



Department  
for Environment  
Food & Rural Affairs



Foreign &  
Commonwealth  
Office



Department  
for International  
Development



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

Submit by **2359 GMT Monday 29 August 2016**

Please read the [Guidance](#) before completing this form.

Information to be extracted to the database is highlighted blue. Blank cells may render your application ineligible

### Basic Data

<b>1. Project Title</b> (max 10 words)	<b>The Ascension Island Ocean Sanctuary (ASIOS): planning for the Atlantic's largest marine reserve</b>		
<b>2. UK OT(s) involved</b>	Ascension Island	<b>Letter of support from OT government attached?</b>	Yes
<b>3. Start Date:</b>	1/4/2017		
<b>4. End Date:</b>	30/9/2019		
<b>5. Duration of project (no longer than 36 months)</b>	30 months		

Summary of Costs	2017/18	2018/19	2019/20	Total
<b>6. Budget requested from Darwin</b>	£108,987	£105,335	£64,800	£279,122
<b>7. Total value of matched funding</b>	£817,508	£331,653	£54,663	£1,203,824
<b>8. Total Project Budget (all funders)</b>	£926,495	£436,988	£119,463	£1,482,946
<b>9. Names of Co-funders</b>	Oceans 5, Blue Marine Foundation, UK Foreign & Commonwealth Office (CSSF fund), Universities of Exeter, Birmingham & Western Australia, Ascension Island Government.			

<b>10. Name, address and contact details of lead applicant organisation (responsible for delivering outputs, reporting and managing funds)*</b>	Ascension Island Government Conservation & Fisheries Department, Conservation Office, Georgetown, Ascension Island ASCN 1ZZ
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\* Notification of results will be by email to the Project Leader named in Question 12

<b>11. Type of organisation of Lead applicant. Place an x in the relevant box.</b>													
OT GOVT	<input checked="" type="checkbox"/>	UK GOVT	<input type="checkbox"/>	UK NGO	<input type="checkbox"/>	Local NGO	<input type="checkbox"/>	International NGO	<input type="checkbox"/>	Commercial Company	<input type="checkbox"/>	Other (e.g. Academic)	<input type="checkbox"/>

**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	Weber	Brown	Broderick
Forename(s)	Sam	Judith	Annette
Post held	Senior Conservation Scientist	Director of Conservation & Fisheries	Associate Professor Marine Conservation
Institution (if different to above)	AIG (& University of Exeter)*	AIG	University of Exeter
Department	Conservation & Fisheries	Conservation & Fisheries	Centre for Ecology and Conservation
Telephone/Skype			
Email			

Details	Project Partner 2	Project Partner 3	Project Partner 4
Surname	Godley	Brickle	Meeuwig
Forename(s)	Brendan	Paul	Jessica
Post held	CEC Director, Chair in Conservation Science	Director	Director, Centre for Marine Futures
Institution (if different to above)	University of Exeter	South Atlantic Environmental Research Institute	University of Western Australia
Department	Centre for Ecology and Conservation		Centre for Marine Futures
Telephone/Skype			
Email			

Details	Project Partner 5	Project Partner 6	Project Partner 7
Surname	Reynolds	Dickey	Hussey
Forename(s)	S. James	Roger	Nigel
Post held	Lecturer in Ornithology & Animal Conservation	Chairman	Research Associate
Institution (if different to above)	University of Birmingham	Army Ornithological Society	University of Windsor, Ontario
Department	Centre for Ornithology		Great Lakes Institute for Environmental Research
Telephone/Skype			
Email			

\*Dr Weber will be primarily based at University of Exeter if the project is successful.

**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
DPLUS021	N. Weber/ S. Weber	Ascension Island Marine Sustainability (AIMS) – a fisheries and marine biodiversity project
DPLUS038	N. Weber/ S. Weber	Mapping Ascension Island's Terrestrial Ecosystem
DPLUS046	S. Weber/ N. Weber	Tracking marine megafauna at Ascension Island: towards evidence-based 'blue belts'

**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?
Dr Judith Brown	Project leader	AIG	50	Yes
Dr Sam Weber	Darwin Research Fellow	UoE	100	Yes
Dr Andy Richardson	Darwin Research Fellow	AIG	100	Yes
Kate Downes	Lead researcher on food web project	UoE & AIG	100	Yes
Dr Annette Broderick	Academic supervisor for Dr Weber & Ms Downes	UoE	10	Yes
Prof. Brendan Godley	Academic supervisor for Dr Weber & Ms Downes	UoE	5	Yes
Dr Matthew Witt	Satellite surveillance project	UoE	5	No*
Dr iLaria Marengo	WebGIS support	SAERI	3	Yes
Dr Eliza Leat	Seabird tracking project	AIG	5	No*
Roger Dickey	Seabird tracking project	AOS	5	Yes
Dr S. James Reynolds	Seabird tracking and food web projects	UOB	5	Yes
Dr Paul Brickle	Marine spatial planning project	SAERI	5	Yes
Dr Nigel Hussey	Aquatic telemetry and food web projects	UWIN	5	Yes
Prof. Jessica Meeuwig	Baited remote underwater video project	UWA	5	Yes

\*Out of contact at the time of submission due to annual leave. But see research profile [here](#).

#### 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.

The designation of a large scale pelagic marine protected area (MPA) at Ascension Island, underpinned by strong science and long-term monitoring and enforcement capabilities.

**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)

The creation of a large-scale MPA around Ascension Island is a flagship commitment of the UK Government's "Blue Belt" initiative, and the most high-profile conservation issue currently affecting the Territory. An important milestone was reached in January 2016 with the announcement of a "no-take" zone covering 50% of Ascension's 440,000 km<sup>2</sup> maritime zone. However, there are still substantial knowledge gaps that need to be addressed to identify those areas that would benefit most from spatial protection measures. For this reason, AIG has deferred formal designation of an MPA while existing scientific data are compiled and new research is carried out. In April 2016, a stakeholder workshop was held at the FCO with the aim of drawing up a list of priority actions needed to inform the placement of the ASIOS and ensure its long-term success. The current project has been developed to deliver the [roadmap agreed at that meeting](#). Using a range of modern scientific methods, the project will build an integrated understanding of Ascension's offshore pelagic ecosystem and develop evidence-based recommendations for the siting of marine reserves. Crucially, it will also plan for the legacy of the ASIOS, ensuring that the Territory learns from experiences elsewhere to deliver world-class MPA practice on Ascension Island.

**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 consist of four work packages that reflect the priority themes and actions identified at the stakeholder workshop:

- 1. Identifying key biodiversity areas for pelagic megafauna.** This will be achieved using a combination of wildlife telemetry techniques (GPS-accelerometry, pop-up satellite archival tags, acoustic arrays), at-sea abundance surveys (baited remote underwater video systems, vessel-based visual transects), remotely-sensed habitat mapping (e.g. composite front and eddy mapping) and species distribution modelling (MaxEnt) to identify areas and habitats of importance for key taxa. Existing telemetry and at-sea survey data will be collated and analysed, and a major new tagging initiative will be launched to fill taxonomic and spatial gaps in species distribution data, particularly in offshore areas and around seamounts.
- 2. Quantifying threats from commercial fisheries.** Direct threats will be quantified through the deployment of ocean-going observers and the collation and analysis of all available fisheries data from within Ascension's Exclusive Fishing Zone (EFZ). An ecological risk assessment approach will be used to quantify and rank by-catch threats to specific taxa and geospatial modelling carried out to identify and map any areas and/or habitats with elevated risk. The project will also initiate research into Ascension's pelagic food web, using stable isotope analysis and dietary sampling to understand better the trophic interactions between key taxa (e.g. tunas and seabirds) and evaluate the indirect impacts of fisheries (and proposed MPAs) on food web dynamics.
- 3. Designing and designating the ASIOS.** This element will bring together data from 1 and 2, along with bio-economic data from the fishery, and use objective decision support tools (e.g. Marxan, Zonation) to help identify optimal locations for marine reserves under different future resourcing models for the Territory. The results will be presented in an "*Ascension Island Future Marine*

*Management*” report that will be circulated for stakeholder review before recommendation to the Ascension Island legislature for enactment.

- 4. Legacy planning.** If it is to succeed over the long-term, the ASIOS must be enforceable, well-resourced and capable of demonstrating clear benefits for biodiversity. The project will contribute to these goals through the testing of experimental satellite surveillance technologies, the development an MPA management plan and monitoring framework, and the formation of an international working group to guide its future development. Best practice will be incorporated into the planning of the ASIOS through engagement with peer-learning networks (e.g. Big Ocean), literature reviews and attendance at international MPA meetings. The project will culminate with a UKOTs “Blue Belts” conference as an opportunity to share experiences and forge stronger relationships with large-scale MPA managers within the Territories.

**Project management.** The project will be delivered by **two, full-time post-doctoral researchers** and a postgraduate marine scientist working between AIG and the University of Exeter and supported by a network of international collaborators (see Section 15). Following a model recently adopted in the [Falklands](#), a **spatial database system and public-facing Web GIS** will be developed to manage and disseminate datasets generated during the project, allowing partners, stakeholders and funders to monitor progress in near-real-time.

#### **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)

##### **a) Priority issues:**

- *Contribution to multilateral environmental agreements.* The project will make a major contribution towards AIG meeting its objectives under the CBD, in particular Aichi Targets 11 (10% of oceans in marine protected areas), 6 (sustainable fisheries) and 19 (biodiversity knowledge improved).
- *Contribution to national commitments.* The UK and Ascension Island Governments are fully committed to the designation of a large-scale marine reserve at Ascension Island, once the necessary scientific data have been collected and analysed. The current project will implement the MPA roadmap developed at the stakeholder workshop, which identified the research priorities in the run-up to designation.
- *Long-term strategic objectives and mainstreaming.* The creation of an offshore marine reserve currently ranks amongst the most high-profile issues affecting Ascension Island, with both economic and environmental aspects and strong political engagement. The project will contribute to this long-term commitment by enabling informed decision-making and developing the plans, governance structures and monitoring tools needed to guarantee the success of the ASIOS.
- *Priority areas:* The project is well aligned with the priority funding areas identified in Round 5, in particular 1) improving protection and management of the marine environment around the UKOTs linked to the UK Government’s Blue Belt manifesto commitment, 2) developing ecosystem-based approaches to marine conservation, and 3) developing data systems on biodiversity.

##### **b) Technical excellence:**

- *Environmental decision-making.* The project will conduct and collate world class research using a range of the latest technologies and analytical approaches to provide the knowledge base needed to inform the placement and long-term management of a large-scale marine reserve. Stakeholders will be kept regularly updated with accessible interpretations of the data to ensure an open and consultative decision-making process.
- *Project planning and value for money.* The project benefits from an exceptional level of matched funding that ensures excellent value for money relative to actual costs (see Section 31). The project plan is based on the collective priorities agreed at the MPA stakeholder workshop and has been

carefully timetabled and costed to ensure that these outputs can be delivered on time and within budget.

- *Monitoring and evaluation.* See Section 29.

### c) Impact:

- *Local ownership.* The project is being driven from within the Territory in response to a manifesto commitment by the UK Government and will provide the management tools, local capacity and international support network needed for Ascension Island to take ownership of its MPA once designated.
- *Institutional capacity.* A strong partnership of NGOs, research institutes and Government has formed over the last few years as interest in marine protection around Ascension has grown. The project brings together these partners, providing the breadth of experience needed to ensure that the work is delivered to a high standard and is suitable to inform high-level management decisions.
- *Anticipated outcomes.* The project will enable the designation and effective long-term management of the Atlantic's largest MPA and is therefore assured of a significant regional and international impact. A varied dissemination programme will ensure that project outputs are widely publicised and accessible to users outside of the Territory.
- *Sustainability.* 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 **Ascension Island Government, Island Council, and Governor of St Helena, Ascension and Tristan da Cunha** will ultimately be responsible for approving an MPA policy and enacting it into law, and they are the principle beneficiaries of this work. The project has been developed as a direct response to the needs of these stakeholders for clearer guidance on the most suitable location(s) for marine reserves, and will engage with them at all stages through Council and Committee meetings and the production of non-technical reports and policy recommendations. Senior management within AIG are fully supportive and committed to ensuring the project is a success and is delivered in a timely manner (see letter of support).

Many organisations and individuals outside of the Territory, including the **UK Foreign & Commonwealth Office, conservation NGOs and marine scientists**, have also played a key role in the drive towards a large-scale marine reserve on Ascension Island and have directly inputted into the current proposal through the MPA stakeholder workshop held earlier this year. The Minister for the UK Overseas Territories also attended part of this meeting, demonstrating the UK Government's commitment to advancing marine management around Ascension.

The key **project partners** have an on-going investment in the conservation of Ascension Island's marine environment and will lend their collective expertise to train AIGCD staff and ensure the long-term sustainability of the work (see letters of support). All datasets will be made freely available to the **wider research community**, who are also stakeholders in the project.

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

**Ascension Island Government Conservation & Fisheries Department** is the principle body responsible for implementing the Government's commitments under the National Biodiversity Action Plan and multilateral environmental commitments. Over the past 5 years AIGCFD has been involved with externally-funded projects with a combined budget of more than £1 million. The current proposal

builds on capacity established through the Darwin-funded “Ascension Island Marine Sustainability” project (DPLUS021) and marine megafauna tracking project (DPLUS046), and will retain skills developed through those initiatives to deliver a scientifically-informed MPA in the Territory.

The **University of Exeter** is a THE Global 100, Russell Group research institute and a centre of excellence in marine conservation science. UoE project leads, **Dr Annette Broderick** and **Prof. Brendan Godley**, have worked on Ascension Island for over 17 years and have a strong track record of delivering interdisciplinary conservation and research projects in the UKOTs and elsewhere. They, along with **Dr Matthew Witt**, will provide academic mentorship and supervision for project staff, as well as access to the wider research expertise and state-of-the-art facilities at the University.

The Falklands-based **South Atlantic Environmental Research Institute** is an academic organisation conducting research in the South Atlantic from the tropics down to Antarctica. SAERI have recently undertaken a major Darwin-funded marine spatial planning exercise in the Falkland Islands and will bring knowledge and experience gained through this project, as well as expertise in the development of spatial information management systems and Web GIS products through their regional IMS-GIS hub.

**Dr Jim Reynolds** from the University of Birmingham and the **Army Ornithological Society** have been working on Ascension for the last 26 years during which they have undertaken long-term monitoring of the Island’s seabird community. Recent research has employed tagging technologies to examine the intra- and inter-breeding season movements of birds and they will work closely with AIGCFD staff in providing support and training. As part of his commitment to the project, Dr Reynolds will give his time and ensure that all tagging protocols are carried out on birds to the highest ethical standards.

**Dr Nigel Hussey** from the University of Windsor, Canada, brings with him over 14 years’ experience in aquatic telemetry and pelagic food web research, from the Arctic to the tropics. Dr Hussey is currently collaborating with AIGCFD on its Darwin-funded shark tracking project (DPLUS046) and will once again give his time to train and support project staff.

**Prof Jessica Meeuwig** is the Director of the Centre for Marine Futures at the University of Western Australia and has pioneered the development of baited pelagic camera systems as a non-destructive monitoring tool for blue water MPAs. Her lab will train AIGCFD staff in the use of this technology and provide on-going analytical support and academic mentorship through a long-term collaboration.

## 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
<p><b>Impact:</b></p> <p><b>The project aims to significantly enhance the conservation and sustainable use of marine biodiversity in the central tropical Atlantic through the planning, designation and resourcing of the region's largest marine reserve.</b></p>			
<p><b>Outcome:</b></p> <p><b>The designation of a large-scale marine protected area (MPA) at Ascension Island, underpinned by strong science and long-term monitoring and enforcement capabilities.</b></p>	<p><b>0.1</b> By Q1 of Yr3, <b>at least 220,000 km<sup>2</sup> of ocean is protected within a Category 1 MPA</b> based on the outcomes of a data-driven marine spatial planning exercise.</p> <p><b>0.2</b> By Q2 of Yr3, Ascension Island Government has <b>the necessary plans, monitoring tools and international support network to effectively manage its MPA</b>, and to develop its potential as an "Ocean Observatory".</p>	<p><b>0.1</b> An Order issued under the Ascension Island National Protected Areas Ordinance and published in the Gazette declaring MPA boundaries and management regulations; public-facing project Web GIS presenting all data products generated (see below).</p> <p><b>0.2</b> Legacy planning activities coordinated and reported through the project, including the adoption of a best-practice MPA management plan and monitoring framework, and the resourcing of this plan through local and international capacity building (e.g. formation of an Ascension Island Oceans Partnership and membership of the Big Ocean Network).</p>	<p><b>0.1</b> Assumes that the Ascension Island Council and Governor approve proposals for MPA designation(s). The Island Council will be fully engaged in the ASIOS project through quarterly meetings of the Biodiversity &amp; Fishery Committee and regular presentations to Councillors, ensuring their involvement in the development of proposals from the outset. The UK Government have already expressed their commitment to an MPA covering at least 50% of Ascension's maritime zone to Councillors and there is now an understanding that this will proceed.</p>

<p><b>Outputs:</b></p> <p><b>1. Information systems for managing and disseminating spatial datasets gathered during the project are established and local conservation managers are trained in their use. (Objective 6.1 of the MPA Roadmap)</b></p>	<p><b>1.1</b> By Q1 of Y1, a <b>GIS-linked spatial database system is created</b> for hosting telemetry and at-sea survey data, remote sensing layers, fishery information (vessel locations, catch reports), and other datasets relevant to the designation and future monitoring of the ASIOS; and,</p> <p><b>1.2</b> A <b>public-facing Web GIS is created</b> for displaying and browsing marine spatial data online.</p>	<p><b>1.1</b> Screen shots of PostGIS database administrator and Microsoft Access and QGIS “front ends” created for data input and visualisation. The publication of a Web GIS is also dependent on this step, so delivery of Output 1.2 will be an additional source of verification.</p> <p><b>1.2</b> Web GIS is accessible online (see <a href="#">here</a> for an example).</p>	<p>There are no important assumptions, we are confident that these outputs can be delivered as stated.</p>
<p><b>2. Distributions of species impacted by commercial fisheries are mapped and modelled in order to identify key usage areas and risk areas. (Objectives 1 &amp; 4 of the MPA Roadmap)</b></p>	<p><b>2.1</b> By Q4 of Y2, <b>telemetry data for &gt;300 seabirds, sharks, billfish, tuna and turtles are collated, collected and analysed</b> in conjunction with environmental data to map key foraging areas and migration routes, and model species’ distributions over multiyear timescales.</p> <p><b>2.2</b> Composite ocean <b>front and eddy maps</b> of Ascension’s EFZ are constructed using the previous <b>5 years of remote-sensing data</b> by Q3 of Y1 to identify any persistent or seasonally-persistent habitat zones that may be candidates for protection (also feeds into 2.1).</p> <p><b>2.3</b> By Q4 of Y2, <b>at-sea abundance surveys</b> for marine megafauna and</p>	<p><b>2.1</b> Project Web GIS, online wildlife tracking data repositories (MoveBank, Global Seabird Tracking Database, seaturtle.org) and peer-reviewed manuscripts prepared by project scientists.</p> <p><b>2.2</b> Oceanographic layers added to project Web GIS and incorporated into peer-reviewed manuscripts prepared by project scientists.</p> <p><b>2.3</b> Geo-referenced survey data added to project WebGIS and</p>	<p><b>2.1</b> Estimated sample sizes are based on a summary of existing telemetry data for seabirds (≈ 120 individuals), turtles (≈ 25), yellowfin tuna (≈ 10) and inshore sharks (≈ 15), along with planned deployments on marlin (≈ 10), offshore sharks (≈ 40) and tuna (≈ 40) and sooty terns (≈ 100 individuals) that will occur during the project.</p> <p>Planned deployments reflect the number of telemetry devices budgeted for and assume that 1) commercial vessels buy licenses and fish in Ascension’s EFZ, 2) sufficient animals can be captured for tagging and 3) that devices are successfully recovered or transmit data. A certain level of tag loss or failure is anticipated and this is incorporated into the indicator value. If commercial vessels do not fish, the AIG patrol vessel (a fully equipped offshore long-liner) will be used to support these elements. If</p>

	<p>important prey taxa (e.g. zooplankton and flying fish) are carried out at <b>&gt; 100 sites</b> using vessel-based visual surveys, plankton tows and baited remote underwater video systems (BRUVs) to identify and ground truth potential hotspot areas.</p> <p><b>2.4</b> By Q4 of Y2, the <b>importance and radius of influence of Ascension Island and its offshore seamounts as aggregation areas for pelagic biodiversity are established</b> using telemetry (2.1) and at-sea survey data (2.3) to develop recommendations for MPA placement and sizing.</p>	<p>summarised in peer-reviewed manuscripts and reports prepared by project scientists. Baited remote underwater video (BRUV) footage incorporated into project micro-documentaries and social media outputs (see 7.4).</p> <p><b>2.4</b> Seamounts expedition report; spatial datasets added to Web GIS; peer-reviewed manuscripts; publicity and outreach activities associated with expeditions (see 7.4).</p>	<p>difficulties are encountered capturing any particular species, tags will be re-distributed among other taxa to ensure that they still yield policy-relevant information.</p> <p><b>2.2</b> Assumes that spatial coverage and temporal resolution of remote sensing data for Ascension’s EFZ is sufficient.</p> <p><b>2.1, 2.3 &amp; 2.4</b> assume that 1) the patrol vessel chartered by AIG in previous fishing seasons continues to be available to support offshore science and 2) the BEST Seamounts project is funded. If these assumptions are not met, stated indicators will need to be adjusted to reflect the amount of vessel time and number of telemetry devices available.</p>
<p><b>3. Threats to marine megafauna from commercial fisheries are quantified, including both direct (by-catch) and indirect (food chain) impacts. (Objectives 2, 3 &amp; 6.2 of the MPA Roadmap)</b></p>	<p><b>3.1</b> At least <b>10% local observer coverage</b> is established in the commercial fishery for the <b>duration of the project</b> and is used to validate vessel catch reporting.</p> <p><b>3.2</b> By Q1 of Y2, a <b>ranked risk assessment</b> is produced identifying those species most threatened by commercial fisheries following a synthesis of all available fishery data and relevant ecological information.</p> <p><b>3.3</b> By Q2 of Y2, <b>the distribution of commercial fishing effort, catch and by-catch in Ascension’s EFZ</b></p>	<p><b>3.1</b> Annual patrol cruise reports compiled by AIG Director of Fisheries &amp; Conservation.</p> <p><b>3.2</b> Results incorporated into the Ascension Island “Future Marine Management” report to be circulated at the end of Yr2 and then made available online.</p> <p><b>3.3</b> Fishery layers and by-catch risk surfaces added to project Web GIS; datasets summarised in peer-</p>	<p><b>3.1</b> Assumes that commercial fishing vessels purchase licenses and fish within Ascension Island’s EFZ during the project and at a time when observers can be deployed by the patrol vessel.</p> <p><b>3.2 &amp; 3.3</b> Some progress towards these outputs has already been made through the Darwin-funded Ascension Island Marine Sustainability project (DPLUS021). The value that can be added will depend on the willingness of foreign fishing authorities to release fine-scale national observer data and vessel positioning information that are currently not publically accessible. AIGCFD will pursue these datasets through direct contact or via diplomatic channels and</p>

	<p>in all years for which data exist are mapped and, where possible, modelled as a function of environmental covariates to identify any specific areas or habitat zones with elevated risk to individual species and taxa.</p> <p><b>3.4</b> By Q3 of Y2, the diets and trophic positions of at least <b>7 species of tuna, seabirds and sharks</b> as well as all key prey taxa are characterised as a basis for mapping Ascension's pelagic food web and modelling the impacts of fisheries (and fishery closures) on food web dynamics.</p>	<p>reviewed manuscripts and in the Ascension Island Future Marine Management report</p> <p><b>3.4</b> Results summarised in a University of Exeter PhD thesis; peer-reviewed manuscripts and reports prepared to disseminate the technical findings.</p>	<p>ICCAT if necessary. If these efforts are unsuccessful, a reduced analysis using geographically and taxonomically summarised data available from ICCAT and pre-2014 vessel reporting will be carried out, alongside high-resolution datasets gathered during the project.</p> <p><b>3.4</b> Assumes that sufficient samples can be gathered for diet and stable isotope analysis from each taxon. Sampling of offshore populations will be conducted in parallel with tagging work and at-sea surveys and therefore has a similar set of assumptions.</p>
<p><b>4. Optimal solutions for MPA placement are proposed based on an integration of species distribution data, threat assessments and economic costs/values within a formal marine spatial planning framework. (Objective 6 of the MPA Roadmap)</b></p>	<p><b>4.1</b> By Q3 of Y2, a <b>bio-economic analysis of Ascension's commercial long line fishery</b> has been conducted to assess its long-term viability under different future management scenarios.</p> <p><b>4.2</b> By Q4 of Y2 an <b>MPA options report is produced</b> based on results and recommendations from outputs 2, 3 and 4 and circulated for stakeholder review prior to AIG submitting to Council for final decision.</p>	<p><b>4.1 &amp; 4.2</b> Ascension Island Future Marine Management report to be circulated at the end of Yr2 and then made available online.</p>	<p>As delivery of Output 4 depends on data gathered through Outputs 2 &amp; 3, assumptions and mitigation options outlined above also apply.</p>
<p><b>5. Experimental satellite surveillance technologies are</b></p>	<p><b>5.1</b> By Q4 of Y2, the level of <b>Illegal, Unlicensed and Unreported (IUU)</b></p>	<p><b>5.1</b> Report to AIG produced by project scientists. Results</p>	<p><b>5.1</b> Targeted patrol vessel deployments assume that IUU</p>

<p><b>trialled as a cost-effective method for MPA compliance monitoring and enforcement. (Objective 8 of the MPA Roadmap)</b></p>	<p><b>fishing</b> in Ascension’s EFZ has been estimated over a <b>2 year period</b> and, where possible, has been verified by targeted patrol vessel deployments.</p>	<p>incorporated into a peer-reviewed manuscript and Ascension Island “Future Marine Management” report. Outcome of patrol vessel deployments recorded in annual cruise reports compiled by AIG Director of Fisheries &amp; Conservation.</p>	<p>vessels are detected during patrol charters and are within reach.</p>
<p><b>6. Pelagic biodiversity baselines are established and a robust monitoring framework is developed for evaluating the long-term conservation benefits of the ASIOS. (Objectives 5.1 and 7 of the MPA Roadmap).</b></p>	<p><b>6.1</b> By Q1 of Y1 at least <b>10 fixed BRUV monitoring sites</b> have been established for assessing trends in the abundance and diversity of key pelagic species, such as sharks. By Q4 of Y2, baselines have been drawn using seasonally-stratified <b>surveys over a 2 year period.</b></p> <p><b>6.3</b> By Q4 of Y2, best practice in pelagic MPA monitoring has been reviewed and incorporated into a <b>“good monitoring framework”</b> that is appropriate for Ascension Island’s needs and resources (see also <b>7.3</b>)</p>	<p><b>6.1</b> Monitoring sites and data layers added to project Web GIS; long-term monitoring targets incorporated into MPA management plan (<b>8.2</b>).</p> <p><b>6.3</b> Monitoring framework is outlined in Ascension Island Future Marine Management report (<b>4.2</b>) and is incorporated into the final MPA Management Plan (<b>8.2</b>).</p>	
<p><b>7. International best practice is incorporated into the design and planning of the ASIOS, and experiences and knowledge gained during the project are widely shared. (Objective 10 of the MPA Roadmap).</b></p>	<p><b>7.1</b> Ascension Island Government joins the Big Ocean Network and representatives attend <b>at least one major international MPA symposium by Q4 of Yr1</b> to present plans and receive feedback.</p> <p><b>7.2</b> UoE and AIG host a <b>UKOT “Blue Belts” conference</b> in Q2 of Y3 as a forum for strengthening links, promoting collaborations and improving knowledge transfer</p>	<p><b>7.1</b> The ASIOS is named as a <a href="#">member site</a> of Big Ocean; AIG conference abstract in online proceedings; project publicity materials, including photographs, social media etc.</p> <p><b>7.2</b> Conference background documents and proceedings; publicity and awareness-raising activities surrounding the meeting.</p>	<p><b>7.1</b> Assumes that AIG can secure a nomination from an existing member (this should be straightforward through links with British Indian Ocean Territory). Timing of delivery will depend on whether membership is permitted pre-designation.</p>

	<p>between Territories responsible for managing large-scale MPAs.</p> <p><b>7.3</b> By Q4 of Y2, a <b>literature review of best practice in large-scale MPA design and management</b> has been produced and incorporated into plans for the ASIOS.</p> <p><b>7.4</b> By Q3 of Y2, <b>at least 30 dissemination products</b> have been produced in <b>7 different media</b>, including micro-documentaries, public lectures, newsletters and articles, technical manuscripts, social media posts and online blogs.</p>	<p><b>7.3</b> Literature review and recommendations are incorporated into Ascension Island Future Marine Management report (<b>4.2</b>) and MPA Management Plan (<b>8.2</b>)</p> <p><b>7.4</b> Most dissemination products will be accessible online and easily verifiable; products in other media will be evidenced through photographs added to online content, or through digital files appended to project reports.</p>	
<p><b>8. The ASIOS is formally designated and management structures are established to ensure its long-term success.</b></p>	<p><b>8.1</b> By Q1 of Y3, proposed <b>MPA boundaries and regulations are presented to the Island Council</b> for recommendation to the Governor.</p> <p><b>8.2</b> By Q2 of Y3, <b>AIG adopts a 5 year MPA management plan</b>, guided by Outputs 2-7.</p> <p><b>8.3</b> By Q2 of Y3, a <b>working group of local and international stakeholders</b> is formed to provide coordinated, long-term scientific, political and fundraising support and steering.</p>	<p><b>8.1</b> Memorandum to the Island Council and formal Council minutes.</p> <p><b>8.2</b> Management plan hosted within the Ascension Island NBAP and made available online.</p> <p><b>8.3.</b> Minutes of founding meeting and memorandum of understanding between the parties.</p>	<p>See assumptions for <b>0.1</b></p>
<p><b>Activities.</b> Corresponding actions from the ASIOS Roadmap (<a href="http://www.ascension-island.gov.ac/wp-content/uploads/2013/12/Scientific-roadmap-Summary-of-workshop-final.pdf">http://www.ascension-island.gov.ac/wp-content/uploads/2013/12/Scientific-roadmap-Summary-of-workshop-final.pdf</a>) are also shown in blue.</p>			

**Output 1. Information systems for managing and disseminating spatial datasets gathered during the project are established and local conservation managers are trained in their use.**

- 1.1 Creation of a PostGIS database and QGIS/MS Access user interfaces for managing spatial data gathered during the project ([Roadmap Action 6.1](#))
- 1.2 Creation of a public-facing Web GIS interface for disseminating spatial data gathered during the project (using QGIS/LizMap).
- 1.3 Training day for AIG staff on the operation and maintenance of the spatial database and Web GIS system.

**Output 2. Distributions of species impacted by commercial fisheries are mapped and modelled in order to identify key usage areas and risk areas.**

- 2.1 Collate and analyse existing tracking data for marine turtles and seabirds to identify key foraging habitats and migration routes. ([Roadmap Action 1.1](#))
- 2.2 Conduct further tracking of tunas, sharks, seabirds and billfish, particularly in offshore areas and around seamounts, to address taxonomic and spatial gaps in species distribution data. ([Roadmap Actions 1.2, 4.1, 4.3 and 7.3](#)). Priority actions include:
  - 2.2.1 Deploy micro GPS-accelerometer tags on breeding sooty terns.
  - 2.2.2 Install acoustic receiver arrays on seamounts and in inshore shelf areas.
  - 2.2.3 Deploy satellite and acoustic telemetry devices on sharks and tunas associated with shallow-water seamounts.
  - 2.2.4 Deploy satellite telemetry devices on oceanic shark species (particularly blue sharks) caught as by-catch in the commercial fishery.
  - 2.2.5 Deploy satellite and acoustic telemetry devices on Atlantic blue marlin caught in the inshore sports fishery.
  - 2.2.6 Analyse telemetry data to establish and map foraging ranges, residence times and migratory routes of tagged species.
- 2.3 Use remote-sensing data to identify and map persistent frontal systems, eddies and other bio-aggregating oceanographic features in Ascension Island's EFZ as potential high-value habitats for conservation. ([Roadmap Action 3.3](#))
- 2.4 Undertake at-sea abundance surveys of marine megafauna and important prey taxa (e.g. zooplankton and flying fish) to identify and ground truth potential "biodiversity hotspots" and link these to environmental drivers. ([Roadmap Actions 1.3, 4.1 and 4.2](#)). This will involve:
  - 2.4.1 Vessel-based visual transects for seabirds and surface-orientated marine vertebrates
  - 2.4.2 Baited remote underwater video (BRUV) deployments for quantifying abundance and diversity of sharks and other predatory fishes
  - 2.4.3 Mid-water plankton tows for estimating biomass and secondary productivity.
  - 2.4.4 CTD deployments for characterising physical oceanography (temperature, salinity and dissolved oxygen profiles of the water column) and primary productivity (chlorophyll A) of study sites.
  - 2.4.5 Analysis of BRUV footage using video analysis software to generate indices of abundance and estimate size classes.
- 2.5 Analyse telemetry and at-sea abundance data (2.4) in conjunction with environmental variables (2.3) to estimate movement parameters and residence times and construct species distribution models (SDMs) for predicting long-term distribution dynamics ([Action 6.1 of the ASIOS Roadmap](#)).

**Output 3. Threats to marine megafauna from commercial fisheries are quantified, including both direct (by-catch) and indirect (food chain) impacts.**

- 3.1 Deploy local fisheries observers on commercial vessels to record and validate catch composition ([Action 2.1 of the ASIOS Roadmap](#)).
- 3.2 Collate all available vessel location and catch-effort data from Ascension's commercial long-line fishery, including those held by foreign fishing authorities, into the local information management system ([Action 2.2 of the ASIOS Roadmap](#)).
- 3.3 Produce a ranked risk assessment of by-catch threats to marine vertebrates within Ascension's EFZ, incorporating local fishery data and ecological information derived from other sources, to help parameterise subsequent analyses ([Action 2.2 of the ASIOS Roadmap](#)).
- 3.4 Analyse fishery data in conjunction with environmental layers to identify and map any specific areas or habitat zones with high by-catch ratio or disproportionate risk to particular species or taxa. ([Action 6.2 of the MPA Roadmap](#)).
- 3.5 Collect diet samples (e.g. stomach contents, regurgitates) and tissues for stable isotope analysis (e.g. blood, feathers, muscle) from pelagic megafauna and potential prey taxa for food web analysis ([Actions 3.1 and 3.2 of the MPA Roadmap](#)).
- 3.6 Stable isotope analysis of biological samples (3.5) to map trophic relationships in Ascension's pelagic food web ([Action 3.1 of the ASIOS Roadmap](#)).
- 3.7 Interim report on the findings and implications of the food web project circulated to stakeholders.

**Output 4. Optimal solutions for MPA placement are proposed based on an integration of species distribution data, threat assessments and economic costs/values within a formal marine spatial planning framework.**

- 4.1. Carry out a bio-economic analysis of Ascension's commercial longline fishery to model spatiotemporal variation in fishing values, investigate factors influencing license uptake, and assess the long-term economic viability of the fishery under different management scenarios, considering alternative economic models where appropriate ([Roadmap Actions 5.2 and 5.4](#)).
- 4.2. Use systematic conservation planning software to identify MPA designs that optimise biodiversity conservation objectives and sustainable financing from fisheries under different sets of assumptions and constraints ([Roadmap Action 6.3](#)).
- 4.3. Report the findings and proposed MPA boundaries from Outputs 2, 3 4.1 and 4.2 and circulate to stakeholders for peer-review ([Roadmap Action 6.5](#)).

**Output 5. Experimental satellite surveillance technologies are trialled as a cost-effective method for MPA compliance monitoring and enforcement.**

- 5.1. Identify and map potential Illegal, Unreported and Unregulated fishing in Ascension's EFZ using nocturnal light signatures from vessels and SAR imaging overlaid with local AIS/VMS data ([Roadmap Action 8.2](#)).
- 5.2. Report the findings of vessel detection trials to local marine managers with recommendations for future deployment of the technology.
- 5.3. Trial targeted patrol vessel deployments using near-real-time vessel detection to ground-truth the technology and test its application as an enforcement

<p>tool.</p> <p><b>5.4.</b> Train local users in the operation of vessel detection systems for long-term self-sufficiency in compliance monitoring and enforcement.</p>
<p><b>Output 6. Historical and contemporary biodiversity baselines are established and a monitoring framework is developed for evaluating the long-term conservation benefits of the ASIOS.</b></p>
<p><b>6.1.</b> Identify suitable pelagic monitoring sites in inshore areas and on seamounts and initiate quarterly (inshore) and annual (seamount) BRUV surveys to establish baselines of abundance and community composition (<a href="#">Roadmap Actions 7.1 &amp; 7.2</a>).</p> <p><b>6.2.</b> Trial targeted monitoring of dynamic open-ocean habitats using near-real-time front and eddy mapping to direct BRUV deployments and vessel-based abundance surveys.</p>
<p><b>Output 7. International best practice is incorporated into the design and planning of the ASIOS, and experiences and knowledge gained during the project are widely shared.</b></p>
<p><b>7.1.</b> AIG engages with peer-learning networks, including joining Big Ocean Managers Network (<a href="#">Roadmap Action 10.3</a>).</p> <p><b>7.2.</b> Representatives from AIG attend a major international meeting of MPA managers, provisionally the 4<sup>th</sup> International Marine Protected Areas Congress (IMPAC4) in La Serena, Chile (<a href="#">Roadmap Action 10.3</a>).</p> <p><b>7.3.</b> UK Overseas Territories “Big Oceans” conference hosted by University of Exeter and AIG (<a href="#">Roadmap Action 10.3</a>).</p> <p><b>7.4.</b> Review published and online resources related to the design, management and monitoring of large-scale MPAs and synthesise into a set of recommendations that are appropriate for Ascension Island’s needs and resources (<a href="#">Roadmap Action 10.1</a>).</p> <p><b>7.5.</b> Production of Darwin-branded micro-documentaries for online consumption showcasing scientific work, Ascension marine life and MPA designation.</p> <p><b>7.6.</b> Publicise and disseminate project activities and findings through social media, local newspaper articles, scientific blogs, peer-reviewed manuscripts, online repositories and public lectures (<a href="#">Roadmap Action 10.2</a>).</p>
<p><b>Output 8. The ASIOS is formally designated and management structures are established to ensure its long-term success.</b></p>
<p><b>8.1.</b> Preparation of the Ascension Island “Future Marine Management” report.</p> <p><b>8.2.</b> Future Marine Management report made available for public consultation and stakeholder peer-review (<a href="#">Roadmap Action 6.5</a>).</p> <p><b>8.3.</b> Submission of proposed MPA boundaries and regulations to the Island Council and Governor for enactment (<a href="#">Roadmap Action 6.6</a>).</p> <p><b>8.4.</b> Development and adoption of a best practice MPA management plan and monitoring framework (<a href="#">Roadmap Action 6.4</a>).</p> <p><b>8.5.</b> Formation of an ASIOS Working Group to provide long-term steering and support. First order of business will be to review and provide comment on the management plan (<b>8.2</b>). (<a href="#">Roadmap Actions 9.2 and 6.5</a>).</p>

**27. 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)

The project will make a substantial contribution to the long-term, sustainable management of marine biodiversity in the tropical, central Atlantic by enabling the designation and effective stewardship of the region's largest marine reserve. Local marine managers at AIGCFD will be the principle custodians of the ASIOS, once designated, and will be empowered through the plans, monitoring tools and local capacity established during the project. The strengthening of international partnerships and collaborations, including the formation of a dedicated ASIOS working group and engagement with peer-learning networks (e.g. Big Ocean and the UKOTs MPA community), will further help to maintain the profile of Ascension Island and provide a broad base of technical, political and fund-raising support for local authorities long after the project is completed. Datasets and reports generated during this work will be made permanently available to support decision-making in the Territory thereby exerting a lasting impact on the evidence base for marine management (see Section 28). There are also numerous benefits for the global marine management and research community, including establishing and trialling methodologies for enforcing and monitoring the benefits of large scale no-take areas, which will further ensure a long-term legacy.

**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)

AIGCFD already operates an open access [data management policy](#) and will ensure that all outputs that are not commercially-sensitive are made accessible online through the project Web GIS, AIG website and other appropriate venues. Following a model adopted during previous projects, all wildlife tracking datasets will be deposited in online repositories, such as MoveBank and the Global Seabird Tracking Database, where they can be made freely available to the wider research community. AIGCFD is also partnering with SAERI to develop an integrated information network where data from the South Atlantic OTs can be easily discovered and accessed online by external users (<http://www.south-atlantic-research.org/ims-gis>). All data from this project will be documented within this online metadata system that will be completed shortly. All other relevant outputs, including final reports to policy makers, will be made available via AIG's website. Finally, in order to maximise impact and inclusiveness, a small amount of funding has been requested to enable open access publication of key project findings in the scientific literature. Given the growing interest in the management of pelagic ecosystems, the results are likely to be relevant to a diverse audience and will benefit from the broader readership that open access permits.

**29. Monitoring & Evaluation:**

Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E. Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact.

The majority of project partners have collaborated previously and have established a close working relationship that encourages a near-continuous M&E process. Nevertheless, given the multiple work packages that need to be coordinated in the current project, a formal M&E framework is recognised as a high priority and has been carefully integrated into the project implementation timetable (see Section 32). The AIG and University of Exeter project leads (Dr Brown & Dr Weber) will be responsible for overall management of the M&E process with input from project partners on specific work packages.

M&E will be carried out quarterly during the first fieldwork-intensive year to assess progress against specific activities/indicators and make contingency plans where necessary (see Section 32). Important milestones in Year 1 include:

**Q1.** The end of the seamounts expedition in May 2017 when several partners will be gathered on Ascension Island. M&E will focus on numbers of telemetry devices deployed and planning for addressing any shortfall (indicators 2.1 & 2.4). This will also be an opportunity to demonstrate the project information management system to stakeholders and receive feedback (1.1 & 1.2).

**Q2.** The end of the first sooty tern tagging expedition in July 2017 when tag deployments and preliminary findings will be reviewed with project partners and formulation of plans for the 2018 expedition will begin (indicator 2.1).

**Q3.** Following the December 2017 fishery patrol to review progress against indicators 2.1–2.3 (telemetry, at-sea surveys and remotely-sensed habitat mapping), 3.1 (fishery observer coverage) and 5.1 (satellite surveillance). This will enable priority setting and methodological adjustments for a subsequent cruise in January-February 2018.

**Q4.** The end of first year, and end of the 2017-18 fishing season (April 2018), will provide an opportunity for a major progress review across Outputs 2, 3, 5 & 6 at a partner meeting in the UK. M&E will focus on identifying any outstanding fieldwork that requires attention as well as on agreeing analytical approaches to be adopted during the following year.

In Year 2, formal M&E will be carried out on a 6-monthly basis to allow extended periods of data analysis to be completed. This will include:

**Q6.** An interim progress review against indicators 2.1 & 2.4 (species distribution modelling), 3.3–3.5 (by-catch and food web analyses) and 4.1 (fishery bio-economic study) prior to the start of the 2018-19 fishing season (September 2018) to identify any major data gaps that need addressing; and,

**Q8.** A final major progress review of all indicators at a partner meeting on Ascension Island at the end of Yr2 (April 2019) to finalise the content of the Ascension Island Future Marine Management report before this is submitted for stakeholder peer-review. This review process will also provide an opportunity for external evaluation of project achievements which will be incorporated into the final recommendations submitted to Council for enactment.

The project will conclude with the UKOTs Blue Belts conference in July/August 2019 (**Q10**) which will provide a final opportunity to reflect on project successes and failures, share lessons learned and receive feedback on draft MPA management plans before these are formalised.

Number of days planned for M&E	8 (+ stakeholder peer-review)
Total project budget for M&E	£6000 (T&S for annual partner meetings, excluding Blue Belts conference)
Percentage of total project budget set aside for M&E	2.1%

**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?)

Grant payments will be administered through Ascension Island Government's bank account, with project expenditures tracked by the AIG Finance Department. AIG has a fully dedicated financial accounting and management team, headed by a UK qualified Chartered accountant. The Government currently manages capital and reserves of £20 million. The Finance and Conservation Departments have jointly managed many biodiversity conservation projects, large and small, over the last 10 years, including those funded by RSPB, OTEP, JNCC and the Darwin Initiative. AIG's accounts are also subject to an annual, independent financial audit by Wilkins Kennedy LLP, based in London.

**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)

The **considerable matched funding already secured through private donations and Central Government support**, along with in-kind salary contributions and overheads volunteered by partner organisations, means that the amount requested represents < 20% of the overall cost of delivering the project. Co-funding primarily provides for the purchase and procurement of capital equipment (e.g. £400,000 for wildlife tags), as well as many of the short-term management costs of the commercial fishery and current closed area (e.g. £320,000 for fisheries observers, AIS/VMS, offshore patrol vessel charters). **Darwin funding is now critical for the provision of technically-competent, full-time staff members to deliver the scientific roadmap and ensure that results are consolidated, analysed and reported in a timely fashion.** Salaries have been calculated on institutional pay scales commensurate with the level of experience required and are therefore in-line with local and national norms. **Darwin funds are also needed to support the mobility of AIGCFD and project partners to enable effective capacity building, M&E and dissemination** (e.g. attendance at international meetings, visits of collaborators to Ascension Island, organisation of UKOTs Blue Belt conference). These costs have been based on fixed prices or best-value quotations wherever possible, ensuring a realistic but efficient T&S budget.

32. 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

Activity	No. of months	Year 1				Year 2				Year 3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Output 1 Information systems for managing and disseminating spatial datasets gathered during the project are established.</b>		Lines in red denote M&E milestones associated with specific project activities (see Section 29)									
1.1 Creation of a PostGIS database and QGIS/MS Access front ends	2										
1.2 Creation of a public-facing Web GIS	1										
1.3 Training day for AIGCFD staff on the use of information systems	0.1										
<b>Output 2 Distributions of species impacted by commercial fisheries are mapped and modelled in order to identify key usage areas and risk areas.</b>											
2.1 Collate and analyse existing tracking data for marine turtles and seabirds	4										
2.2.1 Deploy GPS-accelerometer tags on breeding sooty terns.	1										
2.2.2 Establish acoustic receiver arrays on seamounts and in inshore areas	1										
2.2.3 Deploy telemetry devices on seamount-associated tuna and sharks	1										
2.2.4 Deploy telemetry devices on oceanic sharks and tuna in the offshore fishery	3										
2.2.5 Deploy telemetry devices on marlin caught in the inshore sports fishery	3										
2.3 Map frontal systems, eddies and other key oceanic habitat zones	2										
2.4 Undertake at-sea abundance surveys for megafauna and prey taxa	6										
2.5 Analyse telemetry and at-sea abundance data to construct SDMs.	6										
<b>Output 3 Threats to marine megafauna from commercial fisheries are quantified, including both direct (by-catch) and indirect (food chain) impacts.</b>											
3.1 Deploy local fisheries observers on commercial vessels	3										
3.2 Collate all available data from Ascension's commercial long-line fishery	0.5										
3.3 Produce a ranked risk assessment of by-catch threats to marine vertebrates	1										
3.4 Analyse fishery data to identify and map by-catch hotspots	2										
3.5 Collect diet samples and tissues for stable isotope analysis from key taxa.	12										

Activity	No. of months	Year 1				Year 2				Year 3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
3.6 Stable isotope analysis and processing of data.	10										
3.7 Interim report on the findings and implications of the food web project.	1										
<b>Output 4 Recommendations for MPA placement are developed based on a synthesis of species distribution data, threat assessments and economic costs/values within a marine spatial planning framework.</b>											
4.1 Bio-economic study of Ascension's long-line fishery.	3										
4.2 Systematic conservation planning analysis using Marxan/Zonation.	6										
<b>Output 5 Experimental satellite surveillance technologies are trialled as a cost-effective method for MPA compliance monitoring and enforcement.</b>											
5.1 Identify potential IUU vessels in Ascension's EFZ from satellite data	4										
5.2 Targeted patrol deployments using near-real-time vessel detection.	3										
5.3 Train local MPA/fishery managers in the use of vessel detection technologies.	0.5										
<b>Output 6 Biodiversity baselines are established and a robust monitoring framework is developed for evaluating the long-term conservation benefits of the ASIOS.</b>											
6.1 Identify suitable pelagic monitoring sites in inshore areas and on seamounts and initiate surveys.	2										
6.2 Trial targeted monitoring of dynamic habitats using near-real-time front and eddy mapping.	3										
<b>Output 7 International best practice is incorporated into the design planning of the ASIOS, and experiences and knowledge gained during the project are widely shared.</b>											
7.1 AIG joins the Big Ocean Network	0.25										
7.2 Representatives from AIG attend IMPAC4 to network and present plans	0.5										
7.3 UKOT "Big Oceans" conference held to share experiences and build links	0.25										
7.4 Literature review of best practice in MPA design and management	3										
7.5 Production of project micro-documentaries	0.5										

Activity	No. of months	Year 1				Year 2				Year 3	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
7.6 Public engagement through social media, newspaper articles etc.	1										
<b>Output 8 The ASIOS is formally designated and management structures are put in place to ensure its long-term success.</b>											
8.1 Preparation of Ascension Island Future Marine Management report.	6										
8.2 Stakeholder review of Future Marine Management report.	1										
8.3 MPA boundaries recommended to the Ascension Island legislature	1										
8.4 Development and adoption of an MPA management plan.	2										
8.5 Formation of an ASIOS Partnership to provide long-term steering and support.	0.25										

### CERTIFICATION

On behalf of the company\* of Ascension Island Government  
 (\*delete as appropriate)

I apply for a grant of £279,122 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\*.

\*Accounts for 2015-16 are currently being audited and will not be authorised for release until the end of September 2016. I have enclosed the final, signed accounts for 2013-14 and 2014-15 and will supply the most recent year's financial statements for review once these become available.

<b>Name (block capitals)</b>	DR JUDITH BROWN
<b>Position in the organisation</b>	Director of Conservation and Fisheries

**Signed**



**Date:**

29/08/2016

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

Once you have answered the questions above, please submit the application, not later than midnight **2359 GMT Monday 29 August 2016** to [Darwin-Applications@ltsi.co.uk](mailto: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.