



Centre for Environment
Fisheries & Aquaculture
Science



Cefas

Conditions of Contract Short Form Enhanced

**CEFAS22-101 Contract for the
provision of pilot surveys using
Remote Piloted Aircraft (RPA) of
beach locations in Belize
Ref: CEFAS22-101**

December 2022

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Coastal Zone Management Authority and Institute
Princess Margaret Drive
Belize City
Belize

Attn: [REDACTED]

By email to: [REDACTED]

Date: 18 January 2023
Our ref: CEFAS22-101

Dear [REDACTED]

Contract for the provision of pilot surveys using Remote Piloted Aircraft (RPA) of beach locations in Belize

Following your tender/ proposal for the supply of services for the provision of pilot surveys using Remote Piloted Aircraft (RPA) of beach locations in Belize to **The Secretary of State for Environment, Food and Rural Affairs** acting as part of the Crown through the **Centre for Environment, Fisheries and Aquaculture Science**, we are pleased to confirm our intention to award this contract to you.

The attached contract details ("**Order Form**"), contract conditions and the **Annexes** set out the terms of the contract between **Centre for Environment, Fisheries and Aquaculture Science** and **Coastal Zone Management Authority and Institute** for the provision of the deliverables set out in the Order Form.

We thank you for your co-operation to date and look forward to forging a successful working relationship resulting in a smooth and successful delivery of the deliverables. Please confirm your acceptance of the Conditions by signing and returning the Order Form to procure@cefas.co.uk at the above address within 7 days from the date of this letter, which will create a binding contract between us. No other form of acknowledgement will be accepted. Please remember to include the reference number above in any future communications relating to this contract.

We will then arrange for the Order Form to be countersigned so that you have a signed copy of the Order Form for your records.

Yours faithfully,

[REDACTED]

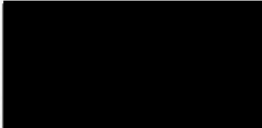
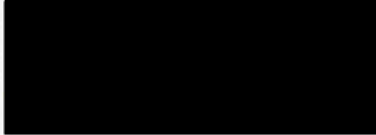
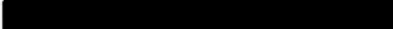
Procurement Advisor
Pakefield Road,
Lowestoft,
Suffolk,
NR33 0HT, UK



Order Form

1. Contract Reference	CEFAS22-101 the provision of pilot surveys using Remote Piloted Aircraft (RPA) of beach locations in Belize	
2. Date	31 January 2023	
3. Authority	Cefas Pakefield Road Lowestoft Suffolk NR33 0HT	
4. Supplier	Coastal Zone Management Authority and Institute Princess Margaret Drive Belize City Belize BZ 1476.03	
4a. Supplier Account Details	Account number: [REDACTED] Bank Name: [REDACTED] Account Name: [REDACTED] [REDACTED]	
5. The Contract	The Supplier shall supply the Deliverables described below on the terms set out in this Order Form and the attached contract conditions ("Conditions") and any Annexes. Unless the context otherwise requires, capitalised expressions used in this Order Form have the same meanings as in Conditions. In the event of any inconsistency between the provisions of the Order Form, the Conditions and the Annexes, the inconsistency shall be resolved by giving precedence in the following order: 1. Order Form, Annex 2 (Specification) and Annex 3 (Charges) with equal priority. 2. Conditions and Annex 1 (Authorised Processing Template) with equal priority. 3. Annexes 4 (Tender Submission) and 5 (Sustainability). In the event of any inconsistency between the provisions of Annexes 4 and 5, Annex 5 shall take precedence over Annex 4. Please do not attach any Supplier terms and conditions to this Order Form as they will not be accepted by the Authority and may delay conclusion of the Contract.	
6. Deliverables	Goods	[None]
	Services	To be performed at the Supplier's premises at: Princess Margaret Drive Belize City Belize BZ 1476.03

		and in locations in Belize as required.	
7. Specification	The specification of the Deliverables is as set out in Annex 2.		
8. Term	The Term shall commence on 31 January 2023 (the Start Date) and the Expiry Date shall be 31 January 2024 unless it is otherwise extended or terminated in accordance with the terms and conditions of the Contract. The Contract may be extended for one further period of 6 months by giving not less than 1 months' notice.		
9. Charges	The Charges for the Deliverables shall be as set out in Annex 3.		
10. Payment	The Authority's preference is for all invoices to be sent electronically, quoting a valid Purchase Order Number (PO Number), to: Finance@cefas.co.uk Alternatively, you may post to: Cefas Pakefield Road Lowestoft Suffolk NR33 0HT Within 10 Working Days of receipt of your countersigned copy of this Order Form, we will send you a unique PO Number. You must be in receipt of a valid PO Number before submitting an invoice. To avoid delay in payment it is important that the invoice is compliant with Annex 3 Non-compliant invoices will be sent back to you, which may lead to a delay in payment. If you have a query regarding an outstanding payment please contact the Authority's Authorised Representative(s).		
11. Authority Authorised Representative(s)	For general liaison your contact will continue to be [REDACTED] or, in their absence, [REDACTED]		

12. Address for notices	Authority: Cefas Pakefield Road Lowestoft Suffolk NR33 0HT  ment Advisor	Supplier: Coastal Zone Management Authority and Institute Belize City Belize BZ 1476.03 Attention: Finance and Operations Manager Email: 
13. Key Personnel	Authority: Cefas Pakefield Road Lowestoft Suffolk NR33 0HT Attention: 	Supplier: Coastal Zone Management Authority and Institute Belize City Belize BZ 1476.03 Attention: Director Email: 
14. Procedures and Policies	<i>For the purposes of the Contract the applied Policies and procedures are available at: Policies, plans, reports and quality - Cefas (Centre for Environment, Fisheries and Aquaculture Science)</i> <i>For the avoidance of doubt, if other policies of the Authority are referenced in the Conditions and Annexes, those policies will also apply to the Contract on the basis described therein.</i>	
15. Limitation of Liability	See Clause 12.1	
16. Insurances	The Supplier shall hold the following insurance cover for the duration of the Contract in accordance with this Order Form: - Motor Insurance to appropriate level of cover; - Marine Vessel insurance to appropriate level of cover and all other insurances as required by law in the country of your organisation's registration.	
Signed for and on behalf of the Supplier		Signed for and on behalf of the Authority

Name: [REDACTED]	Name: [REDACTED]	
Chair, Board of Directors, Coastal Zone Management Authority	Procurement Advisor	
Date: January 31, 2023	Date: 31 January 2023	
Signature: [REDACTED]	Signature: [REDACTED]	

Annex 1 – Authorised Processing Template

NOT USED

Annex 2 – Specification

Requirement:

The OCPP was announced in 2021 as a key bilateral aid programme under the Blue Planet Fund. The UK is working in partnership with Belize and at least five other countries to deliver marine science technical assistance across the 3 core themes of marine pollution, biodiversity loss and supporting sustainable seafood. The OCPP objectives are to support countries to tackle marine pollution, support sustainable seafood practices and establish designated, well-managed and enforced Marine Protected Areas (MPAs).

In 2021-25, Cefas will lead delivery of the Marine Pollution and Sustainable Seafood themes of OCPP, working in partnership with experts from the Joint Nature Conservancy Council (JNCC) and the Marine Management Organisation (MMO).

The OCPP Marine Pollution strand will build on work in countries where Cefas and UK marine partnerships are already active, as well as forge new relationships in priority regions.

OCPP is building on the successes of the Commonwealth Litter Programme (CLiP) in Belize, using established foundations to expand technical training and capacity building utilising UK Overseas Development Assistance (ODA) to foster collaboration with Belize and internationally to tackle marine pollution.

A flagship of the OCPP science and innovation is the cross-country Artificial Intelligence (AI) Environmental Monitoring work package. This work package supports partner countries with developing automated data collection, analysis and reporting on marine pollution to reduce costs and increase efficiencies of increased demands to monitor the marine environment. Cefas is leading the development of an innovative end-to-end machine learning solution to automate the process of monitoring, analysing and reporting marine litter. The tool will support streamlining of decision making for action and policy decision through bespoke automated reporting. Cefas will partner with host nations to co-develop and apply the tool in the host nation. At the core of the project is knowledge and expertise transfer to develop capacity for the long-term sustainable application of tools and methods.

To support the outputs, Cefas wishes to work with experienced stakeholders and organisations in Belize and are looking for an organisation with extensive knowledge and experience in gathering high resolution Remotely Piloted Aircraft (RPA – hence forward referred to as a “drone(s)”) imagery of coastal and beach environments in Belize at a quality that will be sufficient to clearly identify a cigarette butt in raw imagery.

Due to the complex and challenging work environment, this work will be divided into ‘Pilot’ and ‘Operational’ phases. The ‘Pilot’ as the first phase will finalise identified

parameters; the second 'Operational' phase to gather imagery of 6 sites at quarterly intervals across Belize.

The Supplier will select a suitable beach, without excess sargassum to test the resolution, time of day and method. Our assumption is that a DJI Phantom 4 Pro, flown at 15m altitude, will deliver 4mm GSD. We wish to test this assumption by surveying the site at 10m, 15m and 20m altitudes and comparing results. The literature suggests that local noon is the optimal flight time, but local knowledge suggests that glare could be problematic – we therefore wish to test for glare by comparing morning, noon, and afternoon flights (see Table 1).

Time:	10m (above ground level)	15m (above ground level)	20m (above ground level)	Notes:
Between three and four hours before local noon.	1	1	1	To test shadow effects
Local noon	1	1	1	To test glare
Between three and four hours after local noon.	1	1	1	To test shadow effects

Table 1: Test flight details.

Following analysis of the test flight results, Cefas will determine and fix the altitude and time of day to be used for all subsequent surveys. The Supplier shall work with Cefas to select representative and suitable survey sites that shall include a total of 6 sites, 3 coastal and 3 caye locations (See Survey Locations) on at least a quarterly basis. Each survey shall consist of at least one survey flight.

For each flight, the Supplier shall record date, time, drone model, serial number, location, weather conditions, lighting conditions, beach description and any other salient observations.

All surveys shall be flown in accordance with Figure 1.

Survey Deliverables:

Each survey will aim to complete all the following required objectives.

- 1 To conduct all RPA flights and acquire all required data in accordance with the Belize Civil Aviation guidelines.
- 2 The flight team will be expected to manage the planning, required notifications, and safe execution of each survey.
- 3 The flight team will plan and execute the test flight(s) as listed in Table 1.
- 4 Once Pilot test Parameters (see below) have been agreed with Cefas, the flight team will plan and execute at least 24 flights total; a minimum of 6 locations per UK financial quarter for 1 year ($6 \times 4 = 24$) as discussed in Survey Locations section of this document and as part of the Operational Phase of the contract.
- 5 Images captured, where possible, should be of different beach substrates (e.g. sandy, pebble, rocky etc). CZMAI has confirmed that the sites to be used are sandy substrate.
- 6 Number of images per survey will be approximately 200 to 300 images. CZMAI has confirmed that the minimum number of images will be 100 as it may not be possible to get 200 depending on the location, vegetation etc.
- 7 The flight team will supply images for each flight, consisting of the raw images, aligned RGB images in JPEG format as collected by the drone.
- 8 Data should be provided via a secure downloaded link or via secure access to a Microsoft Azure Blob storage container. Details and instructions will be provided.
- 9 Sufficient ground control should be placed, surveyed, and used in data processing to ensure the accuracy of the images and the spatial resolution.

Survey Parameters

Survey Area: Figure 1 provides a schematic diagram of a standard RPA Survey Area for the purposes of this opportunity. 100 metres, or as close as possible to this, measured parallel to the sea, from the water's edge to the back of beach, which is defined as change in elevation, vegetation and/or structures. It will be up to the Supplier to liaise with relevant authorities and landowners to secure permissions. Where start and end point coordinates are not provided, it will be up to the Supplier to determine and map the survey plot. However, once defined, the surveys must be flown over the same area, unless otherwise agreed with Cefas.

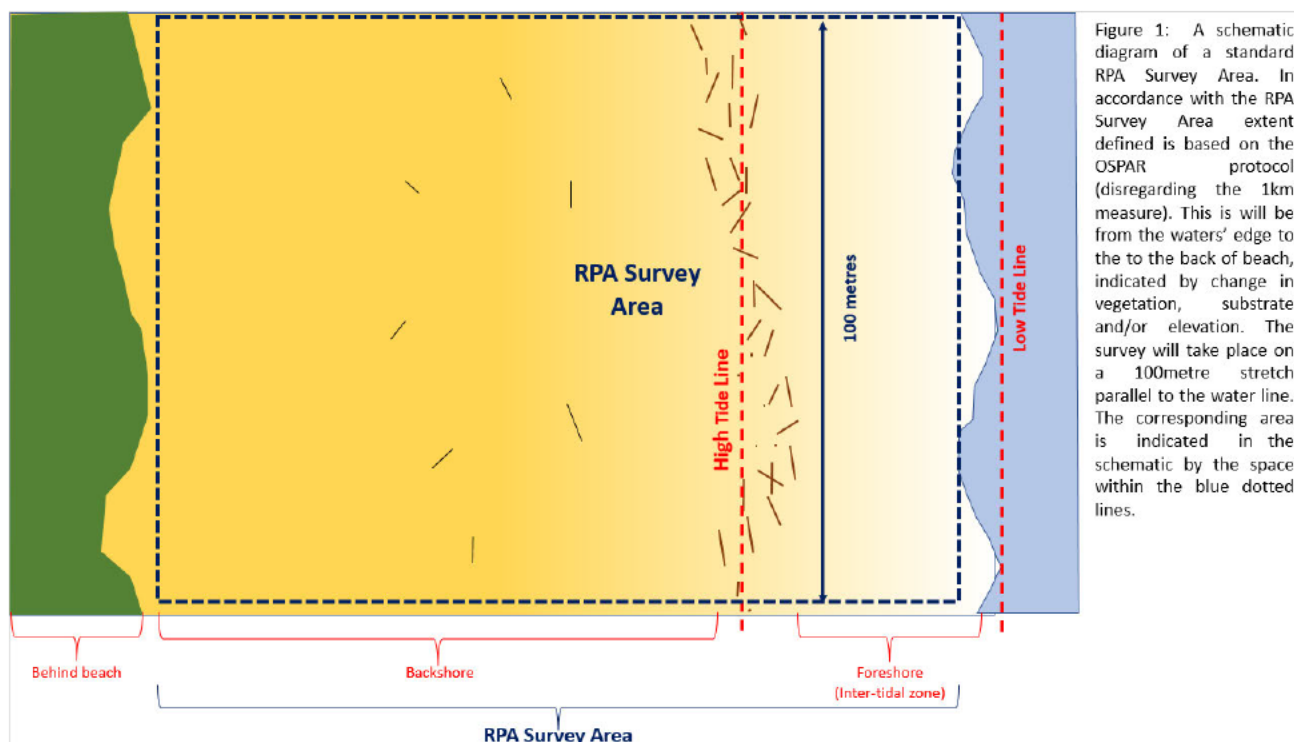


Figure 1: Standard beach RPA survey area schematic.

Survey Location:

Table 2 provides the suggested coastal monitoring sites according to Silburn et al., 2022. These four candidate sites are mapped in Figure 2. These are suggested sites, so the Supplier may choose up to 3 or none of these sites based on its expert opinion of whether their suitability meets requirements set out in this document for drone surveys. For example, perhaps beaches further north and/or south may be recommended instead, even if accessibly only by boat. The sites must be confirmed and agreed with Cefas before surveys are conducted.

The three Caye locations will be selected by the Supplier using their location knowledge and understanding of these requirements set out in this document, and will be confirmed and agreed with Cefas before surveys are conducted.

Location ID	Location Name	Location Description	Survey area length	Latitude (decimal degrees)	Longitude (decimal degrees)
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Location ID	Location Name	Location Description	Survey area length	Latitude (decimal degrees)	Longitude (decimal degrees)
B	Manatee Sign Beach	A rocky beach along the stretch of the coastline between Belize City and Ladyville, just 2.5 km north of the Belize River mouth. Surrounded by sparse residential and business premises, inaccessible to the public.	65.0 m	17.54585	- 88.254917
C	Belizean Beach Carpark Beach	A sandy beach located next to the Belize coastguard station, 3 km south of Belize City and 6 km south of the Haulover Creek mouth.	35.2 m	17.483483	- 88.238583
E	Marine Fish Farm	Located 5 km south of Belize City and 7.5 km south of the Haulover Creek mouth, in a rural location. There was a considerable build-up of sargassum at the location, which increased in volume throughout the monitoring period.	66.6 m	17.463883	-88.252
F	Dangriga Beach	Located 65 km south of Belize City, Dangriga Beach is the most southerly site and provides a location that is likely not influenced by input from Belize City.	65.0 m	16.977066	- 88.223956

Table 2: Survey sites.

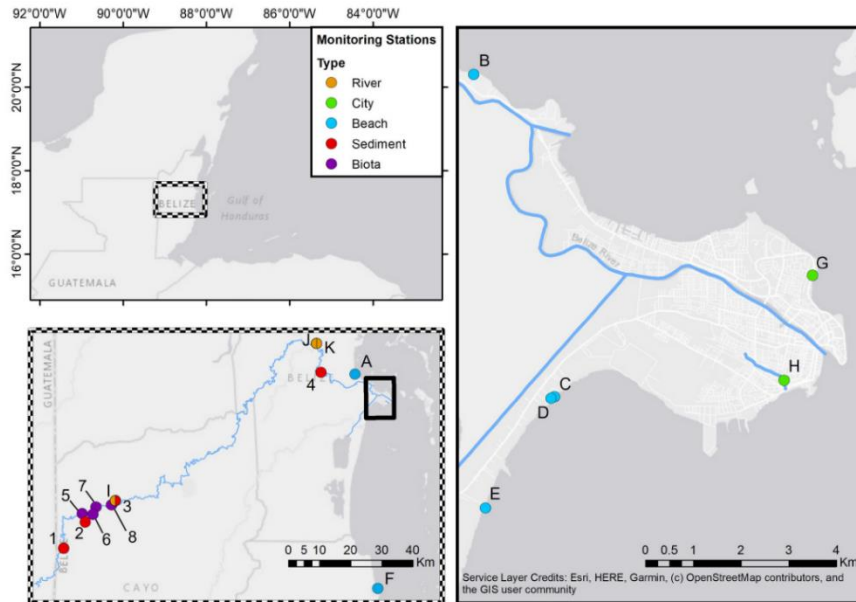


Figure 1. Map of monitoring locations across Belize for both macro/meso litter surveys (river, city, and beach) and microplastic sampling (sediment and biota).

Figure 2: Adapted from Silburn et al. 2022, showing suggested coastal sample sites.

Time of Survey: Phase I, Pilot phase, will test 3 times of day for shadows and glare to identify the optimum time. This will then be discussed, and details agreed before proceeding to Phase II – the Operational Phase.

Images and data specification

Image: Images will be supplied individually as they appear on the SD storage card of the Drone i.e., with minimal processing.

Mosaicks: Optional, Cefas would be keen to receive at least examples of the mosaicked images from the Supplier in RGB.

Spatial Resolution: Objects the size of a cigarette butt or smaller i.e., a Ground Sample Distance (GSD) of 4mm that will allow a cigarette butt to be clearly resolved in imagery.

Test Litter Items: In Phase II, Cefas may ask the Supplier to place pre agreed litter items in parts of the survey as ground truthing data. Cefas may also ask the Supplier to work with beach cleaners to record all litter within the drone survey area.

Calibration Items: Each survey will include a standard measuring ruler in centimetre and metres for example. Include tiled calibration panels in different colours to retrieve colour balance and lens distortion information.

Ground Control: Ground control points are not required but would be ideal.

Platform: The Phantom 4 Pro Drone with a [1"CMOS \(Effective Pixels: 20M\)](#) is preferable as its camera system should allow 4mm GSD at 15metre above ground level height on a 100metre by 30metre beach – this is known as the "Standard Survey". Cefas would be interested in a test flight using a second drone platform to compare. This should be discussed and agreed with Cefas before commencing such a survey.

Survey Height: 10metre, 15metre and 20metre heights shall be flown at each sample location.

Image Overlap: 70% along and cross track.

Image Meta Data: As a minimum GPS location; time and if possible altitude; yaw, pitch and roll (unless the camera is gimbal-stabilised); heading; speed. Data should be supplied within each image file, any variations will be specified by the Supplier.

Image Quality Assurance: The Supplier will QA imagery to ensure adequate lighting and ensure no motion blur. Where surveys have less than or equal to 10% of images being blurry, poorly lit and/or of other general poor standard, the supplier shall re-fly surveys.

Image Availability: Cefas expects images to be uploaded to the Azure online storage or via alternate safe digital upload mechanism as soon as possible after each flight.

Evidence documents: The Supplier will ensure they obtain all necessary permissions to fly at location and to evidence this to Cefas prior to surveys being conducted.

Insurance: Please provide all relevant insurance documentation as required by Law in Belize, both to conduct this specific work, and as is required by all organisations in Belize.

Demonstration of flight competency:

- Be able to mobilise rapidly depending on the developing weather forecast and accommodate a flight schedule which will vary between monthly and quarterly.
- Have enough qualified and trained personnel to safely conduct this work.
- Be able to transfer data in raw format, for example as appears on SD storage device, and to transfer this securely to Cefas. (e.g., We transfer, Azure Blob storage).
- Demonstrate their understanding of Belize Civil Aviation Authority guidelines.
- Demonstrate sufficient safeguards in place for working in the intertidal zone, with local wildlife and other hazards. This will be done through relevant risk assessments, any standard operating procedures and information on previous flights.
- Provide detail of all proposed equipment to be used for these surveys

Evidence documents

Please include all relevant paperwork and license to demonstrate you are legally able and competent to fly RPA surveys in country.

Approach

Cefas requires the flight team to manage the planning, notifications and safe flight of each survey.

Data

Data Protection: The supplying organisation is required to comply with the Data Protection Act 2018 (or equivalent national legislation) by time of contract award.

Image provision: The imagery will be provided as soon as is practicable in a format as available on drone SD card. Optionally, mosaicked data will be also made available via secure transfer medium.

Data Governance: Compliance with the Data Protection Act as described above when handling data.

Security: To take reasonable steps to secure the imagery against unintended access.

Annex 3 – Charges

Defined terms within this Annex:

E-Invoicing: Means invoices created on or submitted to the Authority via the electronic marketplace service.

Electronic Invoice: Means an invoice (generally in PDF file format) issued by the Supplier and received by the Authority using electronic means, generally email

1. How Charges are calculated

1.1 The Charges:

1.1.1 shall be calculated in accordance with the terms of this Annex 3;

1.2 Any variation to the Charges payable under the Contract must be agreed between the Supplier and the Authority and implemented using the procedure set out in this Annex.

2. Rates and Prices

Good or Services Required	Qty	Unit of Measure	Cost	VAT
Transportation	1		£4,142.06	
Per Diem	1		£4,087.23	
Consulting Fee/Staff Costs	1		£4,234.68	
Equipment Fee	1		£4,161.99	
Administrative Fees	1		£4,085.03	
		Total Cost:	£20,711.00	NA

Payment will be made on a quarterly basis following completion of the agreed deliverables.

3. Currency

All Supplier invoices shall be expressed in sterling or such other currency as shall be permitted by the Authority in writing.

4. Variations

The Authority may make reasonable changes to its invoicing requirements during the Term after providing 30 calendar days written notice to the Supplier.

5. Electronic Invoicing

- 5.1 The Authority shall accept for processing any electronic invoice that it is valid, undisputed and complies with the requirements of the Authority's e-invoicing system:
- 5.2 The Supplier shall ensure that each invoice is submitted in a PDF format and contains the following information:
 - 5.2.1 the date of the invoice;
 - 5.2.2 a unique invoice number;
 - 5.2.3 the period to which the relevant Charge(s) relate;
 - 5.2.4 the correct reference for the Contract
 - 5.2.5 a valid Purchase Order Number;
 - 5.2.6 the dates between which the Deliverables subject of each of the Charges detailed on the invoice were performed;
 - 5.2.7 a description of the Deliverables;
 - 5.2.8 the pricing mechanism used to calculate the Charges (such as fixed price, time and materials);
 - 5.2.9 any payments due in respect of achievement of a milestone, including confirmation that milestone has been achieved by the Authority's Authorised Representative
 - 5.2.10 the total Charges gross and net of any applicable deductions and, separately, the amount of any reimbursable expenses properly chargeable to the Authority under the terms of this Contract, and, separately, any VAT or other sales tax payable in respect of each of the same, charged at the prevailing rate;
 - 5.2.11 a contact name and telephone number of a responsible person in the Supplier's finance department and/or contract manager in the event of administrative queries; and

5.2.12 the banking details for payment to the Supplier via electronic transfer of funds (i.e. name and address of bank, sort code, account name and number);

5.3 The Supplier shall submit all invoices and any requested supporting documentation through the Authority's e-invoicing system or if that is not possible to: Finance@cefas.co.uk or Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT with a copy (again including any supporting documentation) to such other person and at such place as the Authority may notify to the Supplier from time to time.

Annex 4 – Tender Submission

1. PROFILE

LEGAL NAME: Coastal Zone Management Authority and

Institute (CZMAI) ADDRESS: Princess Margaret Drive, P.O. Box 1884,

Belize City, Belize PRIMARY CONTACT PERSON: [REDACTED]

Director

CONTACT DETAILS: [REDACTED]
[REDACTED]

SECONDARY CONTACT PERSON: [REDACTED]

CONTACT DETAILS: [REDACTED]
[REDACTED]

SECONDARY CONTACT PERSON:

BACKGROUND:

In 1998, the Government of Belize passed the Coastal Zone Management Act, a visionary legislation with the purpose of strengthening the governance and management of resources for the long-term viability of the barrier reef and its beneficiaries. The Act duly establishes the Coastal Zone Management Authority and Institute (CZMAI) as a body corporate, as well as outlines the governance framework for the CZMAI that is led by a multi-stakeholder Board of Directors. The CZM Act also establishes institutional arrangements for integrated coastal zone management (ICZM) in Belize and the required legislative framework for CZMAI's mandate of promoting the sustainable development of coastal areas through policy development, coordination of existing legislation and policies affecting coastal resources, research and monitoring, capacity building and increased public participation in management activities for Belize's coastal resources. The Act provides for the preparation and implementation of a National Integrated Coastal Zone Management (ICZM) Plan to enable the Government to better address ICZM as a national cross-cutting issue, and to

make defensible, enduring decisions for the sustainable development of the barrier reef resources. In February 2016, the country's first

National ICZM Plan received Cabinet's Approval and later Affirmative Resolution in the House of Representative and Senate in August 2016. Implementation of the ICZM Plan has taken effect since September 24, 2016.

INSTITUTIONAL VISION

To be a global Centre of Excellence in sustainable Coastal Zone Management.

INSTITUTIONAL MISSION

*To lead the sustainable use and planned development of Belize's coastal zone. CZMAI is a registered entity under the Trademarks Act, Chapter 257, Laws of Belize, Revised Edition 2000-2003 in respect of **International Class 41** for the promotion of public environmental education and **International Class 42** for the provision of advice and consultation on environmental protection; execution and implementation of environmental protection programmes and projects; environmental research and monitoring; and environmental services.*

A. Introduction

The Coastal Zone Management Authority and Institute (CZMAI) was invited to submit a proposal to provide technical drone services in two phases which includes capturing and providing high-resolution raw aerial drone imagery of marine litter found on specific tracks of beach within Belize for the Ocean Country Partnership Programme (OCP) - Belize.

The CZMAI is in possession of one (1) DJI Phantom 4 Pro drone and two (2) DJI Mavic Pro 2 drones and has been collecting and processing drone imagery since 2016 under several projects. CZMAI has provided theoretical and practical drone training and image processing to both government and non-governmental agencies in Belize.

The imagery supplied by CZMAI will serve as training data to aid in the development of a machine learning algorithm being developed by Cefas with the participation of University of Belize. The objective is to develop a tool that can automate the data collection, identification, and reporting of marine litter to support more efficient and cost-effective monitoring, scientific studies and papers on methods to build best practices for replication in other partner OCP countries.

Supplemental Info

The intention of carrying out this work in Belize is to serve as a case study for other OCP partners including Maldives, India, Ghana and potentially others. Involving Small Island Developing States (SIDS) and engaging organizations like CZMAI to carry out marine litter monitoring is critical in ensuring the algorithm is suited to use in SIDS and resource-constrained environments.

Furthermore, this work is part of the Artificial Intelligence (AI) Environmental Monitoring Work package under the Ocean Country Partnership Programme (OCPP), part of the UK's Blue Planet Fund. OCPP purpose is to protect the marine environment and support sustainable development to improve livelihoods and the environment. It plans to achieve this through demand led technical assistance and capacity building.

More information can be found here: <https://www.gov.uk/government/publications/blue-planet-fund/ocean-country-partnership-programme-ocpp>

Belize Civil Aviation Requirements for drones

CZMAI has been safely and legally applying and renewing operational drone licenses in Belize since 2016. See below copy of one of the drone permit received.


DEPARTMENT OF CIVIL AVIATION
P. O. BOX 367, BELIZE CITY, BELIZE

Tel: (501) 225-2014, 225-2052
Fax: (501) 225-2533

Philip S. W. Goldson International Airport
Ladyville

AO/56/21 (90) Volume VII

May 6th 2021

[REDACTED]
Coastal Zone Management Authority and Institute
Princess Margaret Drive
Belize City
Belize District
Belize C.A.

Ref: Renewal of Remote pilot aircraft system (drone).

Dear Madam:

The Belize Department of Civil Aviation (BDCA) has received your request for the use of One Remote Pilot Aircraft System (Drone) of DJI Mavic Pro 2 for **research** purposes.

The BDCA has reviewed the documentation by Coastal Zone Management Authority and Institute and has "no objections" to the use of the camera drones in Belize with the following conditions:

1. Coastal Zone Management Authority and Institute will pay the authorization fee of \$30.00 (Belize Dollars) in accordance with the scheme of charges.
2. Approved Drone Operator:
 - Delwin Charles Guevara
3. All drone operations shall be conducted in visual meteorological conditions and must remain clear of clouds.
4. Drone operations must remain at least 100 feet away from all persons, animals, structures or vehicles that are not involved in filming operations.
5. Drone operations are to be conducted between the time periods of 6am - 6pm.
6. The drone operator must keep the drone within his line of sight and must be able to see it with his/her own eyes. She/he must take all precaution to avoid aircraft that may be transiting this area.
7. Take-offs and landings must be done at least 100 feet away from any person not involved in the operation. Hovering must not be done overhead any gathering of persons.
8. Operations must not exceed 100 feet AGL.



9. The Department reserves the right to conduct surveillance on any operation at any time and reserve the right to halt all operations in the interest of aviation safety.
10. "No flying" Restrictions are placed for 0-3 miles from any aerodrome/airport, operations are not allowed except with written consent of the BDCA. This is due to potential hazard to aircraft operating in the area.
11. Authorizations issued for drone use do not extend to archaeological reserves. Permission for such activity within any archaeological reserve must first have approval from the Director of the Institute of Archaeology.
12. Operations are not allowed in Caye Caulker, Placencia and South of San Pedro without written approval from the Department.
13. This authorization is for research purposes and is only valid for the time period starting 6th May 2021 to 6th November 2021 and must be renewed after this date.
14. Permission acquired to enter any PRIVATE PROPERTY.
15. This authorization must be kept on the user at all times and must be made available to the enforcement authorities upon request.
16. The use of alcohol during drone operation is prohibited.
17. All operations are to be halted on the event that you cannot comply with any of the previous requirements.

**"No Flying" means no person is authorized to operate drones in the areas listed.

Regards,

Aligel Cooper
Director of Civil Aviation

 have read this Authorization and agree to the terms and conditions.

Applicant Signature:



All drone flights have been conducted within BCA drone permit guidelines and our drone pilots also have permission to conduct these approved flights. CZMAI has also made arrangements for personnel from the BCA to be present when flying drone in or near restricted areas.

When the contract is finalized, CZMAI will complete and submit BCA the drone permit application for the selected sites and provide a copy to the project partners.

All flights will be in accordance with Belize Civil Aviation (BCA) Rules and Regulations as outlined in the drone permit. All operations will not exceed 100 feet above ground level (AGL). Another beach site will have to be identified in place of Site 2 (Seashore drive) noting that it is too close to the airstrip¹ and the drone will simply not take off in this site due to the restrictions in place. Additional location identified is along the Western Highway where the Water Quality team has previously conducted microplastics survey.

B. Main Tasks

1. Collect high-resolution imagery of marine litter at identified beach sites for Phases I & II within coastal and marine environments using a DJI Phantom 4 Pro drone at a predetermined altitude with 70x70 (%) image overlap on a 100x30 meter section of beach on a monthly basis. [This has subsequently been confirmed as quarterly.](#)
2. A time log will be kept to record date, time of survey, cloud cover, overlap, etc.

C. Breakdown of Phases

In executing main tasks and activities outlined above, specific activities will be conducted in phases.

The phases are as follows:

1. Phase I- Pilot testing
2. Phase II- Drone Monitoring/Imagery Collection (Fieldwork)

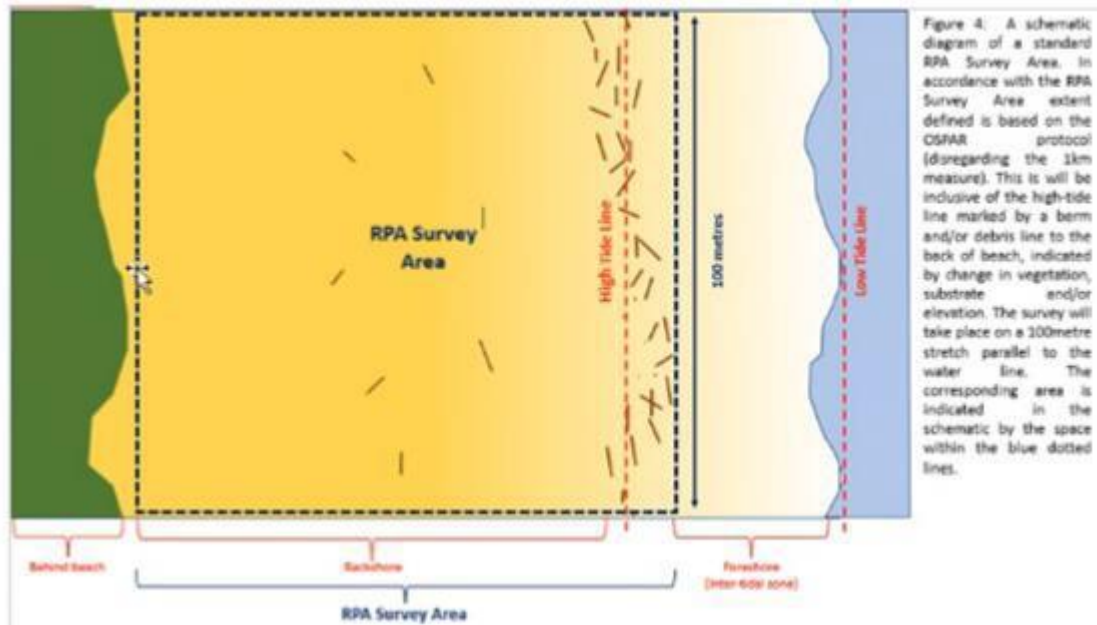
Elements of the stages listed above incorporate staff time, equipment and software, transportation, per diem, and contingency.

Phase I- Pilot testing

- Test flight will be conducted at 10-, 15-, and 20-meter altitude with CZMAI's DJI Phantom 4 Pro drone to determine if indeed the drone camera can produce 4 mm Ground Sampling Distance (GSD).
- Test flight will be conducted at three times (morning, noon and evening) on 1 day to test for glare and shadow.
- Test flight will be conducted on the mainland section of a beach area covering 100x30 meters with predetermined litter items such as plastic bottles, cigarette butts placed in specific locations.

¹ Note: Drone authorizations are not issued for areas near 0 to 3 miles of an aerodrome (airstrips). Such places are: Ladyville, Placencia, Caye Caulker and North of San Pedro without written approval from the department.

- The 100x30 meter section of beach will be measured from the high tide line to the back of the beach marked by change in land use such as roads, vegetation or elevation.



- Raw drone imagery will be analyzed to determine if the GSD of 4mm was achieved. Drone imagery will be uploaded to an online storage folder and submitted to OCPP.
- **Map of Pilot site for Phase I**



Phase II- Drone Monitoring/Imagery Collection (Fieldwork)

- This stage will occur if only “**Phase I- Pilot Testing**” is successful in producing imagery with a GSD of 4mm.
- This phase is considered a full monitoring programme which is to be designed jointly by CZMAI and Cefas.
- Drone flights will be conducted on the mainland and cayes at predetermined locations on a section of beach area covering 100x30 meters (Beach areas to be chosen amongst locations from Silburn et al. 2022 A-G).

Survey Plan²:

² In terms of local flight restrictions, the sites for the Seashore Drive areas will be changed to an area along the George Price Highway where CZMAI’s Water Quality Monitoring (WQM) team has previously conducted marine litter work. Besides this, all flight operations will not exceed BCA flight guideline #8 which states that "Operations must not exceed 100 feet AGL".

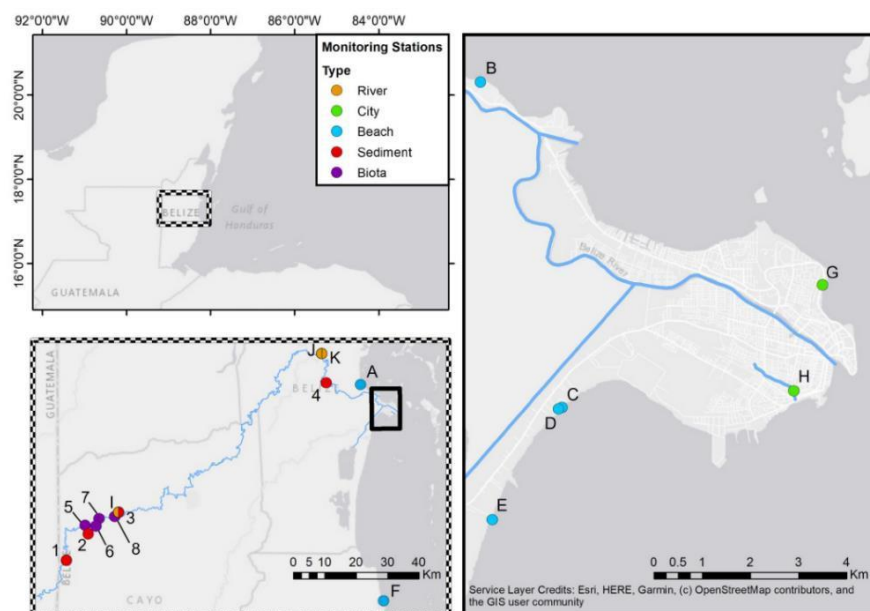
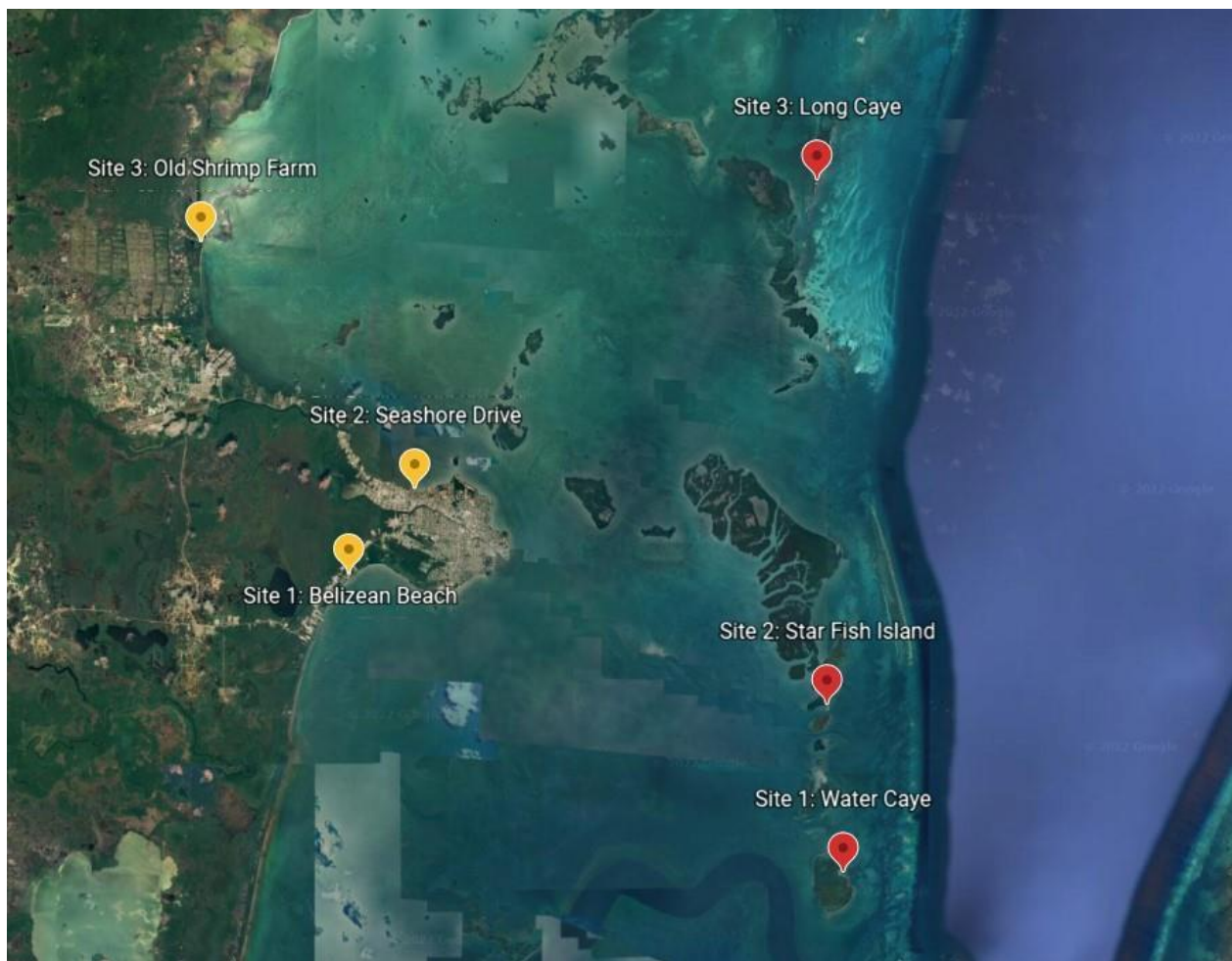


Figure 1. Map of monitoring locations across Belize for both macro/meso litter surveys (river, city, and beach) and microplastic sampling (sediment and biota).

- Survey Sites identified must have a representative sample of beach litter types (i.e. plastic bottles and cigarette butts)
- Survey Sites should also provide a representative sample of beach substrates in Belize (e.g. sandy, rocky, pebble etc.)
- All survey (Phases I & II) must include means of estimating scale (e.g. include a 1 meter rule or 1X1 meter measured target).
- During imagery collection, a ground control point with a color board to help assess lighting conditions can be utilized.
- If time permits, marine litter survey and counts can be performed in some areas.
- Cost for CZMAI staff is for two (2) persons who will collect drone imagery and assist with drone operations.
- Transportation and accommodation costs are estimated based on location.
- This also includes the cost of necessary drone permits for licensed drone flights in country.
- Per diem costs are set with increased rates based on remoteness. This includes meals (if necessary), sundries and water provisions for the day.
- **Step 1: After all sites have been approved and authorized, sites will be logged onto tablets and handheld GPS devices**
- **Step 2: Sites will be visited based on specific approved and suitable times for flying**
- **Step 3: All flights will follow the standard monitoring guidelines so that we ensure standardization across all sites.**
- **Step 4: The team will go out in the field to collect the data**
- **Step 5: Download the data and upload to approved Azure blob storage**

Other factors and considerations associated with “Phase II- Drone Monitoring/Imagery Collection are:

- Test flight and other main task and activities can be performed with a DJI Mavic Pro 2, once the “**Phase I-Pilot Testing**” yields a GSD of 4mm.
- Inclement weather, surrounding avifauna and the risks and challenges of data collection especially with unmanned aerial vehicles within marine environments. **NB: if there is significant hightide or inclement weather not suitable for data collection, another suitable date will be identified for the team to go out in the field. Weather reports will be monitored prior to field visits.**



*

D. Evidence of similar work conducted:

1. Belize Beach 10 Meter Sampling

a. Flight Details

The survey was conducted on December 13, 2022 from 3:30PM-4:30PM at Belizean Beach. The data was collected at 10 meters with a Mavic 2 Pro and an overlap of 75%. The 10-meter flight had a ground sampling distance of 0.20cm/px and captured 297 jpeg images.

b. Sample of Data Collected



Figure 1 Showing a sample of the data collected at 10 meter height.

Figure 1 above shows an aerial image captured using a Mavic 2 Pro with an altitude of 10 meters.

c. Zoomed in at 100%



Figure 2 showing a zoomed in at 100% snippet from the data collected from the aerial survey sampled at 10meters.

Figure 2 above shows the sample data zoomed in at 100% from the sample data seen in figure 1. The cans are more noticeable in the image when zooming in at 100%.

2. Belize Beach 15 Meter Sampling

a. Flight Details

The survey was conducted on December 13, 2022 from 3:30PM-4:30PM at Belizean Beach. The data was collected at 15 meters with a Mavic 2 Pro and an overlap of 75%. The 15-meter flight had a ground sampling distance of 0.40cm/px and captured 121 jpeg images.

b. Sample of Data Collected



Figure 3 Showing a sample of the data collected at 15 meter height.

Figure 3 above shows an aerial image captured using a Mavic 2 Pro with an altitude of 15 meters.
c. Zoomed in at 100%



Figure 4 showing a zoomed in at 100% snippet from the data collected from the aerial survey sampled at 15meters.

Figure 4 above shows a sample of the data zoomed in at 100% from the sample seen on figure 3. The cans are more noticeable in the image when zooming in at 100%.

E. Equipment

1. DJI Mavic 2 Pro



Figure 5 depicts DJI's Mavic 2 Pro

The aerial surveys were captured with DJI's Mavic 2 Pro (see figure 5). The Mavic's 2 Pro is equipped with a camera with lens that have a field of view(FOV) of 77°, 35mm format equivalent of 28mm, and an aperture of /2.8–f/11f/2. The camera has a still image size of 5472x3648 and captures raw aerial imagery in JPEP format. The aircraft has a flight time of 30minutes and uses GPS and GLONASS for location. The images captures by the drone also contains metadata which includes capture date, capture time, altitude, latitude, longitude and the EXIF data. See below:

Goff's Caye 100 Meter Flight Summary

Mission Name: Goff's Caye 100 Meter Flight

Pilot: [REDACTED]

Co-Pilot: None

Date: May 11 2022

Complete: Yes

Weather: Sunny with some clouds

Shooting Angle: Parallel to Main Path

Capture Mode: Capture at Equal Distance Interval

Flight Course: Inside Mode

Speed 23.6 KM/H

Shutter interval: 2.0 sec

Height: 100 M

Expected Resolution: 2.3cm

Frontal Overlap: 85%

Side Overlap: 85%

Course Angle: 181

Margin: 0

Way Points: 26

Course Count: 13 Lines

Flight Length: 3657 M

Cover Area: 6.77 HA

Flight Time: 11 Mins 9 Secs

Photos: 286

Batteries: 1

Comments: Sargassum Drifting in some of the shots.

A. Workplan (Phase 2)

Activities	January				February				March				April				May				June				July				August				September				October				November				Notes
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
Drone Monitoring for 3 Coastal OCCP Sites	x	x										x	x																										For the coastal data collection a total of 12 days will be used; 3 days per quarter. Would need 1 data center, 1 water quality, and 1 driver.						
Drone Monitoring for 3 Marine OCCP Sites				x	x									x	x																									For the marine data collection a total of 12 days will be used; 3 days per quarter. Would need 1 data center, 1 water quality, and 1 boat captain.					
Compile Data and data sheets and send to OCCP Team		x			x								x			x																								A total of 4 days to download and send the marine and terrestrial data to the Team; 1 day per quarter. Would only need 1 data center staff.					

Imagery, data acquisition and handling:

Images

Each image captured is imbedded with metadata such GPS location, altitude, and time. If needed, the drone pilot will note the time, altitude, yaw, pitch and roll, heading direction and speed of each flight before takeoff.

Data

Belize's Data Protection Act states that a data controller and data processor should identify, assess and mitigate risks to personal data. In compliance with this, all images taken will have to be cited as the legal property of CZMAI and full credit must be given to CZMAI if the images are used in reports, publications etc.

B. Budget

Annex 1: Pilot Drone Survey for Marine Litter: Budget contains a breakdown of the preliminary financial proposal to conduct the main tasks, activities for the pilot study.

Summary Budget			
#	Budget Item	Cost(BZD)	COST(USD)
1	Transportation	\$ 252.00	\$ 126.00
2	Per Diem	\$ 120.00	\$ 60.00
3	Consulting Fee/Staff Costs	\$ 475.00	\$ 237.50
4	Equipment Fee	\$ 300.00	\$ 150.00
5	Administrative Fees(10%)	\$ 114.70	\$ 57.35
Total		\$ 1,261.70	\$ 630.85

Activity	Day 1	Day 2
Morning Survey at 10, 15, and 20 meters	06:00-08:00	
Afternoon Survey at 10, 15, and 20 meters	11:00-13:00	
Evening Survey at 10, 15, and 20 meters	15:00-17:00	
Download and send data to OCPP Team		08:00-12:00

Annex 2: Quarterly Drone Survey for 3 Marine Sites: Budget contains a breakdown of the preliminary financial proposal to conduct the main tasks, activities for the pilot study.

Summary Budget			
#	Budget Item	Cost(BZD)	COST(USD)
1	Transportation	\$ 9,720.00	\$ 4,860.00
2	Per Diem	\$ 5,400.00	\$ 2,700.00
3	Consulting Fee/Staff Costs	\$ 16,200.00	\$ 8,100.00
4	Equipment Fee	\$ 7,200.00	\$ 3,600.00
5	Administrative Fees(15%) and Contingency-10% (boat/vehicle rental)	\$ 9,630.00	\$ 4,815.00
Total		\$ 48,150.00	\$ 24,075.00
<i>The budget was done for quarterly monitoring for 3 terrestrial sites and 3 marine sites.</i>			

C. Data Collection Log Chart template

Site Name	Date (MM DD YYYY)	Time Start (00:00)	Time End (00:00)	Location (GPS)	Altitude (m)	Overlap (%)	Weather Conditions	Cloud Cover (%)	Substrate
A									
B									

D. References

Silburn, Briony, et al. "A baseline study of macro, meso and micro litter in the Belize River basin, from catchment to coast." *ICES Journal of Marine Science* (2022).

Annex 5 – Sustainability

1 Sustainability

- 1.1 The Supplier must comply with the Authority's Sustainability Requirements set out in this Contract. The Supplier must ensure that all Supplier Staff and subcontractors who are involved in the performance of the Contract are aware of these requirements in accordance with clauses 8.1(c) and 13.2.
- 1.2 The Authority requires its suppliers and subcontractors to meet the standards set out in the Supplier Code of Conduct in accordance with clause 13.1(c).
- 1.3 The Supplier must comply with all legislation as per clause 13.1.

2 Human Rights

- 2.1 The Authority is committed to ensuring that workers employed within its supply chains are treated fairly, humanely, and equitably. The Authority requires the Supplier to share this commitment and to take reasonable and use reasonable and proportionate endeavours to identify any areas of risk associated with this Contract to ensure that it is meeting the International Labour Organisation International Labour Standards which can be found online - [Conventions and Recommendations \(ilo.org\)](https://www.ilo.org/) and at a minimum comply with the Core Labour Standards, encompassing the right to freedom of association and collective bargaining, prohibition of forced labour, prohibition of discrimination and prohibition of child labour.
- 2.2 The Supplier must ensure that it and its sub-contractors and its [or their] supply chain:
 - 2.2.1 pay staff fair wages and
 - 2.2.2 implement fair shift arrangements, providing sufficient gaps between shifts, adequate rest breaks and reasonable shift length, and other best practices for staff welfare and performance.

3 Equality, Diversity and Inclusion (EDI)

- 3.1 The Supplier will support the Authority to achieve its [Public Sector Equality Duty](#) by complying with the Authority's policies (as amended from time to time) on EDI. This includes ensuring that the Supplier, Supplier Staff, and its subcontractors in the delivery of its obligations under this Contract:

- 3.1.1 do not unlawfully discriminate either directly or indirectly because of race, colour, ethnic or national origin, disability, sex, sexual orientation, gender reassignment, religion or belief, pregnancy and maternity, marriage and civil partnership or age and without prejudice to the generality of the foregoing the Supplier shall not unlawfully discriminate within the meaning and scope of the Equality Act 2010;
- 3.1.2 will not discriminate because of socio-economic background, working pattern or having parental or other caring responsibilities;
- 3.1.3 eliminates discrimination, harassment, victimisation, and any other conduct that is prohibited by or under the Equality Act 2010;
- 3.1.4 advances equality of opportunity between people who share a protected characteristic and those who do not;
- 3.1.5 foster good relations between people who share a protected characteristic and people who do not share it;
- 3.1.6 identifies and removes EDI barriers which are relevant and proportionate to the requirement; and
- 3.1.6 shall endeavour to use gender-neutral language when providing the Deliverables and in all communications in relation to the Contract.

4 Environment

- 4.1 The Supplier shall ensure that any Goods or Services are designed, sourced, and delivered in a manner which is environmentally responsible and in compliance with paragraph 1.3 of this Annex;
- 4.2 In performing its obligations under the Contract, the Supplier shall to the reasonable satisfaction of the Authority ensure the reduction of whole life cycle sustainability impacts including;
 - 4.2.1 resilience to climate change;
 - 4.2.2 eliminating and/or reducing embodied carbon;
 - 4.2.3 minimising resource consumption and ensuring resources are used efficiently;
 - 4.2.4 avoidance and reduction of waste following the waste management hierarchy as set out in Law and working towards a circular economy;
 - 4.2.5 reduction of single use consumable items (including packaging), and avoidance of single use plastic in line with Government commitments;

- 4.2.6 environmental protection (including pollution prevention, biosecurity and reducing or eliminating hazardous substances; and
- 4.2.7 compliance with [Government Buying Standards](#) applicable to Deliverables and using reasonable endeavours to support the Authority in meeting applicable [Greening Government Commitments](#).

5 Social Value

- 5.1 The Supplier will support the Authority in highlighting opportunities to provide wider social, economic, or environmental benefits to communities through the delivery of the Contract.
- 5.2 The Supplier will ensure that supply chain opportunities are inclusive and accessible to:
 - 5.2.1 new businesses and entrepreneurs;
 - 5.2.2 small and medium enterprises (SMEs);
 - 5.2.3 voluntary, community and social enterprise (VCSE) organisations;
 - 5.2.4 mutuals; and
 - 5.2.5 other underrepresented business groups.

Short Form Terms

1. Definitions used in the Contract

In this Contract, unless the context otherwise requires, the following words shall have the following meanings:

"Authority"	means the authority identified in paragraph 3 of the Order Form;
"Authority Data"	a) the data, text, drawings, diagrams, images or sounds (together with any database made up of any of these) which are embodied in any electronic, magnetic, optical or tangible media, including any of the Authority's confidential information, and which: i) are supplied to the Supplier by or on behalf of the Authority; or ii) the Supplier is required to generate, process, store or transmit pursuant to the Contract; or b) any Personal Data for which the Authority is the Data Controller;
"Authority Cause"	any breach of the obligations of the Authority or any other default, act, omission, negligence or statement of the Authority, of its employees, servants, agents in connection with or in relation to the subject-matter of the Contract and in respect of which the Authority is liable to the Supplier;
"Central Government Body"	for the purposes of this Contract this means a body listed in one of the following sub-categories of the Central Government classification of the Public Sector Classification Guide, as published and amended from time to time by the Office for National Statistics: • Government Department; • Non-Departmental Public Body or Assembly Sponsored Public Body (advisory, executive, or tribunal); • Non-Ministerial Department; or • Executive Agency;
"Charges"	means the charges for the Deliverables as specified in the Order Form and Annex 3;
"Confidential Information"	means all information, whether written or oral (however recorded), provided by the disclosing Party to the receiving Party and which (i) is known by the receiving Party to be confidential; (ii) is agreed by the Parties to be confidential;

"Contract"	means this contract between (i) the Authority and (ii) the Supplier which is created by the Supplier signing the Order Form and returning it to the Authority.
"Controller"	has the meaning given to it in the "UK GDPR";
"Crown Body"	means any department, office or agency of the Crown, including any and all Local Authority bodies;
"Data Loss Event"	any event that results, or may result, in unauthorised access to Personal Data held by the Supplier under this Contract, and/or actual or potential loss and/or destruction of Personal Data in breach of this Contract, including any Personal Data Breach;
"Data Protection Impact Assessment"	an assessment by the Controller of the impact of the envisaged processing on the protection of Personal Data;
"Data Protection Legislation"	(i) the UK GDPR and any applicable national implementing Laws as amended from time to time; (ii) the Data Protection Act 2018 to the extent that it relates to Processing of personal data and privacy; (iii) all applicable Law about the Processing of personal data and privacy;
"Data Protection Officer"	has the meaning given to it in the GDPR;
"Data Subject"	has the meaning given to it in the GDPR;
"Data Subject Access Request"	a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data;
"Date of Delivery"	means that date by which the Deliverables must be delivered to the Authority, as specified in the Order Form;
"Deliver"	means handing over the Deliverables to the Authority at the address and on the date specified in the Order Form, which shall include unloading and any other specific arrangements agreed in accordance with Clause 4. Delivered and Delivery shall be construed accordingly;
"Deliverables"	Goods and/or Services that may be ordered under the Contract including the Documentation;

"Documentation"	descriptions of the Services, technical specifications, user manuals, training manuals, operating manuals, process definitions and procedures, system environment descriptions and all such other documentation (whether in hardcopy or electronic form) that is required to be supplied by the Supplier to the Authority under the Contract as: a) would reasonably be required by a competent third party capable of Good Industry Practice contracted by the Authority to develop, configure, build, deploy, run, maintain, upgrade and test the individual systems that provide the Deliverables b) is required by the Supplier in order to provide the Deliverables; and/or c) has been or shall be generated for the purpose of providing the Deliverables;
"Existing IPR"	any and all intellectual property rights that are owned by or licensed to either Party and which have been developed independently of the Contract (whether prior to the date of the Contract or otherwise);
"Expiry Date"	means the date for expiry of the Contract as set out in the Order Form;
"FOIA"	means the Freedom of Information Act 2000 together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government department in relation to such legislation;
"Force Majeure Event"	any event, occurrence, circumstance, matter or cause affecting the performance by either Party of its obligations under the Contract arising from acts, events, omissions, happenings or non-happenings beyond its reasonable control which prevent or materially delay it from performing its obligations under the Contract but excluding: i) any industrial dispute relating to the Supplier, the Supplier Staff (including any subsets of them) or any other failure in the Supplier or the subcontractor's supply chain; ii) any event, occurrence, circumstance, matter or cause which is attributable to the wilful act, neglect or failure to take reasonable precautions against it by the Party concerned; and iii) any failure of delay caused by a lack of funds;
"Goods"	means the goods to be supplied by the Supplier to the Authority under the Contract;
"Good Industry Practice"	standards, practices, methods and procedures conforming to the law and the exercise of the degree of skill and care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced person or body engaged within the relevant industry or business sector;
"Information"	has the meaning given under section 84 of the FOIA;

"Information Commissioner"	the UK's independent authority which deals with ensuring information relating to rights in the public interest and data privacy for individuals is met, whilst promoting openness by public bodies;
"Insolvency Event"	occurs in respect of a legal person (for example an individual, company or organisation): i) if that person is insolvent; ii) if an order is made or a resolution is passed for the winding up of the person (other than voluntarily for the purpose of solvent amalgamation or reconstruction); iii) if an administrator or administrative receiver is appointed in respect of the whole or any part of the persons assets or business; or iv) if the person makes any arrangement with its creditors or takes or suffers any similar or analogous action to any of the actions detailed in this definition as a result of debt in any jurisdiction whether under the Insolvency Act 1986 or otherwise;
"IP Completion Day"	has the meaning given to it in the European Union (Withdrawal) Act 2018;
"Key Personnel"	means any persons specified as such in the Order Form or otherwise notified as such by the Authority to the Supplier in writing;
"Law"	means any law, statute, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, bye-law, right within the meaning of Section 4(1) EU Withdrawal Act 2018 as amended by EU (Withdrawal Agreement) Act 2020, regulation, order, regulatory policy, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements of any regulatory body with which the Parties are bound to comply;
"New IPR"	all and any intellectual property rights in any materials created or developed by or on behalf of the Supplier pursuant to the Contract but shall not include the Supplier's Existing IPR;
"Order Form"	means the letter from the Authority to the Supplier printed above these terms and conditions;
"Party"	the Supplier or the Authority (as appropriate) and "Parties" shall mean both of them;
"Personal Data"	has the meaning given to it in the UK GDPR;
"Personal Data Breach"	has the meaning given to it in the UK GDPR;
"Processing"	has the mean given to it in the UK GDPR;
"Processor"	has the meaning given to it in the UK GDPR;
"Purchase Order Number"	means the Authority's unique number relating to the order for Deliverables to be supplied by the Supplier to the Authority in accordance with the terms of the Contract;

"Regulations"	the Public Contracts Regulations 2015 and/or the Public Contracts (Scotland) Regulations 2015 (as the context requires) as amended from time to time;
"Request for Information"	has the meaning set out in the FOIA or the Environmental Information Regulations 2004 as relevant (where the meaning set out for the term "request" shall apply);
"Services"	means the services to be supplied by the Supplier to the Authority under the Contract;
"Specification"	means the specification for the Deliverables to be supplied by the Supplier to the Authority (including as to quantity, description and quality) as specified in Annex 2;
"Staff Vetting Procedures"	means vetting procedures that accord with good industry practice or, where applicable, the Authority's procedures for the vetting of personnel as provided to the Supplier from time to time;
"Start Date"	Means the start date of the Contract set out in the Order Form;
"Subprocessor"	any third Party appointed to process Personal Data on behalf of the Supplier related to the Contract;
"Supplier Staff"	all directors, officers, employees, agents, consultants and contractors of the Supplier and/or of any subcontractor engaged in the performance of the Supplier's obligations under the Contract;
"Supplier"	means the person named as Supplier in the Order Form;
"Sustainability Requirements"	means any relevant social or environmental strategies, policies, commitments, targets, plans or requirements that apply to and are set out in the Annex 5;
Tender Submission	means the Supplier's response to the invitation to the bidder pack (including, for the avoidance of doubt, any clarification provided by the Supplier).
"Term"	means the period from the Start Date to the Expiry Date as such period may be extended in accordance with the Order Form or terminated in accordance with Clause 11;
"UK GDPR"	means Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) (United Kingdom General Data Protection Regulation), as it forms part of the law of England and Wales, Scotland and Northern Ireland by virtue of section 3 of the European Union (Withdrawal) Act 2018 (and see section 205(4);

"VAT"	means value added tax in accordance with the provisions of the Value Added Tax Act 1994;
"Workers"	any one of the Supplier Staff which the Authority, in its reasonable opinion, considers is an individual to which Procurement Policy Note 08/15 (Tax Arrangements of Public Appointees) (https://www.gov.uk/government/publications/procurement-policy-note-0815-tax-arrangements-of-appointees) applies in respect of the Deliverables;
"Working Day"	means a day (other than a Saturday or Sunday) on which banks are open for business in the City of London.

2. Understanding the Contract

In the Contract, unless the context otherwise requires:

2.1 references to numbered clauses are references to the relevant clause in these terms and conditions and references to numbered paragraphs are references to the paragraph in the relevant Annex;

2.2 any obligation on any Party not to do or omit to do anything shall include an obligation not to allow that thing to be done or omitted to be done;

2.3 the headings in this Contract are for information only and do not affect the interpretation of the Contract;

2.4 references to "writing" include printing, display on a screen and electronic transmission and other modes of representing or reproducing words in a visible form;

2.5 the singular includes the plural and vice versa;

2.6 a reference to any law includes a reference to that law as amended, extended, consolidated or re-enacted from time to time and to any legislation or byelaw made under that law;

2.7 any reference in this Contract which immediately before the IP Completion Day (or such later date when relevant EU law ceases to have effect pursuant to Section 1A of the European Union (Withdrawal) Act 2018) is a reference to (as it has effect from time to time):

- i. any EU regulation, EU decision, EU tertiary legislation or provision of the European Economic Area ("EEA") agreement ("EU References") which is to form part of domestic law by application of Section 3 of the European Union (Withdrawal) Act 2018 and which shall be read on and after IP Completion Day as a reference to the EU References as they form part of domestic law by virtue of Section 3 of the European Union (Withdrawal) Act 2018 as modified by domestic law from time to time; and

- ii. any EU institution or EU authority or other such EU body shall be read on and after the date of exit from the EU as a reference to the UK institution, authority or body to which its functions were transferred.

2.8 the word 'including', "for example" and similar words shall be understood as if they were immediately followed by the words "without limitation";

2.9 a person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality);

2.10 any Annexes form part of this Contract and shall have effect as if set out in full in the body of this Contract. Any reference to this Contract includes the Annexes; and

2.11 all undefined words and expressions are to be given their normal English meaning within the context of this Contract. Any dispute as to the interpretation of such undefined words and expressions shall be settled by reference to the definition in the Shorter Oxford English Dictionary.

3. How the Contract works

3.1 The Order Form is an offer by the Authority to purchase the Deliverables subject to and in accordance with the terms and conditions of the Contract.

3.2 The Supplier is deemed to accept the offer in the Order Form when the Authority receives a copy of the Order Form signed by the Supplier.

3.3 The Supplier warrants and represents that its Tender Submission and all statements made and documents submitted as part of the procurement of Deliverables are and remain true and accurate.

4. What needs to be delivered

4.1 All Deliverables

(a) The Supplier must provide Deliverables: (i) in accordance with the Specification and Tender Submission; (ii) to a professional standard; (iii) using all reasonable skill and care; (iv) using Good Industry Practice; (v) using its own policies, processes and internal quality control measures as long as they don't conflict with the Contract; (vi) in accordance with such policies and procedures of the Authority (as amended from time to time) that may be specified in the Contract (vii) on the dates agreed; and (viii) in compliance with all applicable Law.

(b) Without prejudice to the Specification the Supplier must provide Deliverables with a warranty of at least 90 days (or longer where the Supplier offers a longer warranty period to the Authority) from Delivery against all obvious damage or defects.

4.2 Goods clauses

(a) All Goods Delivered must be capable of meeting the requirements set out in the Specification and be either (i) new and of recent origin, (ii) reused or (iii) recycled.

(b) All manufacturer warranties covering the Goods will be assigned to the Authority on request and for free.

(c) The Supplier transfers ownership of the Goods on completion of Delivery (including off-loading and stacking) or payment for those Goods, whichever is earlier.

(d) Risk in the Goods transfers to the Authority on Delivery but remains with the Supplier if the Authority notices any damage or defect following Delivery and lets the Supplier know within three Working Days of Delivery.

(e) The Supplier must have full and unrestricted ownership of the Goods at the time of transfer of ownership.

(f) The Supplier must Deliver the Goods on the date and to the specified location during the Authority's working hours.

(g) The Supplier, its subcontractor(s) and supply chain must minimise packaging used whilst providing sufficient packaging for the Goods to reach the point of Delivery safely and undamaged. The Supplier must take back any primary packaging where it is possible to do so. Packaging must be 100% re-usable, recyclable or compostable, use recycled content where reasonably practicable and support the Government's commitment to eliminate single use plastic.

(h) All Deliveries must have a delivery note attached that specifies the order number, type, quantity of Goods, contact and details of traceability through the supply chain.

(i) The Supplier must provide all tools, information and instructions the Authority needs to make use of the Goods. This will include, where appropriate, any operation manuals which, unless specified otherwise, will be written in English and provided in electronic form.

(j) The Supplier will notify the Authority of any request that Goods are returned to it or the manufacturer after the discovery of safety issues or defects that might endanger health or hinder performance and shall indemnify the Authority against the costs arising as a result of any such request. Goods must be disposed of in line with the waste management hierarchy as set out in Law. The Supplier will provide evidence and transparency of the items and routes used for disposal to the Authority on request.

(k) The Authority can cancel any order or part order of Goods which have not been Delivered. If the Authority gives less than 14 calendar days' notice then it

will pay the Supplier's reasonable and proven costs already incurred on the cancelled order as long as the Supplier takes all reasonable steps to minimise these costs.

(l) The Supplier must at its own cost repair, replace, refund or substitute (at the Authority's option and request) any Goods that the Authority rejects because they don't conform with clause 4.2. If the Supplier doesn't do this it will pay the Authority's costs including repair or re-supply by a third party.

(m) The Authority will not be liable for any actions, claims, costs and expenses incurred by the Supplier or any third party during Delivery of the Goods unless and to the extent that it is caused by negligence or other wrongful act of the Authority or its servant or agent. If the Authority suffers or incurs any damage or injury (whether fatal or otherwise) occurring in the course of Delivery or installation then the Supplier shall indemnify from all losses, damages, costs or expenses (including professional fees and fines) which arise as a result of or in connection with such damage or injury where it is attributable to any act or omission of the Supplier or, where related to the Contract, any of its subcontractors or suppliers.

4.3 Services clauses

(a) Late delivery of the Services will be a breach of the Contract.

(b) The Supplier must co-operate with the Authority and third party suppliers on all aspects connected with the delivery of the Services and ensure that Supplier Staff comply with any reasonable instructions including any security requirements.

(c) The Authority must provide the Supplier Staff with reasonable access to its premises at such reasonable times agreed with the Authority for the purpose of supplying the Services.

(d) The Supplier must at its own risk and expense provide all equipment required to deliver the Services. Any equipment provided by the Authority to the Supplier for supplying the Services remains the property of the Authority and is to be returned to the Authority on expiry or termination of the Contract.

(e) The Supplier must allocate sufficient resources and appropriate expertise to the Contract.

(f) The Supplier must take all reasonable care to ensure performance does not disrupt the Authority's operations, employees or other contractors.

(g) On completion of the Services, the Supplier is responsible for leaving the Authority's premises in a clean, safe and tidy condition and making good any damage that it has caused to the Authority's premises or property, other than fair wear and tear and any pre-existing cleanliness, safety or tidiness issue at the Authority's premises that existed before the commencement of the Term.

(h) The Supplier must ensure all Services, and anything used to deliver the Services, are of the required quality and free from damage or defects.

(i) The Authority is entitled to withhold payment for partially or undelivered Services or for Services which are not delivered in accordance with the Contract but doing so does not stop it from using its other rights under the Contract.

5. Pricing and payments

5.1 In exchange for the Deliverables delivered, the Supplier shall be entitled to invoice the Authority for the charges in Annex 3. The Supplier shall raise invoices promptly and in any event within 90 days from when the charges are due.

5.2 All Charges:

(a) exclude VAT, which is payable on provision of a valid VAT invoice and charged at the prevailing rate;

(b) include all costs connected with the supply of Deliverables.

5.3 The Authority must pay the Supplier the charges within 30 days of receipt by the Authority of a valid, undisputed invoice, in cleared funds to the Supplier's account stated in the Order Form.

5.4 A Supplier invoice is only valid if it:

(a) includes all appropriate references including the Purchase Order Number and other details reasonably requested by the Authority as set out in Annex 3; and

(b) includes a detailed breakdown of Deliverables which have been delivered (if any).

Details of the Authority's requirements for a valid invoice at the Start Date are set out in Annex 3.

5.5 If there is a dispute between the Parties as to the amount invoiced, the Authority shall pay the undisputed amount. The Supplier shall not suspend the provision of the Deliverables unless the Supplier is entitled to terminate the Contract for a failure to pay undisputed sums in accordance with clause 11.6. Any disputed amounts shall be resolved through the dispute resolution procedure detailed in clause 35.

5.6 If any sum of money is recoverable from or payable by the Supplier under the Contract (including any sum which the Supplier is liable to pay to the Authority in respect of any breach of the Contract), that sum may be deducted unilaterally by the Authority from any sum then due, or which may become due, to the Supplier under the Contract or under any other agreement or contract with the Authority. The Supplier shall not be entitled to assert any credit, set-off or counterclaim against the Authority in order to justify withholding payment of any such amount in whole or in part.

5.7 The Supplier must ensure that its subcontractors and supply chain are paid, in full, within 30 days of receipt of a valid, undisputed invoice. If this doesn't happen, the Authority can publish the details of the late payment or non-payment.

6. The Authority's obligations to the Supplier

6.1 If the Supplier fails to comply with the Contract as a result of an Authority Cause:

(a) the Authority cannot terminate the Contract under clause 11 on account of the failure to comply, provided this will not prejudice the Authority's right to terminate for another cause that may exist at the same time;

(b) the Supplier will be relieved from liability for the performance of its obligations under the Contract to the extent that it is prevented from performing them by the Authority Cause and will be entitled to such reasonable and proven additional expenses that arise as a direct result of the Authority Cause;

(c) the Supplier is entitled to any additional time needed to deliver the Deliverables as a direct result of the Authority's Cause;

(d) the Supplier cannot suspend the ongoing supply of Deliverables.

6.2 Clause 6.1 only applies if the Supplier:

(a) gives notice to the Authority within 10 Working Days of becoming aware of an Authority Cause, such notice setting out in detail with supporting evidence the known reasons for the Authority Cause;

(b) demonstrates that the failure only happened because of the Authority Cause;

(c) has used all reasonable endeavours to mitigate the impact of the Authority Cause.

7. Record keeping and reporting

7.1 The Supplier must ensure that suitably qualified (and authorised) representatives attend progress meetings with the Authority and provide progress reports when specified in Annex 2.

7.2 The Supplier must keep and maintain full and accurate records and accounts on everything to do with the Contract for seven years after the date of expiry or termination of the Contract.

7.3 The Supplier must allow any auditor appointed by the Authority access to their premises to verify all contract accounts and records of everything to do with the Contract and provide copies for the audit.

7.4 The Supplier must provide information to the auditor and reasonable co-operation at their request.

7.5 If the Supplier is not providing any of the Deliverables, or is unable to provide them, it must immediately:

- (a) tell the Authority and give reasons;
- (b) propose corrective action;
- (c) agree a deadline with the Authority for completing the corrective action.

7.6 If the Authority, acting reasonably, is concerned either:

- (a) as to the financial stability of the Supplier such that it may impact on the continued performance of the Contract; or
- (b) as to the sustainability or health and safety conduct of the Supplier, subcontractors and supply chain in the performance of the Contract;

then the Authority may:

- (i) require that the Supplier provide to the Authority (for its approval) a plan setting out how the Supplier will ensure continued performance of the Contract (in the case of (a)) or improve its sustainability conduct or performance (in the case of (b)) and the Supplier will make changes to such plan as reasonably required by the Authority and once it is agreed then the Supplier shall act in accordance with such plan and report to the Authority on demand
- (ii) if the Supplier fails to provide a plan or fails to agree any changes which are requested by the Authority or materially fails to implement or provide updates on progress with the plan, terminate the Contract immediately for material breach (or on such date as the Authority notifies).

8. Supplier staff

8.1 The Supplier Staff involved in the performance of the Contract must:

- a) be appropriately trained and qualified;
- b) be vetted using Good Industry Practice and in accordance with the instructions issued by the Authority in the Order Form;
- c) comply with the Authority's conduct requirements when on the Authority's premises including, without limitation, those Sustainability Requirements relating to Equality, Diversity & Inclusion (EDI) contained in Annex 5; and
- d) be informed about those specific requirements referred to in Clause 13.2.

8.2 Where an Authority decides one of the Supplier's Staff isn't suitable to work on the Contract, the Supplier must replace them with a suitably qualified alternative.

8.3 If requested, the Supplier must replace any person whose acts or omissions have caused the Supplier to breach clause 8.

8.4 The Supplier must provide a list of Supplier Staff needing to access the Authority's premises and say why access is required.

8.5 The Supplier indemnifies the Authority against all losses, damages, costs or expenses (including professional fees and fines) arising from claims brought against it by any Supplier Staff caused by an act or omission of the Supplier or any other Supplier Staff.

8.6 The Supplier shall use those persons nominated in the Order Form (if any) to provide the Deliverables and shall not remove or replace any of them unless:

- (a) requested to do so by the Authority;
- (b) the person concerned resigns, retires or dies or is on maternity, adoption, shared parental leave or long-term sick leave; or
- (c) the person's employment or contractual arrangement with the Supplier or any subcontractor is terminated.

9. Rights and protection

9.1 The Supplier warrants and represents that:

- (a) it has full capacity and authority to enter into and to perform the Contract;
- (b) the Contract is executed by its authorised representative;
- (c) it is a legally valid and existing organisation incorporated in the place it was formed;
- (d) there are no known legal or regulatory actions or investigations before any court, administrative body or arbitration tribunal pending or threatened against it or its affiliates that might affect its ability to perform the Contract;
- (e) it maintains all necessary rights, authorisations, licences and consents to perform its obligations under the Contract;
- (f) it doesn't have any contractual obligations which are likely to have a material adverse effect on its ability to perform the Contract; and
- (g) it is not impacted by an Insolvency Event.

9.2 The warranties and representations in clause 9.1 are repeated each time the Supplier provides Deliverables under the Contract.

9.3 The Supplier indemnifies the Authority against each of the following:

(a) wilful misconduct of the Supplier, any of its subcontractor and/or Supplier Staff that impacts the Contract;

(b) non-payment by the Supplier of any tax or National Insurance.

9.4 If the Supplier becomes aware of a representation or warranty that becomes untrue or misleading, it must immediately notify the Authority.

9.5 All third party warranties and indemnities covering the Deliverables must be assigned for the Authority's benefit by the Supplier.

10. Intellectual Property Rights (IPRs)

10.1 Each Party keeps ownership of its own Existing IPRs. The Supplier gives the Authority a non-exclusive, perpetual, royalty-free, irrevocable, transferable worldwide licence to use, change and sub-license the Supplier's Existing IPR to enable it and its sub-licensees to both:

(a) receive and use the Deliverables;

(b) use the New IPR.

10.2 Any New IPR created under the Contract is owned by the Authority. The Authority gives the Supplier a licence to use any Existing IPRs for the purpose of fulfilling its obligations under the Contract and a perpetual, royalty-free, non-exclusive licence to use any New IPRs.

10.3 Where a Party acquires ownership of intellectual property rights incorrectly under this Contract it must do everything reasonably necessary to complete a transfer assigning them in writing to the other Party on request and at its own cost.

10.4 Neither Party has the right to use the other Party's intellectual property rights, including any use of the other Party's names, logos or trademarks, except as provided in clause 10 or otherwise agreed in writing.

10.5 If any claim is made against the Authority for actual or alleged infringement of a third party's intellectual property arising out of, or in connection with, the supply or use of the Deliverables (an "**IPR Claim**"), then the Supplier indemnifies the Authority against all losses, damages, costs or expenses (including professional fees and fines) incurred as a result of the IPR Claim.

10.6 If an IPR Claim is made or anticipated the Supplier must at its own expense and the Authority's sole option, either:

(a) obtain for the Authority the rights in clauses 10.1 and 10.2 without infringing any third party intellectual property rights;

(b) replace or modify the relevant item with substitutes that don't infringe intellectual property rights without adversely affecting the functionality or performance of the Deliverables.

11. Ending the contract

11.1 The Contract takes effect on the date of or (if different) the date specified in the Order Form and ends on the earlier of the date of expiry or termination of the Contract or earlier if required by Law.

11.2 The Authority can extend the Contract where set out in the Order Form in accordance with the terms in the Order Form.

Ending the Contract without a reason

11.3 The Authority has the right to terminate the Contract at any time without reason or liability by giving the Supplier not less than 30 days' written notice and if the Contract is terminated, clause 11.5(b) to 11.5(g) applies.

When the Authority can end the Contract

11.4 (a) If any of the following events happen, the Authority has the right to immediately terminate its Contract by issuing a termination notice in writing to the Supplier:

(i) there is a Supplier Insolvency Event;

(ii) if the Supplier repeatedly breaches the Contract in a way to reasonably justify in the Authority's opinion that the Supplier's conduct is inconsistent with it having the intention or ability to give effect to the terms and conditions of the Contract;

(iii) if the Supplier is in material breach of any obligation which is capable of remedy, and that breach is not remedied within 30 days of the Supplier receiving notice specifying the breach and requiring it to be remedied. Where a material breach is not capable of remedy, the Authority has the right to immediately terminate the Contract;

(iv) there is a change of control (within the meaning of section 450 of the Corporation Tax Act 2010) of the Supplier which isn't pre-approved by the Authority in writing;

(v) if the Authority discovers that the Supplier was in one of the situations in 57 (1) or 57(2) of the Regulations at the time the Contract was awarded;

(vi) the Supplier or its affiliates embarrass or bring the Authority into disrepute or diminish the public trust in them;

(vii) where a right to terminate described in clause 27 occurs;

(viii) the Supplier is in breach of any of its health, safety and well-being obligations under clause 28.1(a); and

(ix) where, in accordance with clause 33.3, there is or may be an actual or potential conflict of interest.

(b) If any of the events in 73(1) (a) to (c) of the Regulations (substantial modification, exclusion of the Supplier, procurement infringement) happen, the Authority has the right to immediately terminate the Contract and clause 11.5(a) to 11.5(g) applies.

11.5 What happens if the Contract ends

Where the Authority terminates the Contract under clause 11.4 all of the following apply:

(a) the Supplier is responsible for the Authority's reasonable costs of procuring replacement deliverables for the rest of the Term ;

(b) the Authority's payment obligations under the terminated Contract stop immediately;

(c) accumulated rights of the Parties are not affected;

(d) the Supplier must promptly delete or return the Authority Data except where required to retain copies by law;

(e) the Supplier must promptly return any of the Authority's property provided under the Contract;

(f) the Supplier must, at no cost to the Authority, give all reasonable assistance to the Authority and any incoming supplier and co-operate fully in the handover and re-procurement;

(g) the following clauses survive the termination of the Contract: 3.3, 7.2, 7.3, 7.4, 9, 10, 12,13.3, 14, 15, 16, 17, 18, 19, 20, 32, 35, 36 and any clauses or provisions within the Order Form or the Annexes which are expressly or by implication intended to continue.

11.6 When the Supplier can end the Contract

(a) The Supplier can issue a reminder notice if the Authority does not pay an undisputed invoice on time. The Supplier can terminate the Contract if the Authority fails to pay an undisputed invoiced sum due and worth over 10% of the total Contract value or £1,000, whichever is the lower, within 30 days of the date of the reminder notice.

(b) If a Supplier terminates the Contract under clause 11.6(a):

(i) the Authority must promptly pay all outstanding charges incurred to the Supplier;

(ii) the Authority must pay the Supplier reasonable committed and unavoidable losses as long as the Supplier provides a fully itemised and costed schedule with satisfactory evidence - the maximum value of this payment is limited to the total sum payable to the Supplier if the Contract had not been terminated;

(iii) clauses 11.5(d) to 11.5(g) apply.

11.7 Partially ending and suspending the Contract

(a) Where the Authority has the right to terminate the Contract it can terminate or suspend (for any period), all or part of it. If the Authority suspends the Contract it can provide the Deliverables itself or buy them from a third party.

(b) The Authority can only partially terminate or suspend the Contract if the remaining parts of it can still be used to effectively deliver the intended purpose.

(c) The Parties must agree (in accordance with clause 25) any necessary variation required by clause 11.7, but the Supplier may neither:

(i) reject the variation; nor

(ii) increase the Charges, except where the right to partial termination is under clause 11.3.

(d) The Authority can still use other rights available, or subsequently available to it if it acts on its rights under clause 11.7.

12. How much you can be held responsible for

12.1 Each Party's total aggregate liability under or in connection with the Contract (whether in tort, contract or otherwise) is no more than 10 (ten) times the value of the Charges unless specified in the Order Form.

12.2 No Party is liable to the other for:

(a) any indirect losses;

(b) loss of profits, turnover, savings, business opportunities or damage to goodwill (in each case whether direct or indirect).

12.3 In spite of clause 12.1, neither Party limits or excludes any of the following:

(a) its liability for death or personal injury caused by its negligence, or that of its employees, agents or subcontractors;

(b) its liability for bribery or fraud or fraudulent misrepresentation by it or its employees;

(c) any liability that cannot be excluded or limited by law.

12.4 In spite of clause 12.1, the Supplier does not limit or exclude its liability for any indemnity given under clauses 4.2(j), 4.2(m), 8.5, 9.3, 10.5, 13.3, 15.28(e) or 31.2(b).

12.5 Each Party must use all reasonable endeavours to mitigate any loss or damage which it suffers under or in connection with the Contract, including where the loss or damage is covered by any indemnity.

12.6 If more than one Supplier is party to the Contract, each Supplier Party is fully responsible for both their own liabilities and the liabilities of the other Suppliers.

13. Obeying the law

13.1 The Supplier must, in connection with provision of the Deliverables:

- (a) comply with all applicable Law;
- (b) comply with the Sustainability Requirements
- (c) use reasonable endeavours to comply and procure that its subcontractors comply with the Supplier Code of Conduct appearing at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779660/20190220-Supplier_Code_of_Conduct.pdf

13.2 The Sustainability Requirements and the requirements set out in Clause 27, 28 and 30 must be explained to the Supplier's Staff, subcontractors and suppliers who are involved in the performance of the Supplier's obligations under the Contract and where it is relevant to their role and equivalent obligations must be included in any contract with any suppliers or subcontractor that is connected to the Contract.

13.3 The Supplier indemnifies the Authority against all losses, damages, costs or expenses (including professional fees and fines) resulting from any default by the Supplier relating to any applicable Law to do with the Contract.

13.4 The Supplier must appoint a Compliance Officer who must be responsible for ensuring that the Supplier complies with the Law and its obligations under the Contract.

13.5 "Compliance Officer" the person(s) appointed by the Supplier who is responsible for ensuring that the Supplier complies with its legal and other obligations under the Contract.

13.6 The Supplier will provide such evidence of compliance with its obligations under this Clause 13 as the Authority reasonably requests.

14. Insurance

14.1 The Supplier must, at its own cost, obtain and maintain the required insurances as set out in the Order Form.

14.2 The Supplier will provide evidence of the required insurances on request from the Authority.

15. Data protection

15.1 The Authority is the Controller and the Supplier is the Processor for the purposes of the Data Protection Legislation.

15.2 The Supplier must process Personal Data and ensure that Supplier Staff process Personal Data only in accordance with this Contract.

15.3 The Supplier shall take all reasonable measures relating to the security of processing which are required pursuant to Article 32 of the UK GDPR including, without limitation, those security measures specified in this clause 15.

15.4 The Supplier must not remove any ownership or security notices in or relating to the Authority Data.

15.5 The Supplier must make accessible back-ups of all Authority Data, stored in an agreed off-site location and send the Authority copies every six Months.

15.6 The Supplier must ensure that any Supplier system holding any Authority Data, including back-up data, is a secure system that complies with the security requirements specified in writing by the Authority.

15.7 If at any time the Supplier suspects or has reason to believe that the Authority Data provided under the Contract is corrupted, lost or sufficiently degraded, then the Supplier must notify the Authority and immediately suggest remedial action.

15.8 If the Authority Data is corrupted, lost or sufficiently degraded so as to be unusable the Authority may either or both:

- (a) tell the Supplier to restore or get restored Authority Data as soon as practical but no later than five Working Days from the date that the Authority receives notice, or the Supplier finds out about the issue, whichever is earlier;

- (b) restore the Authority Data itself or using a third party.

15.9 The Supplier must pay each Party's reasonable costs of complying with clause 15.8 unless the Authority is at fault.

15.10 Only the Authority can decide what processing of Personal Data a Supplier can do under the Contract and must specify it for the Contract using the template in Annex 1 of the Order Form (*Authorised Processing*).

15.11 The Supplier must only process Personal Data if authorised to do so in the Annex to the Order Form (*Authorised Processing*) by the Authority. Any further written

instructions relating to the processing of Personal Data are incorporated into Annex 1 of the Order Form.

15.12 The Supplier must give all reasonable assistance to the Authority in the preparation of any Data Protection Impact Assessment before starting any processing, including:

- (a) a systematic description of the expected processing and its purpose;
- (b) the necessity and proportionality of the processing operations;
- (c) the risks to the rights and freedoms of Data Subjects;
- (d) the intended measures to address the risks, including safeguards, security measures and mechanisms to protect Personal Data.

15.13 The Supplier must notify the Authority immediately if it thinks the Authority's instructions breach the Data Protection Legislation.

15.14 The Supplier must put in place appropriate Protective Measures to protect against a Data Loss Event which must be approved by the Authority.

15.15 If lawful to notify the Authority, the Supplier must notify it if the Supplier is required to process Personal Data by Law promptly and before processing it.

15.16 The Supplier must take all reasonable steps to ensure the reliability and integrity of any Supplier Staff who have access to the Personal Data and ensure that they:

- (a) are aware of and comply with the Supplier's duties under this clause 15;
- (b) are subject to appropriate confidentiality undertakings with the Supplier or any Subprocessor;
- (c) are informed of the confidential nature of the Personal Data and do not provide any of the Personal Data to any third party unless directed in writing to do so by the Authority or as otherwise allowed by the Contract;
- (d) have undergone adequate training in the use, care, protection and handling of Personal Data.

15.17 The Supplier must not transfer Personal Data outside of the EU unless all of the following are true:

- (a) it has obtained prior written consent of the Authority;
- (b) the Authority has decided that there are appropriate safeguards (in accordance with Article 46 of the UK GDPR);
- (c) the Data Subject has enforceable rights and effective legal remedies when transferred;

(d) the Supplier meets its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred;

(e) where the Supplier is not bound by Data Protection Legislation it must use its best endeavours to help the Authority meet its own obligations under Data Protection Legislation; and

(f) the Supplier complies with the Authority's reasonable prior instructions about the processing of the Personal Data.

15.18 The Supplier must notify the Authority immediately if it:

(a) receives a Data Subject Access Request (or purported Data Subject Access Request);

(b) receives a request to rectify, block or erase any Personal Data;

(c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;

(d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Contract;

(e) receives a request from any third party for disclosure of Personal Data where compliance with the request is required or claims to be required by Law;

(f) becomes aware of a Data Loss Event.

15.19 Any requirement to notify under clause 15.17 includes the provision of further information to the Authority in stages as details become available.

15.20 The Supplier must promptly provide the Authority with full assistance in relation to any Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause 15.17. This includes giving the Authority:

(a) full details and copies of the complaint, communication or request;

(b) reasonably requested assistance so that it can comply with a Data Subject Access Request within the relevant timescales in the Data Protection Legislation;

(c) any Personal Data it holds in relation to a Data Subject on request;

(d) assistance that it requests following any Data Loss Event;

(e) assistance that it requests relating to a consultation with, or request from, the Information Commissioner's Office.

15.21 The Supplier must maintain full, accurate records and information to show it complies with this clause 15. This requirement does not apply where the Supplier employs fewer than 250 staff, unless either the Authority determines that the processing:

(a) is not occasional;

(b) includes special categories of data as referred to in Article 9(1) of the UK GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the UK GDPR;

(c) is likely to result in a risk to the rights and freedoms of Data Subjects.

15.22 The Supplier will make available to the Authority all information necessary to demonstrate compliance with clause 15 and allow for and contribute to audits, including inspections, conducted by the Authority or another auditor appointed by the Authority.

15.23 The Supplier must appoint a Data Protection Officer responsible for observing its obligations in this Contract and give the Authority their contact details.

15.24 Before allowing any Subprocessor to process any Personal Data, the Supplier must:

(a) notify the Authority in writing of the intended Subprocessor and processing;

(b) obtain the written consent of the Authority;

(c) enter into a written contract with the Subprocessor so that this clause 15 applies to the Subprocessor;

(d) provide the Authority with any information about the Subprocessor that the Authority reasonably requires.

15.25 The Supplier remains fully liable for all acts or omissions of any Subprocessor.

15.26 At any time the Authority can, with 30 Working Days' notice to the Supplier, change this clause 15 to:

(a) replace it with any applicable standard clauses (between the controller and processor) or similar terms forming part of an applicable certification scheme under UK GDPR Article 42;

(b) ensure it complies with guidance issued by the Information Commissioner's Office.

15.27 The Parties agree to take account of any non-mandatory guidance issued by the Information Commissioner's Office.

15.28 The Supplier:

- (a) must provide the Authority with all Authority Data in an agreed open format within 10 Working Days of a written request;
- (b) must have documented processes to guarantee prompt availability of Authority Data if the Supplier stops trading;
- (c) must securely destroy all storage media that has held Authority Data at the end of life of that media using Good Industry Practice;
- (d) must securely erase or return all Authority Data and any copies it holds when asked to do so by the Authority unless required by Law to retain it;
- (e) indemnifies the Authority against any and all losses, damages, costs or expenses (including professional fees and fines) incurred if the Supplier breaches clause 15 and any Data Protection Legislation.

16. What you must keep confidential

16.1 Each Party must:

- (a) keep all Confidential Information it receives confidential and secure;
- (b) not disclose, use or exploit the disclosing Party's Confidential Information without the disclosing Party's prior written consent, except for the purposes anticipated under the Contract;
- (c) immediately notify the disclosing Party if it suspects unauthorised access, copying, use or disclosure of the Confidential Information.

16.2 In spite of clause 16.1, a Party may disclose Confidential Information which it receives from the disclosing Party in any of the following instances:

- (a) where disclosure is required by applicable law, permitted in respect of an audit pursuant to clause 7.3, or by a court with the relevant jurisdiction if the recipient Party notifies the disclosing Party of the full circumstances, the affected Confidential Information and extent of the disclosure;
- (b) if the recipient Party already had the information without obligation of confidentiality before it was disclosed by the disclosing Party;
- (c) if the information was given to it by a third party without obligation of confidentiality;
- (d) if the information was in the public domain at the time of the disclosure;
- (e) if the information was independently developed without access to the disclosing Party's Confidential Information;
- (f) to its auditors or for the purposes of regulatory requirements;

(g) on a confidential basis, to its professional advisers on a need-to-know basis;

(h) to the Serious Fraud Office where the recipient Party has reasonable grounds to believe that the disclosing Party is involved in activity that may be a criminal offence under the Bribery Act 2010.

16.3 The Supplier may disclose Confidential Information on a confidential basis to Supplier Staff on a need-to-know basis to allow the Supplier to meet its obligations under the Contract. The Supplier Staff must enter into a direct confidentiality agreement with the Authority at its request.

16.4 The Authority may disclose Confidential Information in any of the following cases:

(a) on a confidential basis to the employees, agents, consultants and contractors of the Authority;

(b) on a confidential basis to any other Central Government Body, any successor body to a Central Government Body or any organisation that the Authority transfers or proposes to transfer all or any part of its business to;

(c) if the Authority (acting reasonably) considers disclosure necessary or appropriate to carry out its public functions;

(d) where requested by Parliament; and/or

(e) under clauses 5.7 and 17.

16.5 For the purposes of clauses 16.2 to 16.4 references to disclosure on a confidential basis means disclosure under a confidentiality agreement or arrangement including terms as strict as those required in clause 16.

16.6 Information which is exempt from disclosure by clause 17 is not Confidential Information.

16.7 The Supplier must not make any press announcement or publicise the Contract or any part of it in any way, without the prior written consent of the Authority and must take all reasonable steps to ensure that Supplier Staff do not either.

16.8 Where essential to comply with or carry out their statutory functions the Authority may disclose Confidential Information.

17. When you can share information

17.1 The Supplier must tell the Authority within 48 hours if it receives a Request For Information.

17.2 Within the required timescales the Supplier must give the Authority full co-operation and information needed so the Authority can:

(a) comply with any Freedom of Information Act (FOIA) request;

(b) comply with any Environmental Information Regulations (EIR) request.

17.3 The Authority may talk to the Supplier to help it decide whether to publish information under clause 17. However, the extent, content and format of the disclosure is the Authority's decision, which does not need to be reasonable.

18. Invalid parts of the contract

If any part of the Contract is prohibited by Law or judged by a court to be unlawful, void or unenforceable, it must be read as if it was removed from that Contract as much as required and rendered ineffective as far as possible without affecting the rest of the Contract, whether it's valid or enforceable.

19. No other terms apply

The provisions expressly incorporated into the Contract are the entire agreement between the Parties. The Contract replaces all previous statements and agreements whether written or oral. No other provisions apply.

20. Other people's rights in a contract

No third parties may use the Contracts (Rights of Third Parties) Act 1999 (CRTPA) to enforce any term of the Contract unless stated (referring to CRTPA) in the Contract. This does not affect third party rights and remedies that exist independently from CRTPA.

21. Circumstances beyond your control

21.1 Any Party affected by a Force Majeure Event is excused from performing its obligations under the Contract while the inability to perform continues, if it both:

(a) provides written notice to the other Party;

(b) uses all reasonable measures practical to reduce the impact of the Force Majeure Event.

21.2 Either party can partially or fully terminate the Contract if the provision of the Deliverables is materially affected by a Force Majeure Event and the impact of such event lasts for 90 days continuously.

21.3 Where a Party terminates under clause 21.2:

(a) each party must cover its own losses;

(b) clause 11.5(b) to 11.5(g) applies.

22. Relationships created by the contract

The Contract does not create a partnership, joint venture or employment relationship. The Supplier must represent themselves accordingly and ensure others do so.

23. Giving up contract rights

A partial or full waiver or relaxation of the terms of the Contract is only valid if it is stated to be a waiver in writing to the other Party.

24. Transferring responsibilities

24.1 The Supplier cannot assign the Contract, or any rights under it, without the Authority's written consent.

24.2 The Authority can assign, novate or transfer its Contract or any part of it to any Crown Body, any contracting authority within the meaning of the Regulations or any private sector body which performs the functions of the Authority.

24.3 When the Authority uses its rights under clause 24.2 the Supplier must enter into a novation agreement in the form that the Authority specifies.

24.4 The Supplier remains responsible for all acts and omissions of the Supplier Staff as if they were its own.

24.5 If the Authority asks the Supplier for details about its subcontractors and/or supply chain, the Supplier must provide such details as the Authority reasonably requests including, without limitation:

- (a) their name;
- (b) the scope of their appointment; and
- (c) the duration of their appointment.

25. Changing the contract

25.1 Either Party can request a variation to the Contract which is only effective if agreed in writing and signed by both Parties. No oral modifications to the Contract shall be effective. The Authority is not required to accept a variation request made by the Supplier.

26. How to communicate about the contract

26.1 All notices under the Contract must be in writing and are considered effective on the Working Day of delivery as long as they're delivered before 5:00pm on a Working Day. Otherwise the notice is effective on the next Working Day. An email is effective when sent unless an error message is received.

26.2 Notices to the Authority or Supplier must be sent to their address in the Order Form.

26.3 This clause does not apply to the service of legal proceedings or any documents in any legal action, arbitration or dispute resolution.

27. Preventing fraud, bribery and corruption

27.1 The Supplier shall not:

(a) commit any criminal offence referred to in the Regulations 57(1) and 57(2);

(b) offer, give, or agree to give anything, to any person (whether working for or engaged by the Authority or any other public body) an inducement or reward for doing, refraining from doing, or for having done or refrained from doing, any act in relation to the obtaining or execution of the Contract or any other public function or for showing or refraining from showing favour or disfavour to any person in relation to the Contract or any other public function.

27.2 The Supplier shall take all reasonable steps (including creating, maintaining and enforcing adequate policies, procedures and records), in accordance with good industry practice, to prevent any matters referred to in clause 27.1 and any fraud by the Supplier, Supplier Staff (including its shareholders, members and directors), any subcontractor and the Supplier's supply chain in connection with the Contract. The Supplier shall notify the Authority immediately if it has reason to suspect that any such matters have occurred or is occurring or is likely to occur.

27.3 If the Supplier or the Supplier Staff engages in conduct prohibited by clause 27.1 or commits fraud in relation to the Contract or any other contract with the Crown (including the Authority) the Authority may:

(a) terminate the Contract and recover from the Supplier the amount of any loss suffered by the Authority resulting from the termination, including the cost reasonably incurred by the Authority of making other arrangements for the supply of the Deliverables and any additional expenditure incurred by the Authority throughout the remainder of the Contract; or

(b) recover in full from the Supplier any other loss sustained by the Authority in consequence of any breach of this clause.

28. Health, safety and wellbeing

28.1 The Supplier must perform its obligations meeting the requirements of:

(a) all applicable Law regarding health and safety;

(b) the Authority's current health and safety policy and procedures while at the Authority's premises, as provided to the Supplier.

(c) the Authority's current wellbeing policy or requirements while at the Authority's premises as provided to the Supplier.

28.2 The Supplier and the Authority must as soon as possible notify the other of any health and safety incidents, near misses or material hazards they're aware of at the Authority premises that relate to the performance of the Contract.

28.3 Where the Services are to be performed on the Authority's premises, the Authority and Supplier will undertake a joint risk assessment with any actions being appropriate, recorded and monitored.

28.4 The Supplier must ensure their health and safety policy statement and management arrangements are kept up to date and made available to the Authority on request.

28.5 The Supplier shall not assign any role to the Authority under the Construction (Design and Management) Regulations 2015 (as amended) (the 'CDM Regulations') without the Authority's prior express written consent (which may be granted or withheld at the Authority's absolute discretion). For the avoidance of doubt so far as the Authority may fall within the role of client as defined by the CDM Regulations in accordance with CDM Regulation 4(8) the parties agree that the Supplier will be the client.

29. Business Continuity

29.1 The Supplier will have a current business continuity plan, which has assessed the risks to its business site/s and activities both directly and with regards to reliance on the supply chain and will set out the contingency measures in place to mitigate them and adapt. As part of this assessment, the Supplier will take into account the business continuity plans of the supply chain. The Supplier's business continuity plan must include (where relevant), an assessment of impacts relating to extreme weather, a changing average climate and/or resource scarcity.

29.2 The Supplier's business continuity plan will be reviewed by the Supplier at regular intervals and after any disruption. The Supplier will make the plan available to the Authority on request and comply with reasonable requests by the Authority for information.

30. Whistleblowing

30.1 The Authority's whistleblowing helpline must be made available to the Supplier and Supplier Staff, subcontractors and key suppliers in the supply chain in order to report any concerns.

30.2. The Supplier agrees:

- (a) to insert the following wording into their whistleblowing policy and communicate to all staff:

“If you feel unable to raise your concern internally and it relates to work being carried out for which the ultimate beneficiary (through a contractual chain or otherwise) is Defra group, please email CMBOffice@cefas.co.uk.”

(b) to ensure that their Sub-contractors have free access to the Authority's whistleblowing policy.

31. Tax

31.1 The Supplier must not breach any tax or social security obligations and must enter into a binding agreement to pay any late contributions due, including where applicable, any interest or any fines. The Authority cannot terminate the Contract where the Supplier has not paid a minor tax or social security contribution.

31.2 Where the Supplier or any Supplier Staff are liable to be taxed or to pay National Insurance contributions in the UK relating to payment received under this Contract, the Supplier must both:

(a) comply with the Income Tax (Earnings and Pensions) Act 2003 and all other statutes and regulations relating to income tax, the Social Security Contributions and Benefits Act 1992 (including IR35) and National Insurance contributions;

(b) indemnify the Authority against any Income Tax, National Insurance and social security contributions and any other liability, deduction, contribution, assessment or claim arising from or made during or after the Term in connection with the provision of the Deliverables by the Supplier or any of the Supplier Staff.

31.3 If any of the Supplier Staff are Workers who receive payment relating to the Deliverables, then the Supplier must ensure that its contract with the Worker contains the following requirements:

(a) the Authority may, at any time during the term of the Contract, request that the Worker provides information which demonstrates they comply with clause 31.2, or why those requirements do not apply, the Authority can specify the information the Worker must provide and the deadline for responding;

(b) the Worker's contract may be terminated at the Authority's request if the Worker fails to provide the information requested by the Authority within the time specified by the Authority;

(c) the Worker's contract may be terminated at the Authority's request if the Worker provides information which the Authority considers isn't good enough to demonstrate how it complies with clause 31.2 or confirms that the Worker is not complying with those requirements;

(d) the Authority may supply any information they receive from the Worker to HMRC for revenue collection and management.

32. Publicity

32.1 The Supplier and any subcontractor shall not make any press announcements or publicise this Contract or its contents in any way; without the prior written consent of the Authority.

32.2 Each Party acknowledges to the other that nothing in this Contract either expressly or by implication constitutes an endorsement of any products or services of the other Party and each Party agrees not to conduct itself in such a way as to imply or express any such approval or endorsement.

33. Conflict of interest

33.1 The Supplier must take action to ensure that neither the Supplier nor the Supplier Staff are placed in the position of an actual or potential conflict between the financial or personal duties of the Supplier or the Supplier Staff and the duties owed to the Authority under the Contract, in the reasonable opinion of the Authority.

33.2 The Supplier must promptly notify and provide details to the Authority if a conflict of interest happens or is expected to happen.

33.3 The Authority can terminate its Contract immediately by giving notice in writing to the Supplier or take any steps it thinks are necessary where there is or may be an actual or potential conflict of interest.

34. Reporting a breach of the contract

34.1 As soon as it is aware of it the Supplier and Supplier Staff must report to the Authority any actual or suspected breach of Law or breach of its obligations under the Contract.

34.2 Where an actual or suspected breach is notified to the Authority under clause 34.1, the Supplier will take such action to remedy any breach as the Authority may reasonably require. Where the breach is material, the Authority has the right to terminate under clause 11.4.

34.3 The Supplier must not retaliate against any of the Supplier Staff who in good faith reports a breach listed in clause 34.1.

35. Resolving disputes

35.1 If there is a dispute between the Parties, their senior representatives who have authority to settle the dispute will, within 28 days of a written request from the other Party, meet in good faith to resolve the dispute.

35.2 If the dispute is not resolved at that meeting, the Parties can attempt to settle it by mediation using the Centre for Effective Dispute Resolution (CEDR) Model Mediation Procedure current at the time of the dispute. If the Parties cannot agree on a mediator, the mediator will be nominated by CEDR. If either Party does not wish to use, or

continue to use mediation, or mediation does not resolve the dispute, the dispute must be resolved using clauses 35.3 to 35.5.

35.3 Unless the Authority refers the dispute to arbitration using clause 35.4, the Parties irrevocably agree that the courts of England and Wales have the exclusive jurisdiction to:

- (a) determine the dispute;
- (b) grant interim remedies;
- (c) grant any other provisional or protective relief.

35.4 The Supplier agrees that the Authority has the exclusive right to refer any dispute to be finally resolved by arbitration under the London Court of International Arbitration Rules current at the time of the dispute. There will be only one arbitrator. The seat or legal place of the arbitration will be London and the proceedings will be in English.

35.5 The Authority has the right to refer a dispute to arbitration even if the Supplier has started or has attempted to start court proceedings under clause 35.3, unless the Authority has agreed to the court proceedings or participated in them. Even if court proceedings have started, the Parties must do everything necessary to ensure that the court proceedings are stayed in favour of any arbitration proceedings if they are started under clause 35.4.

35.6 The Supplier cannot suspend the performance of the Contract during any dispute.

35.7 The provisions of this clause 35 are without prejudice to the Authority's right to terminate or suspend the Contract under clause 11.

36. Which law applies

36.1 This Contract and any issues arising out of, or connected to it, are governed by English law.

36.2 The courts of England and Wales shall have jurisdiction to settle any dispute or claim (whether contractual or non-contractual) that arises out of or in connection with the Contract or its subject matter or formation.