

Darwin Plus: Overseas Territories Environment and Climate Fund Annual Report

To be completed with reference to the “Project Reporting Information Note”
(<https://darwinplus.org.uk/resources/information-notes>)

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes)

Submission Deadline: 30th April 2023

Submit to: BCF-Reports@niras.com including your project ref in the subject line

Darwin Plus Project Information

Project reference	DPLUS143
Project title	What goes thump at night: managing bird-strike in South Georgia
Territory(ies)	South Georgia and South Sandwich Islands (SGSSI)
Lead Partner	Joint Nature Conservation Committee (JNCC)
Project partner(s)	Government of South Georgia and South Sandwich Islands (GSGSSI) International Association of Antarctica Tour Operators (IAATO) Argos Froyanes Ltd (AFL)
Darwin Plus grant value	£95,932
Start/end dates of project	July 2021 / March 2024
Reporting period (e.g. Apr 2022-Mar 2023) and number (e.g. Annual Report 1, 2)	April 2021 – March 2022, Annual Report 2 (AR2)
Project Leader name	Dr Megan Tierney
Project website/blog/social media	N/A
Report author(s) and date	Dr Megan Tierney, May 2023

1. Project summary

The UK Overseas Territory (UKOT) of South Georgia and the South Sandwich Islands (SGSSI), and which lies in the remote and wild South Atlantic Ocean (Figure 1), has a rich environment which sustains globally important populations of seabirds. Despite conservation efforts, some of these populations are showing continuous, declining trends.

Population declines may be attributed to a range of factors from both within and outside SGSSI national boundaries, including bird-strike: *the collision of birds in flight with vessels resulting in physical injury or death*. For example, published reports document 900 birds striking a vessel in a single night (Black, 2005¹; Gregory, 2021²). It is thought that vessel lighting attracts birds towards a ship and poor visibility conditions, e.g. fog or snow, can exacerbate incidents of bird-strike.

¹ Black, A. (2005). Light induced seabird mortality on vessels operating in the South Ocean: incidents and mitigation measures. *Antarctic Science*, **17(1)**: 67-68.

² Gregory, S. (2021; pers. comms). Report submitted to GSGSSI in 2020 recorded 80 bird-strikes from one licenced vessel operating in the SGSSI MZ.

Basic bird-strike reporting protocols for SGSSI do exist, but data collection is not standardised, making robust analysis challenging. Consequently, factors leading to bird-strike events and the magnitude of the problem in SGSSI waters are poorly understood.

The Government of South Georgia & South Sandwich Islands (GSGSSI) is committed to protecting its globally important seabird populations, as evidenced through their MPA Management Plan, Biodiversity Action Plan, Wildlife and Protected Area Ordinance, and signatory status to international conventions, including the Agreement on the Conservation of Albatrosses and Petrels (ACAP). GSGSSI and its operational partners are also committed to working together to ensure measures are based on robust evidence, and are practical and fit-for-purpose.

Through a partnership between the Joint Nature Conservation Committee ([JNCC](#)), [GSGSSI](#), the International Association of Antarctica Tour Operators ([IAATO](#)), and the fishing company Argos Froyanes Limited ([AFL](#)), this 2.75-y Drawing Plus (DPLUS) funded project will develop bird-strike reporting systems for use by all vessels (research, patrol, fishing, tourism) operating in the SGSSI Maritime Zone (MZ), with the overall aim to ensure practical, standardised data collection and robust analysis to inform management practices. In parallel, handling and care guidelines will be revised to improve the identification and survival of landed birds. Reviewing factors that lead to bird-strikes, plus existing mitigation techniques to reduce strike rates, will provide a foundation for further research, allowing GSGSSI and its partners to implement best-practice, and share these techniques across other UKOTs and/or international regulators.

This will be achieved through activities under the following five integrated Work Packages:

- **Work Package 1 (WP1): Literature review** – this will entail a critical review and assessment of bird-strike incidence and mitigation measures, not only from SGSSI but also other regions. This will: i) aid development of reporting forms (Work Package 2) and bird-handling guidelines (Work Package 4); ii) identify potential factors leading to bird-strikes for consideration in future analyses of magnitude and cause; and iii) provide an indication of the effectiveness of existing mitigation techniques and aid future development and trials of mitigation measures in SGSSI (Work Package 5).
- **Work Package 2 (WP2): Development of bird-strike reporting forms** – building upon forms used by Project Partners (GSGSSI, 2020; IAATO, 2020), standardised reporting forms will be developed in consultation with stakeholders that capture information required to assess the magnitude and causes of bird-strike across the fleets that operate in SGSSI waters (patrol, research, fishing, tourism). Forms will be tested for practicality and capability via field-trials conducted/coordinated by Project Partners aboard the breadth of vessels operating in the SGSSI MZ. Final reporting forms will be translated into the common languages used by crew/staff on vessels operating in the SGSSI MZ.
- **Work Package 3 (WP3): Data Management System** – a standardised data management system for collating and storing information from bird-strike reporting forms will be developed. It will be compatible with the system currently used by GSGSSI. Documented guidelines for input and extraction of data will be produced.
- **Work Package 4 (WP4): Development of bird-handling guidelines** – straightforward instructions for non-bird specialists on handling and caring for birds found on vessels will be developed through review and adaptation of existing guidelines (e.g. ACAP, 2019; IAATO, 2020), utilising technical expertise from within the project team and other key stakeholders. Guidelines will be tested for a variety of aspects including clarity of understanding and use, and whether they capture sufficient examples of expected situations/conditions in which birds could be found. Testing will be undertaken via field trials and translated as in Work Package 2.
- **Work Package 5 (WP5): Future programme of work** – using information generated in WP1, and drawing upon data collected and analysed from WP2, a future programme of work to test/develop bird-strike mitigation measures will be formulated, including identifying possible funding streams. A programme for development of additional resources (e.g. presentations, videos) to raise awareness of the collaborative work between Project Partner sectors will also be devised.

DPLUS143 will address priority actions in the GSGSSI ACAP Implementation Plan and enable GSGSSI and partners to collect standardised data on bird-strike which can be fed into wider studies of seabird population changes, assess effectiveness of mitigation techniques, and enhance conservation management decisions. The partnership is highly experienced in seabird conservation, incidences of bird-strike, and knowledge of GSGSSI’s strategic direction and so a successful outcome is strongly anticipated. The team’s links into relevant UKOT and international networks will augment sharing of best practice regionally and globally.

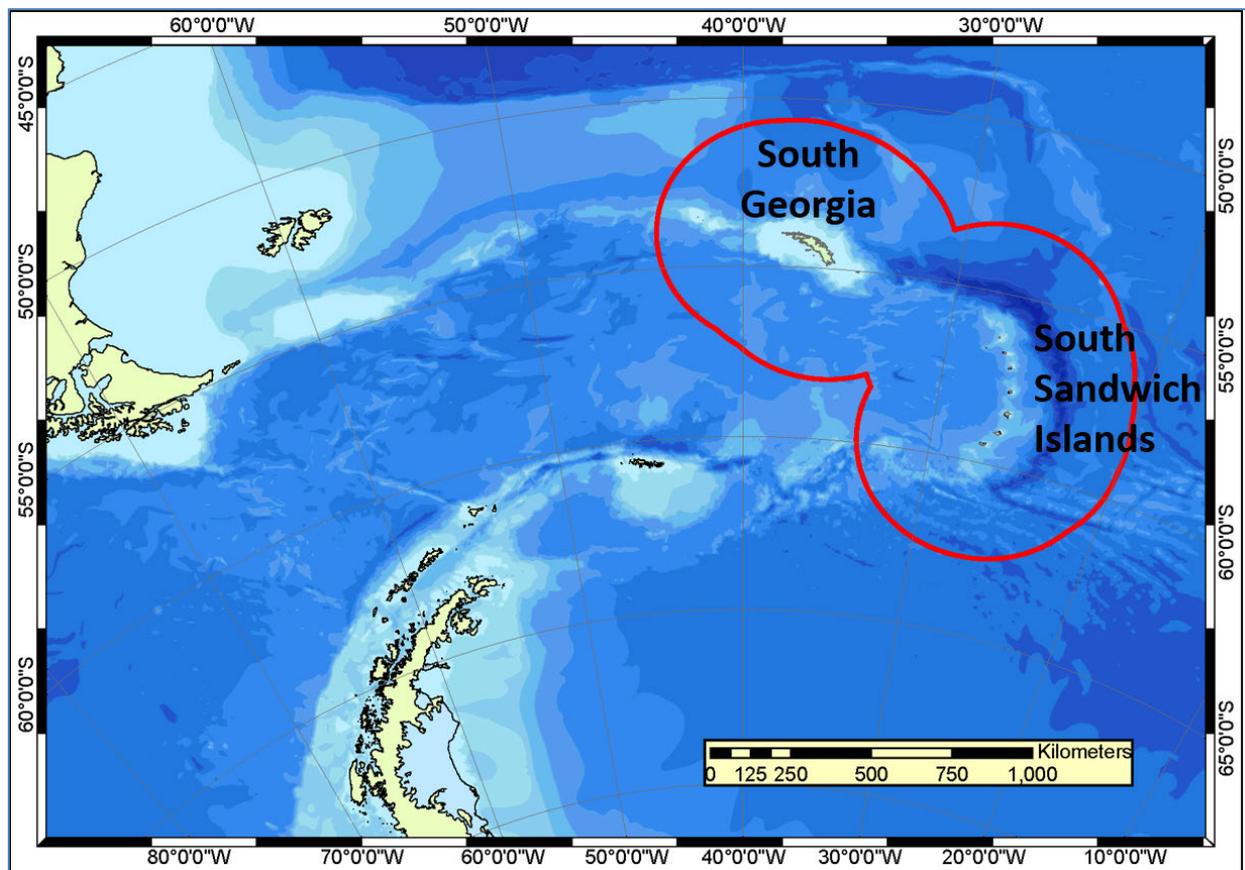


Figure 1. South Georgia and South Sandwich Islands.

2. Project stakeholders/partners

Background to development of project partnerships and project conception

JNCC is the public body that advises UK Government, the devolved administrations and UKOTs on nature conservation. JNCC has worked with GSGSSI for many years on a range of environmental conservation and management projects and has a formal MoU in place defining this partnership. One area that JNCC and GSGSSI work particularly closely on together is implementation of the ACAP. Taking into consideration the continued decline of a number of SGSSI ACAP-listed species, and following the successful reindeer and rodent eradications on South Georgia, which may lead to a step-change in the Island’s population trajectories of other ACAP species, JNCC and GSGSSI felt it was timely to act upon one of the priority actions in the GSGSSI ACAP Implementation plan: *review information on incidents of bird-strike on vessels operating in SGSSI MZ and improve and standardise information collected*. Recognising that success would require input and buy-in from across different sectors, the project was conceived in partnership with the primary stakeholder sectors – government, tourism, fishing and research.

As such, DPLUS143 is led by JNCC (research representative) in partnership with GSGSSI (government representative), IAATO (tourism representative) and AFL (fishing representative). JNCC are responsible for project management and technical development of products; GSGSSI will be ultimately responsible for overseeing distribution and regulated use of primary project products (bird-strike reporting forms and bird-handling guidelines) to key stakeholders – i.e. all research, patrol, fishing and tourism vessels operating in SGSSI MZ. The networks of AFL and IAATO will be one of the dominant users of the products

(crew and expedition staff). These partners will help facilitate uptake of project products. All partners will facilitate the engagement of vessels from the different fleets operating in SGSSI MZ to trial bird-strike reporting forms and bird-handling guidelines. Partners will promote opportunities for participation in the project, as well as its outcomes, through their networks using a range of communication tools – e.g. meetings, email circulation lists, newsletters, social media and websites.

The Project Partners were involved with all aspects of project design, and together with relevant stakeholders have engaged and/or been kept informed of project progress during the reporting period as follows:

Project Partners

A Project Management Group (PMG), which is comprised of representatives from each of the Project Partners (JNCC, GSGSSI, IAATO, AFL) was established. The PMG monitors and steers the project, ensuring it aligns with the project proposal, and that the project is delivered on time and within budget. The PMG also considers and advises on the overall project management plan, including supporting documents such as the Monitoring and Evaluation Plan, Risk Register and Issues Log, and will review and approve all primary project outputs prior to external release. The PMG will also highlight synergies between this project and other, related projects which they may be involved with to align and maximise outputs of each. Online (Microsoft TEAMS) meetings and/or email correspondence between PMG members have been used throughout the reporting period to discuss progress, and share and review project outputs.

Project Stakeholders

The primary role of other stakeholders in this project will be to: i) provide input to the design of the bird-strike reporting forms and bird-handling guidelines; ii) provide feedback on the suitability/ease of use of the forms through field-trials; and iii) help raise awareness and encourage uptake of the forms in other regulated maritime zones/operations. In this reporting period stakeholders identified Year 1 (Y1) of the project were consulted, via a workshop, to provide input into the design of the bird-strike reporting forms and bird-handling guidelines, as well as to then trial the Beta versions (see Section 3, Annex 5).

3. Project progress

3.1 Progress in carrying out project Activities

Output 1. GSGSSI and key stakeholders have informed overview of the incidence and causes of bird-strike, and the effectiveness of existing mitigation measures to reduce strike rates used in regions/areas outside of SGSSI.

Summary: All planned activities for this year have been completed.

Activity 1.1: Completed and reported upon in Y1.

Activity 1.2: Towards the end of Y1Q4, the literature search which commenced under Activity 1.1 and focused on using search terms to return results on the incidence or occurrence of bird-strike, was being widened to include search terms to inform the SWOT analysis to identify and assess the effectiveness of bird-strike mitigation measures. The SWOT analysis was undertaken and completed by Y2Q2, and incorporated into the initial summary report (first deliverable of Activity 1.3).

Activity 1.3: Compilation of the first deliverable for this activity – summary report incorporating the results of Activity 1.1 and Activity 1.2 has been completed (**Annex 4**) and now being prepared by the JNCC Communications team for publication on the JNCC and/or partner websites. Preparation of the Information Documents (second deliverable of Activity 1.3) is not due to commence until Year 3 (Y3).

Output 2. Standardised bird-strike reporting forms that capture all essential information to enable monitoring and assessment of bird-strike in SGSSI MZ developed and presented to GSGSSI for implementation across fleets operating in SGSSI MZ; and

Output 4. Easy-to-follow guidelines for non-bird specialists showing how to handle and care for birds that may be injured after striking and landing on vessels developed and presented to GSGSSI for circulation across fleets operating in SGSSI MZ.

Summary: All planned activities for this year have commenced as scheduled.

Activity 2.1, 2.2, 4.1 and 4.2: Existing bird-strike reporting forms which are used by vessels in the SGSSI MZ (forming part of Activity 2.2), and collation of existing bird-handling and identification guidelines (forming part of Activity 4.2) were undertaken and reported upon in Y1. These formed the basis for discussions with stakeholders around format, usability and/or enhancement of the reporting forms and handling guidelines to be developed by this project at an online workshop held in Y2Q1 (5 & 6 May 2022) (Activity 2.1 and 4.1). A total of 26 participants, which included representatives with expertise or experience in seabird ecology, seabird/fisheries observers and operators, ships' crew and expedition leaders, attended the workshop (**Annex 5a**).

The report summarising the outcomes from the workshop (Indicator 2.1a and 4.1a) has been completed (**Annex 5b**), but is yet to be published on the JNCC and/or Project Partner websites. Feedback and outcomes from the workshop were used to develop a 'Beta-version' of the bird-strike reporting form and bird-handling guidelines, with the format and content of the form being agreed by Project Partners (Activity 2.2 and 4.2; Indicator 2.2a,b and 4.2a,b; **Annex 5ci,ii and 5di,ii**). A feedback form to gather views on the beta-version of the reporting form and handling guidelines were also developed (**Annex 5ciii and 5diii**). Note, a graphic designer (Mindfully Wired Communications; MWC) have been contracted to design the bird-handling guidelines and have worked with JNCC (as lead Project Partner) to develop the Beta-version of the guidelines.

Activity 2.3 and 4.3: The reporting form and bird-handling guidelines have now undergone initial field-trials. Regarding the bird-strike reporting form: A total of seven toothfish and krill fishing vessels operating in South Georgia waters, and covering the last two months of the austral winter fishing season (August – September) were invited to take part in the field-trials to test the Beta bird-strike reporting forms (**Annex 5ei**). Seven tourist operators who are members of IAATO also signed up to part-take in field-trials (**Annex 5eii,iii**) over the austral summer tourist season (October – March). The form has also been trialled on the GSGSSI patrol vessel (MV Pharos), and the project team have been in discussion with the British Antarctic Survey (BAS) to coordinate trials on the BAS research vessels (ongoing).

Regarding the bird-handling guidelines: it took more time than anticipated to get a graphic design team onboard, and so production of the beta-version of the guidelines was delayed slightly. This meant that the beta-version was only ready for distribution in February 2023, whereby it was circulated to the participating tourist vessels for trial between then and the end of the tourist season (March). However, the guidelines will also be circulated to participating fishing and patrol vessels to trial between May-July during the upcoming austral winter fishing season as there will still be time to incorporate feedback into the final design.

The Project Leader (Dr Megan Tierney), met with the captain crew and expedition staff of some of the fishing vessels, and majority of tourist vessels when they were in Port Stanley, Falkland Islands and prior to steaming to South Georgia to discuss the trials in more detail and answer any questions they may have had. The Project Leader was also invited by Project Partner IAATO, to give a (remote) presentation on the project at the October IAATO field-staff conference to promote the work (**Annex 5f**), and also invite any other IAATO members to take part in the trials.

To date eight individual responses on the reporting forms/guidelines have been received, and the project team are in the process of collating comments and feedback to be incorporated into the final version of the reporting forms (Activity 2.4; not due to be completed until the end Y3Q2 of the project).

Activities 2.4 – 2.6, and 4.4 – 4.6: There was no planned work against these activities in this reporting period.

Output 3. Standardised data input and storage facilities and guidelines for data returned in bird-strike reporting forms, and which integrates with the existing national information management system of GSGSSI, is developed.

Summary: All planned activities for this year have commenced as scheduled.

Activity 3.1: Existing bird-strike data is submitted by GSGSSI to the [UK Polar Data Centre](#) who curates and manages the data on behalf of GSGSSI. A series of meetings were held in Y2Q1 with the Head of the Data Centre (Helen Peat) to discuss current procedures and implications that would need to be taken into consideration regarding changes to data fields and format which might be instigated during the development of the new bird-strike reporting forms (Activity 3.1). A specific session on data flow (from capture to reporting) was also included in the stakeholder workshop to both provide a greater understanding to data collectors and end-users about how the data is managed, the process of how data is submitted, and to receive feedback on future requirements in terms of use and accessibility etc. (**Annex 5a**). The beta-version of the form was shared with the Head of the Data Centre prior to the field-trials commencing to ensure it conformed with current capabilities of the Data Centre to receive and curate the data (Activity 3.1; Indicator 3.1a; **Annex 5ci**). Testing and finalising data input and storage procedures will take place once the trials are completed in Y3 of the project (Activities 3.2 and 3.3).

Activities 3.2 and 3.3: There was no planned work against these activities in this reporting period.

Output 5. Strategic programme of prioritised research to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ, including identification of resourcing options, is formulated.

Summary: There was no planned work against this Output or its Activities (5.1 – 5.2) in this reporting period.

3.2 Progress towards the project Outputs

Output 1. GSGSSI and key stakeholders have informed overview of the incidence and causes of bird-strike, and the effectiveness of existing mitigation measures to reduce strike rates used in regions/areas outside of SGSSI.

The bulk of the work feeding into Output 1 has now been completed– see full details of progress against the Indicator outlined in the **Annex 1** logframe. Even though it has become evident that there is not a large body of work which specifically addresses or reports on bird-strike which has occurred in either the SGSSI or other regions, the literature review and SWOT analysis has provided an important foundation in terms of information on where and how bird-strike can occur. This has helped to inform subsequent activities under Output 2 (development of bird-strike reporting forms) and Output 4 (development of bird-handling guidelines); and will also help shape Output 5 (development of a future programme to trial bird-strike mitigation measures). The last component of Output 1 is planned for Year 3 (Y3), which will use the review and assessment conducted to date as the basis for an Information Document which will be prepared for meetings that the Project Partners attend/facilitate and/or for circulation to the wider networks of the partners. **Evidence for Output 1 is provided in Section 3.1 and Annex 4.** It is expected that Output 1 will be achieved within the project timeframe, and the current Indicator is still considered appropriate.

Output 2. Standardised bird-strike reporting forms that capture all essential information to enable monitoring and assessment of bird-strike in SGSSI MZ developed and presented to GSGSSI for implementation across fleets operating in SGSSI MZ.

Output 2 is progressing according to schedule and progress against the individual Indicators is outlined fully in the **Annex 1** logframe. As outlined in Section 1, basic bird-strike reporting forms do exist, but data collection is not standardised, making robust analysis challenging. Consequently, factors leading to bird-strike events and the magnitude of the problem in SGSSI waters are poorly understood. Consultation and input from stakeholders and end-users during this reporting round (via a workshop) has proved instrumental in the development of the ‘beta-version’ of the reporting forms (Indicator 2.2). The field trials (Indicator 2.3) that have been undertaken, will further inform their development and ensure they

are fit-for-purpose. Compiling feedback from the trials has commenced ahead of finalising the forms for sign-off and implementation by GSGSSI (Indicator 2.4). Work against this Indicator and 2.5 are planned for Y3. **Evidence for Output 2 is provided in Section 3.1 and Annex 5.** It is expected that Output 2 will be achieved within the project timeframe, and the current Indicators are still considered appropriate.

Output 3. Standardised data input and storage facilities and guidelines for data returned in bird-strike reporting forms, and which integrates with the existing national information management system of GSGSSI, is developed.

Important steps were taken in this reporting round to ensure the project can progress this Output in Y3 – progress against individual indicators is outlined in the **Annex 1** logframe. Discussions held with the Head of the [UK Polar Data Centre](#) who curates and manages the data on behalf of GSGSSI, identified aspects which needed to be considered in the design of the reporting form to ensure conformity with the capabilities of the Data Centre to receive and curate the data (Indicator 3.1). An informative 2-way session on data flow was also included at the stakeholder workshop to enhance understanding of: i) end-users as to how bird-strike data is curated and managed; and ii) data managers as to how end-users may wish to access/use data in the future. Testing and finalising data input and storage procedures will take place once the trials are completed in Y3 of the project (Indicators 3.2 and 3.3). **Evidence for Output 3 is provided in Section 3.1 and Annex 5.** It is expected that Output 3 will be achieved within the project timeframe, and the current Indicators are still considered appropriate.

Output 4. Easy-to-follow guidelines for non-bird specialists showing how to handle and care for birds that may be injured after striking and landing on vessels developed and presented to GSGSSI for circulation across fleets operating in SGSSI MZ.

Although it took more time than anticipated to get the ‘Beta-version’ of the bird-handling guidelines produced, Output 4 is progressing well – progress against the individual Indicators is outlined fully in the **Annex 1** logframe. As for Output 2, consultation and input from stakeholders and end-users during this reporting round (via a workshop) has proved instrumental in the development of the Beta-version of the bird-handling guidelines (Indicator 4.2). The field trials (Indicator 4.3) that have been undertaken and/or are ongoing, will further inform their development and ensure they are fit-for-purpose. Compiling feedback from the trials has commenced and will continue ahead of finalising the forms for sign-off and implementation by GSGSSI (Indicator 4.4). Work against this Indicator and 4.5 are planned for Y3. **Evidence for Output 4 is provided in Section 3.1 and Annex 5.** It is expected that Output 4 will be achieved within the project timeframe, and the current Indicators are still considered appropriate.

Output 5. Strategic programme of prioritised research to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ, including identification of resourcing options, is formulated.

There was no planned work against this output in this reporting period, and at this stage of the project there is no reason to believe that this Output won’t be achieved with the project timeframe. The current Indicators are also still considered to be appropriate.

3.3 Progress towards the project Outcome

The stated outcome for this project is *‘Practical tools and guidelines for long-term monitoring of bird-strike in SGSSI, enhanced survival of landed birds, and the foundation of a strategic research programme to manage and reduce bird-strike’.*

The project has continued to make steady progress towards achieving this Outcome in this reporting period. While there are existing forms for reporting bird-strike in SGSSI and some bird-handling guidelines, it was recognised that these tools could be enhanced to improve long-term monitoring and assessment of the impact of bird-strike on SGSSI seabird populations, and increase the likelihood of survival of landed birds. In this second reporting period, work has primarily focussed on engaging with stakeholders to gather views on what data fields are considered necessary to enable robust analysis, and format and content of the form and bird-handling guidelines to ensure they are practical for use in real-world situations. This information has been used to develop the ‘beta-versions’ of the reporting form and

bird-handling guidelines (the initial steps towards achieving Outcome Indicator 0.1 and 0.3), as well as identifying what needs to be considered from a data management perspective (initial step of Outcome Indicator 0.2). The trials of both products (mid-way steps of Outcome Indicators 0.1 and 0.3) have commenced. Analysis of the feedback from these trials, which is planned for Y3 will reveal whether we are on the right path to achieving the Overall Outcome of the project. **Evidence cited in Section 3.1 Output 1, 2, 3 and 4 as well as Annex 5 shows the progress** against the related activities. Hence, at this stage all Outcome indicators are still considered appropriate, and it is anticipated that the project will be able to achieve the stated Outcome by the end of the project (March 2024).

3.4 Monitoring of assumptions

A number of important Risks and Assumptions were identified for this project and included in the project logframe (see **Annex 2**). All identified risks and assumptions remained true for this reporting period and are anticipated to remain so for the coming (Y3) reporting period.

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

As evidenced through its range of strategies, legislation and signatory status to a number of international conventions, GSGSSI is committed to protecting its natural environments and managing its resources in a responsible and sustainable way. The outcome of this project will help to support GSGSSI's commitments by providing tools that will enable monitoring of an impact that has the potential to have detrimental effects on SGSSI's already threatened seabird populations, to assess effectiveness of mitigation techniques and ultimately enhance associated conservation management decisions. In the first reporting period for the project, work was primarily on some of the founding steps – i.e. gathering and assessing baseline information on bird-strike incidents, reporting systems, handling guidelines and data management systems. In this reporting period, the work has built upon these foundations, focussing on tool development and testing, with refinement and finalisation planned for Y3.

More specifically, this project will help to meet the following **key priorities and national commitments** of GSGSSI:

- **SGSSI ACAP Implementation Plan:** specifically, actioning a review of the information on incidents of bird-strike on vessels operating in SGSSI Maritime Zones (MZ); improve and standardise information collected; and oblige all vessels to complete these reports.
- **Protect Sustain Inspire: SGSSI Stewardship Framework 2021-2025:** specifically, the Key Priority of Marine Protection (Set exceptional standards for management of our marine environment, underpinned by robust science); under the Guiding Value of Environmental Protection (To safeguard the long-term protection of SGSSI, we must first understand the changes to the environment that may result from any activities, and Develop best practice that can sustain long-term environmental recovery and protection).
- **National Biodiversity Action Plan:** specifically, Objective 2 (increasing SGSSI environmental global outreach through knowledge sharing with stakeholders); 3 (meeting obligations set by multi-lateral environmental agreements); 5 (establishing scientific baselines).
- **Environment Charter:** specifically guiding principles 5 (to aim for solutions which benefit both the environment and development), 7 (to safeguard and restore native species, habitats and landscape features), and 8 (to encourage activities and technologies that benefit the environment).
- **SGSSI Marine Protected Area Monitoring Plan:** specifically, the research need 'Investigate relative risk of potential threats from different human activities'.

It will also help GSGSSI and the UK support the following **key international commitments**:

- **ACAP:** specifically, Article II (Parties shall take measures to achieve and maintain a favourable conservation status for albatrosses and petrels), Article III Conservation Measures c,d,e,g, and elements of Annex 2 (ACAP Action Plan).
- **Convention on Biological Diversity:** specifically, the following Kunming-Montreal Global Biodiversity Targets: 1 (Reducing biodiversity loss), 10 (Sustainable Fisheries), 21 (Knowledge Exchange and Data Accessibility).

- **Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR):** specifically, Article II, Article IX, and Conservation Measures 25 (Minimization of incidental mortality), and 31-01 (Regulation of fishing around South Georgia).
- **Antarctic Treaty System’s Protocol on Environmental Protection to the Antarctic Treaty:** specifically, Article II (Protection of the Antarctic environment and dependent and associated ecosystems) and III (Environmental Principles).

5. Gender equality and social inclusion

The core project team working on development and delivery of this project has a gender ratio of 63% women and 37% men. While gender ratios of expedition or research staff on tourist/research vessels are likely to be relatively balanced, crews of all vessels that partake in the trials of the reporting forms and guidelines are likely to be predominantly male. However, for those events planned by the project (e.g. consultations or workshops), the proposed project implementation has been designed to ensure gender inequality will not be increased – i.e. participation will be open to anyone regardless of gender (or age, ability, race, religion, or sexual-orientation). At the workshop held in May, there was a ratio of 50:50 females:males attending (13 of each). During the design phase, consideration has also be given to ensure that reporting forms/guidelines produced do not promote gender bias – for example, techniques used to report and handle birds safely will be those that can be performed by either sex; and if photos of people are used in project-related media, we will aim to make sure there is equal representation of men and women in these images.

In regard to social inclusion, the project team will be mindful of being as inclusive as possible, ensuring stakeholder events are accessible regardless of gender, age or ability; and trials and design of reporting forms/guidelines will be made with all vessel types and their operation in mind. Further, the forms and guidelines will, in the first instance, be translated into at least five of the most common languages used by crew/staff aboard these vessels.

Please quantify the proportion of women on the Project Board³. 63%

Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women⁴. 75%

6. Monitoring and evaluation

In this reporting round the PMG has continued to take responsibility for overseeing the activities necessary to meet the timelines, been responsible for reviewing the project implementation, and advising on and approving any adjustments required. This has been achieved through PMG meetings and regular email correspondence. Three tools have been developed for the project which also assist the PMG to effectively monitor and govern the project: a Monitoring and Evaluation Plan, Risk Register, and Issues Log. The Project Leader provides regular updates on each, plus financials, at PMG meetings. The PMG, which is comprised of representatives from each project partner (JNCC, GSGSSI, IAATO, AFL) is jointly responsible for monitoring and steering the project, ensuring it aligns with the project proposal, and that the project is delivered on time and within budget. The PMG also reviews and approves all primary project outputs prior to external release.

The project logframe (**Annexes 1 and 2**) provides a clear set of Indicators and Outputs against which the project can be monitored and evaluated. Progress towards the stated Outcome and Outputs can be clearly cross-referenced with the relevant indicators. As most of the indicators relate to specific markers

³ A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

⁴ Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

of progress or end products, they are relatively easy to measure – e.g. reports or guidelines published, meeting agenda and minutes, photos of stakeholder events and/or field trials, email trains etc.

7. Lessons learnt

In this reporting period, the following aspects have continued to be of benefit to the project, and would be recommended approaches for other projects where relevant:

- *In-territory Partner:* Having GSGSSI as a lead partner on the project has proved invaluable for: i) ensuring the direction of the project and the outputs will be of true value and relevance to the GSGSSI; and ii) early identification of other relevant partners and stakeholders, both for project concept and for ongoing engagement and buy-in to the project.
- *Working with known partners:* All the Project Partners have worked with either one or all of the other partners in the past. These strong, established relationships has resulted in good cooperation and ensured a high level of enthusiasm for project has been maintained.

Fortunately, the project has not faced any substantial challenges in its second year; however for future projects/proposals, it is still recommended that the realistic time-frames and resources required to get a project up and running, including development of project management and communication tools are carefully considered and incorporated into project plans accordingly.

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

We received two comments from the Reviewer on our first Annual Report (AR1) which were to be addressed in Annual Report 2 (AR2):

Comment 1: Potential effects of Covid-19 on the longlining toothfish fishing season in South Georgia waters in 2022 are anticipated to affect Assumption 2.6 and 4.6.

- *Action taken:* Covid-19 did not impact on the longline toothfish fishing season, and so these vessels were able to participate in the trials of the bird-strike reporting forms. It was also noted in AR1 that there were some uncertainties (political/regulatory; beyond the control of this project) regarding whether there would be a longlining toothfish fishing season at all in South Georgia waters in 2022, and thereby rendering it not possible to use these particular vessels to trial the beta versions of the bird-strike reporting forms and bird-handling guidelines (Activities 2.3 and 4.3). As such Assumption 2.6 and 4.6 were modified to: *In regard to engaging sufficient fishing company volunteers to participate in the [bird-strike reporting form and bird-handling guideline] trials, the ongoing Covid-19 pandemic does not interrupt fishing operations. (In the 2020 fishing season, Covid-19 did present operational challenges to GSGSSI and licensed fishing companies, but the fishing season did proceed). Further, if there is no longline fishing for toothfish in South Georgia waters in 2022, all field trials on fishing vessels will occur on krill and/or ice-fish trawlers instead of across both longliners and trawlers as originally planned.*

Whilst the AR1 Reviewer advised that the project team discuss any implications this may have on the project, we are pleased to report that a contracted (July – September; as opposed to May – September) toothfish fishing season was permitted within SGSSI waters, and that several longlining vessels partook in trialing the beta bird-strike reporting forms (see details summarised in Section 3, Output 2). The 2023 toothfish season is anticipated to progress as normal, which will enable the longlining vessels to trial the bird-handling guidelines. If this situation changes, we will discuss with the DPLUS Team any implications on the project and the best way forwards.

Comment 2: Please comment on the feedback in the original award letter.

- *Action taken:* We did respond to these comments in the second half-yearly report (HYR2), but have also included it here for ease of reference. The comments in the original award letter, and our responses were:

Comment #1: *Whilst the proposal will facilitate data collection on bird strikes, it does not address the issue of the fate of the birds - many are released "alive", but it is not clear whether there is any scope to check whether they survive (address in half year report - HYR).*

Response: While an important factor, unfortunately, it is beyond the remit of this project to be able to follow the fate of released birds. Understanding 'cryptic' mortality is of itself a major undertaking, requiring a bespoke research plan. Members of the project team have been considering this topic – both from the point of view of the fate of birds that strike vessels by flying into the superstructure but can be released alive, and those which may strike fishing gear (e.g. warp cables) and which are not brought on board, but may be mortally wounded – and have plans to try and secure funding to address the issue. The current project is therefore focussed, in this instance, to standardise the reporting of bird-strikes, with the provision of at least including information of how many birds were found dead and how many were released alive. There are also data fields to include information of where on the ship birds were found, as well as what condition they were found in (e.g. noting if they had any injuries), information which it is hoped will start to provide some indication of the potential fate of birds, at least prior to release.

Comment #2: *Outline what policy changes might result from this project (HYR)*

Response: At this stage it is not possible to specify which policy changes may result from this project; but it is anticipated that: i) GSGSSI reporting regulations will be updated so as to specify that the form to be used for reporting bird-strikes in SGSSI waters will be the one developed by this project; and ii) that the bird-handling guidelines developed by this project will be the principle guidelines used both in SGSSI waters and wider. Longer-term, analysis of the more standardised and scientifically robust data collected using the new reporting forms, will lead to an improved understanding of the factors that cause bird-strike, in turn which may facilitate the development of mitigation measures to reduce strike rates. Implementation of these mitigation measures may be included in revised policy or regulations.

Comment #3: *Please outline how the proposed bird handling guidelines to be developed through this project are distinct from existing guidelines (HYR).*

Response: Until they are developed it is not possible to outline how the new guidelines developed as part of this project will be distinct from existing guidelines. However, feedback has been sought from stakeholders on what they do/don't like on existing guidelines, what was missing from them, what type of format is preferred etc. This feedback has been taken on board to develop improved guidelines which will have addressed/incorporated the comments received from these stakeholders and end-users.

9. Risk Management

The Risk Register developed for the project (see **Annex 6ii**) allows monitoring of project risks and is overseen by the PMG. One risk that has arisen in the last 12-months is the potential for the H5N1 strain of Highly Pathogenic Avian Influenza (HPAI) to appear in birds in South Georgia (see further details in Section 10). As this strain of 'bird-flu' can be passed to humans, and where there is only a 50% chance of survival if it is contracted, GSGSSI have put guidelines in place as to where/how birds can be handled. As such this has impacted on how participants have been able to trial the beta version of the bird-handling guidelines. This risk was added to the Risk Register.

10. Other comments on progress not covered elsewhere

No significant challenges were encountered in this reporting period; however, as noted in Section 9 an additional risk (outside the control of the project) was identified. The DPLUS Team will no doubt be aware of the current outbreak of the H5N1 strain of Highly Pathogenic Avian Influenza (HPAI) in the Northern Hemisphere, the south of Africa and around the Atlantic and Pacific Oceans which has caused high mortality in wild seabird populations. It was expected that this outbreak could spread to Southern Ocean bird populations in the 2022-23 and/or in the 2023-24 austral summers. In readiness for this, GSGSSI

developed a set of guidance on HPAI risk and response in the Territory. The guidance describes what enhanced biosecurity procedures, signs to be vigilant for, how to report these to the GSGSSI and what action the government will take on receiving that report – see full details in the [GSGSSI Biosecurity Handbook](#). These guidelines cover actions/response to a bird-strike event. As it may not be possible to determine if a bird has signs of HPAI or not, the guidelines state that a precautionary approach should be adopted, including releasing live birds as soon as practical in order to minimise time personnel are in contact/exposed – as opposed to more standard practice of potentially housing a bird for a period of time to allow recovery and then release at a time when there would be minimal risk of predation.

Given these revised protocols, in the event of a bird-strike event occurring on vessels during the 2022-23 seasons, in-depth ('hands-on') trials of the bird-handling guidelines were not possible. Instead, participants in the trial, were only able to review and comment without necessarily putting proposed procedures into practice.

The HPAI situation was constantly monitored by GSGSSI throughout the 2022-23 season and advised that the biosecurity guidelines may be reviewed/amended depending on the situation. At the time of writing this report, HPAI had not yet been detected in any SGSSI seabird population, but all vessels involved with the field-trials followed the updated GSGSSI biosecurity guidelines. This will continue to be the case for those vessels still involved with the trials, unless advised otherwise. Likewise, the project team will discuss any major impacts HPAI may have on the project as the situation evolves.

11. Sustainability and legacy

The project has been promoted through: 1) the consultation workshop to help design the reporting forms and handling guidelines held in May 2022; 2) participation of vessels in the trials; 3) the Project Leader being invited by Project Partner IAATO, to give a (remote) presentation on the project at the October IAATO field-staff conference to promote the work (**Annex 4f**), and also to invite any other IAATO members to take part in the trials; and 4) Project Partners keeping their networks updated on project progress.

There are currently no foreseen changes to the planned exit strategy, and therefore project outcomes will still be sustained through:

- Development of stand-alone and finite products (i.e. standardised bird-strike reporting forms, bird-handling guidelines, data management system) that can be used long-term to facilitate standardised and on-going monitoring of bird-strike and facilitate improved chances of survival of landed birds across the array of fleets operating in SGSSI MZ.
- GSGSSI, being responsible for regulating all activities within the Territory and having the capacity to introduce legislation, policy or guidelines as required based on the results of the long-term outcomes of this study.
- Beyond the life of the project, AFL commit to promoting uptake and use of reporting forms and bird-handling guidelines and to encourage their industry networks to implement them globally. IAATO will incorporate any tools into its field operations manual as required by GSGSSI and/or agreed by members, thereby also ensuring longevity. IAATO will also share outputs with industry partners.
- Reporting forms and bird-handling guidelines will need revisions to ensure on-going effectiveness. One avenue already identified to regulate this is to incorporate it into the revision time-table of the GSGSSI ACAP Implementation Plan, coordinated by JNCC.

12. Darwin Plus identity

There is a good understanding of the Darwin Plus initiative within the community of organisations whose work is focussed on SGSSI, with a range of projects having been funded by it over the years.

Within the PMG, the project is referred to by the Darwin Project Code (DPLUS143), ensuring that the Darwin Plus identity is always at the forefront when the project is discussed. The DPLUS logo has been included along with all Project Partner logos on all project outputs so far, including the literature review, workshop materials (invite, presentations etc.), workshop report, trial instructions etc. DPLUS was also

introduced as the project funder in presentations given at the workshop and the IAATO field-staff conference. It will continue to be highlighted on all stakeholder consultation sessions and project documents during the remainder of the project.

13. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes/No
Have any concerns been investigated in the past 12 months	Yes/No
Does your project have a Safeguarding focal point?	<p>Yes/No [If yes, please provide their name and email]</p> <p>Yes, the head of HR is the Safeguarding lead with support from HR Business Partners.</p> <p>██████████</p>
Has the focal point attended any formal training in the last 12 months?	Yes/No [If yes, please provide date and details of training]
What proportion (and number) of project staff have received formal training on Safeguarding?	<p>Past: 0% [and number] Planned: 25% [and number]</p> <p>None but SAFE training will provided to them in 2023 and other relevant safeguarding training that we can obtain will also be provided.</p>
<p>Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.</p> <p>JNCC have updated the safeguarding policy to take on feedback from colleagues at JNCC and also to keep it in line with important priorities as they become clear in safeguarding, the policy will be reviewed annually at the very least and safeguarding issues that are identified will be dealt with in a confidential and speedy manner. An overview of our policy will take place by our ARAC board regularly and changes will be made where necessary to keep it current and at the heart of every project.</p>	
<p>Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.</p> <p>As the lead partner, JNCC is committed to creating a safe environment for all staff and those with whom we work. For JNCC, safeguarding means protecting its staff and communities from potential harm from coming into contact with anyone working for, or with us, or from our activities/programmes of work. JNCC’s primary safeguarding objective is to do no harm, and we take a zero-tolerance approach to anyone who contravenes our policies.</p> <p>Safeguarding is a specific risk in the JNCC organisational risk register. JNCC’s safeguarding policy makes clear the JNCC policy applies to all partners and contractors. For this project, the partner MoUs will: a) incorporate JNCC’s Safeguarding Policy or otherwise implement reasonable due diligence and monitoring procedures of its sub-awards consistent with JNCC’s Policy; b) include appropriate language requiring contracting entities/individuals, and their employees/volunteers to abide with a Code of Conduct that reflects standards of JNCC’s Policy; and c) expressly state that the failure of those entities/individuals to take preventive measures against sexual harassment, exploitation and abuse and child abuse, to investigate and report allegations in a timely manner, or to take corrective actions when breaches have occurred, shall constitute grounds for JNCC to terminate such agreements.</p>	

Once the new policy is released, all projects are to include safeguarding as part of their process and to ensure that project partners also have the safeguarding policy shared with them so that expectations for all participants are very clear.

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2022 – 31 March 2023)

Project spend (indicative) in this financial year	2022/23 D+ Grant (£)	2022/23 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	36,933	37,509		

It had been proposed that the Project Leader would spend some time on the GSGSSI Patrol Vessel undertaking the field trials of the bird-strike reporting forms and bird-handling guidelines, in person. Operating Costs had been allocated to cover berth fees on the vessel. However, as the patrol schedule (which is set by GSGSSI according to operational needs to cover patrolling duties, and can change at short notice) did not allow for this to occur, the funds were reallocated to Staff and Overhead Costs to cover the additional time which was required to facilitate the stakeholder workshop, and develop the beta versions of the reporting forms and handling guidelines. As the Project Leader was able to meet with the Captain and crew of the Pharos when the vessel was in Port Stanley to go over the trial procedure in detail, there will be no overall impact on the project that the Project Leader was not able to carry out the trial themselves.

Upon discussion with the Head of the UK Polar Centre, it was agreed that no new specific hardware/software would need to be purchased to enable upload and management of bird-strike data into the existing system. Therefore, funds which had been allocated for these potential purchases under Capital Items were also reallocated to Staff/OH costs to cover the additional time required to complete the other activities scheduled for this reporting round.

Table 2: Project mobilising of matched funding during the reporting period (1 April 2022 – 31 March 2023)

	Matched funding secured to date	Total matched funding expected by end of project
Matched funding leveraged by the partners to deliver the project.		
Total additional finance mobilised by new activities building on evidence, best practices and project (£)		

15. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes

We have opted not to complete this section for this reporting round.

Annex 1: Report of progress and achievements against logframe for Financial Year 2022-2023 – if applicable. [This logframe is that agreed after submission Change Requests CR21-125].

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
<p><i>Impact</i></p> <p>Improved monitoring of the impact bird-strike has on seabird populations, influencing management decisions and mitigation to reduce bird-strike; enhanced survival through improved capabilities of crew members caring for landed birds.</p>		<p>In this reporting period the primary contribution towards achieving the project's impact was the development of the beta-versions of the bird-strike reporting forms and bird-handling guidelines, which were then put out for trial and testing by intended end-users. Feedback on the beta versions of the forms will direct their finalisation and roll-out in the next year of the project. This will ultimately enable improved monitoring of the impact of bird-strike on SGSSI seabird populations (forms) and increase likelihood of survival if found alive on vessels (handling guidelines). In the future, onward analysis of returned data in the forms will i) aid identification of potential factors leading to bird-strikes for consideration in future analyses of magnitude and cause; and ii) provide an indication of the effectiveness of any existing mitigation techniques and aid future development and trials of mitigation measures in SGSSI. Involving stakeholders in the development and testing of the forms and handling guidelines has helped to raise awareness of the importance of effective monitoring of this issue.</p>	
<p><i>Outcome</i></p> <p>Practical tools and guidelines for long-term monitoring of bird-strike in SGSSI,</p>	<p>0.1 Bird-strike reporting form that captures information required to assess magnitude and causes of bird-strike occurring on vessels operating in SGSSI</p>	<p>0.1 – 0.3 Work continued in terms of developing reporting forms, bird-handling guidelines and data management systems, including: i) engaging with stakeholders to</p>	<p>The primary focus of activity in Y3 of the project will be to i) complete the trials and test the system for managing bird-strike data using data returned from the</p>

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
<p>enhanced survival of landed birds, and the foundation of a strategic research programme to manage and reduce bird-strike.</p>	<p>Maritime Zones (MZ) is developed. Form available in at least five of the most common languages used by crew and staff on vessels operating in SGSSI MZ. (By Y3Q2).</p> <p>0.2 Bird-strike reporting forms established, tested and integrated into GSGSSI national information management system based on process and procedures for collating/archiving bird-strike data. (By Y3Q3).</p> <p>0.3 Bird-handling and care guidelines prepared for distribution by GSGSSI across the four different fleets that operate in SGSSI MZ. Guidelines available in at least five of the most common languages used by crew and staff on vessels operating in SGSSI MZ. (By Y3Q2).</p> <p>0.4 Prioritised programme of work outlining activities and next steps to enhance understanding of factors causing bird-strike in SGSSI MZ and measures that can be developed to mitigate threat is formulated and agreed. (By Y3Q4).</p>	<p>gather views on content and format of the forms and guidelines, as well what considerations need to be taken in terms of managing returned data, from input to output; ii) using this stakeholder input, plus that from the literature review and SWOT analyses conducted in Y1-2, to design beta-versions of the forms and guidelines; and iii) circulating to end-users to begin trials of the form and handling guidelines</p> <p>0.4 Scheduled for Y3 of project.</p>	<p>trials; ii) review and incorporate feedback from the trials into the final design of the forms and handling guidelines, and present them to GSGSSI for roll-out across the fleets operating in the SGSSI MZ; iii) showcase results of the project at a cross-territory session; and iv) plan and execute a consultation session to identify priority next steps to enhance understanding of factors causing bird-strike in SGSSI MZ and measures that can be developed to mitigate any threat.</p>
<p>Output 1. GSGSSI and key stakeholders have informed overview of the incidence and causes of bird-strike, and the effectiveness of existing mitigation measures to reduce strike rates used in regions/areas outside of SGSSI.</p>	<p>1.1 Desk-based literature review of the incidence and causes of bird-strike and an assessment of bird-strike mitigation measures in use in areas outside of SGSSI completed and delivered to Project partners and key stakeholders (by Y2Q1).</p>	<p>1.1 Progressing on schedule. Literature review on incidence and causes of bird-strike completed in Y1, with review and assessment of mitigation measures completed this reporting round and shared with PMG (Section 3.1, Output 1 and Annex 4).</p>	

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
Activity 1.1 Critical review of existing literature (published and grey) on incidence of bird-strike in regions/areas outside of SGSSI MZ.		Complete. Reported upon in Y1.	N/A
Activity 1.2 Identification and assessment of effectiveness of bird-strike mitigation measures used in regions/areas outside of SGSSI via SWOT analysis.		Complete. Review and (SWOT) assessment of mitigation measures undertaken.	N/A
Activity 1.3 Prepare summary report and Information Documents detailing key findings of literature review and assessment of effectiveness of bird-strike mitigation measures for Project Partners and partner networks and stakeholder meetings (e.g. ACAP Population and Conservation Status Working Group (PaCSWG) and Seabird Bycatch Working Group (SBWG); GSGSSI Stakeholder Meeting; IAATO Members meeting; Coalition of Legal Toothfish Operators (COLTO); CCAMLR Scientific Committee).		In progress. Incorporating results from Activity 1.1 and 1.2 into summary report completed.	Finalise summary report for publication on JNCC/partner websites. Prepare Information Documents for submission/circulation to relevant stakeholder/network meetings.
Output 2. Standardised bird-strike reporting forms that capture all essential information to enable monitoring and assessment of bird-strike in SGSSI MZ developed and presented to GSGSSI for implementation across fleets operating in SGSSI MZ.	<p>2.1 Bird-strike reporting form and user guidelines – process for development of bird-strike reporting forms and user guidelines devised. (By Y2Q1).</p> <p>2.2 Bird-strike reporting form and user guidelines – beta-version of bird-strike reporting form and user guidelines agreed by project partners. (By Y2Q2).</p> <p>2.3 Bird-strike reporting form and user guidelines – field trials of bird-strike reporting form and user guidelines completed on at least five vessels. (By Y2Q4).</p> <p>2.4 Bird-strike reporting form and user guidelines – finalised bird-strike reporting form and user guidelines, translated into at least five of the most commonly used languages on vessels operating in SGSSI MZ, agreed by project partners and presented to GSGSSI. (By Y3Q2).</p>	<p>2.1 Complete. Stakeholder workshop held to gather input on content and format of reporting forms and bird-handling guidelines (Section 3.1 Output 2/4 and Annex 5a).</p> <p>2.2 Complete. Beta-versions of reporting forms presented to PMG and agreed. (Section 3.1 Output 2 and Annex 5cii).</p> <p>2.3 Progressing on schedule. To date, forms have been trialled on fishing, tourist and patrol vessels. Trials to continue on research vessels.</p> <p>2.3 Scheduled for Y3 of project.</p> <p>2.5 Scheduled for Y3 of project.</p>	

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
	2.5 Finalised bird-strike reporting form and user guidelines shared with other UKOTs and key stakeholders via online forum, and promoted to at least one network of each project partner. (By Y3Q4).		
Activity 2.1 Hold consultation session with project partners and key stakeholders to explore development process of the bird-strike reporting forms (e.g. format, essential components, field-trials, languages, timings etc.). (Consultation session on development process of bird-handling guidelines – Activity 4.1 – will be held at the same time).		Complete. Consultation session held.	N/A
Activity 2.2 Develop beta-version of bird-strike reporting form.		Complete. Beta-versions of forms developed, based on feedback from consultation session and agreed with PMG.	N/A
Activity 2.3 Field trials of bird-strike reporting forms on at least five vessels. (Field-trials of bird-handling guidelines – Activity 4.3 – will be conducted at the same time).		Ongoing. Trials held on fishing, tourist and patrol vessels. Information packs for vessels participating in sea-trials outlining how forms/handling guidelines are to be tested and feedback recorded prepared and shared with participants of the trials, as well as in-person meetings when vessels passed through Stanley, Falkland Islands enroute to SGSSI.	Trials to continue/commence on research vessels.
Activity 2.4 Finalise bird-strike reporting form, based on feedback from field-trials; present to GSGSSI.		N/A - Scheduled for Y3 of project.	Incorporate feedback from sea-trials of reporting forms, commence finalisation of forms, including translation into other languages if considered necessary.
Activity 2.5 Facilitate online forum with other UKOTs and key stakeholders to showcase and share bird-strike reporting forms. (Online forum to showcase bird-handling guidelines – Activity 4.5 – will be held at the same time).		N/A - Scheduled for Y3 of project.	Identify participants to invite to forum; plan and execute forum.

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
Activity 2.6 Prepare Information Document for partner networks and stakeholder meetings (e.g. ACAP PaCSWG and SBWG; GSGSSI Stakeholder Meeting; IAATO Annual meeting; COLTO; CCAMLR Scientific Committee).		N/A - Scheduled for Y3 of project.	Prepare Information Documents outlining development process and final reporting forms and bird-handling guidelines for submission/circulation to relevant stakeholder/network meetings.
Output 3. Standardised data input and storage facilities and guidelines for data returned in bird-strike reporting forms, and which integrates with the existing national information management system of GSGSSI, is developed.	3.1 Beta-version of data input and storage facilities and guidelines for bird-strike data devised and agreed with GSGSSI data manager. (By Y2Q3). 3.2 Data input and storage facilities and guidelines tested using all data returned in bird-strike reporting form trials. (By Y3Q1). 3.3 Finalised data input and storage facilities and guidelines agreed by project partners and presented to GSGSSI. (By Y3Q3).	3.1 Complete. Meetings held with the Head of the UK Polar Data Centre who manages GSGSSI data, including any bird-strike data, to identify data management aspects that would need to be taken into consideration during development of the bird-strike reporting forms. Data flow session included in stakeholder workshop. 3.2 Scheduled for Y3 of project. 3.3 Scheduled for Y3 of project.	
Activity 3.1 Consult with GSGSSI on the existing national data management system, and working with GSGSSI data manager, design beta-version of data input and storage procedures for bird-strike data.		Complete. Meetings held with the Head of the UK Polar Data Centre who manages GSGSSI data, including any bird-strike data to ensure data flow procedures were correctly considered in the design of the beta version of the reporting forms.	N/A
Activity 3.2 Test system and procedures using data returned from bird-strike reporting form trials.		N/A - Scheduled for Y3 of project.	Run series of tests on the revised data management system using data returned from the sea-trials of the reporting forms.
Activity 3.3 Finalise data management system and guidelines, based on feed-back from trials; present to GSGSSI.		N/A - Scheduled for Y3 of project.	Prepare bird-strike data management guidelines and present to GSGSSI to accompany bird-strike reporting forms.

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
<p>Output 4. Easy-to-follow guidelines for non-bird specialists showing how to handle and care for birds that may be injured after striking and landing on vessels developed and presented to GSGSSI for circulation across fleets operating in SGSSI MZ.</p>	<p>4.1 Bird-handling guidelines – process for development of bird-handling guidelines devised. (By Y2Q1).</p> <p>4.2 Bird-handling guidelines – beta-version of bird-handling guidelines agreed by project partners. (By Y2Q2).</p> <p>4.3 Bird-handling guidelines – field trials of bird-handling guidelines completed on at least five vessels. (By Y2Q4).</p> <p>4.4 Bird-handling guidelines – finalised bird-handling guidelines, in a least five of the most commonly used languages on vessels operating in SGSSI MZ, agreed by project partners and presented to GSGSSI. (By Y3Q2).</p> <p>4.5 Finalised bird-handling guidelines shared with other UKOTs and key stakeholders via online forum, and promoted to at least one network of each project partner. (By Y3Q4).</p>	<p>4.1 Complete. Stakeholder workshop held to gather input on content and format of reporting forms and bird-handling guidelines (Section 3.1 Output 2/4 and Annex 5a).</p> <p>4.2 Complete. Beta-versions of bird-handling guidelines presented to PMG and agreed. (Section 3.1 Output 2 and Annex 5dii).</p> <p>4.3 Progressing on schedule. To date, forms have been trialled on tourist vessels. Trials to continue on fishing and research vessels.</p> <p>4.3 Scheduled for Y3 of project.</p> <p>4.5 Scheduled for Y3 of project.</p>	
<p>Activity 4.1 Consultation session with project partners and key stakeholders to explore development process of the bird-handling and care guidelines (e.g. review of current materials, format, essential components, field-trials, languages, timings etc.). (Consultation session on development process of bird-strike reporting forms – Activity 2.1 – will be held at the same time).</p>		<p>Complete. Consultation session held.</p>	<p>N/A</p>
<p>Activity 4.2 Develop beta-version of bird-handling guidelines.</p>		<p>Complete. Beta-versions of handling guidelines developed, based on feedback from consultation session and agreed with PMG.</p>	<p>N/A</p>
<p>Activity 4.3 Field trials of bird-handling guidelines on at least five vessels. (Field-trials of bird-strike reporting forms – Activity 2.3 – will be conducted at the same time).</p>		<p>Ongoing. Trials held on tourist vessels. Information packs for vessels participating</p>	<p>Trials to continue/commence on fishing, patrol and research vessels.</p>

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
		in sea-trials outlining how forms/handling guidelines are to be tested and feedback recorded prepared and shared with participants of the trials, as well as in-person meetings when vessels passed through Stanley, Falkland Islands enroute to SGSSI.	
Activity 4.4 Finalise bird-handling guidelines, based on feedback from field-trials; present to GSGSSI.		N/A - Scheduled for Y3 of project.	Incorporate feedback from sea-trials of handling guidelines, commence finalisation of guidelines, including translation into other languages.
Activity 4.5 Facilitate an online forum with other UKOTs and key stakeholders to showcase and share bird-handling guidelines. (Online forum to showcase bird-strike reporting forms – Activity 2.5 – will be held at the same time).		N/A - Scheduled for Y3 of project.	Identify participants to invite to forum; plan and execute forum.
Activity 4.6 Prepare Information Document for partner networks and stakeholder meetings (e.g. ACAP PaCSWG and SBWG; GSGSSI Stakeholder Meeting; IAATO Annual meeting; COLTO; CCAMLR Scientific Committee). (Combine with Activity 1.3 and 2.5).		N/A - Scheduled for Y3 of project.	Prepare Information Documents outlining development process and final reporting forms and bird-handling guidelines for submission/circulation to relevant stakeholder/network meetings.
Output 5. (Insert agreed output) Strategic programme of prioritised research to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ, including identification of resourcing options, is formulated.	5.1 Consultation session held to formulate future programme of prioritised work to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ. (By Y3Q3). 5.2 Programme concept and next steps presented to GSGSSI. (By Y3Q4).	5.1 Scheduled for Y3 of project. 5.2 Scheduled for Y3 of project.	
Activity 5.1 Hold consultation session with project partners and key stakeholders to formulate future programme of prioritised work to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ.		N/A - Scheduled for Y3 of project	Plan and execute a consultation session to identify priority next steps to enhance understanding of factors causing bird-strike in SGSSI MZ and measures that can be developed to mitigate any threat.

Project summary	SMART Indicators	Progress and Achievements April 2021 - March 2022	Actions required/planned for next period
Activity 5.2 Based on outcomes of consultation session, develop programme concept and identify resourcing options and next steps. Devise a programme for development of additional resources (e.g. presentations, videos) to raise awareness of the collaborative work between project partner sectors.		N/A - Scheduled for Y3 of project	Use outputs from Activity 5.1 to develop a proposed research plan.

Annex 2: Project’s full current logframe as presented in the application form (unless changes have been agreed). [This logframe is that agreed after submission Change Requests CR21-125]

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>Impact:</p> <p>Improved monitoring of the impact bird-strike has on seabird populations, influencing management decisions and mitigation to reduce bird-strike; enhanced survival through improved capabilities of crew members caring for landed birds.</p> <p>(Max 30 words) Current word count: 30</p>			
<p>Outcome:</p> <p>Practical tools and guidelines for long-term monitoring of bird-strike in SGSSI, enhanced survival of landed birds, and the foundation of a strategic research programme to manage and reduce bird-strike.</p> <p>(Max 30 words) Current word count: 29</p>	<p>0.1 Bird-strike reporting form that captures information required to assess magnitude and causes of bird-strike occurring on vessels operating in SGSSI Maritime Zones (MZ) is developed. Form available in at least five of the most common languages used by crew and staff on vessels operating in SGSSI MZ. (By Y3Q2).</p>	<p>0.1a Reports published detailing development, testing, and assessment of bird-strike reporting forms.</p> <p>0.1b Finalised bird-strike reporting form with instructions for completion and submission, in multiple languages, presented to GSGSSI for distribution to all vessels operating in SGSSI MZ.</p>	<p>Project progresses as outlined in project time-table.</p> <p>Staffing turn-over in lead and partner organisations enables project delivery.</p> <p>Willingness of other stakeholders to engage in activities.</p>
<p>0.2 Bird-strike reporting forms established, tested and integrated into GSGSSI national information management system based on process and procedures for collating/archiving bird-strike data. (By Y3Q3).</p>	<p>0.2a Reports published detailing development, testing, and assessment of data input and storage facilities and guidelines.</p> <p>0.2b Guideline documents for data input, storage and use available upon request from GSGSSI.</p>		
<p>0.3 Bird-handling and care guidelines prepared for distribution by GSGSSI across the four different fleets that operate in SGSSI MZ. Guidelines available</p>	<p>0.3a Reports published detailing development, testing, and assessment of bird-handling and care guidelines.</p>		

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
	<p>in at least five of the most common languages used by crew and staff on vessels operating in SGSSI MZ. (By Y3Q2).</p>	<p>0.3b Finalised bird-handling and care guidelines, in multiple languages, presented to GSGSSI for distribution to all vessels operating in SGSSI MZ.</p>	
	<p>0.4 Prioritised programme of work outlining activities and next steps to enhance understanding of factors causing bird-strike in SGSSI MZ and measures that can be developed to mitigate threat is formulated and agreed. (By Y3Q4).</p>	<p>0.4a Programme concept note published detailing prioritised activities and resourcing options. 0.4b GSGSSI strategies and action plans demonstrate the intention to consider actions proposed in research project concept note.</p>	
<p>Output 1. GSGSSI and key stakeholders have informed overview of the incidence and causes of bird-strike, and the effectiveness of existing mitigation measures to reduce strike rates used in regions/areas outside of SGSSI.</p>	<p>1.1 Desk-based literature review of the incidence and causes of bird-strike, and an assessment of bird-strike mitigation measures in use in areas outside of SGSSI completed and delivered to Project partners and key stakeholders (by Y2Q1).</p>	<p>1.1a Literature review (incorporating assessment results) published and available on JNCC and GSGSSI websites. 1.1b Literature review (incorporating assessment results) listed as an Information Document and available to participants at Partner and stakeholder network meetings – e.g. ACAP Working Group meetings, IAATO, COLTO and CCAMLR Scientific Committee annual meetings.</p>	<p>Information about the incidence of bird-strike rates and mitigation measures in use elsewhere is accessible and/or made available to the project.</p>
<p>Output 2. Standardised bird-strike reporting forms that capture all essential information to enable monitoring and assessment of bird-strike in SGSSI MZ developed and presented</p>	<p>2.1 Bird-strike reporting form and user guidelines – process for development of bird-strike reporting forms and user guidelines devised. (By Y2Q1).</p>	<p>2.1a Minutes of consultation session held between project partners and key stakeholders confirm agreed bird-strike reporting form development process.</p>	<p>Agreement can be reached on development process. Other key stakeholders participate in discussions.</p>

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>to GSGSSI for implementation across fleets operating in SGSSI MZ.</p>	<p>2.2 Bird-strike reporting form and user guidelines – beta-version of bird-strike reporting form and user guidelines agreed by project partners. (By Y2Q2).</p>	<p>2.2a Minutes of PMG meeting confirm beta-version of bird-strike reporting form is agreed.</p> <p>2.2b Beta-version of bird-strike reporting form in project file-structure.</p>	<p>Willingness by vessel operators to undertake/participate in trials to test bird-strike reporting forms.</p> <p>There are incidences of bird-strike during the trial periods.</p> <p>In regard to engaging sufficient IAATO member volunteers to participate in the trials, there has been sufficient recovery from the impact of the global Covid-19 pandemic on the tourist industry and companies are operating in SGSSI. (In the 2020-21 tourist season, no IAATO member vessels were operating in SGSSI).</p> <p>In regard to engaging sufficient fishing company volunteers to participate in the trials, the ongoing Covid-19 pandemic does not interrupt fishing operations. (In the 2020 fishing season, Covid-19 did present operational challenges to GSGSSI and licensed fishing companies, but the fishing season did proceed).</p> <p>In regard to engaging sufficient patrol and research vessel volunteers to participate in the trials, the ongoing Covid-19 pandemic does not interrupt patrol and research operations. (In 2020, Covid-19 did present operational challenges to GSGSSI and the Ministry</p>
	<p>2.3 Bird-strike reporting form and user guidelines – field trials of bird-strike reporting form and user guidelines completed on at least five vessels. (By Y2Q4).</p>	<p>2.3a Photos of crew members or project staff as they participate in the trials – e.g. completing the forms, identifying landed birds, inspecting areas on the vessel where landed birds may be found.</p> <p>2.3b Report published summarising outcome of field trials; report includes list of changes/enhancements to be incorporated into final version of form.</p>	
	<p>2.4 Bird-strike reporting form and user guidelines – finalised bird-strike reporting form and user guidelines, translated into at least five of the most commonly used languages on vessels operating in SGSSI MZ, agreed by project partners and presented to GSGSSI. (By Y3Q2).</p>	<p>2.4a Minutes of PMG meeting confirm final version of bird-strike reporting form is agreed.</p> <p>2.4b Final version of bird-strike reporting form (in multiple languages) in project file-structure.</p> <p>2.4c Email train confirming final version of bird-strike reporting form and recommendations for implementation sent to and received by GSGSSI.</p> <p>2.4d Requirement for vessels to fill in newly developed forms added to the GSGSSI Regulated Activities Permit</p>	

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
	<p>2.5 Finalised bird-strike reporting form and user guidelines shared with other UKOTs and key stakeholders via online forum, and promoted to at least one network of each project partner. (By Y3Q4).</p>	<p>(RAP) permit process or fishing vessel licencing requirements.</p> <p>2.5a Presentation material in project file-structure and on partner websites, invite and attendance list to online forum, and record of forum question and answer session in project file structure.</p> <p>2.5b Report outlining new SGSSI bird-strike reporting form and recommendations for use listed as Information Document and available to participants at partner and stakeholder network meetings – e.g. ACAP Working Group meetings, IAATO, COLTO and CCAMLR Scientific Committee annual meetings.</p> <p>2.5c Social media and website content – e.g. tweets, videos, newsletters.</p>	<p>of Defence, but patrolling and research activities did proceed).</p> <p>Other UKOTs and key stakeholders participate in the online forum.</p>
<p>Output 3. Standardised data input and storage facilities and guidelines for data returned in bird-strike reporting forms, and which integrates with the existing national information management system of GSGSSI, is developed.</p>	<p>3.1 Beta-version of data input and storage facilities and guidelines for bird-strike data devised and agreed with GSGSSI data manager. (By Y2Q3).</p> <p>3.2 Data input and storage facilities and guidelines tested using all data returned in bird-</p>	<p>3.1a Minutes of consultation session held between PMG and GSGSSI data manager confirm key elements to take into consideration when designing data input forms and storage facilities.</p> <p>3.1b Beta-version of data input and storage facilities and guidelines set-up on GSGSSI data-management system.</p> <p>3.2a Report published summarising outcome of data management system tests; report includes list of</p>	<p>Data from bird-strike reporting forms can be translated into a format compatible with the existing GSGSSI data management system.</p>

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
	strike reporting form trials. (By Y3Q1).	changes/enhancements to be incorporated into final version.	
	3.3 Finalised data input and storage facilities and guidelines agreed by project partners and presented to GSGSSI. (By Y3Q3).	3.3a Data input and storage facilities for bird-strike reporting incorporated into GSGSSI data management system is live and ready to receive and archive data. 3.3b Data management guidelines. 3.3c Email train confirming final version of data input and storage facilities and guidelines for implementation sent to and received by GSGSSI.	
<p>Output 4.</p> <p>Easy-to-follow guidelines for non-bird specialists showing how to handle and care for birds that may be injured after striking and landing on vessels developed and presented to GSGSSI for circulation across fleets operating in SGSSI MZ.</p>	4.1 Bird-handling guidelines – process for development of bird-handling guidelines devised. (By Y2Q1).	4.1a Minutes of consultation session held between PMG and key stakeholders confirmed agreed bird-handling guidelines development process.	<p>Agreement can be reached on development process.</p> <p>Willingness by vessel operators to undertake/participate in trials to test bird-handling guidelines.</p> <p>There are incidences of bird-strike during the trial periods.</p> <p>In regard to engaging sufficient IAATO member volunteers to participate in the trials, there has been sufficient recovery from the impact of the global Covid-19 pandemic on the tourist industry and companies are operating in SGSSI. (In the 2020-21 tourist season, no IAATO member vessels were operating in SGSSI).</p>
	4.2 Bird-handling guidelines – beta-version of bird-handling guidelines agreed by project partners. (By Y2Q2).	4.2a Minutes of PMG meeting confirm beta-version of bird-handling guidelines are agreed. 4.2b Beta-version of bird-handling guidelines in project file-structure.	
	4.3 Bird-handling guidelines – field trials of bird-handling guidelines completed on at least five vessels. (By Y2Q4).	4.3a Photos of crew members or project staff as they participate in the trials. 4.3b Report published summarising outcome of field trials; report includes	

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
		list of changes/enhancements to be incorporated into final version of guidelines.	<p>In regard to engaging sufficient fishing company volunteers to participate in the trials, the ongoing Covid-19 pandemic does not interrupt fishing operations. (In the 2020 fishing season, Covid-19 did present operational challenges to GSGSSI and licensed fishing companies, but the fishing season did proceed).</p> <p>In regard to engaging sufficient patrol and research vessel volunteers to participate in the trials, the ongoing Covid-19 pandemic does not interrupt patrol and research operations. (In 2020, Covid-19 did present operational challenges to GSGSSI and the Ministry of Defence, but patrolling and research activities did proceed).</p> <p>Other UKOTs and key stakeholders participate in the online forum.</p>
<p>4.4 Bird-handling guidelines – finalised bird-handling guidelines, in a least five of the most commonly used languages on vessels operating in SGSSI MZ, agreed by project partners and presented to GSGSSI. (By Y3Q2).</p>	<p>4.4a Minutes of PMG meeting confirm final version of bird-handling guidelines are agreed.</p> <p>4.4b Final version of bird-handling guidelines (in multiple languages) in project file-structure.</p> <p>4.4c Email train confirming final version of bird-handling guidelines and recommendations for implementation sent to and received by GSGSSI.</p>		
<p>4.5 Finalised bird-handling guidelines shared with other UKOTs and key stakeholders via online forum, and promoted to at least one network of each project partner. (By Y3Q4).</p>	<p>4.5a Presentation material in project file-structure and on partner websites, invite and attendance list to online forum, and record of forum question and answer session in project file structure.</p> <p>4.5b Report outlining new SGSSI bird-handling guidelines and recommendations for use listed as Information Document and available to participants at partner and stakeholder network meetings – e.g. ACAP Working Group meetings, IAATO, COLTO and CCAMLR Scientific Committee annual meetings.</p>		

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
		4.5c Social media and website content – e.g. tweets, videos, newsletters.	
<p>Output 5.</p> <p>Strategic programme of prioritised research to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ, including identification of resourcing options, is formulated.</p>	<p>5.1 Consultation session held to formulate future programme of prioritised work to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ. (By Y3Q3).</p> <p>5.2 Programme concept and next steps presented to GSGSSI. (By Y3Q4).</p>	<p>5.1a Minutes of consultation session held between PMG and key stakeholders confirm agreed future programme of work for use/development of mitigation measures to reduce bird-strike.</p> <p>5.3a Programme concept note detailing prioritised activities and resource options in project file-structure.</p> <p>5.3b Email train confirming programme concept and next steps sent to and received by GSGSSI.</p> <p>5.3c GSGSSI strategies and action plans demonstrate the intention to consider actions proposed in research project concept note.</p>	<p>Future programme of work is required.</p> <p>If first assumption is met, agreement can be reached on desired programme of work.</p> <p>Commitment can be given from project partners to pursue future opportunities.</p>
<p>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)</p> <p>1.1 Critical review of existing literature (published and grey) on incidence of bird-strike in regions/areas outside of SGSSI MZ.</p> <p>1.2 Identification and assessment of effectiveness of bird-strike mitigation measures used in regions/areas outside of SGSSI via SWOT analysis.</p> <p>1.3 Prepare summary report and Information Documents detailing key findings of literature review and assessment of effectiveness of bird-strike mitigation measures for Project partners and partner networks and stakeholder meetings (e.g. ACAP Population and Conservation Status Working Group (PaCSWG) and Seabird Bycatch Working Group (SBWG); GSGSSI Stakeholder Meeting; IAATO Members meeting; Coalition of Legal Toothfish Operators (COLTO); CCAMLR Scientific Committee).</p> <p>2.1 Hold consultation session with project partners and key stakeholders to explore development process of the bird-strike reporting forms (e.g. format, essential components, field-trials, languages, timings etc.). (Consultation session on development process of bird-handling guidelines – Activity 4.1 – will be held at the same time).</p> <p>2.2 Develop beta-version of bird-strike reporting form.</p> <p>2.3 Field trials of bird-strike reporting forms on at least five vessels. (Field-trials of bird-handling guidelines – Activity 4.3 – will be conducted at the same time).</p>			

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>2.4 Finalise bird-strike reporting form, based on feedback from field-trials; present to GSGSSI.</p> <p>2.5 Facilitate online forum with other UKOTs and key stakeholders to showcase and share bird-strike reporting forms. (Online forum to showcase bird-handling guidelines – Activity 4.5 – will be held at the same time).</p> <p>2.6 Prepare Information Document for partner networks and stakeholder meetings (e.g. ACAP PaCSWG and SBWG; GSGSSI Stakeholder Meeting; IAATO Annual meeting; COLTO; CCAMLR Scientific Committee).</p> <p>3.1 Consult with GSGSSI on the existing national data management system, and working with GSGSSI data manager, design beta-version of data input and storage procedures for bird-strike data.</p> <p>3.2 Test system and procedures using data returned from bird-strike reporting form trials.</p> <p>3.3 Finalise data management system and guidelines, based on feed-back from trials; present to GSGSSI.</p> <p>4.1 Consultation session with project partners and key stakeholders to explore development process of the bird-handling and care guidelines (e.g. review of current materials, format, essential components, field-trials, languages, timings etc.). (Consultation session on development process of bird-strike reporting forms – Activity 2.1 – will be held at the same time).</p> <p>4.2 Develop beta-version of bird-handling guidelines.</p> <p>4.3 Field trials of bird-handling guidelines on at least five vessels. (Field-trials of bird-strike reporting forms – Activity 2.3 – will be conducted at the same time).</p> <p>4.4 Finalise bird-handling guidelines, based on feedback from field-trials; present to GSGSSI.</p> <p>4.5 Facilitate an online forum with other UKOTs and key stakeholders to showcase and share bird-handling guidelines. (Online forum to showcase bird-strike reporting forms – Activity 2.5 – will be held at the same time).</p> <p>4.6 Prepare Information Document for partner networks and stakeholder meetings (e.g. ACAP PaCSWG and SBWG; GSGSSI Stakeholder Meeting; IAATO Annual meeting; COLTO; CCAMLR Scientific Committee). (Combine with Activity 1.3 and 2.5).</p> <p>5.1 Hold consultation session with project partners and key stakeholders to formulate future programme of prioritised work to advance use and/or development of mitigation measures to reduce bird-strike in SGSSI MZ.</p> <p>5.2 Based on outcomes of consultation session, develop programme concept and identify resourcing options and next steps. Devise a programme for development of additional resources (e.g. presentations, videos) to raise awareness of the collaborative work between project partner sectors.</p>			

Annex 3: Standard Indicators

It is our understanding that as an existing project we are not required to complete this section in this reporting round. We will endeavour to do so for the next.

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	X
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	X
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Do you have hard copies of material you need 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.	N/A
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 15)?	N/A
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	