

## FRAMEWORK AGREEMENT SCHEDULE 4

### ORDER FORM/ WORK PACKAGE ORDER

#### FROM

<b>Authority</b>	Secretary of State for Environment, Food and Rural Affairs
<b>Address</b>	Defra Group Commercial 3 <sup>rd</sup> Floor, Mallard House 1-2 Peasholme Green York YO1 7PX
<b>Contact Ref:</b>	Phone: [REDACTED] Email: [REDACTED]
<b>Order Number</b>	Ref: ecm_53435
<b>Order Date</b>	29/10/2018

#### TO

<b>Contractor</b>	British Trust for Ornithology
<b>For attention of:</b>	Name: [REDACTED] Phone: [REDACTED] E-mail: [REDACTED]
<b>Address</b>	The Nunnery Thetford Norfolk IP24 2PU

#### 1. SERVICES REQUIREMENTS

##### (1.1) Services and deliverables required:

##### **Background**

Over the last century, there have been major changes in the extent, tree species composition and management of British woodlands (Fuller *et al.* 2007). In lowland England, traditional management of broadleaved woodland for wood products has greatly reduced and as a result, there is much woodland subject to little management (Mason 2007, Hopkins and Kirby 2007, Fuller *et al.* 2007). In addition, heavy exploitation during both World Wars led to a push for a strategic woodland resource in the UK. Reestablishment of woodlands often took the form of plantations of fast-growing conifers rather than revitalisation of traditional practice (Mason 2007).

The Repeat Woodland Bird Survey (Amar *et al.* 2006, Hewson *et al.* 2007) investigated trends in bird populations and habitat change in British broadleaved and mixed woodlands over a twenty-year period. In line with national monitoring schemes, several species were found to have declined steeply. Of 34 species considered, eight species declined by >25% nationally between the 1980s and repeat surveys in 2003/04. Although causes of decline

are numerous and complex, there is evidence that a primary driver of population decline is through changes in woodland structure as a result of decreased active woodland management and increased deer browsing in some areas of the UK. This mirrors the decline of farmland species because of changes in agricultural practices (Pain and Pienkowski 1997). Previous woodland grant incentive schemes have positioned themselves as the tool to reverse woodland bird declines in the same way that agri-environment schemes (AES) are held as a solution to recover farmland bird populations.

Reversing the decline in woodland bird populations was a targeted outcome of the England Woodland Grant Scheme (EWGS) and its successor, the current Agri-environment scheme (AES) - Countryside Stewardship (CS). This reflects the fact that the state of woodland birds is an impact indicator for AES at an EU level, and that woodland bird populations are used as an indicator of progress with the England Biodiversity Strategy Biodiversity 2020. As a result, monitoring the response of woodland birds fits within the aims and objectives of the Defra/NE AES Monitoring and Evaluation Plan 2014-2020.

Evaluating the effectiveness of AES woodland improvement options, such as those in CS, is challenging because these options are slow to mature, so ultimate effects cannot be measured on the timescales of standard AES monitoring projects. Hence, monitoring such longer-term changes is likely to rely upon comparison with existing data sets. Woodland in the English landscape tends to be found in patches that are too small to be surveyed effectively (in detail) by existing large-scale monitoring schemes such as the Breeding Bird Survey. Therefore, the exploitation of any relevant historical data sets as baselines against which to measure change is valuable, provided that the historical management of monitored sites is relevant to the present-day AES context.

### ***Project Objectives***

- To evaluate the response by woodland birds to large-scale habitat management implemented through woodland improvement grants in lowland and upland woodlands.
- To provide an assessment of habitat change resulting from management and the subsequent development of stand structure appropriate for woodland birds in lowland and upland woodlands.
- To explain how any observed effects on bird population trends and communities relate to landscape characteristics, thus providing an evidence base to inform future woodland management activities for increasing biodiversity and contributing to climate change mitigation.

### ***Project Requirement***

This tender for services is for a resurvey, in 2019, of 64 sites originally surveyed in 2010 - 2013 to enable an evaluation over a single season of the extent to which woodland improvement has contributed to enhancing communities and populations of bird species over the years since the establishment of the baseline survey and control plots.

The Forestry Commission in 2009 launched a regionally (East Midlands) focused Woodland Improvement Grant (WIG) in partnership with RSPB to give financial support to landowners and managers to improve woodland habitats to benefit priority woodland bird species. Habitat requirements of woodland birds have been established (Smart *et al.* 2008, Carpenter *et al.* 2009) and habitat management prescriptions produced for a suite of woodland species. Sixteen species were identified for attention in the East Midlands area, with thirteen classed as high priority. In order to be eligible for grants, applicants had to propose management work in accordance with set criteria. Each application was assessed by an FC and/or a RSPB officer to ensure the work proposed was appropriate. The grant paid 80% of the Standard Costs for the agreed items in the proposed work schedule and was targeted to improve woodland habitat conditions for the named species. Underpinning this initiative was the Bird Conservation Targeting Project, a mapping project involving RSPB, Forestry Commission, BTO and Natural England. Data from this project showed that despite being the most deforested region in the UK (5.3% woodland cover compared to 11.8% national average), the East Midlands region is a national hotspot for populations of woodland birds.

The impact of the scheme was proposed to be evaluated by comparing sites within and out-with of EWGS management. Woods with proposed management work were paired with non-intervention woods/areas of woods within the same estate or close by. Care was taken to select pairs of woods similar in terms of their current vegetation structure, soil and other environmental factors. Baseline monitoring of birds and vegetation before planned management work was conducted for as many pairs as possible as the application process allowed.

Responses of birds to woodland management was proposed to be made in the following ways:

1. Changes in bird trends through time - before and after active management, and as managed areas mature
2. After repeat surveys, bird population changes to be compared between control and treatment areas.

## **Tasks**

This tender comprises two phases. The tasks for each phase are as follows:

### **Phase One (October 2018-March 2019)**

1. Make pre-survey arrangements for the 2019 resurvey of the original 64 sites.
  - a) Make contact with woodland owner and managers, secure access permissions and liaise with local Forestry Commission field staff as required.
  - b) Establish what management has been carried out in the surveyed woodlands and whether any work has happened in the control plots.
  - c) Based on results from tasks 1a and 1b, develop the proposed survey schedule for phase two and include details in the interim report.
  - d) Transfer the original baseline survey data (to be supplied by FC) into a GIS dataset, including attribution such as plot location, breeding bird location, and habitat data to facilitate data analysis following collection of repeat survey information in phase two.

### **Phase Two (March 2019 – March 2020)**

2. Conduct resurvey fieldwork during March 2019 to June 2019 of the sites confirmed in Phase One using the same breeding bird methodologies as in the baseline survey. For the majority of species, surveys will follow established RSPB protocols for point counts and the BTO reduced 4 visit territory mapping method (see Amar *et al.* 2006). Lesser-spotted woodpecker should be surveyed following the protocol of Charman *et al.* (in review) during March. Willow tits should be surveyed using the method described in Lewis *et al.* (2009).
3. Conduct habitat resurvey. Habitat surveys will be carried out at the bird survey point locations in July following methods described in Amar *et al.* (2006).
4. Conduct a data analysis using the results of the 2019 field survey (tasks 2 & 3) and compare to baseline survey data to determine whether birds show associations with managed or non-managed woods. Data will be analysed at the wood scale in a General Linear Mixed Model (GLMM), with 'site' as a random factor. The effects of area (ha) on the number of birds detected within each wood will be statistically controlled. Ideally, data for each species will be analysed using the count of birds in each wood as the dependent variable in a log-linear regression analysis. Details of landscape within 1km of the centre of the survey units will be used as co-variates in the analyses, to account for differences in habitat composition at the landscape level. Population trends for each species

will be based on the change in maximum count of a species in each wood area between the baseline survey and 2019 resurvey years. Variation in maximum count will be assessed in GLMMs, specifying a Poisson error structure and controlling for the effect of the area surveyed on the number of birds detected. Study site identity will be included as a random effect.

### **Outputs**

1. All data and metadata collected during the survey, to be provided in digital format after liaison with FC/NE. It will also include the detailed bird species survey given in GIS format
2. A final written project report (to include an executive summary) which addresses the project objectives listed. Conclusions will be drawn on the impact of management under woodland grant schemes in terms of changes to habitat structure and quality since baseline and the responses by woodland birds will be evaluated in context. Impacts of woodland creation activities on objectives such as enhanced landscape character, climate change mitigation and increased biodiversity will also be evaluated.
3. A two-page summary note detailing key outcomes and conclusions of the project, to be produced using the standard template provided under the AESME Framework.
4. A presentation of final results to key Natural England, Forestry Commission and Defra staff (providing an opportunity to discuss the key findings).

### ***Duration***

29 October 2018 – 31 March 2020.

The first phase of the project (completion of task 1), is to be completed by 28th February 2019. The second phase will be subject to confirmation of available funding for and successful delivery of the first phase. The second phase shall involve carrying out tasks 2 -4. Confirmation of the second phase will be communicated to the Contractor before March 2019 and confirmed by both parties via a change control note. The Contractor should be aware that any work undertaken before an electronically approved CCN is approved by both the Customer and the Contractor is undertaken at the Contractors own risk.

### ***Reporting and Milestones***

1. A brief, interim report summarising progress with the pre-survey element of the project (task 1) will be provided to Natural England by 28th February 2019.
2. A draft final report (with an accompanying draft 2-page summary) will be provided to Natural England by 31 January 2020 and a meeting to present/discuss the results will be arranged soon afterwards.
3. The finalised, peer-reviewed report, and accompanying final 2-page summary, will be provided to Natural England by 31 March 2020.

Natural England/Forestry Commission requires the opportunity to comment on draft Final Reports. The appointed contractor will be responsible for ensuring both the quality of the work as well as the presentation of the material (e.g. proof reading, ensuring clear English). The appointed Contractor is also to be aware that Natural England/Forestry Commission requests acknowledgement in the publication (including oral presentations) of its funded research, and that the project manager is notified at least two weeks prior to publication. All reports should be provided in MS Word and PDF format.

The final report will be externally peer-reviewed (note: the contractor will be responsible for arranging peer-review by two appropriate reviewers, to be agreed with the Natural England/Forestry Commission project officers) and be suitable for publication as a Defra science report. Tenderers should be aware that Natural England and Defra will publish final reports. The final report will be structured in a format that, if appropriate, facilitates rapid conversion into one (or more) papers suitable for submission to an appropriate peer-reviewed scientific journal.

Natural England/Forestry Commission is happy to encourage widespread publication and welcomes the use of appropriate trade press, peer-reviewed journals, sector-specific journals and appropriate use of social media. Given a suitable platform, the results of the project should also be presented at relevant scientific fora. Note: If the findings of the work are deemed suitable, the contractor will aim to submit a manuscript to a peer-reviewed journal as soon as possible after completion of the report, co-authored by staff from the contractor and Natural England/Forestry Commission, as appropriate. A proposed timetable for submission of manuscript and publication timeline will be agreed with Natural England.

### ***Project Management***

The successful contractor will appoint a project leader who must have sufficient experience, authority to act on behalf of the contractor and time allocated to manage the project effectively. The contractor's project leader (CPL) will be

responsible for the management and delivery of the project and will act as the liaison point, particularly liaison between members of any consortium, with the Forestry Commission project manager (FCPM). The CPL will provide a short (no more than one page A4), written monthly progress note. The form of these updates will be agreed in the inception meeting.

This project will be overseen by a project steering group made up of FC, NE, Defra, and wider stakeholders as necessary. An initial face to face project meeting between the steering group and members of the successful contractor's team will be required at the start of the project. This will focus on defining the scope of the project.

The CPL will speak to the FCPM at least monthly throughout the course of the project, and organise tele calls/one further final face to face meeting with the steering group (in addition to the initial meeting), to be agreed with the FCPM. The CPL will be responsible for setting up these meetings, which will occur in NE/Defra offices.

Secretariat and production of minutes from meetings is the responsibility of the CPL, who will share meeting minutes with the FCPM.

### ***IPR and data sharing***

For the avoidance of doubt, all material and intellectual property rights existing prior to or in spite of the work carried out under this contract (including, but not limited to, any pre-existing data) shall remain the property of the originator.

It has been agreed that, for the purposes of this project and Work Package Order only, in reference to clause 21 of Framework Agreement, Natural England hereby agrees to joint ownership of Intellectual Property Rights of the field data that will be produced as part of the Services supplied under this Work Package Order.

All other data resulting from this project, project documents and other materials will be the property of Natural England.

All agreement information provided to the contractor for the purposes of this project shall be kept securely, confidentially and disposed of at the end of the project. It must not be used elsewhere without prior consent. The supplier will be required to follow Natural England's data protection policy and only act on information provided under our instruction.

Any data collected will be made openly and publicly available, as per Natural England's Access to Information statement

(<http://publications.naturalengland.org.uk/publication/6430783876628480?category=5927398087327744>)

## References

Carpenter, J., Charman, E.C., Smart, J., Amar, A., Guar, D., Bierman, S. and Grice, P. 2009. *Habitat associations of woodland birds II: Completing the picture for woodland indicator species*. RSPB Research Report No. 36.

Charman, E.C., Carpenter, J., and Guar, D. 2009. Understanding the causes of decline in breeding bird numbers in England: a review of the evidence base for declining species in the woodland indicator for England. RSPB Research Report NO.37. ISBN 978-1-905601-21-9.

Hopkins, J.J. & Kirby, K.J. 2007. Ecological change in British broadleaved woodland since 1947. *Ibis* 149 (Suppl. 2): 29–40.

Kirby, K.J., Smart, S.M., Black, H.I.J., Bunce, R.G.H., Corney, P.M. & Smithers, R.J. 2005. Long Term Ecological Change in British Woodland (1971–2001). English Nature Research Reports No. 653. Peterborough: English Nature.

Lewis, A.J.G., Amar, A., Charman, E.C. & Stewart, F.R.P. 2009. The decline of the Willow Tit in Britain. *Br. Birds* 102, 386-393.

Mason, W.L. 2007. Changes in the management of British forests between 1945 and 2000 and possible future trends. *Ibis* 149 (Suppl. 2): 41–52.

Pain, D.J. & Pinekowski, M.W.(eds)1997. *Farming and birds in Europe*. London; Academic Press.

Smart J, Taylor E.C., Amar A, Smith K, Bierman, S, Carpenter J, Grice P, Currie F and Hewson C. 2008. *Habitat associations of woodland birds: Implications for woodland management for declining species*. RSPB Research Report No. 26. ISBN 978-1-905601-05-9.

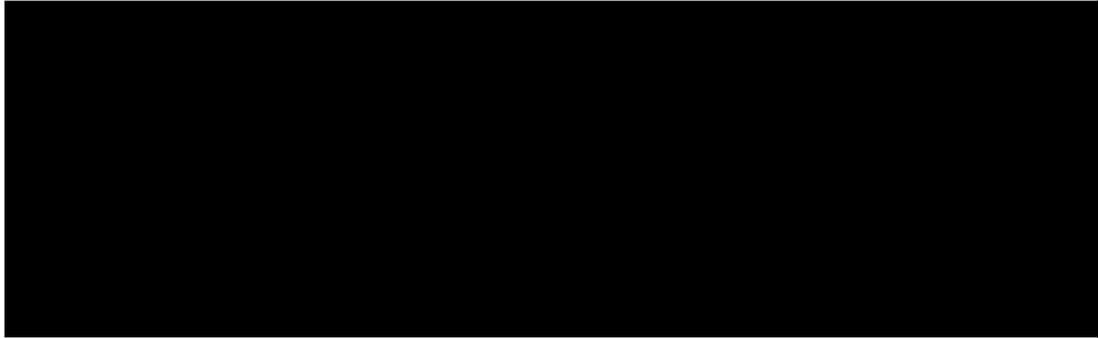
Amar, A., Hewson, C. M. , Thewlis, R. M., Smith, K. W., Fuller, R. J., Lindsell, J. A., Conway, G., [Butler, S. J.](#) and MacDonald, M. A. (2006) *What's happening to our woodland birds? Long-term changes in the populations of woodland birds*. BTO Research Report 169/RSPB Research Report 19.

**(1.2) Commencement Date: 29/10/2018**

**(1.4) Completion Date: 31/03/2020**

## **2. PERFORMANCE OF THE SERVICES AND DELIVERABLES**

### **(2.1) Key Personnel of the Contractor to be involved in the Supply of the Services**



### **(2.2) Performance Standards**

The report will be peer-reviewed as required in the specification provided as part of the Request for Quotation document.

### **(2.3) Location(s) at which Services are to be provided:**

British Trust for Ornithology  
The Nunnery  
Thetford  
Norfolk  
IP24 2PU

### **(2.4) Standards:**

Natural England's Access to Information statement:  
(<http://publications.naturalengland.org.uk/publication/6430783876628480?category=5927398087327744>)

### **(2.5) Contract Monitoring Arrangements**

For the avoidance of doubt the services required are being provided under Framework Agreement 22707

### 3. PRICE AND PAYMENTS

**(3.1) Contract Price payable by the Authority excluding VAT, payment profile and method of payment (e.g. Government Procurement Card (GPC) or BACS))**

**£180,861.00**

**For full pricing schedule, see Annex 1**

**Payable by BACS**

### **(3.2) Invoicing and Payment**

This project will be paid by achievement of milestones. However, not all milestones need to be associated with payment; and it may be appropriate to include additional milestones that are not related to payment but are used to indicate progress within the project. The frequency of milestone payments should be determined by the Supplier, however, we request that they are appropriate and not at a frequency greater than every month.

The Supplier shall issue electronic invoices in arrears following completion of the following milestones:

<b>Task</b>	<b>Date</b>	<b>Invoice amount (excluding VAT)</b>
Completion of Task 1 report	28 February 2019	██████████
Completion of Tasks 2 & 3	31 July 2019	██████████
Completion of final report	31 March 2020	██████████

### 4. Invoicing Requirements

All invoices should be sent, quoting a valid purchase order number (PO Number), to: [Accounts-Payable.neg@sscl.gov.uk](mailto:Accounts-Payable.neg@sscl.gov.uk) or Shared Services Connected Limited, PO Box 790, Phoenix House, Celtic Springs Business Park, Newport, Gwent, NP10 8FZ. Within 10 Working Days of receipt of your acceptance of this letter via Bravo, we will send you a unique PO Number. You must be in receipt of a valid PO Number before submitting an invoice.

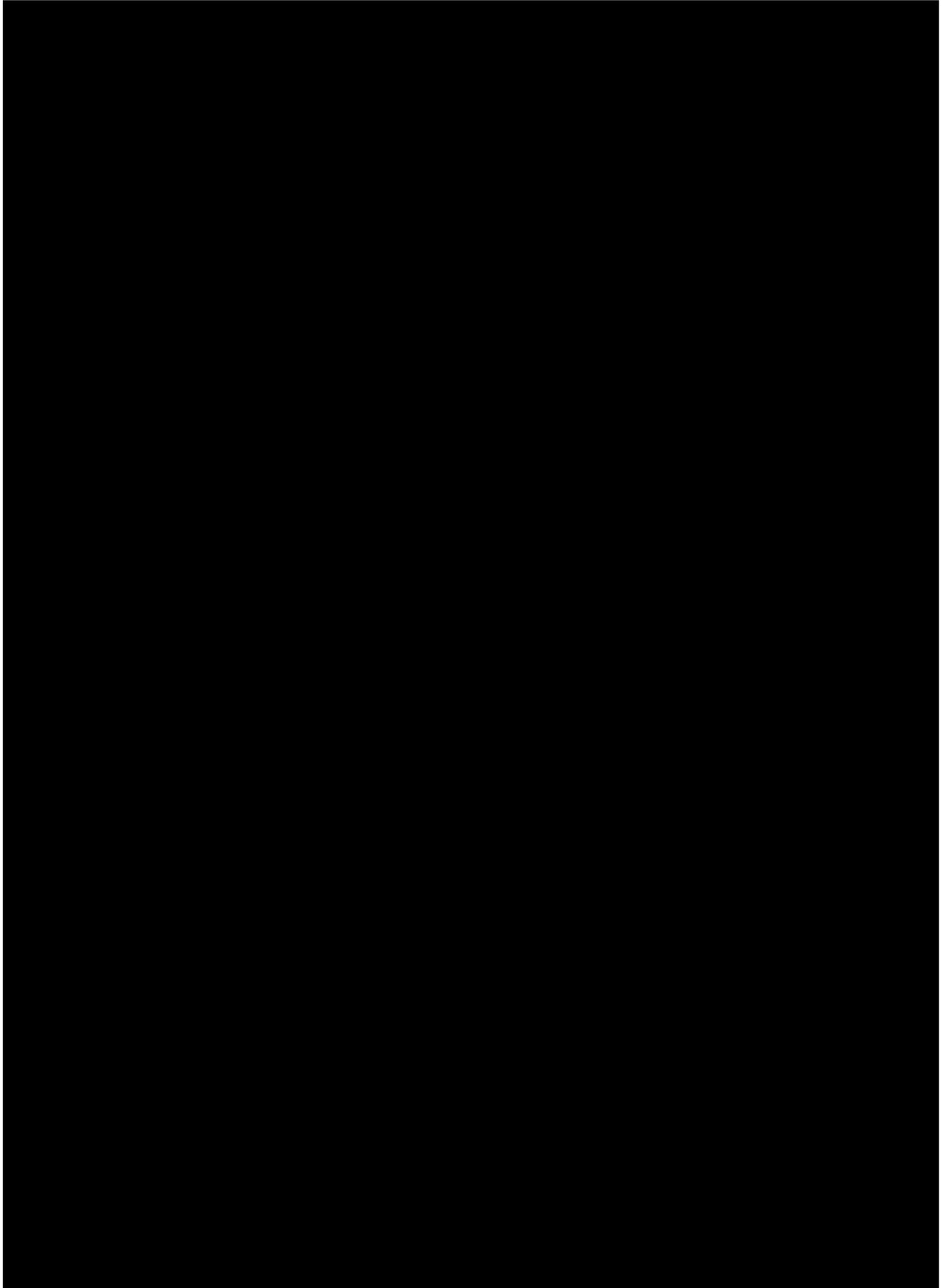
To avoid delay in payment it is important that the invoice is compliant and that it includes a valid PO Number, PO Number item number (if applicable) and the details (name and telephone number) of your Customer contact (i.e. Contract Manager). Non-compliant invoices will be sent back to you, which may lead to a delay in payment. If you have a query regarding an outstanding payment please contact our Accounts Payable section either by email to [Accounts-Payable.neg@sscl.gov.uk](mailto:Accounts-Payable.neg@sscl.gov.uk) or by telephone 0845 603 7262 between 09:00-17:00 Monday to Friday.

**BY APPROVING THIS ORDER FORM THE CONTRACTOR AGREES** to enter a legally binding contract with the Authority to provide to the Authority and natural England the Services specified in this Order Form, incorporating the rights and obligations in the Call-Off Contract that are set out in the Framework Agreement entered into by the Contractor and Defra on 01 June 2018.

### **Electronic Signature**

Acceptance of the award of this Contract will be made by electronic signature carried out in accordance with the 1999 EU Directive 99/93 (Community framework for electronic signatures) and the UK Electronic Communications Act 2000. Acceptance of the offer comprised in this Contract must be made within 7 days and the Agreement is formed on the date on which the Contractor communicates acceptance on the Customer's electronic contract management system ("Bravo"). No other form of acknowledgement will be accepted.

## Annex 1: Full Pricing Schedule





Please note the above costs will be subject to VAT [redacted] at the current standard rates.