# SCHEDULE 6 – CALL-OFF ORDER FORM

Customer	Defra –			
Address	2nd Floor, Horizon House, Deanery Road, Bristol BS1 5AH			
Contact Ref:	Ref: 59533 – Sweet Chestnut Blight Modelling Phone:			
Order				
Number	TBC once accepted			
Order Date	02/11/2020			

Contractor	FERA Science Ltd
For attention	
of:	
Address	FERA Science Ltd Sand Hutton York North Yorkshire YO41 1LZ

#### 1. REQUIREMENTS

## (1.1) Services required including any key personnel:

The Contractor is required to meet all of the requirements of the specification as set out in the RFQ contained within ITT 7210. The contractor shall in addition to this provide all of the services offered and costed as part of their response including all of the answers supplied to the Technical and Commercial questions to ITT 7210. For the avoidance of doubt, the specification taken from ITT 7210 is as follows:

## **Background**

There was an increase in detections of Sweet Chestnut Blight in the UK in 2019, both in terms of the number of affected locations and an increase in disease intensity/number of infected trees at some existing outbreak sites. The UK has a Protected Zone (PZ) which allows for trade to continue under specific conditions. In order to maintain a PZ the Authority needs to take prompt eradication action against all findings of SCB and demonstrate that the action is successful on an annual basis.

In light of the evidence on spread, the Authority now needs to review it's policy approach to ensure that the UK meet the requirements to maintain it's PZ or consider amendments to both the approach and the extent of the PZ. This project is required to contribute to the evidence base which will be used to inform the policy review and assess the impacts of policy changes.

# **Objectives**

The Contractor shall model the overall potential spread of SCB in England over the next 10 years, taking into account climatic suitability, lineage and mating type of the pathogen to:

- 1. Assess the rate and risk of spread within and from sites in the wider environment:
- 2. Assess the potential introduction of 'core zones', including their location and size, and the likelihood of this reducing spread by maintaining the SCB protected zone and thus preventing further introductions; and
- 3. Assess to what extent introducing hypo virulence of the pathogen will slow the spread of the disease (recognising that it will only be possible to introduce this at certain sites and to certain tree types).

#### **Deliverables**

#### The Contractor shall:

- Incorporate the latest surveillance data from recent monitoring surveys carried out by Forestry Commission and meteorological data into an existing or new SCB model
- Provide the Authority with spread data and maps that clearly show the current picture and also future predicted spread of SCB in England as outputted by the model. The maps are to be provided in PDF or PowerPoint format.
- Provide the Authority with a final report which shall include detailed information on the methodology underlying the model (including clear information on the variable used) and the model limitations; maps detailed in previous bullet point; conclusion and clear explanation of assessment of potential core zones which will include justification for proposed solution; clear explanation of the role of hypo virulence and likely outcomes of introduction.

#### The Authority shall:

- Facilitate provision of data from the Forestry Commission/Forest Research if required.
- Specify the legal definition and legal requirements of 'core zone'
- Clarify scope of ability to make policy amendments to PZ.
- Host a meeting to discuss policy options will be held between Defra and the researchers.

(1.2) Commencement Date: 23/11/2020
(1.3) End Date: 22/01/2021
(1.4) Key Personnel of the Contractor
(Fera)
(Fera)
(Fera)
In addition to the Key Personnel of the Contractor, the following Key Personnel of the

Contractor's Sub-contractors (University of Strathclyde (UoSt) and University of Salford

(UoSa)) have been identified in the Contractor's response to ITT 7210:



## (1.5) Quality/Technical/Performance Standards

The project will follow the Aqua Book principles [18] and all code will be held in a central repository (GitLab) for version control and a full revision history. All outputs generated will be closely inspected by experts with experience of the pathogen or the modelled context in question, in order to ensure that predictions are plausible within the considered scenario(s) and discussed in further detail with the APM.

Please refer to the requirements of the RFQ in conjunction with the Contractor's responses to ITT 7210 for further details. Particular attention should be paid to the Contractor's answer to the Methodology question, attached.



(1.6) Location(s) at which Services are to be provided:

FERA Science Ltd, Sand Hutton, York, North Yorkshire, YO41 Digital meetings due to Covid-19 restrictions as allowable in the RFQ.

#### 2. PRICE AND PAYMENTS

(2.1) The Price excluding VAT: £42,454

Payment profile and method of payment: BACS

Payment will be made on completion of milestones as accepted and signed off by the Authority's Project Officer. No partial payments will be made, and no other costs will be payable by the Authority under this Contract.

Twenty percent (20%) of the total price shall be payable on completion of Milestone 2. The remaining costs shall be payable on completion of Milestone 4.

### (2.2) Invoicing and Payment

The Contractor shall issue invoices upon completion of Milestone 2 (20%) and on completion of Milestone 4 (80%) in arrears.

The Contractor shall ensure that all invoices include a valid Purchase Order Number (as provided by the Authority), the Contract Number, the Authority's contact details, a qualitative

description of the work completed and clearly itemised costs linked to the milestones achieved and signed off by the Authority.

The Contractor shall be responsible for submitting invoices within 10 (10) Working Days of the Authority's Project Officer confirming completion of a milestone.

## 3. Commercially Sensitive and Confidential Information

The following information shall be deemed Commercially Sensitive Information or Confidential Information:

There is no intention to transfer any Commercially Sensitive Information or Confidential Information. However, if any of the data collected in service of the requirement contains any confidential information, the data must be aggregated by the Contractor in advance of publication to ensure that no individual may be identified.

# 4. Contractor and Third Party Software

CONTRACTOR SOFTWARE means software which is proprietary to the Contractor, including software which is or will be used by the Contractor for the purposes of providing the Services and which comprises:

Softwar e	Supplier (if Affiliate of the Contractor	Purpose	No. of Licen ces	Restrictions	No. of copies	Other	To be deposited in escrow?
	,						

THIRD PARTY SOFTWARE means software which is proprietary to any third party which is or will be used by the Contractor for the purposes of providing the Services and which comprises:

Software	Supplier	Purpose	No. of Licenc es	Restrictions	No. of copies	Other	To be deposited in escrow?
Gitlab		Code version control	1	Limited functionali ty of free version	n/a web- based		N
R Studio	RStudio. com	Code interact ion	7		7		N
R	https://cr an.ma.im perial.ac. uk/	Code interact ion	7		7		N
QGIS		mappin g	2 (UoSa)		2		N
ArcGIS Pro	ESRI	Data manipu lation	4 (2 UoSt; 2 Fera)		4		N

# **5.LIABILITY**

For the purposes of clause G1.3 of the Call-Off Terms and subject to the remainder of clause G1 of the Call-Off Terms the Contractor's total liability shall not exceed £200,000.

6.TERMINATION
For the purposes of clause H3.1 of the Call-Off Terms the Customer may terminate the Call-Contract on 10 working days' notice to the Contractor.
7.NOTICES
Notices shall be sent to the addresses set out below for the purpose of service of notices under the Call-Off Contract:
For the Customer:
Contact Name:
Electronic notices shall be used for this contract to allow for Covid-19 pandemic restrictions.
For the Contractor:
Contact Name:
Address: York Biotech Campus, Fera Science Limited, Sand Hutton, York YO41 1LZ
Email:
BY SIGNING AND RETURNING THIS ORDER FORM THE CONTRACTOR AGREES to enter a legally binding contract with the Customer to provide to the Customer the Services specified in the Order Form, incorporating the Call-Off Terms set out in the framework agreement entered into by the Contractor and the Authority in April 2020.  For and on behalf of the Contractor:
Signed
Name
Position
Date
For and on behalf of the Customer:
Signed
Name
Position
Date
FOR USE BY FINANCE TEAM ONLY

Category:		VAT Code
Cost Centre Code:		Objective:
Account and Sub Ac	count Code:	Project Code:
Requisition Raised By:		Requisition Number:
Purchase Order Nur	nber:	Receipt Number: