Darwin Plus:
Overseas Territories Environment and Climate Fund
Annual Report

To be completed with reference to the "Writing a Darwin/IWT Report" Information Note: (https://dplus.darwininitiative.org.uk/resources/reporting-forms-change-request-forms-and-terms-and-conditions/). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2021

Darwin Plus Project Information

Project reference	DPLUS067
Project title	Regional collaboration to achieve sustainable Caribbean fisheries management
Territory(ies)	Anguilla, British Virgin Islands (BVI), Turks and Caicos (TCI)
Lead organisation	Centre for Environment, Fisheries and Aquaculture Science (CEFAS)
Partner institutions	Department of Fisheries and Marine Resources (DFMR, in Anguilla), Conservation and Fisheries Department (CFD, in BVI), and Department of Environment and Coastal Resources (DECR, in TCI)
Grant value	£228,584
Start/end dates of project	01/04/2017-31/03/2022
Reporting period (e.g. Apr 2020-Mar 2021) and number (e.g. Annual Report 1, 2)	Apr2020-Mar2021, AR4
Project Leader name	Rosana Ourens
Project website/blog/social media	Regional collaboration to achieve sustainable fisheries in the Caribbean - Cefas (Centre for Environment, Fisheries and Aquaculture Science)
Report author(s) and date	Rosana Ourens, 30/04/2021

Note: Please remove the blue guidance notes from all sections before submission

Evaluation of projects: All Annual Reports are reviewed by a Monitoring and Evaluation (M&E) consultant. They will use your original application and, where applicable, logical framework (or the most recent approved logframe) as a basis of their review. Therefore, it is important that you refer back to this document when writing this report. The review acts as an independent viewpoint of whether the project is making the progress it states based upon the report and associated evidence submitted. Therefore, it is strongly recommended that you submit the Means of Verification listed in your logframe to support your assertions of progress.

When making statements of progress or impact please ensure you refer as much as possible to sources of evidence including the indicators and means of verification outlined in your project logframe. For example, when reporting training events, some measure of effectiveness is required as well as the numbers participating and duration. In order to comment on quality of work it is useful to share with the reviewer project documentation such as training manuals, meeting reports, training feedback etc.

Please note: Major changes in the logframe (e.g., Output and Outcome level changes) must be approved. You can do this through submission of a Change Request form which can be found here: https://dplus.darwininitiative.org.uk/resources/reporting-forms-change-request-

forms-and-terms-and-conditions/. Submission of changes to the project design in the annual report does not constitute notification. Changes requiring formal approval include, but are not restricted to: a delay or change in project implementation causing a re-budget; staff changes (relating to CVs provided at application stage); changes in Outputs or Outcome; project termination. If not clear whether a change requires formal approval please check with LTS.

Report formats: This report should be sent in MS Word only (if you have concerns about layout you may submit a PDF but this is in addition to a Word version). If you have already answered a question in one section, do not repeat the information in another section, but refer back to the section number.

Each section contains questions to guide the completion of the report. **Not all guiding questions have to be answered – Project Leaders should exercise judgement as to those most relevant to the project.**

The assumption is that project partners will play an active role in writing the report.

Please remember that your report will be made public. If there are specific sections that you would like treated in confidence, please ensure these are clearly identified as we can remove sensitive material before posting on the website.

1. Project summary

Caribbean UKOTs possess rich marine environments with significant resources. Fisheries comprise a significant component of the resources and often local economies. Consequently, recent Joint Ministerial Council (JMC) communiqués have recognised the need for policies to support sustainable fisheries, and the UKOT Biodiversity Strategy identified "*Conservation and Sustainable Use of the Marine Environment*" as a priority.

In British Virgin Islands (BVI), Turks and Caicos (TCI) and Anguilla (Fig. 1) conch and spiny lobster are commercially the most important fishing resources, and they support the livelihood of many families. The lack of fisheries data, science capacity, and effective legislation and enforcement, have all been identified as barriers to achieving sustainable exploitation. While in all three UKOTs there is Government support for sustainable exploitation, the lack of capacity and evidence to inform decision making, and broader regional cooperation between UKOTs, has hampered progress to date.

This project will provide the three UKOTs with the skills, knowledge, data, and tools to conduct reliable evaluations of the status of their stocks in the medium to long run and to use scientific evidence to support fisheries management decisions. The project has four main sections: 1) data collection, 2) data analysis and assessment, 3) fisheries management, and 4) capacity building and collaboration.

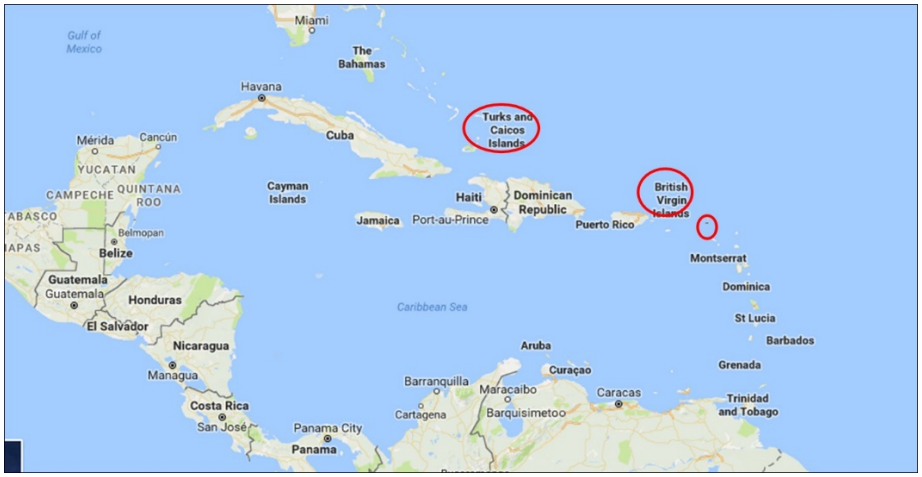

Figure 1. Map of the Caribbean. The three host countries are highlighted in red.

2. Project stakeholders/partners

Darwin Plus projects should engage/support key stakeholders. Please describe the support or engagement between all formal partners and key stakeholders and this project, and how this has developed over the last year of the project. Please focus on:

- Whether partnerships were based on demand stemming from the host territory/ies and the extent to which all partners are involved in project planning, monitoring and evaluation and decision making.
- Particular achievements, lessons, strengths or challenges with the partnership(s), and how have the latter been met.

Please also describe how local communities and technical specialists who are not formally partners in the project have been involved as appropriate.

Please support comments with evidence.

Cefas regularly communicates with the three partner institutions to discuss the progress of the project, request data, clarify information, etc. The communication channels are WhatsApp, phone calls, or emails, depending on the subject and the individual being communicated with.

The main tasks of the partners in the project are: 1) participate in the design of activities providing ideas and local knowledge; 2) collect fishing data and share it electronically with Cefas; 3) actively participate in the training activities programmed; 4) assist Cefas with the organisation of the training activities when they are hosted in their country; 5) collaborate with Cefas during the visits in-country; 6) discuss with Cefas the progress of the project and communicate any issue or potential obstacle to achieve the goals; 7) participate in the decision-making of the project.

Communication with the partners has been crucial to adapt the activities of the project to the local needs to achieve the outcome of the project (the new activities discussed with the UKOTs were approved by Darwin in 2018). In addition, the three partner institutions have greatly assisted Cefas staff during their visits to the UKOTs each year: they have provided advice on the logistics for the trips (i.e., best dates, accommodation, rental cars, etc.); arranged interviews, meetings, and informal chats with the fishing industry; assisted with the organization of workshops; and sent regular updates with the new data.

No trips have been carried out last year because of COVID-19 (see section 12). The main tasks during the reporting period were to finalize the stock assessments for the three UKOTs, the phone app CariCatch, and the database for the sampling programme. This desk work was conducted by CEFAS with the input of the partner institutions (e.g., answering questions regarding their fisheries, or confirming and clarifying data). A picture of the videoconference held between CEFAS and the CFD in the BVI to discuss the progress of the project was included in Annex 3 as a proof of the communication. A webinar was also held in April 2021 to demonstrate the partner institutions how to use the database created by CEFAS to collect sampling data. Staff from the three partner institutions actively participated (Annex 4).

The communication with Anguilla and the BVI was not as good as expected regarding the CariCatch app (see activity 1.11). Whereas both partner organizations agreed to use the app to collect fishing data on a routinely basis, questions were raised by the IT departments in both UKOTs regarding the infrastructure resources needed to host the app and the future maintenance costs. The involvement of numerous parties in the migration of the app (app developers, Cefas, UKOT government project leads, their legal and IT teams) slowed down the communication and the decision-making, causing a delay in the delivery of this product.

The fishing industry has been directly and indirectly involved on this project. Informal chats as well as formal interviews have been held with fishers in the three UKOTs at the beginning of the project (Annex 5). A fisher from the TCI participated in the first workshop hold in Anguilla in 2018, and three meetings with the fishing industry in the BVI were held so far to discuss diverse topics relevant for the project (Annex 6). In addition, the data used to assess the stocks (activity 2.4) came from the fishing industry (fishers in the BVI and Anguilla, and processing plants in

the TCI). However, it is worth to note the fishers in Anguilla are not engaged and their collaboration with DFMR is very limited, as well as the fisheries data provided for the assessments (see section 3.2-Output 1).

3. Project progress

3.1 Progress in carrying out project Activities

Only the activities that have been fully or partly conducted in 2020/2021 are included in this section. All activities expected during the project are listed in the logframe (Annexes 1 and 2).

OUTPUT 1. DATA COLLECTION

Activity 1.3. Develop and issue Maturity Model questionnaire to fisheries departments to monitor project progress

The maturity model questionnaire was completed by the fisheries departments at the beginning of the project as programmed. However, the respondents in the TCI and Anguilla are currently not involved in the project and will not be able to answer the questionnaire at the end of the project to evaluate achievements. As recommended in the Mid Term Review, the questionnaire was sent to DFMR and DECR again to consider staffing changes. (Annex 7)

Activity 1.8. Assess the effectiveness of the new BVI data collection programme

A new data collection programme was implemented in 2018/2019 with Cefas' assistance. As part of the programme, fisheries officers from CFD visit the main landing areas to sample a representative number of the fishing boats. Landing and effort data are collected as well as biological information from a representative sample of the landings. The data will be used to evaluate the status of the stocks in the BVI in general, and in the Horseshoe Reef Fisheries Protected Area specifically (activity 1.9).

The effectiveness of the programme was evaluated by summarising the data collected so far and using them to assess the feasibility of evaluating the status of the spiny lobster and conch stocks. Data are presented in the report on the stock status (see activity 2.6 below). Cefas has received data of 1,676 and 734 lobsters that were measured from 41 trips (4 vessels) and 12 trips (2 vessels) in 2018 and 2019, respectively. In the same period, 30 conchs were measured from one fishing trip only. The data were used to produce the first spiny lobster stock status evaluation. Data were too scarce to evaluate the conch population. A report was produced and shared with the BVI (Annex 8).

This activity related to measurable indicator (c) of main outcome in Annex 1 as well as d) of output 1.

Activity 1.11. Design and test a phone application for the fishermen

The app development company Quytech has developed a mobile app for the fishermen to report information about their daily fishing activity. Fishers will be asked to report fishing effort, fishing area, weight landed by species, and the main market (local restaurants, processing plants, exports, etc.), which will help with the development of indicators of sustainability and stock assessments in the future. The information will be stored in a database hosted by the partners on their server for further analyses. Fishers can also see and download summary reports of their fishing activity. Annex 9 contains a video showing the information that will be collected by the app.

While the TCI has collaborated with QuyTech providing the infrastructure details for the migration of the app and doing some tests, Anguilla and BVI have not provided the information needed and it is not clear if they will use it in the future (see comments in section 2). This miscommunication has delayed the release of the app and has prevented TCI from using this deliverable. To solve this problem, it was agreed with the partners and approved by Darwin in 2020/21 that it would be preferable to launch independent mobile apps in the three UKOTs, as it would be simpler for the TCI to maintain and further develop if they wish to, their own app beyond the project.

The phone app is currently being upgraded to work with the newest software of Apple and Android (Annex 10), and it will be migrated to the TCI government server soon. After that, fishers in the TCI will be able to download the app from PlayStore and Apple Store and start reporting data. The app will be tested for a month with QuyTech's assistance. The project will be in charge of solving any problem with the app during the life of the project, but after that will be responsibility of the partner institutions.

The infrastructure resources in Anguilla and the BVI are very limited, and the IT departments have raised concerns regarding their capacity to host the app. Cefas has requested the partners of the project to identify with their IT departments what resources are needed in case the project can provide them. If a compromise is not achieved in the life of the project, the source code for the application and all the related data will be shared with the partner institutions. This will allow them to implement the phone app in the future.

This activity related to measurable indicators (b), (c) and (g) of output 1 in Annex 1.

Activity 1.12. Design and test the use of Bluetooth callipers for data collection. In 2019 each UKOT was provided with a Dell Latitude 7212 rugged tablet designed to be used outdoors in rough weather conditions, an electronic calliper, and a Bluetooth adapter (Annex 11). Last year (2020/21), Cefas finalised a database to enter the data recorded with the sampling programme (Annex 12). The database compiles information about the landings, fishing effort, fishing area, and biological data from the landings (e.g., sex, size, and maturity stage of a sample of individuals). The database, used in combination with the tablet and the Bluetooth callipers, allows fisheries officers to electronically record and save the data during the sampling. The size data can be entered either manually or electronically with the Bluetooth system. A webinar was held in April 2021 to show the partners how to use the database in combination with the Bluetooth callipers. The session was recorded, and it can be used to train new staff in the future (Annex 4). This new technology is expected to greatly streamline the data collection system.

This activity relates to measurable indicators (b), (c) and (g) of output 1 in Annex 1.

OUTPUT 2. DATA ANALYSIS

Activity 2.1. Apply data analysis routines to existing datasets to describe historic trends in conch and spiny lobster stocks over time.

All datasets have been analysed and the results are included in the stock assessment reports (see activity 2.6).

This activity related to measurable indicator (a) of output 2 in Annex 1.

Activity 2.4. Assess the sustainability of TCI conch and spiny lobster exploitation levels

The status of the conch and spiny lobster stocks in the TCI have been analysed (see activity 2.6). A summary of these analyses is presented below, under Activity 2.6.

This activity related to measurable indicators (a) of output 2 in Annex 1.

Activity 2.5. Produce stock assessment toolkits for both species in all 3 UKOTs

The workshop on stock assessment was postponed to 2021/2022 due to COVID-19 (see section 12). Material is being prepared at Cefas with focus on data exploration and assessment methods for data limited stocks. Books have been ordered to be distributed to the partners at the workshop. These have been chosen to support essential aspects of the toolkit – using R, fish biology and fisheries statistics and stock assessment methods.

This activity related to measurable indicators (b) of output 2 in Annex 1.

Activity 2.6. Produce stock status reports for both species in all 3 UKOTs

Three individual stock status reports, one for each UKOT, have been written. The stocks in Anguilla could not be evaluated as the data was very limited and outdated. The data from their landing sampling programme (2009-2017) and the data collected from the interviews with the fishers (activity 1.14 in Annex 2) was used to identify temporal trends on fisheries performance indicators (Annex 13).

The stocks in the BVI were expected to be evaluated using the historical data collected with the logbooks, but unfortunately the information was limited, patchy, and it did not represent well the fisheries (Annex 8). The evaluation of the stocks was therefore based on the data collected with the sampling programme implemented at the end of 2018 (activity 1.8). A length-based indicators method was applied to the spiny lobster stock, but no quantitative analysis could be performed for the conch stock as no time-series information was available at the time of writing this report (Data available covers 30 samples from a single fishing trip; Annex 8).

The stocks in the TCI were assessed using the landing data provided by the processing plants and the length data collected by DECR on a routine basis. Three different length-based methods often applied to data-limited stocks were used to assess the spiny lobster stock (length-based indicators, mean length mortality, and length cohort analysis). A surplus production model in continuous time (SPiCT) was explored in conch but the lack of contrast in the data produced high uncertainty in the outputs and it was not possible to determine the status of the stock. The report cannot be shared yet as it is being internally reviewed in Cefas.

The analyses showed the spiny lobster stocks in the BVI and the TCI are likely to be exploited above maximum sustainable yield reference points, although the results are not conclusive given the limited data available. The reports include recommendations to improve the input data in the models as well as management recommendations when possible.

The reports for the BVI and Anguilla have been shared with the partner institutions. The report for the TCI is being reviewed within CEFAS and it is expected to be ready in May 2021.

This activity related to measurable indicators (a) of output 2 in Annex 1.

OUTPUT 3. SUSTAINABLE MANAGEMENT

Activity 3.1 Assess the strengths and weaknesses of existing fisheries management approaches in each UKOT

Cefas ran a 3-day workshop on fisheries management in 2019, and a SWOT (strengths, weaknesses, opportunities, threats) analysis of fisheries governance was conducted for the 3 UKOTs (Annex 14). This was followed by discussions on the specific goals of each UKOT, covering aspects such as sustainable fishing practices, and on their respective options for the development and implementation of management plans. The information collected during this workshop is being summarised in the report ‘UKOT Fisheries Management Review’, which will be available in the first half of the year 2021/2022.

This activity related to measurable indicator (a) of output 3 in Annex 1.

Activity 3.2. Using a collaborative approach, involving fisheries managers and fishers, recommended management options based on best practice identified in other UKOTs (or beyond).

Management options for lobster and conch stocks were discussed during the workshop on fisheries management in 2019. The report ‘UKOT Fisheries Management Review’ will include recommendations to improve fisheries management, and a set of potential regulations for these resources will be provided. These recommendations are based on the discussions held at the workshop, the results of the stock assessments, and the approaches used by other countries to manage resources with similar life histories.

This activity related to measurable indicator (a) of output 3 in Annex 1.

Activity 3.3. Using the outcomes of the wider project, the relevant government fisheries departments will collaborate to develop a generic conch and spiny lobster fishery management plan, which can be built upon and refined to meet local management needs. A locally specific management plan will be developed for TCI.

A fisheries management plan for TCI is being designed (see activity 3.4). Additionally, co-management plans applied to benthic resources in diverse countries have been revised (Annex 15) and a template for the co-management plan in the BVI will be provided. However, the plan should be designed by the Fisheries Management Council, which has not been created yet

(see activity 3.6 in Annex 1), with feedback from the fishing community. Cefas will assist CFD next year with the implementation of the Fisheries Management Council and the co-management in Anegada as required.

Activity 3.4. Draft TCI species management plans and recommendations presented to Government

DECR, with CEFAS collaboration, is updating the previous TCI fisheries management plan 2005-2010. The draft plan is a confidential document and cannot be shared. An email between CEFAS and DECR was attached as a proof of the activity (Annex 16).

Activity 3.8. Assess the effectiveness of the management measures implemented by the Fisheries Management Council In BVI

BVI has not yet officially implemented the Horseshoe Reef FPA or the Fisheries Management Council and therefore there are no regulations to assess.

This activity will not be carried out during the project because the new management regulations must be in place for a few years before evaluating their impact on the stocks. It is expected that Cefas visits the three UKOTs at the end of the project to ensure legacy. During this visit, the methodology to evaluate the effectiveness of any management regulation will be discussed with CFD.

This activity related to measurable indicators (e) of output 3 in Annex 1.

OUTPUT 4. CAPACITY BUILDING AND COLLABORATION

Activity 4.1. Deliver three 3-day training workshops, one hosted in each UKOT

2 members of each partner organization were expected to visit CEFAS this year to attend a course on stock assessment and exchange experience and knowledge on fisheries science. These activities were postponed to 2021/2022 due to COVID-19 (section 12).

3.2 Progress towards project Outputs

Report on how overall progress has been made towards the project Outputs and how likely the project is to achieve them by its close. Address each Output in turn, identifying the baseline condition, change recorded to date, and the source of evidence for this change. Please comment on how you are measuring the Output indicators and whether these are still the best indicators. Please support comments with evidence and use indicators to support progress towards Outputs.

Output 1. Implement new or improve existing conch and spiny lobster fisheries data collection approaches in the three UKOTs.

The first output of the project has been mostly achieved already. The data provided by the processing plants in the TCI was collated and combined in a single dataset for the analyses (measurable indicator *h* in Annex 1). The data is provided in independent spreadsheets every year, and the data of each week is in a different sheet. A code in R was created to automatically combine all data in a single dataset, and the code was shared with DECR (Annex 17). The data was used in the stock status report.

In Anguilla, the fishing grounds for spiny lobster were identified and fishers were interviewed to identify the development of the fishery (Annex 13, measurable indicators *e* and *f*). A new landing sampling form was designed to collect information regarding landings, fishing effort, and biological data (Annex 18), measurable indicator *g*). CEFAS staff collaborated with DFMR for the implementation of the programme during a visit in 2018 (Annex 19). Nevertheless, the data collected so far was very limited because fishers are not willing to cooperate with DFMR and the current Fisheries Act does not provide legal support to DFMR to demand the data. Although some recommendations were discussed with DFMR to improve the relationship with the fishing community and a workshop was held with the fishing community to iron out their

differences (Annex 13), this political and social issue cannot be solved within the project timeline.

The previous measurable indicators in the BVI are no longer applicable given the poor quality of the data collected in the logbooks (indicators a, b, c, d). The data collection in the BVI was improved by implementing a new sampling programme for conch and lobster that ensures comprehensive data relevant to stock assessments were consistently collected. A preliminary database was also developed for BVI to encourage and facilitate data entry as collected information was not systematically digitised and years of data were lost as a result in the 2017 hurricane (Annex 20). To date, 53 sampled trips are in the database provided to Cefas by the BVI. These include biological information on 2,415 spiny lobsters and 30 conchs (all 30 conchs from a single trip). Conchs were not sampled due to fishers reporting very low to no catches in the Horseshoe reef FPA area (usually their main fishing ground for the species).

Additionally, the three partners of the project were provided with a tablet and a Bluetooth calliper to streamline the biological data collection programmes in the three UKOTs and make them more effective (Annex 11). A comprehensive database, which link with the callipers to efficiently store the information collected, has been also developed and handled to the partners (Annex 12).

The CariCatch app was developed in order to standardise landings data collection and move from paper to digital recording (Annex 9). It will be migrated to the TCI servers in the first half of 2021/22, but it is uncertain if the app will be hosted in Anguilla and the BVI in the project timeline. As a backup plan, the code of the app will be shared with them in case they decide to implement it in the future.

Output 2. Data assessment

Data quality and availability dictate what type of stock status evaluation can be conducted. Data from all 3 UKOTS have now been analysed and reported on. Only data from the TCI and the BVI allowed some level of quantitative stock assessments, with TCI having the most comprehensive datasets, albeit still limiting in terms of how much can be drawn from it. Spiny lobster was assessed in both countries, but challenges remain for conch in both territories due to data limitations of different sources. In the TCI, the lack of contrast in the data lead to meaningless results. More work, including the creation of a robust biomass index and the identification of the stock unit is required to improve the assessment model. In the BVI, a combination of landings data not being consistently recorded historically, with loss of data from hurricane Irma, and conch landings having recently been very sparse, pre-empted an assessment to be conducted. The three reports have been finalised (Annex 8, 13). The report for Anguilla and the BVI were shared with the partners and the report for TCI is being reviewed (measurable indicator a).

The partner institutions will attend a course on data-limited stock assessments. The methods used to assess their stocks will be explained, as well as other methods that they could use in the future when more data become available. The code created to assess their stocks will be shared with them, so the assessments can be replicated (measurable indicator b).

Output 3. Sustainable management

The UKOT Fisheries Management review report is being developed and it will be available in 2021/2022 (measurable indicators a, b, c). It summarizes the information gathered during the workshop on fisheries management (annex 14), informal discussions with the partners and the fishing community regarding fisheries management, literature review, and the outputs of the stock status reports. In addition to identify the strengths and weakness of the governance systems in the three UKOTs, the Fisheries Management review report also includes recommendations to improve fisheries management of conch and lobster. Additionally, the fisheries management plan in the TCI is being updated (measurable indicator d).

Unfortunately, COVID-19 caused delays in the implementation of the Fisheries Management Council and the Horseshoe Reef FPA in the BVI, which are now expected to be in place in 2021/2022 (measurable indicator e). A half day community workshop was successfully held in Anegada (BVI) in 2019/2020 to discuss the co-management of the future Horseshoe Reef FPA.

The meeting was well attended with active participation and positive engagement of the fishers (Annex 21). The creation of the Fisheries Management Council was discussed as well as the implementation of new management regulations for the co-management area. In addition, a 3-day fisheries management workshop took place in Tortola in 2019/2020 where Cefas worked together with the BVI partners on an overview of a management plan for the Horseshoe Reef FPA (Annex 22). Cefas will continue providing support through 2021/22 as part of the expected delivery of an overview of a common fisheries management framework. Specifically, a roadmap detailing the bullet points to consider for the implementation of the co-management will be provided, as well as guidance to develop a co-management plan in Anegada.

Output 4. Training and knowledge exchange initiatives and collaborative working opportunities for UKOT fisheries scientists, managers and fishers.

Two out of the three planned workshops have been successfully delivered: one on fisheries data collection and sampling design, and other on fisheries management (annex 23). The feedback provided by the participants on the quality of the training was very positive in both cases (Annex 24).

The third workshop on stock assessment will take place during the visit of two members of the partner organizations to the UK. The visit was expected last year, but it had to be postponed until 2021/22 because of COVID-19.

Although it is not included in the logframe of this project, a webinar was hold in April 2021 to train the staff of the three partner organizations in using the sampling database created under this project (Annex 4).

3.3 Progress towards the project Outcome

Please report on progress made towards the project Outcome. Please make specific reference to the Outcome indicators including baseline condition and progress to date, and provide evidence against them. Consider the following:

- Are the indicators adequate for measuring achievement of the project Outcome?
- Is the project likely to achieve the Outcome by end of funding? If not, what action will you take to ensure the situation can be improved?

Good progress was made towards the main project outcome: ‘Fisheries managers in the three UKOTs have the skills, knowledge, data and tools to inform sustainable management and exploitation of their commercially important fisheries’.

Before the project, the data collection in Anguilla and the BVI was very poor and the data available was not adequate to assess the status of the stocks. The data collection programme in the TCI was more comprehensive, although some key information, such as total landings, were still unknown. A common problem in the three UKOTs was the limited staff available for data collection and data entry, which has facilitated the loss of several data kept on paper during several hurricanes both in the TCI and the BVI. Whereas the stocks in Anguilla and the BVI have never been assessed using quantitative methods, the stocks in the TCI were evaluated in the past using a surplus production model. However, the results of the model were considered unreliable, and the stocks have not been assessed in the last decade. In addition, the staff in the three partner organisations had limited numerical skills to conduct stock assessments and knowledge on population dynamics. Many of them were not familiar with the software R for statistical computing or Access databases.

Diverse tools have been provided in this project to improve the data available for the stock assessments in the future. The current data collection programmes were reviewed, and their limitations and strengths were discussed with the partners (workshop 1). In collaboration with the three UKOTs, the data parameters that need to be collected in the future were identified, and CEFAS created a database to enter the future data. The project also provided tablets designed to be used outdoors and Bluetooth callipers, that will allow the partners to directly enter the data in the database during the sampling, without the need of using paper forms that have to be automatized later in the office. The CariCatch app will also streamline the data collection process, as it is expected to gradually replace the logbooks forms in paper. In

addition, it can be used to estimate total landings assuming that all fishers submit their fishing data. It is worth to note that the main obstacle in Anguilla to collect data is that the current Fisheries Act is very broad and vague, and it does not provide legal support to DFMR to collect fisheries data. In addition, the fishing industry is not engaged and most of the fishers refuse to collaborate with DFMR. The project is providing DFMR with the tools and skills to effectively collect fisheries data and assess the stocks, as well as advice to improve fisheries management. These tools and skills will be useful for the future when the current issues are solved and DFMR is able to collect fisheries data. Meanwhile, DFMR is likely to fail in its goals of monitoring fisheries.

A baseline assessment of the status of the stocks was produced. Data sources made available from the partners were explored and where possible quantitative assessments were conducted, using previously collected data and data collected from the onset of the project. With the workshop on stock assessments still to be conducted and the toolkit to be provided, together with the tools that will be in place for data collection (catch app for landings and callipers with database for biological sampling), the project will deliver on the objective of supporting each UKOT in building up the capacity to assess the status of their stocks. Additionally, the management plan for the TCI is being updated.

Training and knowledge exchange have been on-going, and two workshops (on fisheries management and design of a sampling scheme) and a webinar (to learn how to use the sampling database in Access) have been held so far. Two staff members of each partner organization will also visit CEFAS next year to exchange more experience and knowledge on data-collection, data analysis, and providing scientific management advice. A course on stock assessment and an introduction to the software R will be held as well during the visit. Although with some delays, the project is delivering, and the outcome is expected to be achieved by the end of the project.

3.4 Monitoring of assumptions

Some of the assumptions have changed since the proposal of this project:

Assumption 1: Fishers will support data collection programmes. The data collection programme in Anguilla has been designed and implemented already. However, only a few fishermen are collaborating, and the number of observations is limited. To improve the situation, Cefas and DFMR have agreed a set of actions to engage fishermen in data-collection (see Annex 13) but they are not in place yet. DFMR is also trying to implement new legislation that authorises DFMR to measure and weigh the landings.

Assumption 2: Available data are robust enough for assessment purposes. Available data were mostly not robust enough for assessment purposes, even the most data-limited methods. Only the status of the spiny lobster stocks of TCI and BVI could be assessed, but still with high uncertainties in the outcomes. All data available were analysed and reported on, for example as temporal trends indicators or through size structure analysis (Annex 8, 13). The stock assessment workshop will aim to provide each UKOT with the tools to assess the status of their stocks as more data become available, following on from the work done during this project to support best data collection practices.

Assumption 3: Fisheries Advisory Council in the BVI was created. Some of the activities of the project relied on the Fisheries Management Council of BVI to be put in place. Since this is still in development in BVI, it will not be possible to provide support and analyses during the lifespan of the current project. Additionally, the work on data collection relies on the fishers catching conch but this has become a problem recently with an increasingly scarce resource.

Assumption 4: logbook database contains sufficient data to develop meaningful indicators. The logbook data was considered unreliable and insufficient to assess the stocks, and consequently other databases were explored. A new monitoring programme has been also put in place to record the data needed for future assessments.

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

The overarching objective of Darwin Plus is to provide support to the UKOTs to achieve strategic long-term outcomes for the natural environment.

- Please describe the progress the project has made in this year to support the achievement of this objective. Please support any comments with evidence.
- What contribution is your project making to key UKOT Government priorities and themes e.g. Environmental Charters, national biodiversity strategies, and environmental action plans etc.
- How is the project working to support the host Territory(ies) to meet their obligations under multi-lateral agreements extended to the UKOTs, particularly those on biodiversity and climate change?

By the end of the project fisheries officers in the BVI, TCI and Anguilla will have the skills, tools and knowledge to design and implement a fisheries policy to preserve the marine ecosystems and enhance the socio-economic development of the fishing communities.

The design of an effective fisheries monitoring programme is the first step towards promoting responsible use of marine resources, as data is needed to identify the status of the stocks and provide scientific advice on management. So far, the project has improved the data-collection programmes in the three UKOTs, assessed the stocks where possible and highlighted where data were lacking and issues in the quality of existing information.

5. OPTIONAL: Consideration of gender equality issues

This year there were 9 women and 5 men involved in the project (excluding third parties), an improvement on first year's 4 women and 8 men. The Project manager (PM) and Project Leader (PL) are both women as are the directors of 2 out of the 3 fisheries departments.

Fishing is often a family business in the Caribbean, and whereas most of the fishers are men, women are often involved in post-catch activities, such as marketing or fish processing. In addition, both conch and lobster fisheries are part of the culture and identity of the Caribbean society. For example, the lobster festival in Anegada (BVI) is a popular event that takes places every year to celebrate the opening of the fishing season, whereas conch salad and conch fritters are popular dishes in the Caribbean cuisine that can be easily found in the local farmers markets. The improvement of the lobster and conch stocks would benefit the wellbeing of the fishing communities in general, and the livelihood of many women and men.

The main goal of this project is to provide the partner organisations with the skills and knowledge to assess their stocks and make informed management decisions based on scientific evidence. Fisheries officers are therefore the main target of the project, although diverse meetings have been held with the fishing industry when needed. Partners of the project also regularly meet the fishing industry (men and women) to discuss diverse fishing matters.

6. Monitoring and evaluation

Discuss systems and processes employed internally to monitor and evaluate the project this year. Comment on the suitability of this approach, and whether you have identified any areas for improvement.

When writing this section, consider the following:

- How can you demonstrate that the Outputs and Activities of the project actually contribute to the project Outcome?
- What are the indicators of achievements (both qualitative and quantitative) and how are you measuring these?
- Have there been any changes made to the M&E plan over the reporting period

- Do partners share the M&E work or is this the role of one organisation? How is information shared amongst partners/stakeholders?

The project manager is operating in accordance with Cefas' ISO 9001 certified quality management system. The Project Manager (PM) and Project Leader (PL) meet at least once a month to track progress against milestone delivery and quality using the logical framework of the project and the timetable of the activities. Finances are also revised monthly and the expected expenses for the following months are forecast. The PM also maintains a risk register which is reviewed monthly. When a new risk has been identified (e.g., Hurricane Irma, COVID-19 pandemic), the PM and PL have explored options to revise the project plan to achieve the best outcome. The changes of the project were discussed with the partners in the UKOTs as well as being discussed and internally approved by the project sponsor (senior fisheries scientist at Cefas) before submitting the formal request to Darwin. The reports submitted to the Darwin Administrators are also reviewed and approved by the project senior fisheries advisor prior to submission.

The maturity model questionnaire completed by the three UKOTs at the beginning of the project, will be completed again at the end of the project to monitor achievements from the partners' perspective. The quality of the training is also assessed by the attendees by completing an evaluation form.

7. Lessons learnt

Use of lessons learned is important for continuous improvement and adaptive management. This includes lessons from all levels including administrative, management, technical, and M&E. When writing this section, consider the following:

- What worked well, and what didn't work well, this past year?
- If you had to do it again, what would you do differently?
- What recommendations would you make to others doing similar projects?
- How are you going to build this learning into the project and future plans?

The partners' engagement is essential for the success of the project and it is necessary to ensure they can do the work assigned to them. A good strategy for engagement is to design a project adapted to their needs, so the effort and time invested on the project is worthwhile for them. In this case, DFMR did not have enough staff to work on the camera survey planned in Anguilla. For this and other reasons, the camera survey was replaced with the use of new technologies in fisheries data-collection. The new activities much better meet the partners' needs and contribute to achieve the outcome of the project. The three UKOTs provided the information that was required to develop the phone app. The next step involves migrating the app to the government servers, testing, and making sure the legal documentation is in place, which requires encouraging third party organisations (app developers) and IT and legal departments of the UKOTs to communicate effectively and solve issues in a timely and efficient manner. This has proven difficult for Cefas to monitor and help with.

Political, social, and cultural circumstances might affect the outcomes of the project. The data-collection in Anguilla is challenging due to two external factors to the project: 1) the fishing industry is not cooperative. During interviews and informal chats many fishermen complained about the poor state of the landing areas, the lack of a maritime rescue, or the lack of economic help by the government to overcome the impacts of the Hurricane Irma on fishermen's livelihoods. Although they realise DFMR is not responsible of all these limited services, they do not want to cooperate with DFMR as they are part of the government. A set of actions were discussed in this project to engage the fishing industry, and DFMR is exploring methods to implement them. 2) DFMR submitted a request to the government more than 5 years ago to create legislation that authorises DFMR to measure and weigh the landings. On latest update to Cefas, the request was still being processed, and in the meantime the data-collection depends on the fishermen's collaboration. Because these issues cannot be solved by the project, our strategy was to advise DFMR to improve the relationship with the fishing industry

and design a data-collection programme appropriate for the future, when DFMR is able to collect data. Another note here is how the current pandemic crisis has been hampering work progress everywhere around the globe and challenged each partner of this project.

The study area is situated in a potential hurricane region, and the activities must be scheduled taking the hurricane season into account. The partners can provide good advice in this regard. In addition, a risk assessment and a safety plan have been developed to mitigate the impacts of future hurricanes on the outputs of the project (section 6).

Phone calls and texts via *WhatsApp* are the best methods to communicate with the partners in the host countries. Slow e-mail communication has been shown to hamper progress and risk misunderstandings and frustration. However, it is still preferable to follow up a conversation with an email to have a record of what has been discussed and agreed for future reference and handover. However, some communication requires multiple parties involved at once, on different time zones, and email is the only way to communicate, which does not facilitate solving complex issues.

The duration of administrative processes needs to be taken into account when a change request is submitted. Overseas projects need to be very adaptive to the fluctuating circumstances. Experience with approval of change requests in the 1st year and a half of the project were that this process may cause delays, however the most recent change request was dealt with in a timely manner.

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

Have you responded to issues raised in the review of your last year's annual report? What were the views of project partners on the review? Briefly describe what actions have been taken as a result of recommendations from last year's review, unless you have already clearly done so through a separate note or the half year report. Please use this section to respond to any feedback you received when your project was funded, if appropriate.

Here the answers to the reviewer's comments:

- **The legal teams in BVI and Anguilla still need to review the privacy policy for the CariCatch App – how will the project manage any potential delays to this beyond the lifetime of the project?**

The project is now producing three different apps, one for each UKOT. This allows TCI starting using the app independently of the other UKOTs. If the app is not migrated to the Anguilla and BVI servers in the lifetime of the project, the code of the app will be handled to them in case they want to implement it in the future. Partners are responsible for the implementation and maintenance costs beyond the lifetime of the project.

- **In its final report, the project might want to consider and comment on the gendered nature of the fishing industry in its focal territories and how its outputs might interact with this.**

See section 5

- **It is not clear to what extent the project has actioned or taken on board recommendations given during the Mid Term Review of April 2019 (e.g. re-establishing the baseline for the maturity model questionnaire). Consideration to these points should be given in the Final Report.**

The recommendations of the Mid Term Review of April 2019 were shared with the partners and they were taken on board. For example, it was recommended to increase the number of people involved in the training opportunities provided through the project. Consequently, the webinar celebrated in April 2021 to learn how to use the sampling database was recorded with the aim of being used to train new staff. The project will also pay the travel and subsistence of two member staff of each UKOTs to visit the UK next year, when originally the project budgeted the travel costs for one person per UKOT.

Recommendations of the Mid Term Review have been addressed in this report when appropriate (e.g., section 3.1. addresses the suggestion of re-establishing the baseline for the maturity model questionnaire).

- **To demonstrate the likely sustainability of Output 4, it is recommended that the project captures feedback from fisheries management staff involved in the project related to improvements in capacity building and collaboration between territories over the course of the project.**

Fisheries officers involved in the project have provided feedback on these matters after each workshop. The analysis of the maturity model questionnaire will also provide feedback related to improvements in capacity building.

- **The logframe should be reviewed to ensure all indicators remain valid. For example, the project should consider updating indicator 1d related to Horseshoe Reef monitoring survey as this is no longer planned.**

The logframe is being reviewed and it will be discussed with Darwin soon.

9. Other comments on progress not covered elsewhere

Please use this section to provide any further comments on progress that have not been covered elsewhere in this report. Issues that might be covered in this section include:

- Has the design of the project been enhanced over the last year, e.g. refining methods, or exit strategy?
- Discuss any significant difficulties encountered during the year and steps taken to overcome these if not already discussed elsewhere.
- Does the project face any particular risks?

Several change requests have been approved by Darwin to adapt the activities of the project to the local and current needs and achieve the outputs. The measurable indicators and means of verification of the logframe are being updated, as pointed out by the reviewer last year. The main changes from the original application are the following:

- The project will end on the 31st March 2022 instead of the original date 31st March 2021. This change was approved to consider the delays caused by the Hurricane Irma in September 2017 and the COVID-10 pandemic crisis.
- The original camera survey in Anguilla to characterise the preferent habitats on spiny lobster was replaced with the introduction of new technologies in the data collection schemes in the three UKOTs. This includes the development of the phone app CariCatch, the design of a database to enter sampling data, and the use of Bluetooth callipers and tablets in the sampling. The use of new technologies (activities 1.11 and 1.12) will streamline the process making possible to collect more data in an efficient way. We are confident that the new technologies will contribute more than the habitat survey to achieve the outcome of the project. In addition, the project in Anguilla is now only focused on the spiny lobster fishery.
- The stock assessment workshop will take place in the UK when fisheries officers from the three UKOTs visit Cefas next year. This change allows more fisheries scientists from CEFAS, experts in some of the methodologies used in this project, to be involved in the training. In addition, the budget initially allocated to travel and subsistence costs for the workshop will be used to bring an additional staff member of each partner institution to CEFAS for training.
- The phone app will work independently in the three UKOTs. This change will allow the partners to update the app according to their needs in the future.

10. Sustainability and legacy

Discuss the profile of the project within the Territory(ies) and what efforts have been made during the year to promote the work. What evidence is there of increased interest and capacity resulting from the project?

Is your planned exit strategy still valid or have you, or are you, planning to make changes to what was originally proposed? Likewise, how do you plan to ensure a sustained legacy (e.g., social, economic, ecological, technical etc.) of your project Outcome?

The three partner institutions of the project are the fisheries departments of the governments in the three UKOTs, and their mission is to promote responsible use of the marine resources. This project has been specifically designed to assist them to fulfil their goal. The data collection programmes have been revised and improved (output 1), the stocks have been assessed when possible (output 2); and scientific advice on fisheries management is being provided (output 3). In addition to these three scientific outputs, a technical output has been incorporated to ensure a sustained legacy of the project outcome: build local capacity on fisheries science (output 4). To achieve this latter output, fisheries officers from the three UKOTs are attending three workshops on data collection, stock assessment and fisheries management, and they will visit Cefas for knowledge exchange. In addition, Cefas will visit the three UKOTs at the end of the project to support outcomes implementation and legacy (activity 3.10 in Annex 1).

As in BVI and TCI, fisheries officers in Anguilla will be provided with the skills, knowledge and tools to monitor fisheries, conduct stock assessments and use scientific evidence to support fisheries management decisions. However, their capacity to manage the fisheries successfully in the future could be limited if the availability of data to assess the stocks does not improve.

11. Darwin identity

The goals of Darwin Plus, and more specifically the goals of this project, have been explained to the fishing communities in the three UKOTs during the initial meetings, informal conversations, and the interviews with the fishers.

The project is being publicised on the Cefas website and it links back to the Darwin Initiative website:

https://www.cefas.co.uk/impact/case-studies/regional-collaboration-to-achieve-sustainable-fisheries-in-the-caribbean/

Additionally, the Darwin logo has been included in all presentations of the project, as well as in the splash screen of the phone app CariCatch, and the flyers created to publicise the project within the fishing communities (Annex 25).

12. Impact of COVID-19 on project delivery

For many of our projects, we know that COVID-19 will have impacted project delivery and so it might be relevant to discuss the pandemic throughout your report. Here, we would like you to summarise the impact of COVID-19 on your project as well as providing an overview of how you have responded.

- To what extent has COVID-19 impacted your project?
- How have you responded? For example, by adjusting your workplan or approach to help maintain delivery.
- Are longer-term delays expected?
- How are you assuring the health and safety of project staff and beneficiaries?
- Could any of your project outcomes or impacts assist with the response to COVID-19 or reduce the risk of future pandemics?
- Do you expect or hope to continue with any of the new ways of working adopted over the past year, once the pandemic passes? For example, greater use of virtual meetings to reduce the need to travel?

COVID-19 had a substantial impact on the project. All travel had to be suspended, and consequently the course on stock assessment and the visit to the UK could not take place in 2020/21 as planned. Although a virtual training was considered, the stock assessment course requires high computing skills from the participants and a remote course would take longer and would be very difficult to deliver effectively. In addition, the material and settings for the course would need to be adapted for a virtual interaction, which would increase the time (and expenses) required for CEFAS to develop the course. Therefore, it was agreed with Darwin to extend the project to 31st March 2022 and conduct the stock assessment and the visit to the UK this coming year when travel is safe. A final trip to each UKOT by CEFAS staff is also planned for this year to ensure the legacy of the project. If this final trip cannot happen because of limited budget or time, a virtual meeting will be considered to discuss the sustainability of the outcomes of the project.

Both the UK and the UKOTs have undergone severe lockdowns, where people involved in this project had to work from home and find a new work-life balance. Poor internet connection, limited social contact, and home-schooling, were some of the obstacles that workers had to tackle last year, and this situation also led to delays in some of the activities. For example, the communication with the fishing industry was nil during the lockdown, and CFD was not able to make progress in the implementation of the Fisheries Management Council in the BVI.

13. Safeguarding

Please tick this box if any safeguarding violations have occurred during this financial year. ☐

If you have ticked the box, please ensure these are reported to ODA.safeguarding@defra.gov.uk as indicated in the T&Cs.

Cefas has in place, and maintains, all of the following:

- a safeguarding policy, which includes a statement of our commitment to safeguarding and a zero-tolerance statement on bullying, harassment and sexual exploitation and abuse
- a detailed register of safeguarding issues raised and how they were dealt with
- clear investigation and disciplinary procedures to use when allegations and complaints are made, and have clear processes in place for when a disclosure is made
- a whistle-blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised
- a Code of Conduct for staff and volunteers that sets out clear expectations of behaviours - inside and outside the work place - and make clear what will happen in the event of non-compliance or breach of these standards

Cefas also shares its safeguarding policy with downstream partners.

14. Project expenditure

Please expand and complete Table 1. If all receipts have not yet been received, please provide indicative figures and clearly mark them as Draft. The Actual claim form will be taken as the final accounting for funds.

Table 1: Project expenditure during the reporting period (1 April 2020 – 31 March 2021)

Project spend (indicative) in this financial year	**2020/21 D+ Grant (£)**	**2020/21 Total actual D+ Costs (£)**	**Variance %**	**Comments (please explain significant variances)**
Staff costs				
Consultancy costs				

Overhead Costs	[redacted]
Travel and subsistence	
Operating Costs	
Capital items	
Others (Please specify)	
TOTAL	

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin?

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2020-2021 – <u>if applicable</u>

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Impact Conch and spiny lobster fisheries in Anguilla, BVI and TCI are well-managed and exploited sustainably, supporting a healthy marine environment, food security, national economies and livelihoods for coastal communities.		Fishing data are needed to conduct reliable stock assessments and provide scientific advice on fisheries management. Consequently, the design of an effective data collection programme is the first step to conduct fisheries towards sustainability. The data collection programmes in the three UKOTs have been improved and the stocks have been assesed. A set of measures has been agreed to strengthen the relationship between DFMR and the fishing industry in Anguilla. This is essential to improve the fisheries data collection and management. CFD and the fishing industry had the first discussions to discuss the design of a co-management system in BVI.	
Outcome Fisheries managers and fishers in three Caribbean UKOTs have the skills, knowledge, data and tools to inform sustainable management and exploitation of their commercially important fisheries.	a) Fisheries managers and fishers' representatives from each of the three Caribbean UKOTs have significantly enhanced their skills and knowledge by participating in four training and knowledge exchange workshops. From a position of limited fisheries stock assessment capacity within governments, a minimum of one fisheries department staff member from each UKOT will be able to independently perform stock assessment by the end of the project.		a) Run the stock assessment workshop

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	b) A baseline assessment (currently not existing) of the status of the two key commercial species (conch and spiny lobster) are produced to inform management plans in TCI and BVI. In Anguilla only the spiny lobster stocks will be assessed. c) Data collection and reporting procedures will be improved, drawing on best practice from existing programmes, ICES and Northwest Atlantic Fisheries Organization (NAFO) processes, to develop and inform future management. Improvements in fisheries data collection, analysis and management will be evident for all UKOTs.	b) Data available for conch and lobster stock assessments were analysed and assessment conducted were possible, trends or descriptive analyses produced elsewhere. Reports are in internal quality check at Cefas c) 1.A database to collect sampling data was created. A webinar was held to show the partners how to use it 2. Progress have been made in the development of the CariCatch phone app	b) Address Cefas internal quality check of the stock assessment report for the TCI. c) 1. UKOTs test the database and database is updated if needed. 2. Phone app is migrated to the UKOTs data-centres and available to download in apple and playstores. UKOTs test the phone app and QuyTech provides support. 3. Maturity questionnaires are completed by the partner institutions to evaluate the success of the project improving their skills and tools to assess and manage fisheries.
Output 1. Data Collection Implement new or improve existing conch and spiny lobster fisheries data collection approaches in all three UKOTs	**BVI** a) Two fisheries stock status indicators (one for conch, one for spiny lobster) are developed using existing logbook records (completed Year 1). b) Revisions to existing logbook reporting systems following the outputs of a) c) Logbook data are currently submitted by fishers, but they do not receive feedback. A feedback mechanism will be developed to enable fishers to be kept informed about status and trends in commercial fish stocks.	*a)* A report with the analysis of the logbook data, containing indicators to assess fisheries performance, was finalised during the 18/19 period. It can be read in Annex 8. *b)* The phone app and the sampling programme have been carefully designed and discussed with the partners in order to provide all information needed for the stock assessments. The phone app is expected to replace the logbook data in the BVI. *c)* The phone app will generate individual reports showing the fishing performance of fishermen. They can also see and download a summary of their daily records. In addition, annual reports will be created with the information collected with the app and published in the government website.	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	d) Horseshoe Reef Fisheries Protected Areas collaborative species monitoring survey be designed and undertaken at least twice. **<u>Anguilla</u>** e) Identification of the fishing grounds in Anguilla f) Interviews with fishermen to collect historical fishing data. g) Design and implementation of a fishing data collection programme using new technologies. **<u>TCI</u>** h) Collate fish processor statistics	*d)* A survey was designed (Annex 10 in annual report AR2) but it was decided in agreement with the partner that the stocks in the Horseshoe Reef area could be assessed using the new BVI landing sampling scheme, that would provide equivalent, or better, data. *e)* Map with the fishing grounds completed during 18/19 period (Annex 13). *f)* Interviews completed and data analysed (Annex 13). *g)* The data collection programme was designed and implemented in 2018/19 (Annex 19). *h)* Fish processors datasets were collated during the 18/19 period (Annex 17).	
Activity 1.1. Cefas visits to Anguilla, BVI and TCI (one working week per UKOT) at project commencement to gather existing fisheries data, identify fisheries management policies and practices, meet with fisheries managers and fishers to thoroughly communicate expected project outcome, outputs, activities, and monitoring & evaluation plan.		Completed at the beginning of the project.	
Activity 1.2. Existing data (logbook, landings, observer, scientific, etc.) in all three UKOTs are collated and assessed for their suitability to assess conch or spiny lobster stock status.		Data were collated in 17/18. The newest data was shared by the TCI in 2019/20, before conducting the analysis. The suitability of the data to conduct stock assessments was evaluated.	
Activity 1.3. Develop and issue Maturity Model questionnaire to fisheries departments (topics covered will include status of fisheries data collection, assessment and management along with capacity within government fisheries		The first questionnaire was completed at the onset of the project. Anguilla and the TCI completed again the	The questionnaire will be filled out again at the end of the project to assess the effectiveness of the project.

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
departments). Monitor project progress against questionnaire at end of year 2 and 3.		questionnaire in 2020/21 to take into account staff changes.	
Activity 1.4. Review extensive logbook holdings in the BVI and where possible develop analysis routines to inform fisheries management.		Completed during the 18/19 period.	
Activity 1.5. Report basic trends derived from BVI logbook reporting with fishers to demonstrate the value of the data collected.		Completed during the 18/19 period.	
Activity 1.6. Develop sustainability indicators based on logbook data to inform BVI fisheries management.		Completed during the 18/19 period.	
Activity 1.7. Revise existing protocols for data collected through logbooks and landings reporting. Collaborate with fisheries managers, fishers and BVI Fishery Advisory Committee to develop an effective data collection programme.		Completed during the 18/19 period. In addition, see activity 1.11 and 1.12	
Activity 1.8. Assist the implementation of the new data collection programme in BVI and data reporting to fishers via Government website. Assess the effectiveness of the new data collection programme and reporting system		Data were analysed, reported on and used to assess the stocks status.	
Activity 1.9. Trial community led rapid species status survey in the Horseshoe Reef FPA, BVI. Use of new technologies.		During the 18/19 period it was decided that the stocks in the Horseshoe Reef FPA could be assessed using the new landing sampling implemented in BVI instead of conducting a survey. Only limited data have obtained from the Horseshoe reef area so far.	
Activity 1.10. Analyse trends in BVI species status based on the rapid assessment methodology		See comment in 1.9	
Activity 1.11. Design and test a phone application for the fishermen to provide fishing data.		The app has been developed. It is being upgraded to work with the latest iOS and android software	The app will be migrated to the partners' servers and made available to download online by the fishers. The UKOTs will organise a meeting with the fishermen to explain how to

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
			use it. The app will be tested and improved if needed.
Activity 1.12. Design and test the use of Bluetooth callipers for data collection.		Bluetooth callipers were provided to UKOTs and tested in 18/19. The associated database was finalised in 20/21 period	UKOTs provide feedback for potential bugs and the database will be improved accordingly.
Activity 1.13. Design and implement an effective fishing data collection programme in Anguilla using new technologies.		Completed during the 18/19 period.	
Activity 1.14. Set up interview surveys in Anguilla to reconstruct fishery history.		Completed during the 18/19 period.	
Activity 1.15. Interviews in Anguilla to identify the fishing grounds for spiny lobster		Completed during the 18/19 period.	
Activity 1.16. Collate and rationalise fish processor datasets from TCI		Completed during the 18/19 period.	
Activity 1.17. Improve the data collection programme in TCI if needed.		See activity 1.11 and 1.12	
Activity 1.18. Improve the data management in TCI if needed		Completed during the 18/19 period.	
Output 2. Data Assessment The stock status of conch and spiny lobster fisheries in each UKOT are assessed to inform the potential nature of sustainable management measures.	**<u>All UKOTs</u>** a) Conch and spiny lobster species stock status reports are produced for each UKOT using existing or new data gathered under Output 1. In Anguilla only spiny lobster stocks will be assessed b) Produce stock assessment toolkit for these fisheries based on ICES "data limited" approaches. Realising that it will not always be possible to collect extensive new datasets, different approaches will be supported based on: collection of new field survey data by	a) Assessments reports were produced for TCI and BVI stocks. Data permitted an evaluation of spiny lobster stocks, but conch data were too limited. No assessment was possible for Anguilla due to lack of data, but a report presenting the available information was produced (Annex 8, 13). b) Cefas is currently working on gathering material for the stock assessment workshop that will be held in period 21/22. The workshop will cover aspects of data exploration, fisheries statistics, and assessment methodology for data-limited situations. The methods used to assess their stocks will be explained, as well as potential methods that could be used when more data become available. The code created to assess their stocks will be shared with the UKOTs during the course.	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	fisheries departments or fishers; logbook data; landings data.		
Activity 2.1. Apply data analysis routines to existing datasets to describe historic trends in conch and spiny lobster stocks over time.		BVI, TCI and Anguilla datasets were analysed and reported on as part of the assessment process	
Activity 2.2. Analyse recently collected survey data from Anguilla and BVI to inform current fishery status.		Anguilla and BVI datasets were analysed and reported on as part of the assessment process	
Activity 2.3. Assess sustainability of existing conch and spiny lobster exploitation levels. Implement analysis and assessment routines to inform local decision making.		Assessments were conducted with available data. Conch stocks statuses could not be assessed but a number of methodologies were applied to the BVI and TCI lobster data and stock statuses were derived.	
Activity 2.4. Produce stock assessment toolkits for both species in all three UKOTs. This will draw on the ICES approach for Data Limited Stocks, tailored to the data streams available in the UKOTs and will comprise a report and some software examples.		The toolkits are being prepared for the stock assessment workshop to be delivered in 21/22 as per accepted change request.	Run stock assessment workshop during which UKOTs partners will be presented with a toolkit.
Activity 2.5. Produce stock status reports for both species in all three UKOTs.		Reports for the three UKOTs were produced. The reports for Anguilla and the BVI were shared with the partners.	Address Cefas internal quality check of the stock assessment report for the TCI, and share with the partner
Output 3. Sustainable Management A generic conch and spiny lobster management plan relevant to all three UKOTs is developed and customised, using best available evidence, for one UKOT. Increased desire from fishermen to adhere to the management plans and stronger regional collaboration in fisheries management between the three UKOTs is evident.	**<u>All UKOTs</u>** a) Fisheries management policies and practices reviewed to inform best practice management plan (>10) b) Ten relevant fisheries datasets have been sourced or reviewed. c) Best practice recommendations for the management of conch and spiny lobster fisheries in each	a) b) Management plans applied to other fisheries around the world have been revised (Annex 15) c) Recommendations will be provided in 2021/22 in the report 'UKOT Fisheries management review'. The recommendations will be based on the results of the stock status reports, the strengthens and weakness of the management systems identified by each partner, knowledge and experience of the scientists providing the recommendations, and management practices used in other lobster and conch fisheries.	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
	UKOT are made, two for each UKOT. **TCI** d) Regionally adaptable management plans for both species. Using data collected and analysed, develop detailed draft species management plans for TCI **BVI** *e)* Fisheries Management Council (FMC) established for the Horseshoe Reef FPA (fisheries protected area) with members from Government and fisheries sector. Management plan developed and agreed with stakeholders for implementation.	d) The management plan for the TCI is being developed by DECR with feedback from Cefas (Annex 16). e) The Fisheries Management Council has not been established yet in the BVI, in part because of delays caused by COVID-19. Cefas will assist CFD with its implementation when required. The management plan must be designed by the Fisheries Management Council, and therefore it will not possible its implementation during the timeline of the project. Instead, Cefas will provide a roadmap for the implementation of the co-management in Anegada and guidance with the co-management plan.	
Activity 3.1. Assess the strengths and weaknesses of existing fisheries management approaches in each UKOT.		A detailed SWOT analysis was conducted during the first day of the BVI fisheries management workshop run on Tortola beginning of October 2019.	The SWOT analysis is part of the report 'UKOT Fisheries management review' to be delivered in 21/22
Activity 3.2. Using a collaborative approach, involving fisheries managers and fishers, recommended management options based on best practice identified in other UKOTs (or beyond).		The fisheries management workshop run on Tortola in BVI early October 2019 permitted the 3 UKOTs to exchange on their respective systems and practices. Fishers were not involved in the main workshop. However, a one-day community workshop on Anegada followed where fishers and managers actively debated best practices.	This will be reported on as part of the report mentioned under activity 3.1.

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Activity 3.3. Using the outcomes of the wider project, the relevant government fisheries departments will collaborate to develop a generic conch and spiny lobster fishery management plan, which can be built upon and refined to meet local management needs. A locally specific management plan will be developed for TCI.		The generic framework for fisheries management plans was discussed at the workshop in BVI in October 2019. However, the differences in legal frameworks and objectives between the three UKOTs make it challenging to develop an overarching plan that suits all.	A template for a co-management plan in the BVI will be provided as well as guidance as required.
Activity 3.4. Draft TCI species management plans and recommendations presented to Government.		The TCI management plan is being developed by DECR with feedback from CEFAS	The management plan will be finalised.
Activity 3.5. Encourage fishers to adopt responsible fishing practices– meet with fisheries representatives through the workshops – include responsible fishing practices on the agenda, advise of responsible fishing schemes and benefits to encourage uptake.		Responsible fishing practices were discussed at the workshop in BVI in October 2019 and further debated at the one-day community workshop on Anegada the following day. As an example, fishers did not all agree on the use of traps in the protected area as they were perceived as potentially having a negative impact on reefs, especially in adverse weather conditions.	
Activity 3.6. Assist BVI with the implementation of a Fisheries Management Council to oversee co-management of an established Fisheries Protected Area.		A one-day community workshop was held in Anegada following the fisheries management workshop on Tortola in October 2019. The workshop was well attended and challenges to set up a co-management structure for Anegada discussed.	Cefas will continue supporting CFD with the implementation of the Fisheries Management Council in 2021/22 as required.
Activity 3.7. Community workshop to agree spatial, temporal, gear or species restrictions to minimise fishing impacts within the Fisheries Protected Area		See activity 3.6. Fishers shared their opinions on the need for restrictions in the FPA during the second part of the one-day community workshop on Anageda. BVI government will have to come up with a plan to accommodate	The management regulations will be decided by the Fisheries Management Council when implemented.

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
		the various concerns regarding all metiers and activities in the data with support of Cefas	
Activity 3.8. Using data collected assess the effectiveness of the management measures implemented by the Fisheries Management Council		The Fisheries Management Council was not implemented in the early phases of the project as expected so no data could be collected.	This cannot be achieved in the timeline of the project
Activity 3.9. Share co-management experiences with other UKOTs through workshops (see Output 4).		The fisheries management workshop was held in BVI with all 3 UKOTs in October 2019 where exchange on experience was the cornerstone.	
Activity 3.10. Cefas visits to Anguilla, BVI and TCI (one working week per UKOT) towards end of project to support project outcomes implementation and legacy.			To be done in 2021/22
Output 4. Capacity Building & Collaboration Training and knowledge exchange initiatives and collaborative working opportunities for UKOT fisheries scientists, managers, and fishers.	**<u>All UKOTs</u>** a) Three, 3-day knowledge exchange and sharing workshops. Two fisheries scientists or managers plus one fishing industry representative from each UKOT will participate in each workshop. Each workshop will stimulate regional cooperation, knowledge exchange and fisher/government collaboration. b) One government staff member from each UKOT visits Cefas, UK, to undertake knowledge exchange activities for a minimum of 2 working weeks, working alongside Cefas fisheries managers, and participating in statutory fisheries surveys.	a) Two out of the three workshops were held so far, with the participation of two fisheries officers from each UKOT (Annex 23). In addition to provide training on fisheries matters, the workshops were a good opportunity to exchange experiences and knowledge with fisheries officers in another countries. Both workshops received a good feedback by the participants (Annex 24). b) The visit of the UKOTs to Cefas will be organised in 2021/22, when travel is advised.	

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Activity 4.1. Deliver three 3-day training workshops, one hosted in each UKOT, involving at least two fisheries managers and one fisher representative from each UKOT. Workshop content will be developed and delivered as follows: (1) training on data collection methods (fieldwork and logbook/landings) (hosted in Anguilla), (2) training on the analysis of any available data to assess stock status (hosted in BVI), and (3) training on using the available evidence base to inform fisheries management plans and policy (hosted in TCI). Results from Activities under Outputs 1 to 3 above will be communicated at the relevant workshop.		Two workshops were held so far. The workshop in Anguilla was focused on data collection methods (2018/19) and the workshop in the BVI (2019/20) in fisheries management.	The stock assessment workshop will be held in 2021/22 as agreed in change request. It will take place when staff members from the UKOTs visit Cefas (activity 4.3.).
Activity 4.2. Gather feedback after each workshop to inform the organisation of the next workshop to maximise effectiveness of the training.		The attendees completed an anonymous survey at the end of the workshops to evaluate the quality of the training, with an overall positive return	Same survey will be completed after the next workshop.
Activity 4.3. Plan UK-based knowledge exchange activities, involving one government staff member from each UKOT visiting Cefas, UK, to undertake knowledge exchange for a minimum of 2 working weeks, including participation in vessel based fisheries stock assessment surveys and subsequent data analysis. It is anticipated that the annual *Nephrops* survey will be most appropriate for this purpose, as the approach will be most similar to those applied for conch and spiny lobster. Identify with senior fisheries managers in each UKOT the most appropriate person to participate in UK-based knowledge exchange activities.			To be done in 2021/22.
Activity 4.4. Develop regional network of fisheries managers.		Fisheries managers from the three UKOTs exchanged knowledge and experiences during the workshops held in Anguilla and BVI.	Fisheries managers will exchange knowledge and experience during the next workshop and the visit to UK. Cefas will encourage them to keep the communication when the project is over.

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

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Conch and spiny lobster fisheries in Anguilla, BVI and TCI are well-managed and exploited sustainably, supporting a healthy marine environment, food security, national economies and livelihoods for coastal communities. (Max 30 words)			
Outcome: (Max 30 words) Fisheries managers and fishers in three Caribbean UKOTs have the skills, knowledge, data and tools to inform sustainable management and exploitation of their commercially important fisheries.	a) Fisheries managers and fishers' representatives from each of the three Caribbean UKOTs have significantly enhanced their skills and knowledge by participating in four training and knowledge exchange workshops. From a position of limited fisheries stock assessment capacity within governments, a minimum of one fisheries department staff member from each UKOT will be able to independently perform stock assessment by the end of the project. b) A baseline assessment (currently not existing) of the status of the two key commercial species (conch and spiny lobster) are produced to inform management plans in TCI and BVI. In Anguilla only the spiny lobster stocks will be assessed. c) Data collection and reporting procedures will be improved, drawing on best practice from existing programmes, ICES and Northwest Atlantic Fisheries Organization (NAFO) processes, to develop and inform future management. Improvements in fisheries data collection, analysis and	a) Signed training attendance records for all workshops recording participants. Cefas will provide a fisheries dataset, a member of fisheries department staff from each UKOT will perform stock assessment; Cefas will certify successful completion. b) Reports available for each species in each UKOT. ICES methods will be referenced within each report. c) Maturity Questionnaire for each UKOT scoring data collection, analysis and management status will be developed and completed by UKOTs. By the end of the project each area will show an increased score.	Fisheries remain viable and have not been impacted by external factors. Governments remain committed to securing sustainable fisheries and healthy ecosystems.

	management will be evident for all UKOTs.		
Outputs: **1. Data Collection** Implement new or improve existing conch and spiny lobster fisheries data collection approaches in all three UKOTs	**<u>BVI</u>** a) Two fisheries stock status indicators (one for conch, one for spiny lobster) are developed using existing logbook records (completed Year 1). b) Revisions to existing logbook reporting systems following the outputs of a) (completed Year 1). c) Logbook data are currently submitted by fishers but they do not receive feedback. A feedback mechanism will be developed to enable fishers to be kept informed about status and trends in commercial fish stocks (completed Year 1). d) Horseshoe Reef Fisheries Protected Areas collaborative species monitoring survey will be designed (completed Year 2) and undertaken at least twice. **<u>Anguilla</u>** e) Identification of the fishing grounds in Anguilla. f) Interviews with fishermen to collect historical fishing data. g) Design and implementation of a fishing data collection programme using new technologies. **<u>TCI</u>** h) Collate fish processor statistics (completed Year 1).	a) Documentation showing developed indicators is available. b) New logbook reporting protocol is available. c) Annual fisheries statistics reported at Fisheries Advisory Council. d) Methodology document available. Survey reports available. e) Map of the fishing grounds. f) Report with the results of the interviews. g) Dataset available. h) Report with the result of the analyses.	Fishers will support data collection programmes. Field surveys can be undertaken and are not hampered by equipment failure or natural disasters. Permission is obtained from Government to share fisheries statistics data freely. Fisheries Advisory Council set up completed. Logbook database contains sufficient data to develop meaningful indicators.

2. Data Assessment The stock status of conch and spiny lobster fisheries in each UKOT are assessed to inform the potential nature of sustainable management measures.	**All UKOTs** a) Conch and spiny lobster species stock status reports are produced for each UKOT using existing or new data gathered under Output 1 (completed Year 2). In Anguilla only spiny lobster stocks will be assessed b) Produce stock assessment toolkit for these fisheries based on ICES "data limited" approaches (completed Year 2). Realising that it will not always be possible to collect extensive new datasets, different approaches will be supported based on: collection of new field survey data by fisheries departments or fishers; logbook data; landings data.	a) Reports submitted to the Governments. Evidence of data collected under Output 1 is used in stock status assessments. b) Methodology reports produced.	Available data support assessment of stock status. Available data are robust enough for assessment purposes. IT equipment and facilities are available in OTs to perform assessments.
3. Sustainable Management A generic conch and spiny lobster management plan relevant to all three UKOTs is developed and customised, using best available evidence, for one UKOT. Increased desire from fishermen to adhere to the management plans and stronger regional collaboration in fisheries management between the three UKOTs is evident.	**All UKOTs** a) Fisheries management policies and practices reviewed to inform best practice management plan (>10) (completed Year 3) b) Ten relevant fisheries datasets have been sourced or reviewed (completed Year 1) c) Best practice recommendations for the management of conch and spiny lobster fisheries in each UKOT are made, two for each UKOT (completed Year 3) **TCI** d) Regionally adaptable management plans for both species. Using data collected and analysed, develop detailed draft species management plans for TCI (completed Year 3). **BVI**	a) "UKOT Fisheries Management Review" report produced. b) See a). c) See a). d) Draft conch and spiny lobster management plans developed for TCI in collaboration with the fisheries department. e) Terms of reference of the FMC.	Existing documentation and data can be shared with the Cefas project team. Gaps in current fisheries management policies exist allowing recommendations to be made. UKOT fisheries departments have the resource and maintain government support to develop fisheries management plans. BVI Government is able to facilitate setting up a Fisheries Management Council for one of the FPAs. UKOT Governments remain committed to the sustainable exploitation of marine resources. Fishers buy-in to the sustainable management plans.

	e) Fisheries Management Council (FMC) established for the Horseshoe Reef FPA with members from Government and fisheries sector (completed Year 1). f) Management plan developed and agreed with stakeholders for implementation (completed Year 3).	f) Management plan produced and agreed by FMC.	
4. Capacity Building & Collaboration Training and knowledge exchange initiatives and collaborative working opportunities for UKOT fisheries scientists, managers and fishers.	**All UKOTs** a) Three, 3-day knowledge exchange and sharing workshops (two in Year 2, one in Year 3). Two fisheries scientists or managers plus one fishing industry representative from each UKOT will participate in each workshop. Each workshop will stimulate regional cooperation, knowledge exchange and fisher/government collaboration (completion Year 3). b) One government staff member from each UKOT visits Cefas, UK, to undertake knowledge exchange activities for a minimum of 2 working weeks, working alongside Cefas fisheries managers and participating in statutory fisheries surveys (completion Year 3).	a) Workshop agendas, attendance records and minutes. b) Boarding passes and visit reports.	Suitable dates can be found for all UKOT staff to attend workshops. Fishery officers and fishers actively participate in training courses.

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

1. Data Collection

1.1. Cefas visits to Anguilla, BVI and TCI (one working week per UKOT) at project commencement to gather existing fisheries data, identify fisheries management policies and practices, meet with fisheries managers and fishers to thoroughly communicate expected project outcome, outputs, activities and monitoring & evaluation plan.

1.2. Existing data (logbook, landings, observer, scientific, etc.) in all three UKOTs are collated and assessed for their suitability to assess conch or spiny lobster stock status.

1.3. Develop and issue Maturity Model questionnaire to fisheries departments (topics covered will include status of fisheries data collection, assessment, and management along with capacity within government fisheries departments). Monitor project progress against questionnaire at end of year 2 and 3.

1.4. Review extensive logbook holdings in the BVI and where possible develop analysis routines to inform fisheries management.
1.5. Report basic trends derived from BVI logbook reporting with fishers to demonstrate the value of the data collected.
1.6. Develop sustainability indicators based on logbook data to inform BVI fisheries management.
1.7. Revise existing protocols for data collected through logbooks and landings reporting. Collaborate with fisheries managers, fishers and BVI Fishery Advisory Committee to develop an effective data collection programme.
1.8. Assist the implementation of the new data collection programme in BVI and data reporting to fishers via Government website. Assess the effectiveness of the new data collection programme and reporting system.
1.9. Trial community led rapid species status survey in the Horseshoe Reef FPA, BVI. Use of new technologies.
1.10. Analyse trends in BVI species status based on the rapid assessment methodology.
1.11. Design and test a phone application for the fishermen to provide fishing data.
1.12. Design and test the use of Bluetooth callipers for data collection.
1.13. Design and implement an effective fishing data collection programme in Anguilla using new technologies.
1.14. Set up interview surveys in Anguilla to reconstruct fishery history.
1.15. Collate and rationalise fish processor datasets from TCI.
1.16. Improve the data collection programme in TCI if needed.
1.17. Improve the data management in TCI if needed.

2. Data Assessment

2.1. Apply data analysis routines to existing datasets to describe historic trends in conch and spiny lobster stocks over time.
2.2. Analyse recently collected conch survey data from Anguilla and TCI to inform current fishery status.
2.3. Analyse video data collected from the Anguilla Banks areas and develop analysis routines for local officers, which can be shared with other UKOTs.
2.4. Assess sustainability of existing conch and spiny lobster exploitation levels. Implement analysis and assessment routines to inform local decision making.
2.5. Produce stock assessment toolkits for both species in all three UKOTs. This will draw on the ICES approach for Data Limited Stocks, tailored to the data streams available in the UKOTs and will comprise a report and some software examples.
2.6. Produce stock status reports for both species in all three UKOTs.

3. Sustainable Management

3.1. Assess the strengths and weaknesses of existing fisheries management approaches in each UKOT.
3.2. Using a collaborative approach, involving fisheries managers and fishers, recommended management options based on best practice identified in other UKOTs (or beyond).
3.3. Using the outcomes of the wider project, the relevant government fisheries departments will collaborate to develop a generic conch and spiny lobster fishery management plan, which can be built upon and refined to meet local management needs. A locally specific management plan will be developed for TCI.
3.4. Draft TCI species management plans and recommendations presented to Government.
3.5. Encourage fishers to adopt responsible fishing practices (Year 3) – meet with fisheries representatives through the workshops – include responsible fishing practices on the agenda, advise of responsible fishing schemes and benefits to encourage uptake.

3.6. Assist BVI with the implementation of a Fisheries Management Council to oversee co-management of an established Fisheries Protected Area.
3.7. Community workshop to agree spatial, temporal, gear or species restrictions to minimise fishing impacts within the Fisheries Protected Area.
3.8. Using data collected assess the effectiveness of the management measures implemented by the Fisheries Management Council
3.9. Share co-management experiences with other UKOTs through workshops (see Output 4).
3.10. Cefas visits to Anguilla, BVI and TCI (one working week per UKOT) towards end of project to support project outcomes implementation and legacy.

4. Capacity Building & Collaboration

4.1. Deliver three 3-day training workshops, one hosted in each UKOT, involving at least two fisheries managers and one fisher representative from each UKOT. Workshop content will be developed and delivered as follows: (1) training on data collection methods (fieldwork and logbook/landings) (hosted in Anguilla), (2) training on the analysis of any available data to assess stock status (hosted in BVI), and (3) training on using the available evidence base to inform fisheries management plans and policy (hosted in TCI). Results from Activities under Outputs 1 to 3 above will be communicated at the relevant workshop.
4.2. Gather feedback after each workshop to inform the organisation of the next workshop to maximise effectiveness of the training.
4.3. Plan UK-based knowledge exchange activities, involving one government staff member from each UKOT visiting Cefas, UK, to undertake knowledge exchange for a minimum of 2 working weeks, including participation in vessel-based fisheries stock assessment surveys and subsequent data analysis. It is anticipated that the annual *Nephrops* survey will be most appropriate for this purpose, as the approach will be most similar to those applied for conch and spiny lobster. Identify with senior fisheries managers in each UKOT the most appropriate person to participate in UK-based knowledge exchange activities.
4.4. Develop regional network of fisheries managers.

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

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, questionnaires, reports etc.) and you should ensure you include some of these materials to support the annual report text, ideally cross referenced in the report itself.

If you are attaching separate documents, please list them here with an Annex reference number so that we can clearly identify the correct documents.

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	No
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.	Yes
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.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	