversity knowledge and fisheries science capacity. The team comprises of postgraduate and postdoctoral ecologists and local conservation practitioners.

Georgia Aquarium

Georgia Aquarium has made substantial research progress since 2004 on natural history, health and conservation of whale sharks. Aquarium staff have co-authored well over 100 peer reviewed publications, including several seminal whale shark works, as well as a superlative track record in marine K-12 education and public outreach.

Mote Marine Laboratory

Mote Marine Laboratory (www.mote.org) is an internationally recognized, independent, not-for-profit research and education institution in Florida, USA. Dr. Hueter, who oversees the Directorate for Marine Biology & Conservation has a 40-year history of shark research and directs Mote's Centre for Shark Research, a US Congress-designated national research centre. Mote is experienced in administering and conducting marine research and Dr. Hueter has supervised project support exceeding US$16 million.

25. Expected Outputs

Output (*what will be achieved e.g. capacity building, action plan produced, alien species controlled)*	Indicators of success *(how we will know if its been achieved e.g. number of people trained/ trees planted)*	Status before project/baseline data *(what is the situation before the project starts?)*	Source of information *(where will you obtain the information to demonstrate if the indicator has been achieved?)*
1. Capacity building - Marine section staff trained as local fisheries observers.	Fisheries scientist appointed. Minimum of 2 local project staff trained by AIG and Falkland Fisheries as observers and in fisheries data and sample collection.	Local staff only have basic fisheries science skills No fisheries scientist on island.	Staff training reports and certificates of completion. Fisheries scientist on island in post. Employment records.
2. Fisheries stock assessment undertaken.	Data mining activity completed. Observer database, log book and protocols set up and in place. Observer presence on all local inshore commercial vessels 10	No fisheries stock assessment data present. No observer presence on local fishing vessels. No fishing effort data requirements imposed on fishing community.	Observer manual produced for St Helena observer work Fisheries management report produced including analysis of historical and current data collected. Data included in SHG

	days/month Observer presence on all offshore vessels 30% of time Database set up and populated. Stock assessment and fisheries management plan produced.		state of the environment report Database for fish biological data established Licensing conditions updated to include any recommendations from data analysis
3. Age growth and reproductive biology of main inshore and offshore commercial fish species is significantly advanced.	At least 600 otolith samples collected with related length weight and maturity data. 50 gonad samples will be processed for histological examination. Growth curves, annual reproductive cycles and age-at maturity of at least 2 commercially exploited inshore fish species established.	Grouper data exists. Little/no data available on other inshore species or offshore commercial species for ageing or reproduction for St. Helena	Licensing conditions updated to include any recommendations from data analysis Scientific publication produced
4. By catch risk assessments for seabirds, turtles and sharks in commercial fishing fleet are established.	Observer deployed on fishing vessels. SHG observer receives seabird data collection training from FIG Geospatial analysis of seabird tracking data in conjunction with catch data are conducted to examine potential overlaps. Different fishing methods assessed for by catch levels by observer monitoring.	Levels of seabird, turtle and shark by- catch in St. Helena commercial fisheries is unknown.	Licensing criteria updated to include any recommendations from data analysis Section on bycatch (and any necessary mitigation methods) included within Fisheries management report
5. A fisheries management plan for management and on- going monitoring of St. Helena's fishery is developed and	Report produced detailing methodology and management strategies for St Helena fishery. All standard at sea recording forms produced and filed in	No data recording forms or detailed long term methodology/management available	Section on long term monitoring included within fisheries management plan Folder exists containing all data recording forms

implemented.	specific folder.		
6. Reporting by observer of marine based tourism compliance and human interaction with marine species.	1 x local observer appointed. Local observer training in data collection. Each local operator is observed 3 times per season during whale shark tours Each local operator is observed 4 times per year during sports fishing tours Each local operator is observed once each month during dive operation tours. Each local operator is observed twice a year during cetacean tours.	Best practise guidelines available including policy on whale shark and cetacean interactions however currently no observations of marine tourism compliance with these or mandatory data collection.	Assessment of each marine tourism operator conducted with report on compliance and including analysis of data collected. Data included in SHG state of the environment report
7. Establish comprehensive information system regarding whale shark and cetaceans in St. Helena's waters (including data on identification photos (eco ocean), biological data and tagging (whale sharks only)	60 days dedicated to collection of whale shark data during peak season. Successful deployment of 8 satellite tags on whale sharks. Collection of 8 genetic tissue samples Local promotion of photo identification pictures from tourists/locals of whale sharks and cetaceans Collation, analysis and management of photo records (including submission to ECO-OCEAN – see www.whaleshark.org) Educational video produced	Limited resources. No capacity currently for dedicated monitoring of compliance or data collection towards a management information system	Tag data retrieved and analysed. Scientific publication produced Eco-ocean populated with St Helena whale shark records Species action plan created for whale shark. Cetacean photo records collated and analysed Presentation of data at 2016 4th International Whale Shark conference in Qatar.
8. Deployment of mechanical & PSAT tags on marlin and tuna	16 tags deployed: 8 in winter 8 in summer	No data on migration routes of these species available	Tag data retrieved and analysed. Scientific publication produced Species action plan created for marlin. Information informs

			sportsfishing and commercial fisheries
9. Application of marine ecosystem services assessment (incl. social and economic benefits)	Delivery of an ecosystem services assessment, including an estimate of the social and economic benefits derived from the ecosystem services.	No data currently exists on the relationship between the marine ecosystem functions, the services they generate, and the social and economic benefits to St. Helena.	Ecosystem services assessment report.
10. Development and application of future marine management scenarios	Management measures that protect ecosystem function whilst generating enhanced social and economic benefits are identified.	There is no mechanism at present to model the likely impacts of management measures on the social and economic benefits generated by fisheries and tourism.	A minimum of 4 workshops with stakeholders. Report presenting recommendations for future marine management measures.
11. Marine Ecosystem Service Assessment and Marine Planning capacity building programme	A minimum of 10 people trained in ecosystem service assessment to support marine planning and management.	There is no capacity for ecosystem services assessment to support marine planning and management.	Production of a concise guide to ecosystem service assessment. Certificate of attendance at capacity building activities.

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

Three complimentary work programmes are essential for successful achievement of long-term strategic advances within St Helena's marine management. Outputs 1 to 5 will establish the local capacity to conduct fisheries science; facilitating the collection of the necessary data for comprehensive stock assessment contributing to a well-managed fishery.

Outputs 6 to 8 will ensure monitoring and compliance of established marine tourism management schemes. Research will be conducted on anthropogenic influences on the marine ecosystem from tourism activities.

Outputs 9 to 11 will assess the ecosystem services and quantify the social and economic benefits associated with developing marine based industries to pre-empt potential risk and facilitate proactive management strategies.

27. Main Activities	
Output 1	**Capacity building - Marine section staff trained as local fisheries observers.**
1.1	Appointment of fisheries scientist
1.2	Appointment of marine tourism observer (local post)

1.3	Training of local project staff in fisheries observer programs, data collection gonad staging and otolith collection, preparation and reading by FIG and AIG.
Output 2	**Assessment of inshore and offshore commercial fisheries undertaken.**
2.1	Collate and review all fisheries data, including catch and effort data, and any biological or environmental data available for both inshore and offshore catches.
2.2	Establish observer database, produce observer manual
2.3	Review offshore logbooks
2.4	Observer presence on inshore, offshore and sports fishing vessels
2.5	Geospatial analysis of existing data
2.6	Development of predictive models to attempt to explain patterns of distribution and abundance
2.7	Deployment of at least 500 mechanical tags and 16 PAT tags on pelagic fish (tuna and marlin) from sport fishing and offshore commercial vessels.
2.8	Fisheries management plan produced. Licensing conditions updated where appropriate
Output 3	**Age growth and reproductive biology of main inshore and offshore commercial fish species is significantly advanced.**
3.1	At least 600 otoliths sectioned, processed, validated and read
3.2	At least 600 gonads, assessed for reproductive status. A subsample (50) fixed stained and sectioned. Condition and gonad indices analysed
3.3	Establishment of growth curves, annual reproductive cycles and age-at-maturity for at least 2 commercially-exploited species.
Output 4	**By catch risk assessments for seabirds, turtles and sharks in commercial fishing fleet are established.**
4.1	Observer training in seabird data collection
4.2	Geospatial analysis of seabird tracking data in conjunction with catch data are conducted to examine potential overlaps
4.3	Different fishing methods assessed for by catch levels by observer monitoring.
4.4	Section on bycatch (and any necessary mitigation methods) included within fisheries management report. Licensing criteria updated where appropriate
Output 5	**A strategy for on- going monitoring and management of St. Helena's fishery is developed and implemented.**
5.1	Plan produced detailing methodology and management strategies for St

	Helena fishery. Licensing conditions updated where appropriate
5.2	Folder exists containing all data recording forms
Output 6	**Reporting by observer of marine based tourism compliance and human interaction with marine species**
6.1	Marine observer trained.
6.2	Assessment of each marine tourism operator (sports fishing, diving, whale shark tours and cetacean trips) conducted with report on compliance and including analysis of data collected.
Output 7	**Establish comprehensive information regarding whale shark and cetaceans in St. Helena's waters (including data on identification photos (eco ocean), biological data and tagging (whale sharks only)**
7.1	Deployment of 8 PAT tags on whale sharks.
7.2	Collection of biological & photographic data of all whale sharks seen (size, sex, T-zone) and submission to Eco-ocean
7.3	Tag data retrieved and analysed by experts. Scientific publication produced Species action plan created for whale shark.
7.4	Cetacean photo records collated and analysed
Output 8	**Deployment of mechanical & PSAT tags on marlin and tuna**
8.1	Tag data retrieved and analysed. Scientific publication produced
8.2	Species action plan created for marlin.
Output 9	**Application of marine ecosystem services assessment**
9.1	Ecosystem services assessment focused on fisheries and tourism activities.
9.2	Report describing the methods and results of the ecosystem services assessment, including an assessment of social and economic benefits associated with fisheries and tourism activities.
Output 10	**Development and application of future marine management scenarios**
10.1	Local stakeholder workshops to develop realistic scenarios to test the application of a range of plausible future marine management measures.
10.2	Recommendations for future marine management measures to protect the marine ecosystem whilst supporting the realisation of social and economic benefits.
Output 11	**Marine Ecosystem Service Assessment and Marine Planning capacity building programme.**
11.1	Written guidelines to support the future application of social and economic assessment methods to inform marine management and planning
11.2	Development of a tailored capacity building programme focused on marine ecosystem service assessment to inform marine management and planning.

28. Risks			
Description of the risk	Likelihood the event will happen (H/M/L)	Impact of the event on the project (H/M/L)	Steps the project will take to reduce or manage the risk
Unsuitable fisheries scientist is appointed or person with required qualifications not found	L	H	SHG have an experienced HR team in getting people to work on small remote islands Detailed job and person specifications and terms of reference combined with appropriate timescale to recruit. Job advert will be widely disseminated in appropriate media.
Co-partners/stakeholders fail to provide assistance	L	H	Partners involved in this project have collaborated previously, have excellent delivery track records and are reputable organisations of international standing. MOU agreement signed between partners on approval of bid.
Co-funding not available	L	H	All co-partners have agreed to their commitments and this will be formalised through the signing of memoranda of understandings. Contingency planning would include seeking funds elsewhere or implementation of project activities.
Fisherman & local tour operators not compliant with observers on board inshore vessels.	L	H	Current licensing schemes will be changed to make this a mandatory requirement on any vessel used for commercial gain. Local marine section staff members have good working relationships with all local fisherman and marine tour operators.
Whale sharks do not occur during whale shark scientists' research visit.	L	L	Historical data analysed to identify dates for highest opportunity of whale shark occurrence. In the unlikely event that whale sharks aren't encountered during scientists visit, training will be given to local project staff and volunteers to conduct these project outputs when whale sharks are present
Fish catches very low	M	M	Analysis based on smaller sample size.
Adverse weather and conditions	L	M	St. Helena has a year round moderate sea state and mild weather conditions. Historically rough sea and bad weather usually lasts for short periods of time. In most cases all fishing vessels continue to fish.

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

This project reflects the long-term vision of SHG for the conservation and management of its marine biodiversity. With tourism and fisheries as areas targeted for growing St. Helena's economy this area is high on the agenda at all levels within Government (see covering letter and letter of support from HE The Governor), as well as key stakeholders of the local fishing and marine tourism industry (see letter of support from St Helena's Fishermen's Association, local tour operators).

The project will leave a compliment of fully-trained fisheries/marine ecology observers/scientists (local permanent staff members) with the capability to collect, monitor and access impacts within the fisheries and marine tourism sector and identify their connections to social and economic benefits. It will also leave substantial datasets of both local and international significance and appropriate data management systems.

It will build stronger networking within the South Atlantic UKOTs and with Plymouth University and researchers at Atlanta Georgia Aquarium and Mote Marine Laboratory.

This project will ensure that there is clear and supported evidence based advice, which will feed into SHG strategic planning, sustainable development planning and national environment management planning. Most importantly it will form the base of SHG's future marine management.

30. 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, AIG, Plymouth University, Georgia Aquarium and Mote Marine Laboratory each with proven track records of delivery of similar projects. An MOU will be drawn up and will document the obligations of all parties for successful delivery of the project. EMD management will co-ordinate the budget and monitor deliverables against timeframe on a quarterly basis ensuring all project partners are on track for completing their specific requirements under the project outputs. Regular communications with representatives from each project partner will be conducted with the host country, and the project lead will be responsible for reporting to Darwin as stipulated.

Outputs including training will form part of marine section staff annual targets and will be assessed by their line manager on a biannual basis. The project lead will report to the Head of EMD on a monthly basis, reporting progress and any issues arising, impacts on the project and methods for mitigating against these.

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

31. 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.

NB: Please state all costs by financial year (1 April to 31 March) and in GBP. **Budgets submitted in other currencies will not be accepted.** Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.

33. 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)
The experience of managing the Darwin project 19-031, alongside collaboration with AIG and SAERI who have experience with budgeting for similar projects have allowed this project budget to be based on realistic costs. Although travel costs to St Helena are expensive, this is justifiable as training of local permanent staff ensures longevity of skill set obtained. The significant matched funding contributed by project partners including collaboration with other OT's for use of equipment and training ensures excellent value for money against total project cost and makes use of equipment purchase through other Darwin bids. The large amount of in-kind staff time (£190,622) highlights the support and high importance of this project given by SHG and other partners. Researching St Helena's whale sharks will inform regional and global data gaps in whale shark biology and match funding provided by Plymouth University, Georgia Aquarium and Mote Marine Laboratory reflect the high value of the data this project will provide. The external partners also bring experiences and best practices from elsewhere to ensure St. Helena can adopt world-leading approaches to integrated marine management.

Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project (Q1 starting April 2014)

	Activity	No of Months	Year 1				Year 2			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	**Capacity building - Marine section staff trained as local fisheries observers.**									
1.1	Appointment of fisheries scientist	2	■							
1.2	Appointment of marine tourism observer (local post)	1	■							
1.3	Training of local project staff in fisheries observer programs, data collection gonad staging and otolith collection, preparation and reading by FIG & AIG	3	■		■					
Output 2	**Assessment of inshore and offshore commercial fisheries undertaken.**									
2.1	Collate and review all fisheries data, including catch and effort data, and any biological or environmental data available for both inshore and offshore catches.	4	■	■						
2.2	Establish observer database, produce observer manual	2		■						
2.3	Review offshore logbooks	2		■	■	■	■	■	■	
2.4	Observer presence on inshore, offshore and sports fishing vessels	21	■	■	■	■	■	■	■	
2.5	Geospatial analysis of existing data	2				■				
2.6	Development of predictive models to attempt to explain patterns of distribution and abundance	3							■	■
2.7	Deployment of at least 500 mechanical tags and 16 PAT tags on pelagic fish (tuna and marlin) from sport fishing and offshore commercial vessels.	18		■	■	■	■	■	■	
2.8	Fisheries management plan produced. Licensing conditions updated where appropriate	5							■	■
Output 3	**Age growth and reproductive biology of main inshore and offshore commercial fish species is significantly advanced.**									
3.1	At least 600 otoliths sectioned, processed, validated and read	2			■			■		
3.2	At least 600 gonads, assessed for reproductive status. A subsample (50) fixed stained and sectioned. Condition and gonad indices analysed	2		■	■	■	■	■		
3.3	Establishment of growth curves, annual reproductive cycles and age-at-maturity for at least 2 commercially-exploited species.	1							■	■

Output 4	**By catch risk assessments for seabirds, turtles and sharks in commercial fishing fleet are established.**										
4.1	Observer training in seabird data collection	3									
4.2	Geospatial analysis of seabird tracking data in conjunction with catch data are conducted to examine potential overlaps	1									
4.3	Different fishing methods assessed for by catch levels by observer monitoring.	3									
4.4	Section on bycatch (and any necessary mitigation methods) included within fisheries management plan. Licensing criteria updated where appropriate	1									
Output 5	**A strategy for on- going monitoring and management of St. Helena's fishery is developed and implemented.**										
5.1	Plan produced detailing methodology and management strategies for St Helena fishery. Licensing conditions updated where appropriate	3									
5.2	Folder exists containing all data recording forms	2									
Output 6	**Reporting by observer of marine based tourism compliance and human interaction with marine species**										
6.1	Marine observer trained.	1									
6.2	Assessment of each marine tourism operator (sports fishing, diving, whale shark tours and cetacean trips) conducted with report on compliance and including analysis of data collected.	21									
Output 7	**Establish comprehensive information regarding whale shark and cetaceans in St. Helena's waters (including data on identification photos (eco ocean), biological data and tagging (whale sharks only)**										
7.1	Deployment of 8 PAT tags on whale sharks.	2									
7.2	Collection of biological & photographic data of all whale sharks seen (size, sex, T-zone) and submission to Eco-ocean	2									
7.3	Tag data retrieved and analysed by experts. Scientific publication produced Species action plan created for whale shark.	3									
7.4	Cetacean photo records collated and analysed	2									
Output 8	**Deployment of mechanical & PSAT tags on marlin and tuna**										
8.1	Tag data retrieved and analysed. Scientific publication produced	6									

8.2	Species action plan created for marlin.	3								
Output 9	**Application of marine ecosystem services assessment**	12								
9.1	Ecosystem services assessment focused on fisheries and tourism activities.									
9.2	Report describing the methods and results of the ecosystem services assessment, including an assessment of social and economic benefits associated with fisheries and tourism activities.									
Output 10	**Development and application of future marine management scenarios**	6								
10.1	Local stakeholder workshops to develop realistic scenarios to test the application of a range of plausible future marine management measures.	6								
10.2	Recommendations for future marine management measures to protect the marine ecosystem whilst supporting the realisation of social and economic benefits.									
Output 11	**Marine Ecosystem Service Assessment and Marine Planning capacity building programme.**	6								
11.1	Written guidelines to support the future application of social and economic assessment methods to inform marine management and planning									
11.2	Development of a tailored capacity building programme focused on marine ecosystem service assessment to inform marine management and planning.									

CERTIFICATION

On behalf of the trustees/company* of **The Environment and Natural Resources Directorate**

I apply for a grant of **£270,737.00** 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 project principals and letters of support.

Our most recent audited/independently verified accounts and annual report are also enclosed/can be found at (delete as appropriate):

Name (block capitals)	ELIZABETH CLINGHAM & GERALD BENJAMIN
Position in the organisation	MARINE CONSERVATION & SENIOR FISHERIES OFFICERS

Signed		**Date:**	30/07/2014

Application Checklist for submission

	Check
Have you **read the Guidance Notes**?	Yes
Have you **checked the Darwin Plus website** immediately prior to submission to ensure there are no late updates?	**Yes**
Have you provided **actual start and end dates** for your project?	Yes
Have you provided your **budget based on UK government financial years** ie 1 April – 31 March and in GBP?	Yes
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?	Yes
Has your application been **signed by a suitably authorised individual**? (clear electronic or scanned signatures are acceptable in the email)	**Yes**
Have you included a **1 page CV for all the principals**?	Yes
Have you included a **letter of support from the main partner(s) organisations**?	Yes
Have you included a **copy of the last 2 years' annual report and accounts** for the lead organisation? An electronic link to a website is acceptable.	Yes

Once you have answered the questions above, please submit the application, not later than midnight GMT Monday 4 August 2014 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.