Darwin Plus:
Overseas Territories Environment and Climate Fund
Annual Report

To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2020

Darwin Plus Project Information

Project reference	DPLUS071
Project title	Fine scaling the design of Falkland Islands Marine Management Areas (MMA project for short)
Territory(ies)	Falkland Islands
Lead organisation	South Atlantic Environmental Research Institute
Partner institutions	Fisheries Department; Directorate of Natural Resources; Falkland Islands Government (FIG) Shallow Marine Surveys Group (SMSG) British Antarctic Survey (BAS). Falkland Islands Government (FIG) Policy Unit and Environmental Planning Department
Grant value	£329,379
Start/end dates of project	1st April 2018 / 31st December 2020
Reporting period (e.g. Apr 2019-Mar 2020) and number (e.g. Annual Report 1, 2)	April 2019 – March 2020
Project Leader name	Dr Paul Brickle
Project website/blog/social media	https://www.south-atlantic-research.org/research/marine-science/fine-scaling-the-design-of-falkland-islands-marine-management-areas/ @SAERI_FI
Report author(s) and date	Dr Ander M. de Lecea (30th April 2020) Dr Marina Costa

1. Project summary

The Falkland Islands' economy is underpinned by the marine environment, and commercial activities such as fisheries, tourism, and offshore hydrocarbon exploration are major contributors to GDP. In addition, the Falkland Islands are home to diverse and important marine environment, including highly diverse inshore systems, deep-water corals as well as globally important populations of seals, seabirds and cetaceans. For example, the Falkland Islands hosts three quarters of the global population of black-browed albatross, half of the global population of thin-billed prions, half of the Atlantic population of South American fur seals, one third of the global population of southern rockhopper penguins and Gentoo penguins, and three unique genetic stocks of Commerson's and Peale's dolphins (see Literature in Annex 3 for references). Recognizing this and the need for a holistic marine management approach across

all sectors that promotes sustainable use of the Falkland Islands' marine resources and that safeguards its biodiversity, a long-term process of marine spatial planning (MSP) began in 2014 with the 'Marine Spatial Planning in the Falkland Islands' Darwin Plus project (project number DPLUS027).

Following the successful conclusion of DPLUS027, the Falkland Islands Government (FIG) funded SAERI to undertake a second phase (MSP Phase II; July 2017 to December 2017) which covered three key aspects: 1. **A**ssessment of **F**ishing **C**losure **A**reas as **S**ites (AFCAS) as potential Marine Management Areas (MMAs) against international criteria for Marine Protected Areas; 2. A review of the current legislative gaps for the implementation of MSP, and; 3. The drafting a long-term strategy for the future of MSP in the Falkland Islands.

The current '*Fine scaling the design of Falkland Islands Marine Management Areas*' project (DPLUS071; hereafter MMA) is the next step for the effective design and management of these MMAs.

Three main marine management areas were proposed by the AFCAS report, these were the inshore region, the region around Beauchêne Island and the southern limits of the Falkland Islands Outer Conservation Zone (FCOZ), including the Burdwood Bank (**Figure 1**). These three areas were further subdivided by the AFCAS process. These include five areas designated as *Marine Nature Reserve* (Beauchêne Island, Bird Island, Jason Islands, Kidney & Cochon Islands, and the Burdwood Bank (defined by the 200 m bathymetric contour)), and two areas designated as *Sustainable multi-use zones* (the inshore Falkland Islands waters (with the exception of the previous areas) and the waters around the Burdwood Bank) (Error! Reference source not found.). Together these MMAs represent about 15% of the Falkland Islands waters

In order to consider the implementation of these MMAs, the project will conduct key baseline studies required for their effective design and management. Five steps have been identified for development in this project: (1) economic consequences of the design (present and future), (2) Policy formulation, (3) Site Management Plans, (4) Suggested legislative framework and, (5) Legacy Planning (resourcing, financial, human).

The MMA project is being delivered through four work-packages:

1. WP1. Data Collection Inshore: The inshore waters of the Falkland Islands have been poorly studied. This project allowed the collection of more data in both shallow (0-20 m) and deeper (20-100 m of depth) inshore waters using cutting-edge scientific.
2. WP2. Data Collection on the Burdwood Bank: Using the research vessel *RRV James Clark Ross* occurrence wide range of data was collected in order to help us to better understand this poorly studied.
3. WP3. Designing the MMAs: New and existing data are being used to support the identification of the optimal locations for MMA delineations. Policy and legislative frameworks are being developed as parallel but interlinked processes.
4. WP4. Designating the MMAs: A review of resourcing requirements (financial and human) for designation are being undertaken and the 'designation package' (design, policy legislation, impact and resource) will be submitted to relevant government committees for approval.

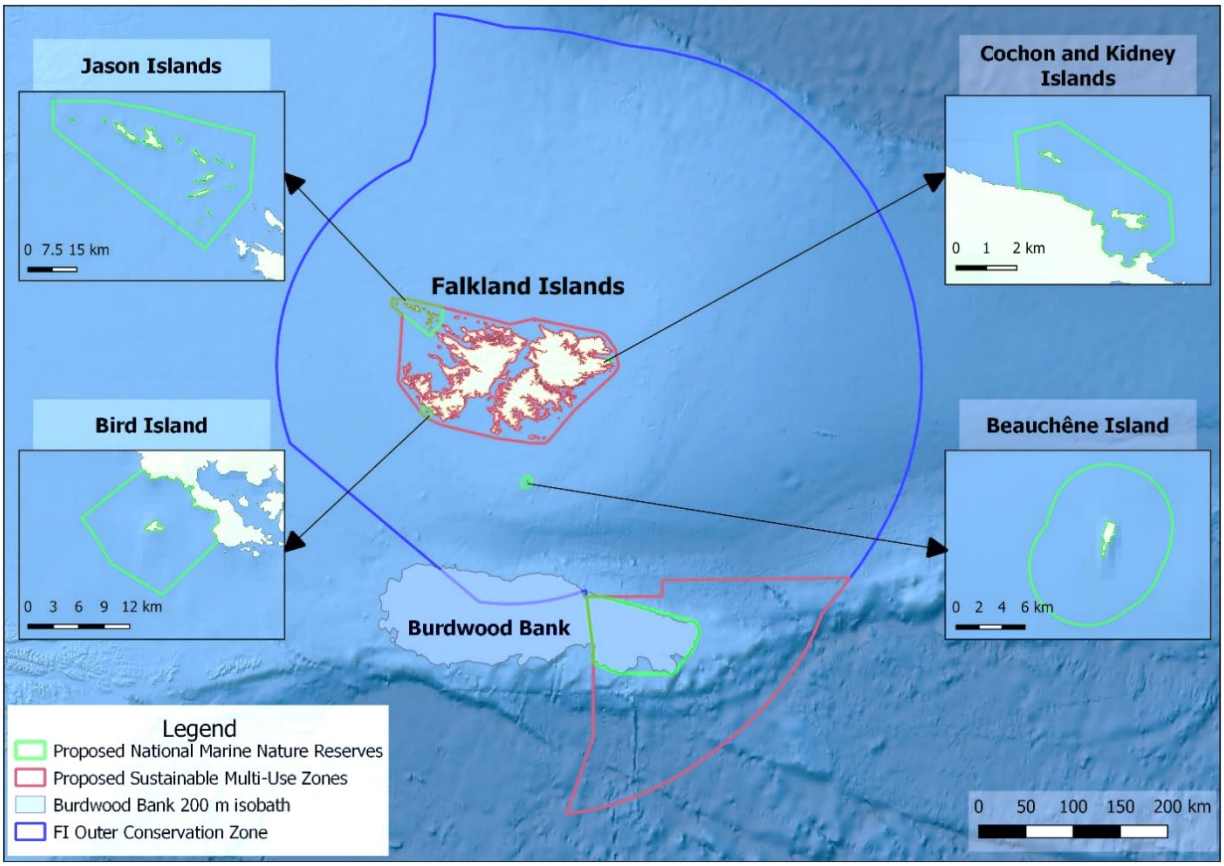

Figure 1 - Map showing the Falkland Islands Outer Conservation Zone (FIOCZ) and the proposed marine management areas. The Sustainable Multi-Use Zones are highlighted in red, the National Marine Nature Reserves, nested within the former, are highlighted green.

2. Project stakeholders/partners

The project partners continue to provide invaluable help towards achieving the project goals, particularly during the planning and the decision-making. In addition, the project partners supported the field campaigns through providing logistical support and/or sharing their knowledge/experience with a view to maximising outputs.

- The Falkland Islands Government (FIG) was a partner in the MSP project (Project No. DPLUS027) and funded the AFCAS report from which this project was developed. Moreover, FIG has provided support to this project in a number of ways:
    - Financially, FIG has provided £7,500 for the 2019/20 financial year as outlined in the project proposal.
    - The Director of Policy (Diane Simsovic, and since November 2019 Andrew Gaule), the Director of Natural Resources (John Barton, and since November 2019 Andrea Clausen) and the Director of Mineral Resources (Stephen Luxton) are all representatives on the Project Management Group (PMG) for the project and help in the monitoring and decision-making.
    - Logistically, FIG has provided licencing and permits to conduct the fieldwork and to export samples in UK, Italy, USA, and Chile.
- The Shallow Marine Surveys Group (SMSG) supported the project scientifically by planning the survey design, and logistically by providing the necessary diving equipment to conduct two successful inshore surveys conducted in April and November 2019. Additionally, on both occasions, SMSG contacted its network of local volunteer divers that joined the expeditions supporting the fieldwork.
- The British Antarctic Survey (BAS) provided essential logistical support during the offshore fieldwork on the Burdwood Bank, which took place on board of the *RRS James*

Clark Ross (JCR). Drs David Barnes and Chester Sands used their extensive field experience and knowledge of the broader region to provide the MMA project with advice on methodology and survey planning on the Burdwood Bank. Dr Sands is conducting DNA barcoding analysis for many of the organisms collected on the Burdwood Bank.

The local community is an important component of this project and other people were involved because of their technical skills. For example, Tom Blake (Falkland Islands Fisheries Companies Association representative) and Pippa Christine (Falkland Islands Petroleum Licensees Association representative) were asked to join the Project Management Group (hereafter PMG) together with FIG and SMSG representatives. The PMG has met regularly every three months to review the project progress, monitor achievements, and suggest changes compatible with the economic activities carried out in the Falkland Islands (see **Section 3.1**). Additionally, economic data have been provided by PMG members for the economic reports (see **Activity 4.2** and **4.3).**

Building consensus over the marine management plans also requires input from all stakeholders. The local community responded positively when the Project Stakeholder Group (hereafter PSG) was formed. Stakeholders include representatives from Falkland Conservation, FIG's Fisheries Department, the Falkland Island Tourist Board, the UK Military (Navy), New Island Trust, Rural Business Association, FIFCA, salmon industry representative, the Maritime Authorities and Harbour Master representative, and the Falkland Islands Yacht Club. Project aim and progress were presented during the first meeting (see **Section 3.1**). During the next meeting the changes suggested by the PMG will be presented for discussion.

Additionally, the project has engaged with the wider local community, through a series of outreach activities, such as:

- Inshore fieldwork expedition blog 26/04/2019 (Click here for blog)
- A short video (available here) was produced for the stakeholders and the local community, to keep them abreast of and promote the outcomes of the project.
- Presentation at the Falklands Yacht Club AGM on 02/05/2019 (link)
- 2 activities with the local youth conservation group 'The Watch Group'
    - 09/05/2019 – Classroom activities (link)
    - 02/06/2019 – Outdoor activities (link)
- Penguin News (popular) article published on the 31st May 2019 (Annex 3)
- Public outreach promoting good management and the importance of the marine environment during Ocean Day activities – 08/06/2019
- Promotion of the MMA project to members of the Falkland Islands' rural community through a poster presentation at the agricultural show in Stanley – 06/2019 (link)
- Interview in Falkland Islands Radio Station (FIRS) regarding the MMA project and the Burdwood Bank for the local community – March 2020; listen to recording of the interview here
- Regular Twitter and Facebook posts throughout the year promoting the MMA project and the work we do.

The MMA team has also conducted some international outreach activities, such as:

- A briefing paper was written for the Falkland Islands Governor Mr Nigel Phillips in order for him to present the important work being done by the MMA project to an international audience, the UK government – 05/09/2019
- A short presentation and the above mentioned video was also provided to representatives of the local *Members of the Legislative Assembly* (MLAs) for them to showcase the work on a UK visit.
- Feature article published in the international magazine *the Marine Biologist* titled '*Marine ecosystem protection in the Falkland Islands*' – October 2019 (link)
- Both project manager and project officer interview with Sky News about the Burdwood Bank & subsequent publication of both interview on Sky News blog – 01/02/2020

Moreover, there have been a number of additional people and activities that have added value to the project itself and to the wider community such as:

- Dr Alastair Baylis, an expert on sea mammals, initially volunteered his time to assist with the high-trophic level predator work. He has subsequently become SAERI's Deputy Director of Science, and is now directly involved in the project as the PM's line manager.
- A number of volunteers have been recruited to assist with field and computer work, significantly enhancing project outcomes and the speed at which these are achieved.
- The project manager obtaining extra funding from the Shackleton Scholarship Fund (SSF) used to increase vessel time at sea.
- SMSG also obtained funding from SSF in order to bring an anemone expert to the Falkland Islands. This expert joined the second expedition.
- Drs Claire Goodwin (a sponge expert) obtained funding from the Falkland Islands Environmental Studies Budget (ESB) to join the second expedition (see **Section 3.1**).
- The participation of a team of experts (see **Section 2** – new partnerships) that will greatly improve the knowledge on certain aspects of the benthic community in the Falkland Islands and its genetic connectivity to the benthos of the Patagonian shelf.
- Recruitment of the intern Lauren Shea, who joined the MMA team for four months supporting the first inshore expedition, as well as analysing some of the data collected on that expedition.

During the inshore and offshore field expeditions, the project team met with technical specialists who volunteered to carry out spin-off studies. Due to the paucity of current knowledge on the benthos of the Falkland Islands, their contribution will be of great value to both the project and the Islands as will continue well after the competition of this project. Several new partnerships have been established in order to maximise the project outputs include:

- Dr. Stefano Schiapparelli and PhD student Alice Guzzi, Italian National Antarctic Museum, Genoa – Genetic barcoding for several of the Burdwood Bank species.
- Dr Claire Goodwin, Huntsman Marine Science Centre, Canada – Understanding the sponge diversity in the Falkland Islands inshore waters.
- Dr Angie Diaz, Universidad de Concepcion, Chile – Studying the genetic connectivity between Chile and Falkland Islands benthic communities.
- Ms Heather Glon, Ohio State University – Looking at the diversity of the anemones in the Falkland Islands waters and at the bio-invasion of the anemone species *Metridium senile*.
- Julian Blumenroeder, Hull University – Identification of pelagic zooplankton and microplastic studies on the Burdwood Bank.
- Tristyn Garza (on behalf of Dr Alexis Janosik), University of West Florida – Studying the presence, composition and origin of microplastics in bottom and surface waters.
- A/Prof Kotaro Shirai, Tokyo University – Understanding long-term environmental changes in the region using the C^{14} from corals collected on the Burdwood Bank.

Please note, these collaborations are not essential for the main results of the MMA, and they are not using extra resources from the project. E.g. A/Prof Kotaro Shirai collected dead coral shells that otherwise were going to be discarded, all costs are being covered by his laboratory.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1: *Project Management structure, monitoring, evaluation and communications tools established*

The Project Management Group (PMG) meetings occurred regularly every three months during the past year (**Activity 1.3**). The meeting planned for March 2020 was cancelled due to the Covid-19 pandemic. Instead of face-to-face meetings, a briefing note with the project progress

was circulated to PMG members and comments returned through email or audio communication. PMG meeting minutes and briefing are available on request.

The first Project Stakeholder Group (PSG) meeting (**Activity 1.4**) was held on the 22nd July 2019 (notes can be made available on request). The 2nd meeting was initially scheduled for January 2020, but later postponed until April 2020 to avoid conflict with fieldwork. Unfortunately, due to the Covid-19 pandemic, the meeting has been postponed. Large part of the local community is currently dealing with the emergency assistance generated by the Covid19. Meeting will resume as soon as possible. Despite the current challenges, the PSG and the wider community are being kept informed via social media, reports and local press (see **Section 2** for full details).

The project webpage (**Activity 1.5**) was constantly updated during the past year and information was shared on the SAERI media accounts in twitter, Facebook, and the SAERI Newsletter (for blogs and newsletters please click here).

DPLUS reports have been submitted as required (**Activity 1.6**).

Output 2: *Work-Package 1 - Data collection inshore*

The inshore benthic data collection was carried out successfully (**Activity 2.2**). Two inshore research expeditions were conducted in April and November 2019 focusing on poorly studied areas, e.g. the waters around West Falkland, and focal areas for the project, e.g. Bird Island and the Jason Islands (**Figure 2**). Fieldwork included the collection of specimens, benthic habitat classification in shallow (0-20 m) and deep waters (20-100 m), oceanographic characterization, assessment of pollution presence along the remote coastlines where the work was being conducted, and tissue sampling of the unique Falkland Islands dolphin populations (fieldwork reports available here). Both expeditions were conducted on board of the yacht *Golden Fleece* thanks to the support of ten volunteers and the two-crew members that joined the research team for the diving work (**Figure 3**).

Data extraction and partial analysis has been completed for the first expedition (see fieldwork report) and is ongoing for the second one.

Preliminary results about the presence of the invasive species *Metridium senile* have been submitted for peer-reviewed publication, *Bioinvasion Records,* by Heather Glon and co-authors. The manuscript was accepted with only minor comments from the reviewers and should soon be published.

Some work about the management of datasets (**Activity 2.3**) and the habitat modelling analyses (**Activity 2.4**) has been completed. Currently 23 new datasets have been collated and stored in the SAERI IMS-GIS data centre. Metadata record generation is ongoing. Higher predator modelling has been completed ahead of schedule and an overview of the results can be seen in **Figure 7** (presented as part of WP2). This work is due for Y3Q1.

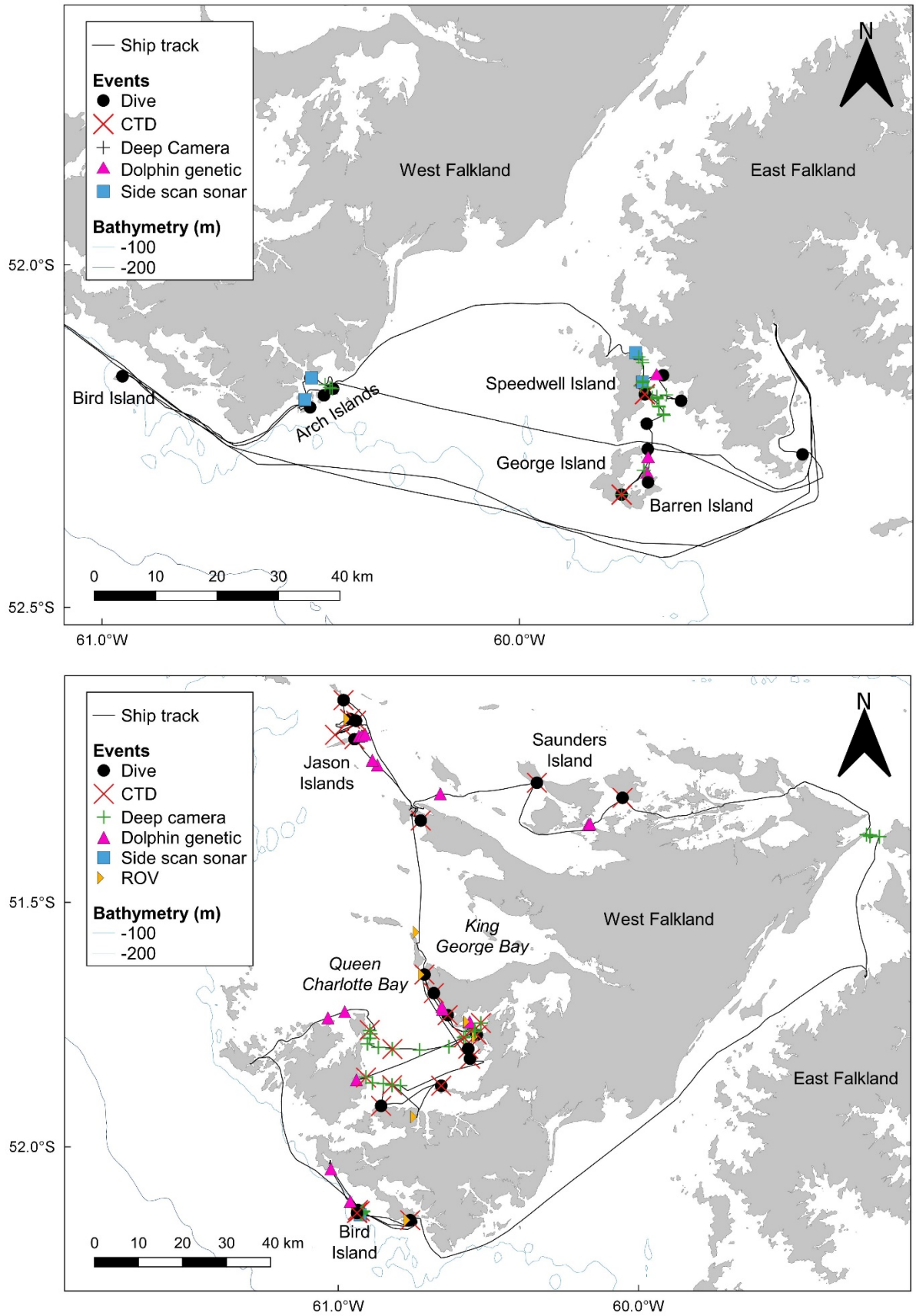

Figure 2 – Maps showing the inshore benthic research expeditions carried out in April (top) and November 2019 (bottom) on board of the vessel Golden Fleece.

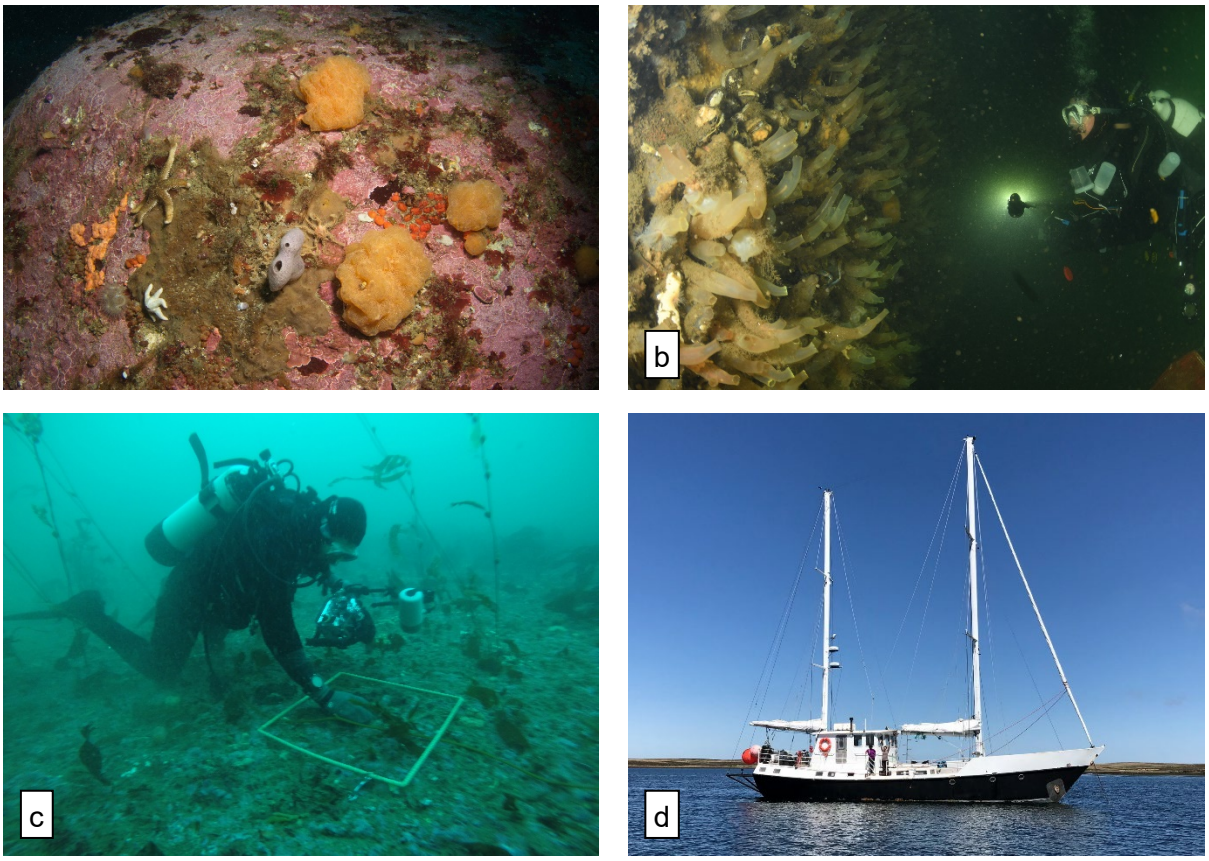

Figure 3 – Inshore fieldwork in the Falkland Islands waters: (a) example of a benthic community at Bird Island; (b) the invasive species Ciona intestinalis *covering a wall in Queen Charlotte Bay; (c) one of the researchers positioning the quadrat before taking a picture to quantify the benthic community; (d) the vessel Golden Fleece, used for both expeditions in April and November 2019.*

Output 3: *Work-Package 2 - Data Collection Southern MMA and Burdwood Bank*

Data collection in the southern MMA and Burdwood Bank was carried out successfully (**Activity 3.2**). For logistical reasons offshore fieldwork was divided across two years. The first part was carried out on the 4th and 5th of December 2018 and was presented in the DPLUS Annual Report Y1. The second offshore fieldwork was carried out from the 31st of January to the 3rd February 2020 (**Figure 4**). Both expeditions were completed on board of the *RRS James Clark Ross* (JCR) in collaboration with the British Antarctic Survey (BAS) (**Figure 5**). Information gathered included oceanographic data collected with a CTD, bottom and surface water collection for microplastics studies, pelagic zooplankton collected with a N70 plankton net, benthic organisms collected with a mini Agassiz trawl (hereafter miniAGT), pictures of the benthic community collected with a Self-Underwater Camera System (hereafter SUCS), high-resolution bathymetry data recorded with a multibeam, sub-bottom profile acquired with a topographic parametric sonar (TOPAS), and cetacean observations. Examples of organisms collected using the miniAGT can be seen in **Figure 6**. Cruise expedition reports are available here. Please note the reports have been formatted differently because the report for the first expedition is included in the main JCR Cruise Report as sections 5.5.1 and 5.5.5, while the second report is stand-alone as the JCR Cruise Report 2020 is not yet published.

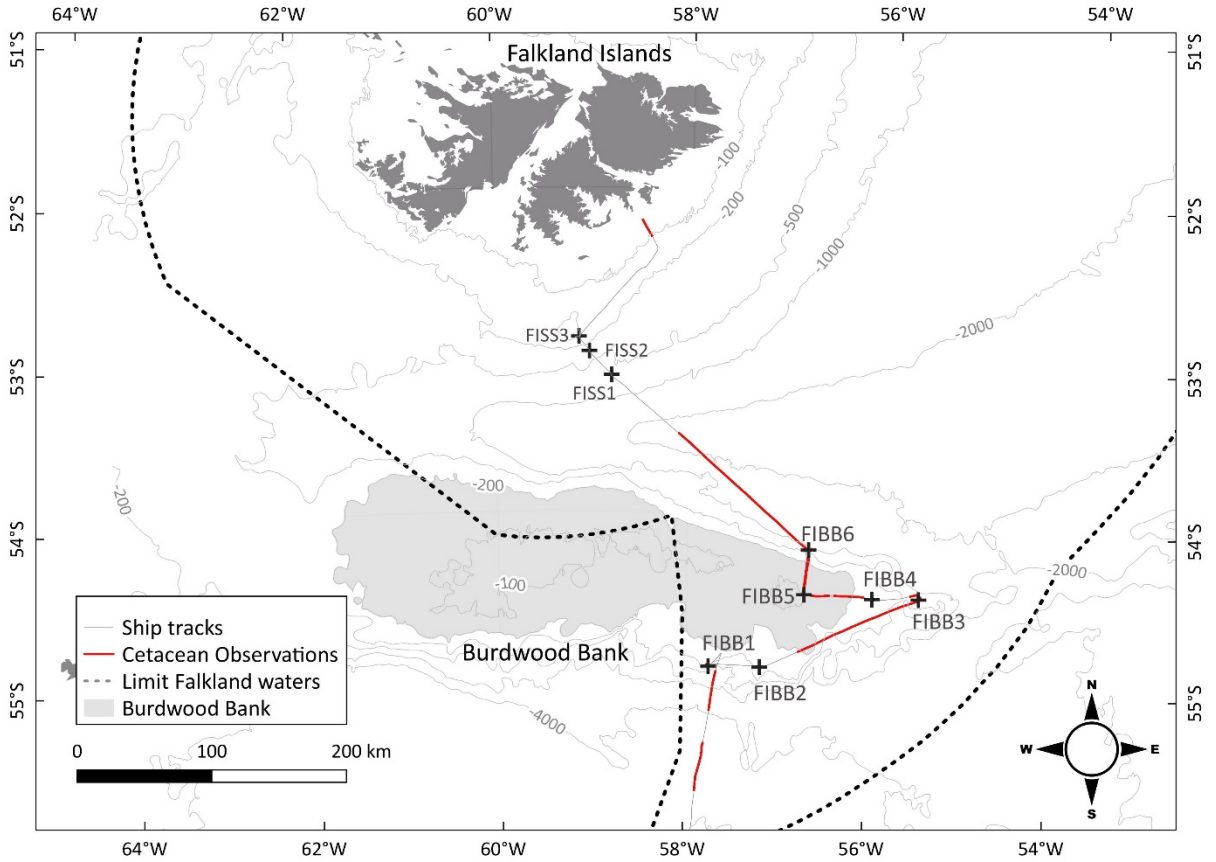

Figure 4 - Map of the Burdwood Bank showing the stations where work was carried out (FIBB1-FIBB6) and the three stations south of Beauchene Island (island not visible on the map). The grey line shows the ship track from the 31st of January to the 4th of February 2020. The red line shows where cetacean observation was carried out. The dotted lines show the limit of the Falkland Islands Outer Conservation Zone.

Figure 5 - The RRS James Clarke Ross photographed from the Rothera station in Adelaide Island (Antarctica) on January 2020, prior to the work conducted on the Burdwood Bank.

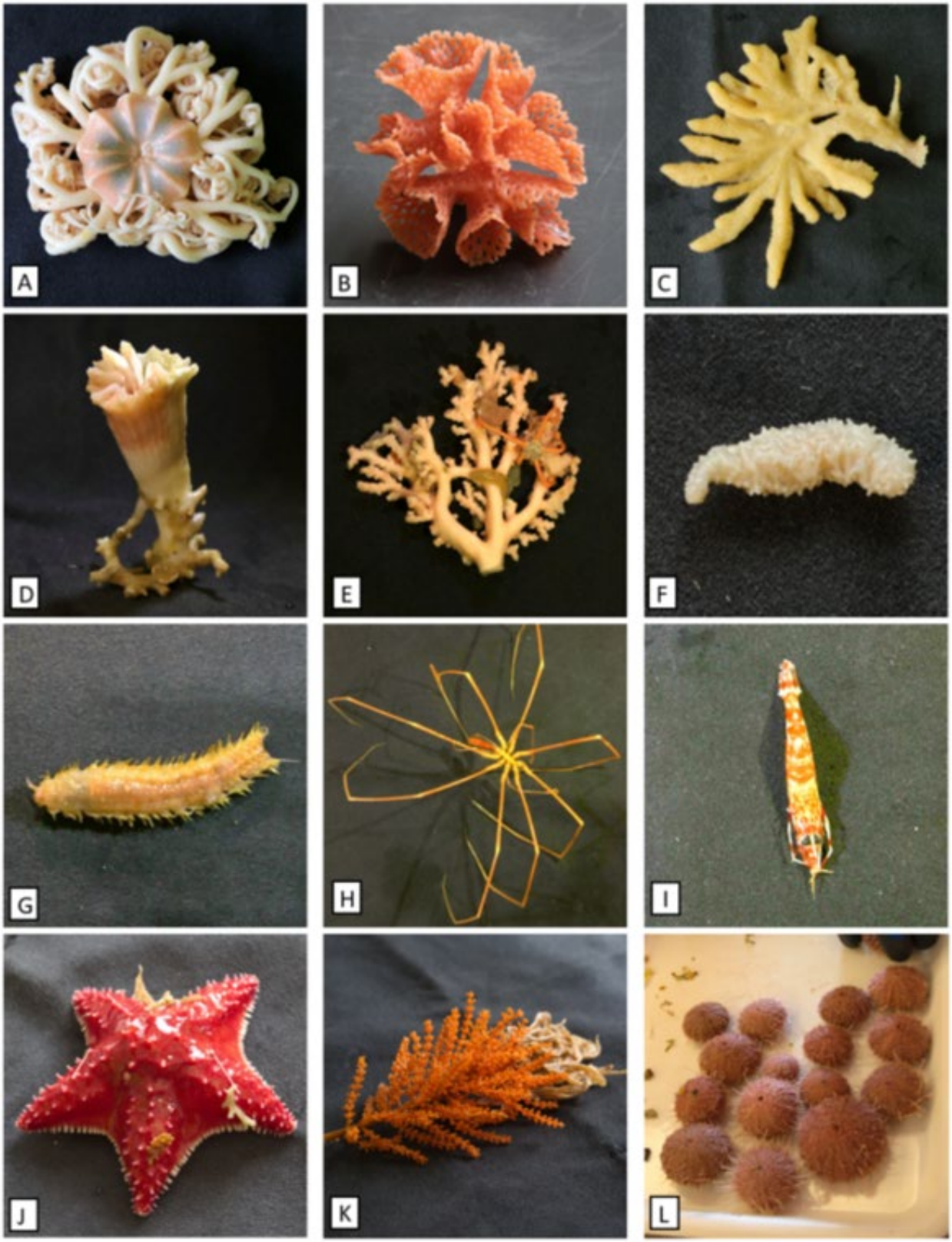

Figure 6 - Example of specimens collected from the Burdwood Bank using a mini AGT. (A) Ophiuroid of the genus Gorgonocephalus*, (B) Bryozoan of genus the* Reteporella*, (C) sponge of unknown genus, (D) cup coral order Scleractinia, (E) lace coral family Stylasteridae with Ophiuroid and Polychaete, genera unknown, (F) Holothurian genus unknown, (G) Polychaete genus unknown, (H) sea spider order Pantopoda, (I) shrimp of genus* Camphylonotus *(possibly* C. semistriatus*), (J) starfish* Gabraster anarctica*, (K) Gorgonian with Crinoid, genera unknown, (L) sea urchins* Sterechinus agassizii*.*

The metadata for the 20 datasets acquired during the offshore cruise expeditions have been produced and stored in the SAERI IMS-GIS centre (**Activity 3.3**). Metadata records are available through the SAERI metadata portal.

Higher predator modelling of the southern MMA and Burdwood Bank has been completed (**Activity 3.4**). Data were compiled and modelled for 9 marine predator species, which were regarded as being broadly representative of data deficient species in the Falkland Islands. These included black-browed albatross, Sooty-shearwaters (flying seabirds), Magellanic, Rockhopper, Gentoo and King penguins (penguins) and South American fur seals, South American sea lions and southern elephant seals (pinnipeds). Results indicated the heavy use of the Burdwood Bank by some of the higher predators. Combined results by group can be seen on **Figure 7**; more detailed maps are available on the SAERI WebGIS service (click here for full details).

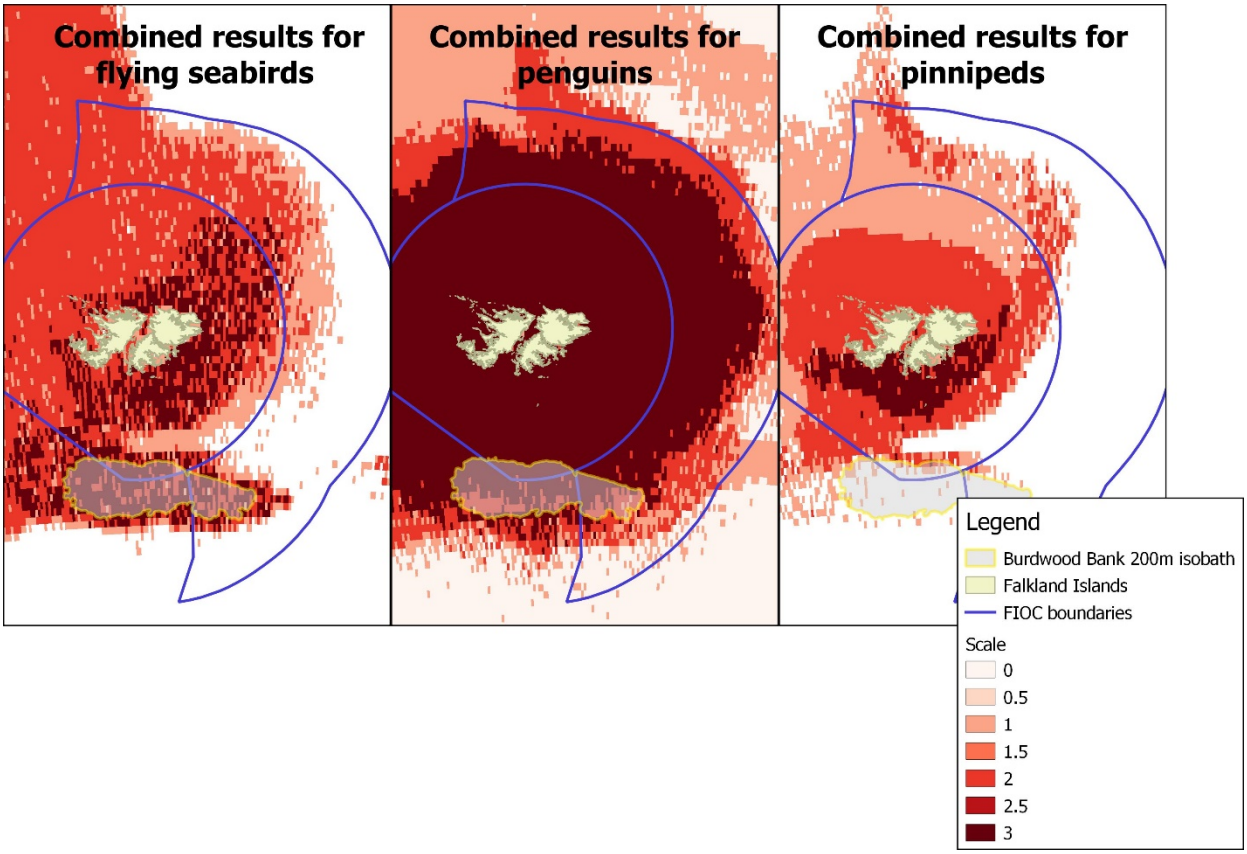

Figure 7. High predators combined modelling results for all flying seabirds, all penguin species and Pinniped species. Scale represents probability of occurrence.

Output 4: *Work-Package 3- Designing the MMAs*

The proposal with options for the MMA design (**Activity 4.1**) has been circulated to the PMG. The document is available upon request.

The study of the economic impact (**Activity 4.2**) and the analysis of the economic impacts of the MMA design (**Activity 4.3**) have been delivered (**Figure 8**). The economic reports contain sensitive information and are currently for internal (PMG) circulation only.

Figure 8 - Front page of the economic reports presented to the PMG in November 2019.

The draft of the MMA policy (**Activity 4.5**) was produced and being reviewed internally after which it will be shared (via google drive) with the PMG.

Activity 4.4 and **4.6** deliverables will be delivered in Y3, as per logic framework.

Output 5: *Work-Package 4 – Designating the MMAs*

Work-package 4 is on-track to be delivered in Y3.

3.2 Progress towards project Outputs

Output 1: *Project Management structure, monitoring, evaluation and communications tools established*

Communication with the PMG and PSG remains an integral part of this project (**Activity 1.3** and **1.4** are ongoing). Following the creation of the management structure during Y1 of the project, this has been maintained and six PMG meetings have been organised (five conducted and one postponed due to Covid-19).

Each participant has been actively supporting, monitoring and evaluating the progress in the development of MMA designation in the Falkland Islands. For instance, to assist with the economic assessment reports, PMG members provided the economic data that was requested from them.

The first PSG meeting was hosted in July 2019. In addition, the MMA team regularly communicate with the wider community, including the PSG, via the SAERI media channels, e.g. Newsletter, Twitter and Facebook (See **Section 2** for further details). The MMA webpage updated regularly since it was originally created; it provides the project background, activities and progress. Many project documents are available for download on this site (e.g. field reports, FIG briefings). Local outreach and community engagement continues to take place through public presentation, and activities (such as the Ocean Day) that target local clubs (e.g. Yacht club and Falkland Conservation Watch Group), and schools (see **Section 2** for a full list).

Indicators for this output are easily measured as they involve constant production of information and update about the project. Indicators remain appropriate.

Output 2: *Work-Package 1- Data collection inshore*

The baseline condition was that additional inshore sites should be identified and data collected from these additional sites.

Progress towards achieving the inshore data collection significantly progressed in year 2, specifically: (a) all fieldwork was completed; (b) survey reports have been prepared and available on the project website; (c) data cleaning and analysis was completed for April 2019 fieldwork data; (d) 23 new datasets acquired and metadata record creation is ongoing; and (e) habitat modelling analysis using high predator tracking data completed (**Activities 2.1, 2.2, 2.3** and **2.4**).

Additionally, a series of activities were conducted that add value to the project, these are: (a) extra funding for Work-package 1 acquired; (b) new partnerships established with the Huntsman Marine Science Centre (Canada), the Universidad de Concepcion (Chile), and Ohio State University (USA); and (h) a scientific paper reporting a novel invasive species of anemone in the Falkland Islands submitted for publication.

The MMA team reviewed and organised SMSG records stored in an over complex database, the project team effectively contributed to the design, development, and testing of a new database along with the IMS-GIS data centre. This database should replace the current SMSG database that can be updated while in the field, instead of having to wait until returning to an area with internet access. The new database strongly improved data safety and availability, as well as the ease of use. It will also facilitate marine research planning in the Falkland Islands.

Indicators for this output remain appropriate.

Output 3. *Work-Package 2- Data Collection Offshore*

The baseline condition for this work-package was that to date little data has been collected on or around the Burdwood Bank. Due to its remoteness and the cost of vessel charter, the area remains poorly studied. The project made significant progress to fill this knowledge gap by: (a) carrying out two field campaigns, one in December 2018 (reported in Y1) and January-February 2020; (b) writing two fieldwork reports available on the project website (click here for reports); and (c) compiling 20 new datasets and creating metadata records in the SAERI IMS-Data centre; (**Activity 3.1, 3.2 and 3.3**). And further, by establishing new partnerships with the Italian National Antarctic Museum (Italy), Hull University (UK), University of West Florida (USA), and Tokyo University (Japan) (See **Section 2** for full details). Modelling of the probability of occurrence of higher predators in the MMAs has been completed (**Activity 3.4**).

Indicators for this output remain appropriate.

Output 4. *Work-Package 3- Designing the MMAs*

The baseline condition for this output was that previous work provided some background information for preliminary MMA design. Two economic reports in relation to MMA design and implementation were produced (**Activities 4.2** and **4.3**). Following this study and further consultation with the PMG, an updated proposal for the MMA design was prepared and shared (**Activity 4.1**). This represents significant progress towards achieving this output. Finally, a draft version of the policy has been prepared (**Activity 4.5**).

Indicators have been modified as per the latest change request.

Output 5. *Work-Package 4- Designating the MMAs*

Designating the MMAs had no activities for delivery in Y2.

Indicators and means of verification for this output remain appropriate.

3.3 Progress towards the project Outcome

Outcome

This project aims to design the first network of MMAs in the Falkland Islands waters and to submit the enabling policy to the Falklands Executive Council. In second year, the majority of the activities have been completed or will be completed as planned meaning that the project is on budget and schedule, and it will achieve the logic framework outputs by project close.

The main outcome of the project is *Designation of new Marine Management Areas (MMA) around the Falkland Islands*,

The current outcome indicators are:

0.1 MMA designation announced in the Falklands media

0.2 MMA policy paper submitted to the Falklands Executive Council.

As indicated in the recently approved change request, there is a possibility that the legislation may not be drafted by project end – therefore the (related) indicator 4.4 has been amended to reflect this i.e. recommendations for legislation. In terms of the Outcome indicators, this means that indicator 0.1 might not be achieved in its entirety as the designation depends on the legislation.

Outcome indicator 0.2 is still likely to be achieved, as the first policy draft has already been prepared and is under internal review.

3.4 Monitoring of assumptions

Assumption 1 (Output 1): *Recruitment results in appropriate candidate being recruited and available to be on island within the given time frame.* Held for Y1, not relevant to Y2.

Assumption 2 (Output 1): *Continued resource from project partners available to engage with the project for its duration*

Comments: this assumption still holds. Project partners continue to contribute to the project economically; e.g. FIG contributed an annual stipend to help with the cost of running the project combined sum of £12,500 for Y1 and Y2, and a further expected £7,500 towards Y3. Project partners also contribute logistically (e.g. economic data were made available by several FIG sectors; SMSG logistical support for the inshore work; materials for specimen storage and extra shipping time were provided by BAS), and intellectually (e.g. the PMG regularly met and documents produced were meticulously reviewed; BAS researchers contributed knowledge and skills).

Assumptions 3 (Output 2) and 4 (Output 3): *Weather conditions enable data collection within the proposed time period*

Comments: inshore and offshore fieldwork expeditions were successfully carried out resulting in a large amount of data collected. These assumptions are not relevant for Y3 as fieldwork is now completed.

Assumption 5 (Output 4): *Stakeholders available and have capacity to engage in the workshop within the given timeframe*

Comments: Overall, this assumption still holds as stakeholders continue to be actively kept informed and/or involved where possible in the project. A workshop will be held in Y3 that brings all stakeholders together and discussed the different MMA plans and policies in order to ensure that the community and companies are involved in the process. Because the community and stakeholder are regularly engaged, and have shown interest on the project, we predict that the workshop should we well attended.

Assumption 6 (Output 4): *Policy and legal departments have the capacity to engage in the drafting processes within the given timeframe*

Comments: The economic reports were produced, and provided a clear perspective on how the marine management areas plan should be created, while keeping conservation at their heart. These reports allowed for the draft policy to move forward. On the latter, it became apparent that with the changes to the directorate of the Policy and Economic Development Department, the department was not going to be able to meet the project deadline. Consequently, in the policy front, SAERI took the lead to produce a first draft, while through a change request the MMA team requested for **Activity 4.4** to be modified from '*Draft MMA legislation undertaken by*…' to '*Recommendations for draft MMA legislation undertaken by*…' and moved to Y3Q3. This was due to the time that this process would take, which would cause this deadline no to be achieved by project end.

Assumption 7 (Output 5): *Stakeholder buy in secured through continuous engagement and workshops*

Comments: The assumption is for Y3 and still hold true. Additionally, the stakeholders have been kept informed through the PMG and PSG platforms, while the wider stakeholder community has been kept involved throughout the project (see section 2 for more detail)

Assumption 8 (Output 5): *Active FIG engagement and FIG project partners help with political buy in*

Comments: Assumption is for Y3 and still holds true.

New risks/assumptions
The global pandemic Covid-19 now provides a new risk that might impact the project. However whether there will be an impact and the extent of it is currently unknown as there are a number of uncertainties. The project will monitor and address Covid-19 impacts and propose any required mitigation as part of its project monitoring and evaluation processes.

4. Project support to environmental and/or climate outcomes in the UKOTs

The project fits well with the Falkland Islands' goals (e.g.: Falkland Islands Ecoregions, Habitats, Species and Sites Strategy 2016 - 2020 (FIEHSSS) & Falkland Island Biodiversity Framework (FIBF). FIG is a partner in the project and was directly involved in the project design. Under the FIBF the FIG aims to '…*conserve and enhance the natural diversity, ecological processes and heritage of the Falkland Islands, in harmony with sustainable economic development*'. The marine management plan plays an important role in helping the government to achieve that aim. The government seeks to achieve this by meeting international commitments.

The CBD Aichi targets commitments are also highlighted within the FIEHSSS, again the MMA project will help the government prepare to meet some of its international commitments by providing a plan to protect at least 10% of their marine area by 2020 (CBD Aichi Target 11). The project will also make important contributions to Aichi Target 10 (Vulnerable Ecosystems) and 19 (biodiversity knowledge improved).

Other MEAs for which the project will make an important contribution are towards commitments under ACAP (albatross and petrels) and CMS for Appendix I and II species (cetaceans, fur seals, sea lions).

In addition, although the Falkland Islands is not part of the UK Government Blue Belt Programme, the results would support similar outputs such as a) improved scientific understanding of the marine environment; b) develop and implement evidence-based, tailored marine management strategies including surveillance and enforcement; and c) ensure management is sustainable and long term.

At a logistical level, capability to manage environmental assets across the Falkland Islands have been improved through increased equipment, data collection and capacity building. For example, since October 2018, the project has acquired equipment that will provide the Islands

with high quality underwater imagery in order to continue monitoring the subtidal ecosystem around the Islands beyond scuba diving depth.

The project has collected novel data on the Burdwood Bank as well as collecting and collating all the available marine data within the inshore area. This project has provided baseline data for many previously unstudied sites. This will enable the monitoring of MMA areas into the future and allow benchmarking of management strategies. It will also provide a baseline of the natural environment against which future change (e.g. climate change) can be measured.

Furthermore, information and data generated in this project will be available in the future to any third party interested in working with it (pending permission from the data owners). This information on the Falkland Islands natural environment is likely to prove useful for other aspects of management of the marine environment beyond the scope the MMA project. For example, it could help the government taking decisions when new marine developments might be proposed (e.g. oil development; aquaculture development and coastal development).

On Island capacity in marine science has been developed and strengthened by the MMA project, through participation in project activities, and through outreach and project stakeholder interactions. As the project moves into year 3, we anticipate further strengthening and development of the policy framework within which the marine environmental assets of the Falkland Islands are managed.

5. OPTIONAL: Consideration of gender equality issues

The project teams that worked on the development of this project proposal were of mixed genders. Upon the project being awarded, the team hired to run it were male (project manager) and female (project officer). The consultant hired to conduct the economic work was female (Dr Rachel Cooper). An intern hired for 5 months was female (Ms Lauren Shea), and collaborations have been established with a number of leading female experts (e.g. Heather Glon, Dr Claire Goodwin or Dr Angie Diaz).

The MMA project team works with FIG staff and stakeholders of mixed gender, ensuring an equal gender representation wherever possible. The Project Management Group, which is formed by the main stakeholders of the project, was originally formed by two females and five males. A new member was added, bringing the ratio to three females and five males. Currently, this number has gone back to two females and six males

The project aims to engage key stakeholders irrespective of gender and our public engagement strategy has been to target all members of society irrespective of age, gender or social background to ensure that all parts of the local community are invested in the project, as management of the marine environment should be for the benefit of all.

In the SAERI office, the current staff cohort is 60% female and 40% male, and SAERI has an equal opportunities policy as part of its internal policy framework.

6. Monitoring and evaluation

The Monitoring and Evaluation plan can be found in the MMA project web-page, ensuring transparency in this process. In terms of internal monitoring, weekly meetings are held between the project manager and his line manager, as well as a progress meeting on a monthly basis with Dr Brickle, SAERI's Executive Director and grant holder.

There is also ongoing accountability for progress to groups external to the main organization (SAERI). The PMG oversees the evaluation and monitors project progress, for example through regular meetings and careful review of documentation. The minutes for all PMG meetings have been recorded. In addition, the first PSG meeting took place in July 2019, following that the PSG has been updated regularly, especially on key milestones.

Indicators of achievements such as project reports, presentations on fieldwork or data analyses are regularly made available to the above-mentioned groups, as well as to the general public when appropriate. These are measured against the logic-framework when appropriate and otherwise overseen by the SAERI senior management team, the PSG and PMG.

Changes have been made to the M&E plan over the reporting period in accordance to the change requests.

7. Lessons learnt

Piloting a participatory approach to the development of the first MMAs in the Falkland Islands is a process that requires engagement of a wide variety of stakeholders. While such a process can take time, it is currently progressing well. With SAERI being a local organisation and the team being based in the territory, the project can actively meet with stakeholders, project partners and/or PMG in order to make the process run smoother.

In addition, the PMG is formed by people that are not only aware of the importance of MMAs, but can also have influential roles in government. As such, the effort taken to form and inform the group has certainly been well spent. For others doing similar projects, it may be very worthwhile to invest early on in developing an active and supportive PMG.

Another key factor to maintaining momentum during the MMA process has been to build relationships with and motivate other stakeholders to remain engaged over time. This is particularly important, considering that legislative approval will be a long process and its success will require broad participation and agreement. This will be a key focus of Y3 where two workshops will be conducted, and the lessons learned (from Y1 and Y2) regarding how to engage stakeholders and maintain excellent working relationships with them will be applied.

The partnership with SMSG, and other local organizations (e.g. the Golden Fleece crew) was, once again, a win-win situation. Knowledge of the local area and its challenges is essential for any successful data collection at sea, in particular in remote and dangerous areas such as the Falkland Islands, not to mention key in analysing and interpreting data. The use of a local platform for fieldwork should always be considered even when more comfortable outsider options are available.

Similarly, tagging the MMA work along a BAS international research expedition to the Antarctic meant that when it was our time slot to conduct the work on the Burdwood Bank, there were many international experts in different fields that could be approach if needed. Tapping into existing knowledge from local resources as well as international experts allows for the best possible interpretation of data, application of best international practice, and maximizes outputs and relevancy.

Lessons can also be learnt from our latest change request, where we modified **Activity 4.4**. Other projects should consider that legislation and policy development is a lengthy process, and in remote OTs where contract staff (e.g. legislators, policy makers) change every few years, and where these few staff are often juggling multiple demands in terms of policy and legislative creation, delays are often unforeseen, even by the legislators themselves. Consequently, similar future projects should consider costing for a legislative draftsperson from the outset that could be hired as a consultant to provide the work and facilitate these outcomes.

8. Actions taken in response to previous reviews (if applicable)

Comment and queries from previous reviews:

Comment 1:

- *While there is an undeniable logic to postpone policy drafting (activity 4.5) until economic, social and environmental data has been collated and analysed, was there a reason why this was initially planned for Y1?*
    - The initial planning anticipated the requirement for a draft policy early in the project to form the framework for the other project outputs. The economic valuation was initially perceived as more of a ‘costing’ of policy implementation. However, with staff changes and subsequent changes in ideas around process, the approach was revisited to one where the additional evidence was sourced and analysed before the policy was framed.

- *Getting all the information together is going to be crucial for this project to meet its outcome. Could the PMG ensure they are happy with the timing and sequencing of events for Y2 & Y3?*
    - There has been consultation with the PMG regarding the time-frames for the project and the logical framework has been adjusted as and when necessary via a change request, following PMG agreement. For example, there was a realisation that the Legislation (**Activity 4.4**) aspect of the project might not fit within the originally proposed timelines due to the busy schedule of the Attorney General's in the Falkland Islands and the need to prepare an Executive Council Paper for the local government before it gets to the general attorney stage. The approval of the ExCo paper is outside the control of the project team. Consequently, following consultation with the PMG, in the last change request we have modified **Activity 4.4** from 'Draft MMA legislation undertaken by…' to 'Recommendations for draft MMA legislation undertaken by…'.
- *Linked to this, please make sure you review your assumptions for output 4 & 5*
    - Assumptions were carefully considered when **Activity 4.4** was modified in the last change request. – see also **Section 3.4**.

Comment 2:

- *Given the compounding effect climate change is having on ecosystems, it would be good to see aspects of resilience to such pressures more explicitly inserted in the MMA considerations.*
    - The reviewer raises a good point and resilience aspects of the design will be made clearer in documentation. Part of the thinking behind the Burdwood Bank area being proposed as an MMA is that it is an important hard-stop for organisms whose distributions may shift South with climate change. Thus thinking around resilience is already implied in the design with, for example niche squeeze of local species being considered, with baseline information being important for understanding this.
    - A further point on climate change, linked to the work conducted on the Burdwood Bank, and in collaboration with Dr Dave Barnes from BAS, the project manager will conduct a carbon sequestration study for the area with the already collected samples. This will allow us to understand the role played by this important benthic region on carbon sequestration and in relation to climate change.
    - Inshore, SAERI is currently conducting a (EU-funded – MOVE project) study on the carbon sequestration role played by large kelp forests around the Falkland Islands (Dr Dan Bayley). The baseline kelp maps used were generated by a previous Darwin Project (DPLUS065 Falklands and South Georgia Coastal Mapping, a project with strong synergies with the MMA project). These baselines will also feed into the MMA project to provide guidelines on the importance of these ecosystems in terms of carbon sequestration and how to best manage them.
    - It is also important to note that for many UKOTs, including the Falkland Islands, there is growing urgency to develop baseline information to understand ecosystem status and to help quantify risks posed by synergistic threats such as introduced marine invasive and human induced climate change. This project provides important baseline information that can be used by future studies to quantify changes in surveyed sites.

9. Other comments on progress not covered elsewhere

All issues have been discussed in the other sections of this report.

10. Sustainability and legacy

The project fits well with the Falkland Islands' goals (e.g.: Falkland Islands Ecoregions, Habitats, Species and Sites Strategy & Falkland Island Biodiversity Framework), as FIG is a partner in the project and was directly involved in the project design. The aim of taking existing non-fishing areas and with sufficient data turning them into marine management areas that should have a long-term legacy.

Additionally, the project continues to reach the islanders via a variety of methods, which include penguin news articles (see Annex 3), radio interviews variety of popular talks, including a talk at the local Yacht Club Annual General Meeting, as described in **Section 2** (links to specific documents available in **Section 2**). Increased interest in the project has been shown through the request to conduct a local radio interview, as well as volunteering from various members of the local community and high attendance of public events/talks in relation to the project.

All of the data collected and analyse by the project will be submitted to the Falkland Islands data portal, and will therefore enhance the marine evidence base available for research, policy and decision-making on the Falklands into the future. All spatial data will be made available through the WebGIS portal which will enable wide access to this data for multiple use, including as a tool for school teachers and the wider community.

There are also scientific publications coming out of the project. For instance, Heather Glon for the Ohio State University, published a scientific article on the presence of invasive species *Metridium senile* in the Falkland Islands. The manuscript has gone through peer-review has been accepted and came back with minor corrections. We also expect to submit another scientific manuscript on the use of MMA sites by higher predators. Other scientific manuscripts will follow. This will strongly increase SAERI and the Falkland Islands research output, giving a stronger global profile to the project.

11. Darwin identity

The name Darwin Plus and the Darwin Initiative logo have been used in all the communications related to the project (**Section 2**) – talks (**Section 2**), reports (**Section 3**) and project webpage. At all stages, the Darwin Initiative was presented as a distinct entity, and the main sponsor of the MMA project. Furthermore, the Darwin Plus project code name is used as part of the project title in all communications and presentations (i.e. DPLUS071). There have been previous projects funded by Darwin Plus in the Falkland Islands, this project serves to enhance existing awareness and understanding of the funding scheme, particularly amongst government and businesses due to the many stakeholders involved in the project.

In a scientific manuscript by Heather Glon titled '*New Records of the Plumose Sea Anemone, Metridium senile, from the Falkland Islands*', Darwin DPLUS071 was acknowledged. A draft of the manuscript can be made available upon request.

Furthermore, new collaborations with international institute and organizations in Chile, Japan, USA, UK, and Canada (see **Section 2** for the full list) have been developed. This will ensure international visibility as scientific manuscripts are published that acknowledged the Darwin Initiative funding.

Examples of social media posts from the project that link back to the Darwin Initiative follow below. Example of newspaper article in annex 3.

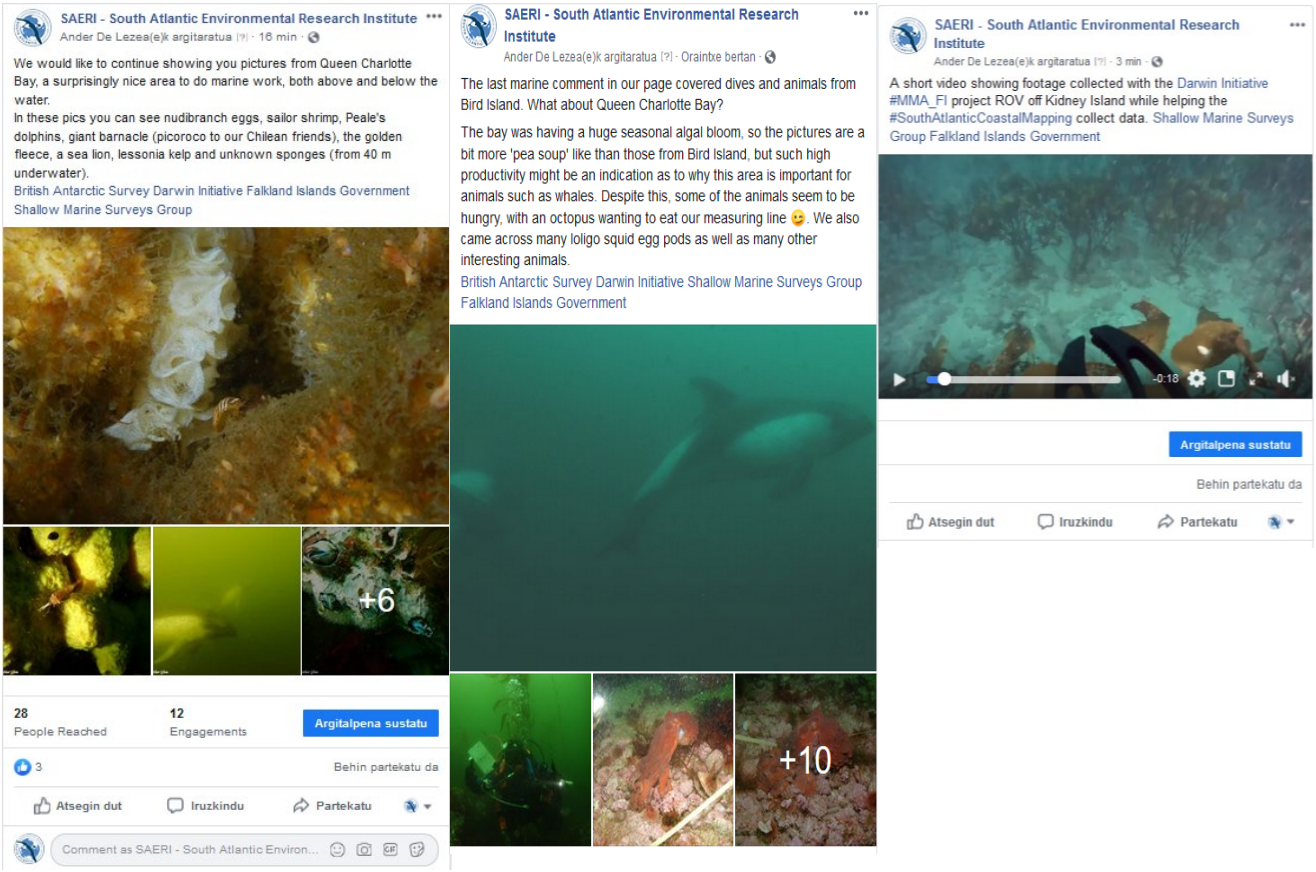

Figure 9. Examples of Facebook posts from the MMA project acknowledging the Darwin Initiative.

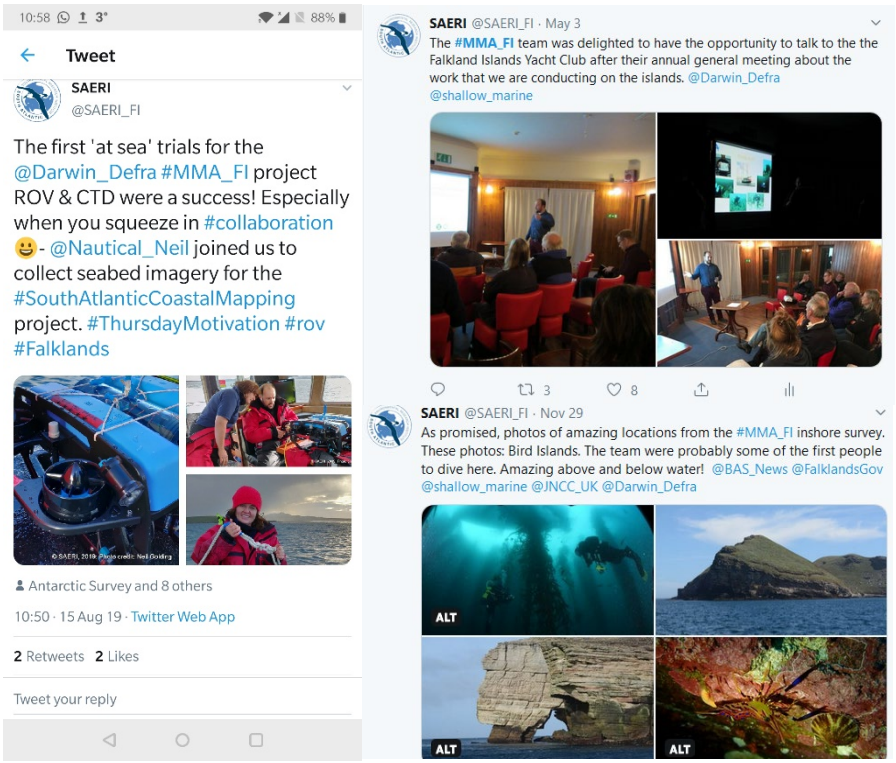

Figure 10. Example of Twitter posts from the MMA project acknowledging the Darwin Initiative.

12. Safeguarding

SAERI has a draft safeguarding policy that is currently under review, part of the review includes ascertaining its compatibility with in-territory government safe-guarding policies. Once finalised it will be presented to our Board for sign off. In the interim period, SAERI's projects apply the safeguarding principles as described. SAERI also has a whistle blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised. During the reporting period of this project, there have been no actions that relate to this policy.

13. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)

Project spend (indicative) in this financial year	**2019/20 D+ Grant (£)**	**2019/20 Total actual D+ Costs (£)**	**Variance %**	**Comments (please explain significant variances)**
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others (Please specify)				
TOTAL				

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020 – if applicable

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Impact A Policy and legislative framework for Marine Management Areas will be established on the Falkland Islands with new designations and supporting costed implementation options		The project aims at designing the MMA areas by increasing our understanding of the biodiversity of the Falkland Islands amongst other things. Therefore, any new data in this respect is a positive achievement. To this end, the project has completed two intensive inshore fieldwork studies where divers conducted a systematic survey of the benthos of the Islands. In addition videos at depths greater than those possible by divers were filmed, providing one of the more detailed views of life at depths greater than 20 m to date. This work will provide a nice in-depth baseline to compare future changes against. Similarly, the work conducted offshore on the Burdwood Bank provided insights of life on top of the Bank as well as on the slopes (<1000 m). This will help to better understand the biodiversity of the region. There has also been a considerable effort put towards the understanding of how megafauna would interact with the proposed MMA areas. Through collaboration, the MMA team has also been involved in the first study of invasive species *Metridium senile* on the Falkland Islands. Such knowledge will help better understand bio-invasion	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
		pathways and potentially improve current biosecurity plans.	
Outcome Designation of new Marine Management Areas (MMA) around the Falkland Islands.	0.1 At least 3 Marine Management Areas designated around the Falkland Islands by end of project 0.2 At least 1 MMA enabling policy drafted by end of project or shortly after the end of project (depends on the Policy Department).	0.1 MMA proposed designation by AFCAS has now been modified and is awaiting PMG approval before it is taken to government. 0.2 MMA policy paper to be submitted to the Falklands Executive Council in Y3	- Complete data analysis - Stakeholder workshops - Draft legislation - MMA site plans prepared - ExCo paper submitted
Output 1. Project Management structure, monitoring, evaluation and communications tools established	1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners by November 2018 1.2 Project Manager recruited by August 2018 1.3 A Project Management Group (PMG) meeting held every 3 months starting October 2018 1.4 A Project Stakeholders group (PSG) meeting held every 6 months starting November 2018 1.5 At least 1 project webpage created by April 2018, and at least 1 update to the page made every 3 months.	1.1 MoU signed in Y1 (link) 1.2 PM and PO recruited and contract signed. The PO contract extended for extra five months to support with the large amount of data collected 1.3 5 PMG meetings and a 6th cancelled due to coronavirus (but communications followed remotely via email and/or Skype) 1.4 1st PSG meeting held. The 2nd meeting was cancelled due to coronavirus; project progress are communicated by local media and social networking 1.5 Web page revamped in Y2 and regularly updated (see web page for details)	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	1.6 1 Monitoring and evaluation plan created by October 2018 1.7 Regular DPLUS reports submitted as required (yearly and half-yearly)	1.6 M&E plan created and shared 1.7 DPLUS Half- and Annual reports submitted as required	
Activity 1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners		Completed	
Activity 1.2, Project Manager recruited		Completed	
Activity 1.3 A Project Management Group (PMG) meeting held every 3 months		Completed for Y2	Regular PMG meetings held at least every 3 months or as required throughout the duration of the project. Currently, most communications need to be made remotely due to Covid-19.
Activity 1.4 A Project Stakeholders group (PSG) meeting held every 6 months		Completed for Y2	Regular PSG meetings held at least every 6 months or as required throughout the duration of the project. Currently, most communications need to be made remotely due to Covid-19.
Activity 1.5 Project webpage created and updated every 3 months		Completed for Y2	Web-page regularly updated.
Activity 1.6 Monitoring and evaluation plan created		Completed for Y2	
Activity 1.7 Regular DPLUS reports submitted as required (yearly and half-yearly)		Completed for Y2	As required by the Darwin Initiative.
Output 2. Data collection inshore	2.1 x (2) of inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam) Y1 Q4	2.1. Inshore sites identified in Y1.	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	2.2 x (2) x inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out in Y2 Q1 and Y2 Q3	2.2. Two inshore expeditions completed April 2019 and November 2019 (reports available here)	
	2.3 At least x (80) new data sets and existing data sets will be cleaned and collated by the end of Y3 Q1	2.3. To be completed in Y3	
	2.4 Modelling analyses, analysis outputs will be produced by end of Y3 Q1. This includes new data from higher predator tracking gained since 2014 and new benthic data collated from SMSG	2.4 To be completed in Y3, with some preliminary results with the modelling on the tracking data from megafauna already completed. Click here for full details.	
Activity 2.1. inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam)		Completed	
Activity 2.2. Inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out		Completed	
Activity 2.3 New data sets and existing data sets will be cleaned and collated		Activity for Y3	Although most of the datasets have already been cleaned, the first quarter of year 3 will see the project manager cleaning and collating the rest of this data.
Activity 2.4 Modelling analyses and biodiversity analyses outputs produced		Activity for Y3	Data collected during the inshore fieldwork will be analysed. Modelling for the megafauna data has already been conducted and some results are already available in the SAERI WebGIS. Click here for full details.

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Output 3. Work-Package 2-Data Collection Southern MMA and Burdwood Bank.	3.1 x (1) Research cruise organisation for the Burdwood Back in Y1 Q3 and now extended to Y2Q4 3.2 x (1) Research cruise undertaken by Y1 Q3 and now extended to Y2Q3 3.3 At least 20 new data sets cleaned and collated by Y2 Q4 3.4 Modelling analyses and biodiversity analyses output will be produced by Y2 Q4. This includes new data from higher predator tracking gained since 2014 and new benthic data collated from the hydrocarbons industry	3.1. Plans completed prior to each expedition taking place. (Y1 and Y2) 3.2. Second cruise completed in January/February 2020 (reports available here) 3.3. 20 datasets collated and cleaned. 3.4. Modelling on the tracking data from megafauna completed. Biodiversity data analyses is on-going. Click here for full details.	
Activity 3.1 Research cruise organised for the Burdwood Bank		Completed	
Activity 3.2 Research cruise undertaken		Completed	
Activity 3.3 New data sets cleaned and collated		Completed	
Activity 3.4 Biodiversity analyses outputs will be produced		Partially completed	The higher predator tracking data work for this activity has been completed. The benthic data analysis is on-going.
Output 4. WP3: Designing the MMAs	4.1 Proposal with options for potential future MMA designs prepared by Y2 Q4 4.2 Study of economic impact of the designs undertaken by Y2 Q2 4.3 Analysis of the economic impacts of MMA designs undertaken by Y2 Q4	4.1. Brief presented to the PMG and is under review. 4.2. Economic impact study completed. 4.3. Analysis of the economic impacts due to the MMA designs completed.	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	4.4: Recommendations for draft MMA legislation by Y3Q3 4.5 Draft MMA policy undertaken by Y2Q4 4.6 At least 20stakeholders attend local consultation workshop in Y3Q3	4.4. To be completed Y3. 4.5. 1st policy draft completed post economic reports. 4.6. To be completed Y3Q3.	
Activity 4.1 Proposal with options for potential future MMA designs prepared		Completed	
Activity 4.2 Study of economic impact of the designs undertaken		Completed	
Activity 4.3 Analysis of the economic impacts of MMA designs undertaken		Completed	
Activity 4.4 Recommendations for draft MMA legislation		Activity due in Y3	Recommendations for the MMA legislation.
Activity 4.5 Draft MMA policy undertaken		Completed	On-going review.
Activity 4.6 Local workshop consultation		Activity due in Y3	Consultation to present and discuss the policy and economic studies.
Output 5.	5.1 3 MMA site management plans prepared by Y3 Q1 5.2 Review of the resourcing requirements of designation undertaken by Y3 Q1 5.3 At least 20 stakeholders attend local consultation on the 'MMA designation package' by Y3 Q2	All activities are due in Y3.	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	5.4 ‘MMA Designation package’ submitted to Exco for consideration by Y3 Q3		
5.1 3 MMA site management plans prepared by Y3 Q1		Activity for Y3	
5.2 Review of the resourcing requirements of designation undertaken by Y3 Q1		Activity for Y3	
5.3 At least 20 stakeholders attend local consultation on the ‘MMA designation package’ by Y3 Q2		Activity for Y3	
5.4 ‘MMA Designation package’ submitted to ExCo for consideration by Y3 Q3		Activity for Y3	

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed) - if applicable

N.B. if your application's logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact Darwin-Projects@ltsi.co.uk if you have any questions regarding this.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: A Policy and legislative framework for Marine Management Areas will be established on the Falkland Islands with new designations and supporting costed implementation options			
Outcome: Designation of new Marine Management Areas (MMA) around the Falkland Islands.	0.1 At least 3 Marine Management Area designated around the Falkland Islands by date 0.2 At least 1 MMA enabling policy drafted by date	0.1 MMA designation announced in the Falklands media 0.2 MMA policy paper submitted to the Falklands Executive Council	Staffing turnover in FIG enables the continued progress of policy development Political will for this process will be maintained by through regular consultation and discussion
Outputs: **1.** Project Management structure, monitoring, evaluation and communications tools established	1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners by November 2018 1.2 Project Manager recruited by August 2018 1.3 A Project Management Group (PMG) meeting held every 3 months starting October 2018 1.4 A Project Stakeholders group (PSG) meeting held every 6 months starting July 2019 1.5 At least 1 project webpage created by April 2018, and at least 1 update to the page made every 3 months. 1.6 1 Monitoring and evaluation plan created by October 2018	1.1 MoU signed by all parties 1.2 Project Manager employment contract signed 1.3 PMG meeting notes available online 1.4 PSG meeting notes available online. 1.5 Project webpage available for viewing online 1.6 Monitoring and evaluation plan available online	Recruitment results in appropriate candidate being recruited and available to be on island within the given time frame. Continued resource from project partners available to engage with the project for its duration

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	1.7 Regular DPLUS reports submitted as required (yearly and half-yearly)	1.7 Final project report available online.	
2. WP1: Data Collection Inshore	2.1 x (2) of inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam) Y1 Q4, Y2 Q3 2.2 x (2) x inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out in Y2 Q1 and Y2 Q3 2.3 At least x (80) new data sets and existing data sets will be cleaned and collated by the end of Y3 Q1 2.4 Modelling analyses, analysis outputs will be produced by end of Y3 Q1. This includes new data from higher predator tracking gained since 2014 and new benthic data collated from SMSG	2.1 Map to show data collection sites available to project partners 2.2 Survey reports written and made available online 2.3 Metadata records for new data available online 2.4 WebGIS project available online; data and modelling data reviewed by PMG and external collaborators	Weather conditions enable data collection within the proposed time period.
3. WP2: Data Collection Southern MMA and Burdwood Bank	3.1 x (1) Research cruise organisation for the Burdwood Back in Y1 Q3 3.2 x (1) Research cruise undertaken by Y1 Q3 and Y2 Q3 3.3 At least 20 new data sets cleaned and collated by Y2 Q4 3.4 Modelling analyses and biodiversity analyses output will be produced by Y2 Q4. This includes new data from higher predator tracking gained since 2014	3.1 Research cruise plan available to partners 3.2 Cruise report written and made available online 3.3 Metadata records for new data available online 3.4 WebGIS project available online; data and modelling data reviewed by PMG and external collaborators	Weather conditions enable data collection within the proposed time period

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	and new benthic data collated from the hydrocarbons industry		
4. WP3: Designing the MMAs	4.1 Proposal with options for potential future MMA designs prepared by Y2 Q4 4.2 Study of economic impact of the designs undertaken by Y2 Q2 4.3 Analysis of the economic impacts of MMA designs undertaken by Y2 Q3 4.4 Recommendations for draft MMA legislation undertaken by Y3 Q3 4.5 Draft MMA policy undertaken by Y2 Q4 4.6 At least 20 stakeholders attend local consultation workshop in Y3 Q3	4.1 MMA designation options proposal paper available to partners and stakeholders 4.2 Economic impact study available to partners 4.3 Report on Analysis of the economic impacts of MMA designs available to partners and online 4.4. draft legislation recommendations circulated to partners 4.5 draft policy circulated to partners 4.6 Workshop report circulated to all partners and attendees.	Stakeholders available and have capacity to engage in the workshop within the given timeframe Policy and legal departments have the capacity to engage in the drafting processes within the given timeframe.
5. WP4: Designating the MMAs	5.1 3 MMA site management plans prepared by Y3 Q1 5.2 Review of the resourcing requirements of designation undertaken by Y3 Q1 5.3 At least 20 stakeholders attend local consultation on the 'MMA designation package' by Y3 Q2 5.4 'MMA Designation package' submitted to Exco for consideration by Y3 Q3	5.1 MMA management plans available to partners and stakeholders 5.2 Resourcing requirement review available to partners and stakeholders 5.3 Stakeholder attendance and active participation at the workshop 5.4 Workshop report available online 5.5 Exco paper submitted	Stakeholder buy in secured through continuous engagement and workshops. Active FIG engagement and FIG project partners help with political buy in.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1) Output 1 - Project Management Structure 1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners 1.2 Project Manager recruited 1.3 A Project Management Group (PMG) meeting held every 3 months 1.4 A Project Stakeholders group (PSG) meeting held every 6 months 1.5 Project webpage created and updated every 3 months 1.6 Monitoring and evaluation plan created 1.7 Regular DPLUS reports submitted as required (yearly and half-yearly) Output 2 - WP 1: Data collection inshore 2.1 inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam) 2.2 Inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out 2.3 New data sets and existing data sets will be cleaned and collated 2.4 Modelling analyses and biodiversity analyses outputs produced Output 3 - WP2: Data collection southern MMA and Burdwood bank 3.1 Research cruise organised for the Burdwood Bank 3.2 Research cruise undertaken by 3.3 New data sets cleaned and collated 3.4 Biodiversity analyses outputs will be produced Output 4 - WP3: Designing the MMAs 4.1 Proposal with options for potential future MMA designs prepared 4.2 Study of economic impact of the designs undertaken 4.3 Analysis of the economic impacts of MMA designs undertaken 4.4 Draft MMA legislation undertaken 4.5 Draft MMA policy undertaken 4.6 Local workshop consultation Output 5 – WP 4: Designating the MMAs 5.1 MMA site management plans prepared 5.2 Review of the resourcing requirements of designation undertaken 5.3 Local consultation on the ‘MMA designation package’ 5.4 ‘MMA Designation package’ submitted to Exco for consideration			

Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	