



Department for
Business, Energy
& Industrial Strategy

CONTRACT FOR THE PROVISION OF Improving the Sustainability of Biomass Feedstocks Production

Purchase Order Number:

DUNS Number:

This Contract is dated *12th September 2022* and is made between:-

1. **The Secretary of State for Business, Energy and Industrial Strategy** (“the Authority”) of 1 Victoria Street, London SW1H 0ET, acting as part of the Crown;

and
2. **RSK ADAS Limited** (the “Contractor”) whose registered office is at Spring Lodge, 172 Chester Road, Helsby, WA6 0AR

INTRODUCTION

- (A) On 7th June 2022 the Authority issued an invitation to tender for the provision of Greenhouse gas emissions inventory monitoring and verification services this including the specification a copy of which is set out in Schedule 1 (the “Specification”).
- (B) In response the Contractor submitted a proposal dated 19th July 2022 and entitled Proposal Document explaining how it would provide the services, a copy of which is set out in Schedule 2 (the “Proposal”).

The parties agree as follows:-

1. SUPPLY OF SERVICES AND PRICE

In consideration of payment by the Authority to the Contractor of the sum of £199,532 exclusive of Value Added Tax (the “Contract Price”) and in accordance with (a) the Specification; (b) the Proposal; and (c) the Authority’s Standard Terms and Conditions of Contract for Supplies/Services (the “Standard Terms” (a copy of which were issued by the Authority with the Invitation to Tender and are attached at Schedule 3); the Contractor shall provide the Services described in the Specification and the Proposal to the Authority.

2. COMMENCEMENT AND CONTINUATION

This contract shall commence on 12th September 2022 and subject to any provisions for earlier termination contained in the Authority’s Standard Terms and Conditions shall end on 12th June 2023.

3. TERMS AND CONDITIONS



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- 3.1 The Authority's Terms & Conditions of Contract for Supplies/Services shall form part of this Contract.
- 3.4 The Contractor's Standard Terms and Conditions of business shall not apply to this Contract.
- 3.5 This Contract is formed of these clauses and the Schedules hereto. Any other attachments are provided for information purposes only and are not intended to be legally binding. In the event of any conflict or inconsistency, the documents prevail in the following order:
- a) these clauses
 - b) the Standard Terms,
 - c) the Specification
 - d) and finally, the Proposal

4. CONTRACTOR'S OBLIGATIONS

- 4.1 Where the Contractor is supplying goods to the Authority these shall be delivered to the Authority in full compliance with the Specification and shall be of satisfactory quality and fit for purpose. Where the Contractor is performing services for the Authority it shall do so in accordance with the Specification and exercise reasonable skill and care.

5. MANAGEMENT AND COMMUNICATIONS

- 5.1 The Contractor shall perform the Services under the direction of the Authority.
- 5.2 Any direction by the Authority may be given by Rose Durcan (the "Contract Manager") who is an officer in the Authority's Science and Innovation for Climate and Energy Directorate, BEIS, 1 Victoria Street, London SW1H 0ET or such other person as is notified by the Authority to the Contractor in writing.
- 5.3 The Contractor appoints This information has been redacted to be the Contractor's first point of contact for this Contract. All queries to the Contractor from the Authority's Contract Manager shall initially be addressed to the Contractor's first point of contact.
- 5.4 The Contractor's first point of contact and the Contract Manager shall meet as often as either the Contractor or the Authority may require to review the Contractor's performance of the Contract.

6. INVOICES AND PAYMENT

- 6.1 Subject to the Contractor providing the Services to the Authority in accordance with this Contract and submitting invoice/s to the Contract Manager in the manner reasonably required by the Contract Manager payment will be made by the Authority to the Contractor in accordance with (as referred to in Condition 11 of the Standard Terms & Conditions).



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7. TRANSPARENCY

- 7.1 The Authority is required to publish information about this contract within the Find a Tender Service and through the Governments Transparency website, Contracts Finder.
- 7.2 The Authority's decision not to publish full details of the contract does not however preclude it publishing such information in the future (subject to applicable redactions) and the Authority may be required to disclose such information under the Freedom of Information Act 2000, the Environmental Information Regulations 2004 (EIR) or other legal requirement. In such cases, the Authority would need to consider disclosure in the context of the particular circumstances of the request or requirement concerned.

8. TERMINATION FOR LEGAL OR REGULATORY REASONS

Either Party may end the Contract immediately by giving written notice to the other if the performance of it (including the application of any fee arrangements) may breach a legal or regulatory requirement.

Signed by the parties' duly authorised representatives:-

For the Secretary of State for Business, Energy and Industrial Strategy

This information has been redacted

Print Name: This information has been redacted

Job Title: This information has been redacted

Date: This information has been redacted

For the Contractor

This information has been redacted

Print Name: This information has been redacted

Job Title: This information has been redacted

Date: This information has been redacted



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The following Schedules form part of this Contract:

Schedule 1	The Authority's Specification
Schedule 2	The Contractor's Proposal
Schedule 3	The Authority's Terms & Conditions of Contract for Supplies/Services



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Schedule 1

The Authority's Specification

1. Introduction and summary of requirements

This project will collate evidence surrounding sustainable biomass production, to inform the upcoming BEIS Biomass Strategy and provide evidence to support improvements to current sustainability criteria which are applied to biomass feedstock production and usage.

To achieve Net Zero targets, it is vital that biomass feedstocks are produced sustainably and at present there are several uncertainties in BEIS knowledge of the sustainability of biomass feedstock production and usage (both UK produced and imported feedstocks).

One area of uncertainty is indirect land use change (ILUC) resulting from increasing biomass production. ILUC occurs when biomass production displaces previous activity (e.g. agriculture) somewhere else. Estimates of indirect land use change impacts are highly variable, and with multiple methodologies for their prediction there is a high amount of uncertainty around the accuracy of their estimates. Another uncertainty is how increased UK demand on imported biomass feedstocks (i.e. wood pellets) will impact soil organic carbon at the place of origin. As the UK imports a third of its biomass feedstocks, and may increase its usage in the future, BEIS requires an up-to-date knowledge of these impacts and how to reflect them in analysis, to understand the overall climate impact of our policy choices. Finally, we wish to look at the evidence surrounding the sustainability of waste biofuels. At present, waste bioenergy and biofuels can sometimes fall under exemptions from certain current UK sustainability criteria, or have different criteria based on their sustainability. However, it is important to establish whether this approach to waste related sustainability criteria remain appropriate, and whether current sustainability criteria (or exemptions) applied to different waste derived feedstocks are appropriate.

To address these research gaps, we intend to procure specialist research services that will further the department's understanding and evidence of sustainable biomass production. Commissioning this research will be instrumental in supporting the implementation of the forthcoming Biomass Strategy.

2. Background

To achieve Net Zero, the UK has committed to decarbonising the economy across all sectors, with a movement away from fossil fuels, and an increase in the deployment of low carbon energy. Key to this transition is the production of biomass feedstocks and use of bioenergy and biofuels as a green technology, with the Net Zero strategy setting out ambitious targets that will require an increase in biomass feedstocks production to 30,000 ha yr⁻¹ by 2035 and planting of 700,000 ha of energy crops by 2050¹. To reach these goals, the way we use and manage land will have to change, both in the trade-offs between land used for food production and climate mitigation, and the management of land to ensure biomass feedstocks production is achieved sustainably. One key issue is to ensure that any GHG emissions associated with the production of biomass are correctly calculated (to accurately understand the human contribution to climate change) and minimised (to achieve our climate change targets at least cost). Sources of emissions can include loss of carbon from soil to

¹ <https://www.gov.uk/government/publications/net-zero-strategy>

the atmosphere due to disturbances, reduction in carbon stored in the biosphere (e.g., through replacing established trees with energy crops, and indirect land use change because of biomass feedstocks production, removal of crop/forestry residues), and cultivation and processing of feedstocks. Achieving net-zero (where negative emissions from technologies such as BECCS may play a part) requires the sustainable production of biomass, ensuring that emissions from production of biomass are minimised and that where the aim is to provide *negative* emissions the carbon sequestered is greater than carbon emitted throughout the supply chain, from feedstocks to energy usage.

3. Aims and Objectives

This research study aims to answer the key questions set out below which will address uncertain areas in the evidence base surrounding the sustainability of biomass feedstock production. The improved knowledge and evidence base which will result from this programme will directly inform the development and implementation of the Biomass Strategy². Furthermore, it will provide the groundwork for improving accuracy in accounting for indirect land use change in life cycle analyses, which at present is internationally uncertain.

The selected key themes and questions that this research will answer are set out below in the methodology:

² <https://www.gov.uk/government/publications/biomass-policy-statement-a-strategic-view-on-the-role-of-sustainable-biomass-for-net-zero>

1. Methodology

This project will collate and assess current and up to date evidence surrounding 3 key themes in biomass sustainability: Indirect land use change, soil carbon under non-domestic feedstocks, and waste exemption from sustainability criteria. This work will use scoping exercises and analyses of current evidence to answer the key questions set out below surrounding these topics and feedstocks.

Feedstocks which are in scope include:

- Forest biomass products
- short-rotation forestry
- perennial energy crops (e.g., short rotation coppice and Miscanthus)
- domestic feed and food crops (e.g., maize)
- novel feedstocks (such as hemp)

Wastes which are in scope include:

- Agricultural residues (e.g. straw)
- Forestry residues (low value pulpwood, sawmill residues)
- Biogenic fractions of municipal solid wastes, farm and food wastes
- Wastes and residues generated in industries
- Wastes and residues generated in processing relating to animal husbandry, aquaculture and fisheries

Where the work will consider non-domestic bioenergy feedstocks production, the sourcing regions will encompass:

- North America (USA and Canada)
- Balkan States (Latvia, Estonia)
- Scandinavian states (Sweden, Norway, Finland)
- South Europe (Portugal)

Work Packages

This research study shall be split into three work packages. All work packages are procured together, and suppliers are expected to deliver all three. An approach to addressing these work packages should be set out in the tender. The work packages set out are not dependant on one another and are not in order of occurrence.

1) Work package 1: minimising current uncertainties relating to ILUC (indirect land use change) factors

Accurate life cycle analyses (LCA) of biomass feedstocks are strongly reliant on accurate representations of indirect land use changes associated with bioenergy feedstocks production (i.e., increasing production of biomass feedstocks in one region will displace land production such as food to another). Such indirect land use changes will bring with it negative impacts such as increased CO₂ emissions, loss of biodiversity and decreased carbon sequestration. Currently, models used for estimating ILUC vary greatly, with different models using different assumptions surrounding counterfactual scenarios, and prediction of indirect changes under such scenarios. Such vast variation between methodologies casts

uncertainty around the reliability of ILUC factors. You will assess current evidence surrounding indirect land use change. This work package will review current evidence surrounding the indirect land use impacts of both UK domestic feedstocks production and UK demand for international biomass feedstocks (see above list for scope). In addition, it will review previous ILUC modelling research, identifying key strengths and weaknesses and setting the case for improvements to current methodologies or if appropriate set out a proposal for a new methodology. The work should also explicitly set out a potential methodology for improving the reliability of current ILUC factors and predictions of indirect land use change. Your tender must demonstrate how you will answer the following key questions:

- What evidence currently exists surrounding the indirect land use impacts of both UK domestic feedstocks production and UK demand for international biomass products?
- What are the strengths and weaknesses of current methods for estimating ILUC factors?
- What biomass crop types are currently covered in existing models, what crop types are missing?
- How can we improve assumptions of causality (how we can say to a degree of certainty that feedstock production caused LUC elsewhere)?
- How can models for estimating ILUC be improved to better represent the indirect land use impacts of both UK domestic biomass feedstock production, and international demand of feedstocks?
- How can we extend potential methodologies to cover all bioenergy feedstock types (see above)?
- Which biomass feedstocks are high risk for ILUC?

In assessing current methodologies for predicting ILUC, you should consider both quantitative and qualitative evidence and use the gathered information to establish the strengths and weaknesses of each method. This may include but not limited to: taking into account treatment of uncertainty; counterfactual scenarios used; spatial resolution; ensuring methods are World Trade Organisation (WTO) compliant; and biomass feedstock types considered. Each method should be assigned a level of confidence (high, medium, low). Your approach should take the findings from review of current methodologies into account when setting out the case for a new or improved methodology for the prediction of ILUC and ILUC factors. The work will not directly involve building the new/improved methodology, but will be used by BEIS to inform decisions on whether to commission further work surrounding ILUC.

2) Work Package 2: Impacts of increased UK demand of imported feedstocks on soil carbon stocks in land used for production

Currently it is unclear what the ultimate impact of biomass production is on soil carbon stocks and sequestration internationally. As the UK imports around a third of its existing bioenergy supply (predominantly as wood pellets), and as biomass usage may increase in the coming years, it is important to understand the impact existing and potential additional demand for international feedstocks is having on soil carbon sequestration in international sourcing regions. Both in forest and energy crop production, there remains a question of whether certain management practices, feedstock types, and harvesting techniques

negatively or positively impact soil carbon stocks. This work package will aim to answer the following key questions and points:

- Quantifying soil carbon versus aboveground carbon, belowground biomass, litter pools etc, and their change over time in non-domestic biomass feedstock production
- Soil carbon stock differences between different feedstock scenarios
- Effects of management on soil carbon sequestration
- Effects of removal of residues from harvesting on soil carbon and what might be an acceptable amount of removal? What are the effects of other residue treatment options on soil carbon?

This work will only consider soil carbon stocks in areas of non-domestic biomass production (see above for relevant regions) and will be carried out as a synthesis of existing data/literature. The work package will carry out a literature review to establish the existing published and grey literature on soil carbon stocks and changes in areas of non-domestic biomass production. Soil carbon datasets will be identified and used to carry out statistical analyses with the aim of exploring trends in soil carbon with biomass feedstock production, including the impacts of management practices, trends within specific feedstock types and scenarios. The output for this work package will be a report which brings together the available evidence. Any soil carbon data identified and used for analyses, there will be required to be supplied to BEIS in a supporting database of extracted data.

3) Work Package 3: Waste Exemptions (is the use of wastes as bioenergy and biofuels sustainable)

Currently, waste products (including, waste, biomass wholly derived from waste, and processing residues with the exception of wood) can fall under exemptions from land and greenhouse gas (GHG) sustainability criteria. As demands on land for food will increase in coming years, the use of wastes as bioenergy and biofuels could provide a useful source of energy without adding extra pressures to land availability. However, it is important to be certain that waste usages as bioenergy and biofuels are sustainable, and whether they should be exempt from sustainability criteria. This work package will investigate and gather evidence on the sustainability of waste products, such as biofuels. This will be undertaken as a review of existing data/evidence synthesis and will address the following key questions:

- What evidence is available surrounding different waste use scenarios
- Does the evidence indicate that waste use as bioenergy and biofuels is sustainable?
- What evidence gaps are there? What, if any, research is needed to be certain wastes are sustainable?
- Are the current sustainability criteria applied to wastes appropriate? If not what criteria could be applied to waste derived feedstocks?
- Where exemptions to sustainability criteria apply currently, what criteria could be suitable instead?
- How does this evidence look internationally? What is the impact of regional best practice waste management?

The output for this work package will be a report, setting out the available evidence surrounding waste bioenergy and biofuel sustainability and including the analysis and

recommendation of potential sustainability criteria in place of current exemptions applied to waste bioenergy and biofuels (where applicable). If possible, the review of evidence should consider both qualitative and quantitative evidence when assessing whether waste usage is sustainable.

2. Outputs Required

The following summarises the main outputs from the work packages described in the preceding section:

- Outputs for Work Package 1:
 - A collation of up to date evidence surrounding indirect land use change estimates due to both domestic and imported biomass, methods of ILUC estimation, crop types covered under ILUC models and their associated risk levels (high, medium, low). A list of sources, references to these sources, data of publication, and description of the evidence contained in each, should be provided, as well as a table of quantitative estimates of indirect land-use change (and, where available, associated emissions).
 - An identification of methods/models used to estimate ILUC – a list of which, together with short model description, should be provided
 - A critical analysis of the evidence reviewed to identify if the assumptions used in ILUC modelling identified (such as assumptions of causality) are robust, and if not, how they can be improved, and a wider assessment of the approach used by each model, to establish the strengths and weaknesses of current ILUC methodologies and assign confidence levels to each (high, medium low).
 - A recommendation/proposal of future work, either through improvements to current ILUC models or a new method, which would allow better estimation of ILUC due to biomass production, and the associated GHG emissions. The proposal should set out the rationale for why these recommendations are being made based on the evidence collation and assessment steps carried out, as described above, the methodology being recommended, and how it will improve current estimates of land use change and associated GHG emissions.
 - The above outputs will be brought together in a final report for this Work Package.
- Outputs for Work Package 2:
 - A report which brings together the available *quantitative* evidence surrounding impacts of UK demand for international feedstocks on soil carbon. A list of sources, references to these sources, data of publication, and description of the evidence contained in each, should be provided, as well as a table of quantitative estimates of changes in soil carbon, disaggregated by feedstock type and/or region, where possible. An analysis of existing soil carbon data which aims to identify trends in soil carbon changes (gains/losses) under areas with biomass feedstock production in countries / regions the UK imports biomass from.

- In addition to the list of sources and a table of estimates, any soil carbon data gathered from existing literature will be supplied to BEIS as an spreadsheet which can be read in MS Excel
- Outputs for Work Package 3:
 - a report, setting out the available evidence surrounding sustainability of wastes as bioenergy and biofuels, detailing recommendations on whether current sustainability criteria are appropriate, and if not, or where exemptions currently apply, what potential criteria could look like.
 - Where available the analysis of existing evidence should consider both quantitative and qualitative evidence. If qualitative evidence is used, it should be supplied to BEIS in an excel database.

Each report should be:

- Accompanied by an Executive Summary which accurately summarises the body of the report.
- Written in clear English with correct spelling, grammar, and punctuation, and with acronyms spelled out on first use.
- All headings and figures should be numbered and clearly referenced in the text, with a table of contents and table of figures at the beginning of the report.
- References should be provided within the text, and listed in a table of references at the end each document.
- All charts and diagrams should be presented with numbered captions, and be clearly cross referenced in the text.

The Contractor will provide progress updates biweekly email, teleconference or video conference. Bidders should expect progress reviews at the point of each milestone delivery, where the Authority (BEIS) may provide steer and feedback.

The Contractor shall provide a presentation to BEIS and the Steering Group at the midpoint of the project, reporting on progress and discussing any issues and findings which have occurred.

The Contractor will provide three final project reports (one for each work package) to the Authority, covering all findings, the level of uncertainty in the results, how the results may be used, and any evidence gaps, or further work identified (with an opening executive summary), and accompanying excel file or all data compiled during the project.

The Contractor shall provide a final one-page summary of the research and findings for each individual work package (3 in total), to be used for easy and accessible public dissemination to be published by BEIS and knowledge sharing within and between government departments. This can be in the format of a one-page summary, poster, one PowerPoint slide, or one page leaflet (format to be agreed between the Authority and Contractor).

The Contractor shall provide a final presentation to policy makers and stakeholders from BEIS and other UK Government Departments summarising the findings of the project. There will be an option to hold three separate presentations (one for each work package) to the relevant stakeholders for each.

3. Ownership and Publication

All outputs from the research project will be assumed to be owned by BEIS. The outputs, raw data and analyses carried out in the research will be transferred to BEIS at times agreed with BEIS and can only be used for further uses with the express permission of BEIS.

BEIS standard terms and conditions require that BEIS retain the Intellectual Property (IP) from all models and software paid for by BEIS.

The Contractor will be required to seek approval in advance from the Authority Project Officer(s) of any press release, presentation or publication related to this project until the final report is published. The Contractor shall allow sufficient time for this approval. There will also be a delay between the project end date and publication of the final report while BEIS quality assurance processes, possibly including independent review of the final report, are carried out.

Project outputs should be accessible, and suitable for publication and further use, with exception to where the outputs are internal documents only for BEIS, e.g. project updates and the research plan.

4. Quality Assurance

This project must comply with the BEIS Code of Practice for research (Annex B) and bidders must set out their approach to quality assurance in their response to this ITT, with a QA plan. The QA plan must be transparent and demonstrate how the bidder will apply quality assurance and quality control to any analyses and products in the project.

Bidders may find it useful to review the Aqua Book for further guidance on analytical assurance (<https://www.gov.uk/government/publications/the-aqua-book-guidance-on-producing-quality-analysis-for-government>)

Sign-off for the quality assurance must be done by someone of sufficient seniority within the contractor organisation to be able to take responsibility for the work done. Tenderers should also consider sourcing advice and peer review from external advisors, independent of their own organisation, to support the quality assurance process. Acceptance of the work by BEIS will take these factors into consideration. BEIS reserves the right to refuse sign off of outputs which do not meet the required standard specified in this invitation to tender.

The final reports will also undergo a BEIS quality assurance check and include review of the project and suggested revisions. This may include external peer review of outputs. BEIS expects the supplier to suitably act on any quality issues identified by reviewers with the final 10% of the payment for the deliverable being subject to revisions being taken on board.

5. Timetable

ITT published	7/6/2022
Deadline for tenders	19/7/2022

Tender appraisal completed and all bidders notified of result	9/8/2022
Standstill period ends	23/8/2022
Contract sign and Kick off meeting	23/8/2022 (1/9/2022)
Interim report and mid-point presentation	January 2023
Final report (draft)	April 2023
Final presentation to Authority	May 2023
BEIS Review of draft	April 2023 – May 2023
Update report in light of BEIS review	June – July 2023
Final report (final)	July 2023
Contract closes	July 2023

6. Challenges

There may be a number of challenges in conducting this research; some are given in the following section. Contractors must consider how these and any other challenges will be addressed through the research design and delivery.

- Due to the outputs of this work being intended to inform policies arising from the Biomass Strategy, it must be completed with timeliness. Therefore, contractors must mitigate against risks of delays through ensuring there are adequate personnel to complete the work, particularly during peak periods.
- Collecting evidence from a wide range of sources, including grey literature, may be a challenge. Particularly the extraction of raw data from different sources. Plans for acquiring data must be taken into account when setting out the work plan. If necessary, BEIS will consider providing data where possible.
- The project covers three different and highly technical areas of research and the availability of the sufficient range of technical expertise to cover each topic may present a challenge. The contractor must ensure that they can cover each topic, and have the adequate level of expertise to produce high quality outputs.

7. Ethics

All applicants will need to identify and propose arrangements for initial scrutiny and on-going monitoring of ethical issues. The appropriate handling of ethical issues is part of the tender assessment exercise and proposals will be evaluated on this as part of the 'addressing challenges and risks' criterion.

We expect contractors to adhere to the following GSR Principals:

- Sound application and conduct of social research methods and appropriate dissemination and utilisation of findings
- Participation based on valid consent
- Enabling participation
- Avoidance of personal harm

- Non-disclosure of identity and personal information

8. Working Arrangements

The successful contractor will be expected to identify one named point of contact through whom all enquiries can be filtered. A BEIS Project Manager will be assigned to the project and will be the central point of contact.

The Contractor shall attend an Initial meeting with BEIS to review the set out in the tender work plans and clarify project objectives and timelines within the first two weeks of the project start date. This can take place in person or virtually. Contractor shall provide fortnightly updates to Authority Project Officer(s) to report on project progress via telephone, meeting and/or email which will be agreed by the Authority.

The Contractor shall appoint a nominated person of appropriate grade to be the Contractor's Authorised Representative to manage the project and to liaise with the Authority as required. At any meeting, the Contractor's Authorised Representative shall be authorised to make critical decisions.

The Contractor shall be supervised by an official from the Authority who will act as nominated officer for the project (the Authority's Project Officer(s)). The Authority will be responsible for agreeing dates and drafting the agenda for and producing a note of the review meeting.

The Contractor shall maintain their own management reports, including a risk and issues log and shall present these as requested by the Authority at any meeting requested by the Authority.

9. Data Protection

The Contractor will be compliant with the Data Protection Legislation, as defined in the terms and conditions applying to this Invitation to Tender. A guide to The General Data Protection Regulation published by the Information Commissioner's Office can be found [here](#).

The only processing that the Contractor is authorised to do is listed in Annex 1 by BEIS, "the Authority" and may not be determined by the Contractor.

Annex 1: Processing, Personal Data and Data Subjects

(1) The contact details of the Authority's Data Protection Officer are:

BEIS Data Protection Officer
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London
SW1H 0ET

Email: dataprotection@beis.gov.uk

- (2) The contact details of the Contractor's Data Protection Officer (or if not applicable, details of the person responsible for data protection in the organisation) are: To be completed by the Contractor
- (3) The Contractor shall comply with any further written instructions with respect to processing by the Authority.
- (4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details
Subject matter of the processing	<p>Contact details of stakeholders to be invited to the presentation of key findings of the project.</p> <p>The processing of names and business contact details of staff of both the Authority and the Contractor will be necessary to deliver the services exchanged during the course of the Contract, and to undertake contract and performance management.</p> <p>The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.</p>
Duration of the processing	Processing will take place from August 2022 for the duration of the Contract. The Contract will end in July 2023.
Nature and purposes of the processing	<p>The nature of the processing will include collection, storage and retrieval for use only for the purposes of communicating with stakeholders.</p> <p>The nature of processing will include the storage and use of names and business contact details of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.</p>
Type of Personal Data	<p>Name, role, telephone number, email address of stakeholders.</p> <p>Names, business telephone numbers and email addresses, office location and position of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will</p>

	include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Categories of Data Subject	<p>Stakeholders involved in the presentation of key results by the contractor</p> <p>Staff of the Authority and the Contractor, including where those employees are named within the Contract itself or involved within contract management.</p>
Plan for return and destruction of the data once the processing is complete UNLESS requirement under European member state law to preserve that type of data	<p>The Contractor will</p> <ul style="list-style-type: none"> delete the Personal Data and erase the Personal Data from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion. <p>Where Personal Data is contained within the Contract documentation, this will be retained in line with the Department's privacy notice found within the Invitation to Tender.</p>

10. Skills and experience

BEIS would like you to demonstrate that you have the experience and capabilities to undertake the project. Your tender response should include a summary of each proposed team members experience and capabilities.

Contractors should propose named members of the project team, and include the tasks and responsibilities of each team member. This should be clearly linked to the work programme, indicating the grade/ seniority of staff and number of days allocated to specific tasks.

Contractors should identify the individual(s) who will be responsible for managing the project.

11. Consortium Bids

In the case of a consortium tender, only one submission covering all of the partners is required but consortia are advised to make clear the proposed role that each partner will play in performing the contract as per the requirements of the technical specification. We expect the bidder to indicate who in the consortium will be the lead contact for this project, and the organisation and governance associated with the consortia.

Contractors must provide details as to how they will manage any sub-contractors and what percentage of the tendered activity (in terms of monetary value) will be sub-contracted. Any sub-contractors will require written approval from BEIS.

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided in the Annex. However, please note the Department reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2006.

The Department recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to the Department so that it can make a further assessment by applying the selection criteria to the new information provided.

12. Budget

The budget for this project is up to £200,000 excluding VAT.

Indicative budgets for each work-package are as follows:

Work package	<i>Up to £80,000</i>
Work package	<i>Up to £60,000</i>
Work package	<i>Up to £60,000</i>

Suppliers are encouraged to propose a different budget structure for each work package if appropriate.

Suppliers should provide a full and detailed breakdown of costs This should include staff (and day rate, shown with a rate card) allocated to specific tasks.

Cost will be a criterion against which bids which will be assessed.

Payments will be made at the end of the project, upon the completion of the three work packages. Please advise in your tender response how this breakdown reflects your usual payment processes:

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 60 calendar days from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

The Department aims to pay all correctly submitted invoices as soon as possible with a target of 10 days from the date of receipt and within 30 days at the latest in line with standard terms and conditions of contract.

Clarifications on Authority's Specification

Clarification Question received	Contracting Authority's response
In 18 (7), you are mentioning that the liability for this project is 2 mGBP or twice the contract value. We believe that this is very high for such a project and we usually do not agree on these terms. Is that something that you are open to decrease?	The Contracting Authority has considered the level of liability implied in the contract, and has obtained internal approval to modify this downwards to £600k. This variation is solely related to Section 18.7 of the Contract and will not lead to a variation of other terms.
To be able to receive the necessary data, one had to outline under what category the company is working under. We are an engineering/consulting service within multiple industries. I cannot remember exactly what was written, but it was mentioned that one needs to be an Environmental Research center. Do you also consider a consulting company as an option as we have deep insights and experts within the field?	All bids received will be considered and assessed against the evaluation criteria stated in the ITT.
The tender implies the entire project has to be delivered and payment will be at the end of the project i.e. no stage payments. Please could you advise if this is correct?	As the work packages can be carried out concurrently and the project is less than a year, payment will be made upon completion of all.
Could you please clarify whether the tender is to be uploaded on the BEIS platform or sent by email via the sidscienceteam email address.	Bidders should upload their submissions onto BEIS' Jaggaer e-procurement platform rather than the sidscienceteam email address.



Department for
Business, Energy
& Industrial Strategy

Schedule 2

The Contractor's Proposal

E01 - APPROACHES AND METHODOLOGY

UNDERSTANDING OF THE REQUIREMENTS

The UK government has set out an ambition for the UK to be a Net Zero emitter of greenhouse gas (GHG) emissions by 2050, and to align with the Paris Agreement goal to limit global warming to well below 2°C and pursue efforts to limit warming to 1.5°C. The energy sector is recognised as being responsible for about 21% of the UK's total GHG emissions¹. Meeting the Government's Net Zero and wider sustainability targets will require significant movement away from fossil fuels and an increase in the deployment of low carbon energy. A key source of low carbon energy in the UK is the use of bioenergy and biofuels, in combination with the production and import of biomass feedstocks. To ensure biomass feedstocks are sourced sustainably the Department for Business, Energy and Industrial Strategy (BEIS) have recognised that further research is needed to fully understand the environmental impacts of biomass feedstock production and use (both UK produced and imported feedstocks). Sourcing biomass for energy applications in the UK has direct and indirect impacts both domestically and overseas. It is important to establish the extent of indirect land use change (ILUC) as a result of increased biomass production, as well as its potential impact upon soil organic carbon (SOC). A further area of interest to BEIS is to develop a greater understanding of the sustainability of waste biofuels to establish whether current sustainability criteria and exemptions related to waste-derived feedstocks are appropriate.

APPROACH

This ADAS-led consortium will bring together a mix of highly experienced consultants, researchers and technical specialists to address the wide knowledge base required across the three work packages. Each partner has been designated specific roles and responsibilities to the project, which will be co-ordinated by ADAS. An expert panel will be established (see WPO) to provide additional insight, expertise and interpretation of the review findings.

WP1: Minimising current uncertainties relating to ILUC (indirect land use change) factors

Led by (ICON) This information has been redacted

Task 1.1 Identify current methodologies for estimating ILUC impacts, key assumptions and causal relationships: The indirect land use change effects of biofuels rose to prominence in 2008 and has subsequently been incorporated into bioenergy policies and support frameworks in the US and in EU countries. The main tools applied to the question of ILUC analysis are equilibrium economic models, however 'causal descriptive' and 'empirical' approaches relying on the analysis of historical trends have also been used. ILUC impacts are most often discussed in terms of 'ILUC factors' which aim to reflect the likely average CO₂ emissions caused by displaced production, and in terms of feedstocks that are considered 'high' or 'low' risk depending on the likelihood that production would lead to the conversion of high-carbon stock land.

Task 1.1 will provide an overview of the principal methods used to evaluate ILUC impacts, the assumptions around causality built into the modelling frameworks, key assumptions for the most critical parameters, and the level of confidence that can be attributed to the results.

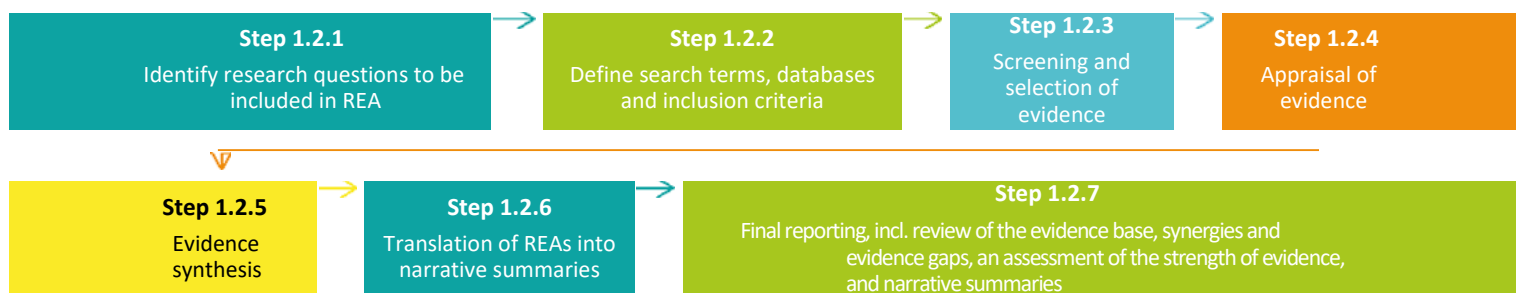
Deliverable 1: Overview of ILUC assessment approaches, key assumptions, and mechanisms.

Task 1.2 – Rapid Evidence Assessment (REA) of ILUC impacts: The majority of academic and grey literature related to ILUC focuses on the production of biofuels from food crops, however, literature also exists, albeit more limited, on the consequential impacts of expanding production of lignocellulosic biomass. Task 1.2 will use a Rapid Evidence Assessment (REA) methodology to identify and synthesise evidence of ILUC impacts from feedstock production based on the methodology outlined by Collins et al. (2015)². REAs provide a robust and systemic approach to assessing the

¹ BEIS. 2022. 2020 UK greenhouse gas emissions: final figures - statistical summary. <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2020>

² Collins, A., Coughlin, D., Miller, J. and Kirk, S. 2015. The Production of Quick Scoping Reviews and Rapid Evidence Assessments: A How to Guide'. <https://www.gov.uk/government/publications/the-production-of-quick-scoping-reviews-and-rapid-evidence-assessments>.

literature and are well suited to informing policy development and practice. An overview of key steps is shown in Figure 1. The approach will be complemented under the guidance of the **Expert Panel** (WP0) where necessary to provide insight into the most appropriate search terms, databases and inclusion criteria. This same methodology will be used on subsequent tasks in WP2 & 3.



Considering both peer-reviewed and grey literature, the REA will gather both qualitative and quantitative evidence on the impacts of ILUC arising from the production of in-scope (confirmed in Step 1.2.1) bioenergy feedstocks (both domestic and imported) used in the UK. The impact categories of focus (which will guide the search terms) will be confirmed with BEIS.

Key questions to be addressed:

- What is the evidence for ILUC impacts from expanding consumption of biomass feedstocks?
- How are ILUC impacts quantified and reported?
- What are the ILUC impacts for the biomass resources of interest to the UK?

Search terms: The initial set of key words, search terms and evidence categorisation are described below. These may be revised following discussion with BEIS and the Expert Group members where appropriate.

Biomass resources	Countries	Impact categories
Bioenergy / biomass / biofuel Forest biomass products, short-rotation forestry, short rotation coppice (SRC), miscanthus, maize, rapeseed, (other)	US, Canada, Latvia, Estonia, Sweden, Norway, Finland, Portugal, Northern Europe, UK	Land use change, Induced change, ILUC factor, ILUC risk, CO ₂ / MJ, CO ₂ / ha

Combinations of search terms: These search terms will be combined into a set of search strings and applied to the databases below. The initial search strings are listed below. These will be adapted and expanded (to include other terms from the table above) once the initial search results have been reviewed.

Bioenergy/ biomass / biofuel
+
UK/ US/ Canada/Latvia/ Estonia/ Sweden/ Norway/ Finland/ Portugal
+
Indirect land use change / land use change
+
Impacts / ILUC Factors (CO₂ / MJ) / (CO₂ / ha)/ Risk

Where a particular search string returns a large number of hits, only the first 50-100 results will be examined for initial relevance, based on the document title and abstract. The number of hits that are deemed relevant on this initial examination will be recorded, along with details of each document that passes this first stage assessment.

Databases / sources: A number of databases will be identified and considered for undertaking the searches.

- E.g., Web of knowledge, Web of Science, Google Scholar, IEA.

Synthesis and evaluation: The results of the REA will be recorded in an Excel-based matrix. The matrix will set out the impact categories assessed, the specific impacts identified, as well as the robustness of the supporting evidence. The confidence in the results will be scored based on the quantity of evidence and level of agreement using the calibrated language approach developed by the Intergovernmental Panel on Climate Change (IPCC, 2010)³. Biomass feedstocks with a high risk of ILUC will be clearly identified.

***Deliverable 2:** Excel dataset of ILUC impacts associated with the production of bioenergy feedstocks. **Deliverable 3:** Comparison of estimates for different feedstocks.*

Task 1.3 – Critical evaluation of key ILUC assessment methods and their practical application: Building on Tasks 1.1, 1.2 and recent syntheses (e.g., Ahlgren and Di Lucia, 2014⁴; Daioglou et al., 2020⁵), this task will prioritise (up to 10 methods) and then undertake an in-depth assessment of ILUC methods most applicable to the UK. This prioritised list will be agreed with BEIS. The team will conduct online research to review the selected methodologies for estimating ILUC and their supporting evidence. For each method the evaluation will include an assessment of the method's strengths and weaknesses, spatial resolution and regional coverage, cost of application, the level of confidence that can be assigned to the model results, any recent applications in informing policy. A full set of criteria is outlined in the table below. The results of the review will be recorded in an Excel-based matrix and then summarised in a score card. A list of references for any supporting evidence will be compiled for each reviewed methodology, with summary descriptions also provided. Supporting quantitative datasets will also be compiled. The team will endeavour to assess all methodologies in the prioritised list; however, not all may be available for assessment (e.g., behind a paywall) or provide access to the underlying assumptions.

Table 1. Criteria to review for each of the selected ILUC assessment methods.

Criteria	Details
Version control	Date of publication. When was the methodology last updated?
Geographical relevance	Which geographic region is the methodology aimed at? Can it be applied to other regions? How specific is it? (UK relevance – domestic production and imports).
Biomass feedstock types supported	Which crop types are covered under ILUC models? What are their associated risk levels (e.g., high, medium, low)?
Impact categories	E.g., CO ₂ / MJ or CO ₂ / ha, impacts on biodiversity etc.
Data assumptions	Quality of assumptions (e.g., sample size, source). How transparent are the data assumptions used? Date of last review/update.
Accessibility/ freely available	Scoring: Full methodology available, some methodology available (e.g., described but missing some equations/parameters), publicly available tool/model (e.g., where the methodology has been made available in software format that allows it to be used), no methodology available. Estimated cost of application (both financial cost and time requirements for each instance).
How widely used it is in the sector?	Inferred from informed expert judgement. Scoring: Widely used in multiple sectors, Widely used in a specific sector, Some use within the industry, Limited users/new emerging tool.
Supporting resources	Is any guidance provided which details the assumptions and methods used? Scoring: Limited information, Good information, Excellent information.
Treatment of uncertainty	How is uncertainty addressed within the modelling framework?
Cause and effect relationships	Explicit and implicit assumptions including e.g., counterfactual scenarios.

³ Guidance Note for Lead Authors of the IPCC Fifth Assessment Report on Consistent Treatment of Uncertainties. https://www.ipcc.ch/site/assets/uploads/2017/08/AR5_Uncertainty_Guidance_Note.pdf

⁴ Ahlgren, S. and Di Lucia, L., 2014. Indirect land use changes of biofuel production—a review of modelling efforts and policy developments in the European Union. *Biotechnology for biofuels*, 7(1), pp.1-10.

⁵ Daioglou, V., Woltjer, G., Strengers, B., Elbersen, B., Barberena Ibañez, G., Sánchez Gonzalez, D., Gil Barno, J. and van Vuuren, D.P., 2020. Progress and barriers in understanding and preventing indirect land-use change. *Biofuels, Bioproducts and Biorefining*, 14(5), pp.924-934.

Role in informing policy development	Recent applications to policy development, World Trade Organisation (WTO) compliance.
Identified issues	This analysis will draw upon any existing critiques of these tools.

Deliverable 4: Completed Excel-based matrix of ILUC assessment methods and score card.

Task 1.4 – Options for methodological development to improve ILUC estimates: This task will draw on all the elements of WP1 to evaluate the feasibility and practicality of expanding and extending current modelling frameworks to increase their applicability to a wider range of feedstocks and improve their robustness to inform policy over the short to medium term. This will identify how current ILUC factors and predictions of ILUC impacts might be advanced, for both UK and imported feedstocks, and the costs and implications of doing so.

A key step in this will be the presentation to BEIS and the expert panel (WP0) of the outputs of the previous tasks to steer the development of the final report.

Deliverable 5: Draft report with recommendations for improving ILUC estimates.

Deliverable 6: Final report. Deliverable 7: One page summary.

WP2: Impacts of increased UK demand of imported feedstocks on soil carbon stocks in land used for production

Led by (ADAS) This information has been redacted. (Supported by This information has been redacted (ADAS)).

Increasing the amount of carbon stored in soils results in carbon removal from the atmosphere. Conversely, the loss of carbon from soils results in increased concentrations of carbon dioxide in the atmosphere. On managed cropland and forests, the choice of crops and trees and how these are managed will influence soil carbon dynamics. Understanding these carbon dynamics is important if the sustainability of bioenergy is to be maximised and to avoid inadvertent increases in emissions, as well as achieve gains in carbon sequestration.

The UK imports biomass for bioenergy, and there is a possibility the volume of imports will increase. Decisions on where to source this feedstock and to encourage better practice requires quantifying the carbon dynamics of these production systems. We will take a modelling approach to do this, and our approach to this work package is set out below.

Task 2.1 – Define project scope, scenarios and research questions: This first task will define the scope, feedstock scenarios and research questions used in WP2. The project inception meeting (task 0.3) will have provided definitions for key terminology, such as ‘carbon sequestration’, to assist later interpretation of the outputs. BEIS have provided a list of supplying countries that are in-scope for the assessment of non-domestic biomass production, which are predominantly exporters of wood pellets to the UK.

To facilitate the modelling approach, a series of feedstock scenarios will need to be defined. A baseline scenario will be created that represents current supply, capturing the species, systems and locations used for producing feedstock for the UK. Further scenarios will consider the different sourcing strategies that could be taken to meet increased feedstock demand from the in-scope regions.

To assist with this task, a scoping review of the literature and data sources (e.g., HM Revenue and Customs, FAOSTAT) will be used to identify the current supply and capacity of international feedstocks. Based on this, scenarios will be created to represent set increases in the amounts of feedstock being imported from in-scope countries and production systems where there is capacity to increase supply. The agreed list of scenarios will inform the research questions and related search terms used in the REA literature review (task 2.2) to ensure that appropriate datasets are targeted within the searches.

This task will also include defining the parameters required for modelling carbon dynamics from the production of these feedstocks. A schematic of the model will be created to identify the pertinent data required to generate the outputs, as well as any additional data that would strengthen the outputs. The parameters required will feed into the REA search and data extraction template.

Deliverable 8: Agreed project scope, key terms, feedstock scenarios and research questions.

Task 2.2 – REA to gather quantitative data on soil carbon stocks related to non-domestic biomass production: A full description of the REA approach can be found in task 1.2 above. In WP2, we propose to use this approach to compile quantitative evidence on soil carbon stocks in relation to non-domestic biomass production.

Scope and approach: A set of research questions will be developed from the defined scenarios in task 2.1 with the aim to quantify soil carbon stocks and impacts on sequestration for different feedstock (and residue) management practices. The REA will gather available quantitative data on soil carbon versus aboveground carbon, belowground biomass, litter pools, etc., making sure to distinguish between pre- and post-harvest values and the method of residue incorporation/removal (see example data fields below). The REA will primarily target high-quality scientific literature (i.e., meta-analyses), identified from databases such as the Web of Science, to efficiently collate quantitative data from up-to-date studies. If insufficient data is identified, grey literature will also be consulted to obtain values. The REA search terms ultimately need to deliver data points that can feed in to task 2.3 – the analysis of trends via the modelling framework. The use of the screening process will ensure that only studies from relevant geographical regions are targeted.

Data extraction matrix: An Excel-based matrix will be developed to facilitate consistent gathering of the quantitative data during the REA process. The matrix fields will align with the research questions and prompt review of the quality for each source (e.g., extent of supporting evidence). The expected fields include:

- Site details: Location, soil type, relevant land-use history.
- Feedstock type: Species, processing method (e.g., pellets made from timber waste).
- Management practices: How the feedstock was managed, including harvesting method, residue management and age at harvest.
- Measurement methodology: Description of how carbon was measured, including timing of measurements (e.g., when were measurements taken during the life cycle – were measurements made prior to establishment and at intermediate times or just during the harvest period), sampling process (e.g., number and depth of samples) and sample assessment (e.g., calculation based on LOI or dry combustion, whether bulk density was also measured). The robustness of the methodology will be scored on a RAG rating to enable prioritisation of the best-quality data. The specific nature of the assessment will be clearly defined (e.g., measurement before and after harvest, comparison between different management practices).
- Change in carbon: Quantitative data on the change in carbon resulting from the harvesting of the feedstock. Units to be defined.

Deliverable 9: REA outputs in Excel matrix.

Task 2.3 – Analysis of trends: The purpose of task 2.3 is to use a modelling approach with the data collected in task 2.2 to explore soil carbon dynamics for the supply of feedstock to the UK for the given scenarios defined in task 2.1. The first step will be to define the changes in soil carbon for the specific systems and locations supplying the UK. Given the cost and logistical challenges of using field experiments to collect soil carbon data for forestry production systems, the data collated during task 2.2 is likely to be incomplete, with some locations, feedstocks and management practices underrepresented in the data. Other areas will have multiple data points. To collate these changes in soil carbon, several approaches will be available:

- Mean values: Where there is limited data, mean values from individual studies can be used.
- Meta-analyses: These may have already been undertaken and representative values based on multiple individual studies can be extracted from these. Further meta-analyses can be undertaken in this WP provided that sufficient data and of robust enough quality is available.
- Where multiple values are available, but there is insufficient data for a meta-analysis, expert judgement will be used to determine the most reliable value (e.g., based on robustness of methodology, such as the number replicates) with clear explanation of decisions made.
- Where there are gaps in the data, expert judgement will be used to determine whether a proxy value can be used from a comparable region or system. If this is not possible, the study will exclude that specific system from the analysis.

Once representative values have been defined for the different species, systems and locations, a calculation will be made of the net change in soil carbon resulting from the UK's current demand for overseas biomass. Changes in the demand for biomass specified in the scenarios created in task 2.1 will be assessed to determine their likely impact on net changes in soil carbon and these will be contrasted with the baseline scenario.

Deliverable 10: *Collated dataset of soil carbon changes for biomass produced for species, systems and locations.*

Deliverable 11: *Estimates of changes in carbon pools resulting from current biomass production and for predicted future scenarios.*

Task 2.4 – Report: The outputs of the previous tasks will be presented to BEIS and the expert panel (WPO) to steer the development of the final report. The final report will present an analysis of key findings and trends from the compiled quantitative data, including basic statistics (i.e., averages, ranges, standard deviations). It will also include discussion of the modelled outputs for the different feedstock scenarios and their impacts on carbon stocks and sequestration potential. Considerations will be given to how increases in demand may impact soil carbon stocks and sequestration internationally. The report will also include a brief discussion on how changes in soil carbon from production systems are allocated when the biomass for feedstock is a by-product (e.g., would sawmill waste be allocated for any losses or increases in soil carbon). Any gaps in the data (e.g., missing soil carbon data for a given production system) will be highlighted and the implications of these gaps on the understanding of carbon dynamics will be discussed. The final report will include an Excel-based appendix detailing a full list of the sources used, their references, high-level summaries of the evidence contained and key data points disaggregated by feedstock type and/or region. A one-page summary will be created to highlight the key findings.

Deliverable 12: *Draft report of key outputs.* **Deliverable 13:** *Final report.* **Deliverable 14:** *One-page summary.*

WP3: Waste Exemptions - Is the use of wastes as bioenergy and biofuels sustainable?

Led by (ADAS) [redacted] (Supported by [redacted] (ADAS), [redacted] (ADAS) and [redacted] (WRc))

Many waste materials can be used for the production of bioenergy. These materials are often exempt from sustainability criteria that are applied to biomass grown specifically for the purpose of producing bioenergy. These exemptions help to facilitate the use of these waste materials for bioenergy. There is, however, a question of whether these exemptions are providing the most effective approach for producing sustainable energy. This work package seeks to review the current legislation and identify its impacts on sustainability outcomes and whether there are changes required to provide sustainable use of wastes.

Task 3.1 – Review of sustainability criteria and exemptions within a global context: ADAS will review the current legislation around the use of waste biomass for bioenergy production. The focus will be on the current rules in the UK (i.e., the sustainability criteria in the Renewable Transport Fuel Obligation [RTFO] and the Renewables Obligation [RO])^{6,7} with exploration of the rules in other countries/regions such as the EU (i.e., European Union Renewable Energy Directive [RED])⁸. This will also draw on suggestions put forward in academic and grey literature for improving sustainability criteria in the UK and overseas. There are three stages to this task:

1. Defining the scope
2. Defining the sustainability criteria
3. Mapping wastes that are, or could be, used for bioenergy in the UK

Define scope: To provide a clear understanding for the analysis proposed in task 3.3, the first stage will define key terminology for use in this WP. We will provide detailed definitions for all key wastes and other relevant terminology

⁶ <https://www.gov.uk/guidance/renewable-transport-fuels-obligation>

⁷ https://www.ofgem.gov.uk/sites/default/files/docs/2018/04/ro_sustainability_criteria.pdf

⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2001&from=EN>

used within this work package, including a clear definition of the term ‘sustainable’ to provide context of this work and to enable the question of whether the exemption criteria support ‘sustainable’ bioenergy. This will include identifying the specific impact categories being considered and the importance/weighting of these and the aim of the sustainability criteria (e.g., is the focus on GHG emissions savings or environmental impact in general). ADAS envisages sustainability of bioenergy production as incorporating various different environmental (e.g., GHG emissions, biodiversity) and socio-economic (e.g., land tenure, labour) aspects. Sustainable bioenergy production should aim to minimise impacts on biodiversity and ecosystems (e.g., soil and water quality) along with avoiding carbon leakage resulting from indirect land use change. A definition for use in this work package will be agreed with BEIS for use in the analysis.

Define sustainability criteria: The second stage will identify and clearly set out the sustainability criteria (i.e., GHG criteria, land criteria) currently used within UK and overseas legislation (e.g., RTFO, RO, RED). This will explore what sustainability information is captured and how the exemptions influence which aspects of these sustainability criteria are removed/ will be required. The UK legislation will be contrasted with the overseas legislation. ADAS will draw on the RTFO, RO and RED legislation to understand how sustainability is being defined and will contrast that with other definitions of ‘sustainable’; this will identify whether aspects of sustainability are being missed from the legislation.

Mapping wastes: BEIS have set out the key wastes that are used in UK bioenergy that they would like included in the analysis; this will include those defined by the Department for Transport for use under the RTFO.⁹ The third stage will involve a scoping exercise to map the current use of waste products for bioenergy in the UK as well as any trends in these. The alternative destinations for these wastes will also be identified (e.g., landfill). Based on the current use of these waste materials for bioenergy production and the potential future availability of these wastes for use as bioenergy feedstock, ADAS will define 10 waste scenarios for use in the REA (task 3.2). This will also include any waste categories where there appears to be significant variation in the materials within that category.

***Deliverable 15:** One-page summaries for each of the three components, including defined waste scenarios for the REA.*

Task 3.2 – REA to synthesise evidence on sustainability of wastes as bioenergy and biofuels: Following the REA methodology outlined in WP1, ADAS will synthesise the available evidence on the sustainability of different waste scenarios. This will focus on the waste scenarios and the key sustainability impact categories defined in task 3.1.

Scope and approach: A set of research questions will be developed based on the scenarios defined in task 3.1. The REA will gather qualitative and quantitative evidence from peer-reviewed and grey literature on the environmental impacts for each of the identified waste scenarios. The REA will primarily target high-quality scientific literature, identified from databases such as the Web of Science to efficiently collate quantitative data from up-to-date studies. If insufficient data is identified, grey literature will also be consulted to obtain values. The REA search terms ultimately need to deliver data points that can feed in to task 3.3 – ‘Analysis of current sustainability criteria’ and to determine whether good sustainability outcomes are being achieved.

Research questions: The primary research question is ‘What are the environmental impacts of using a specific waste for bioenergy production and how do these emissions compare to alternative fates of that waste?’

Search terms: The search terms will take the form below, with the specific categories dependent on what is defined in task 3.1. A testing phase will be used to make sure the search terms are providing sufficient relevant data. Terms will be clarified and constraints will be used where necessary.

[Defined waste] + [Define environmental impact category] + [“bioenergy” OR “biomass” OR “biofuel”] + [relevant time and geographic constraints]

Data extraction matrix: An Excel-based matrix will be developed to facilitate consistent gathering of the quantitative data during the REA process. The matrix fields will align with the research questions and also prompt review of the quality for each source (e.g. extent of supporting evidence). The expected fields include:

- Description of the waste, including details about processing

<https://www.gov.uk/government/publications/renewable-transport-fuel-obligation-rtfo-guidance-2021/list-of-feedstocks-including-wastes-and-residues-year-2021--2>

- Details of location and dates when assessments were made
- Comparisons made (e.g., whether emission data has been collected for alternative fates)
- Life-cycle GHG emissions – Emissions to be defined in kg CO₂e (or a breakdown of individual GHGs) per tonne of feedstock or per unit of energy. Where possible, these emissions will be collected for individual components of the life-cycle (e.g. processing, storage)
- Other environmental impacts – Defined emission category/ies and emissions (with relevant units)

Additional data may be collected should relevant data categories be identified during the initial searches. The data will contribute to the expert analysis and interpretation in task 3.3.

Deliverable 16: REA outputs in Excel matrix.

Task 3.3 – Expert analysis and interpretation: The purpose of this task is to put the sustainability criteria and exemptions in the context of the sustainability of different types of waste biomass and determine whether the current legislation is conducive to achieving good sustainability outcomes.

The first stage will be to assess the sustainability of wastes used as bioenergy feedstock. The data collected in the REA will be analysed to provide collated environmental impacts for each waste material, both for its use as a bioenergy feedstock and, if available, for its alternative destination. This will also draw on any indirect land use change data collected as part of WP3.

ADAS will draw on the panel of experts (WP0) in various subject areas (i.e., land use, waste, soils) to guide in-depth analyses of the sustainability criteria and legislation outlined and defined in task 3.1 and subsequently assess the sustainability of waste as bioenergy feedstock based on the evidence from the REA in task 3.2. ADAS will make a judgement and comment on biomass waste exemptions in relation to the criteria and highlight any gaps in legislation. Where there is significant variation in the emissions of waste materials, and the criteria do not adequately prevent these higher emissions (e.g., incentives to reduce emissions), it will be outlined in the report.

Based on this analysis, ADAS will present recommendations on how the rules around waste biomass for bioenergy can be improved. These will fit into three categories:

1. Waste categories – ADAS will determine if these need to be redefined. For example, should some waste categories be divided into multiple categories with different exemption criteria to account for waste materials with a wide range of characteristics? ADAS will set out recommendations for new waste categories.
2. Sustainability assessments – ADAS will determine if the sustainability criteria need to be redefined to better capture the sustainability of feedstocks. For example, are there emissions from the life cycle that are not included under the current criteria, but should be allocated to the waste? ADAS will set out recommendations for how these assessments can be updated to better capture sustainability information.
3. Exemptions – ADAS will determine if the exemptions currently applied to waste materials are appropriate. For example, are current rules resulting in reduced sustainability of bioenergy systems? ADAS will set out recommendations for how exemptions should be applied to waste materials.

Deliverable 17: Analysis outputs in Excel matrix with technical summary.

Task 3.4 – Report: The report will set out the evidence from the REA and the analysis in the previous tasks. The report will provide recommendations on whether current sustainability criteria and exemptions that are appropriate in relation to waste bioenergy and biofuels - qualitative and quantitative evidence where possible will be used to support. Where limitations are identified, potential revisions to the criteria will be presented. Evidence gaps will be highlighted and guidance provided on how these gaps can be addressed through further research.

Deliverable 18: Draft report of key outputs. Deliverable 19: Final report. Deliverable 20: One-page summary.

WP0: Project Management

Work package 0 has been assigned for project management tasks (i.e., meetings) needed to coordinate the work, which will also include the management and provision of technical expertise across the three main work packages. Full project

management details and tasks are available in 'E03 Project Management' below; however, the key tasks that relate to the approach are summarised here.

Task 0.1 – Inception meeting: This meeting will be used to define the scope of the project and the key definitions being used. For example, the term 'carbon sequestration' can be approached in multiple ways (e.g., considerations on the permanence of carbon removal from the atmosphere). This meeting will clearly define these terms so that our consortium is delivering to BEIS's specification.

Task 0.4 – Expert panel: ADAS has confirmed participation from a group of bioeconomy, land use, soil carbon and waste experts to provide additional technical expertise, project guidance and interpretation of the review findings. The confirmed individuals for the panel and a summary of their expertise are detailed in 'E02 Expertise and Experience of Project Team'.

E02 - EXPERTISE AND EXPERIENCE OF PROJECT TEAM

ADAS is part of the RSK group of companies. ADAS is the UK's largest privately owned provider of agricultural and environmental consultancy, rural development services and policy advice. We have a unique combination of insight and practical experience, underpinned by robust, science-based practices that allows us to meet the needs of both our public and private sector clients. We have offices throughout England and Wales, with over 400 staff delivering national and international projects in 60 subjects, along with a network of partners with specialist knowledge. This is supported by health, environment and quality systems, standards and certifications, including ISO 9001, ISO 14001, ISO 45001, ORETO and Good Laboratory Practice (GLP). Our wide coverage of knowledge and expertise across the agri-environmental sector enables effective multidisciplinary approaches for developing solutions for our clients.

ADAS have comprehensive expertise supporting the development of the evidence base for policy in relation to greenhouse gas (GHG) emissions, nutrient loss and water quality in relation to agriculture. Through our role in leading the design and implementation of the national Ammonia and GHG Inventory for the United Kingdom (UK) (Defra projects AC0114; SCF0102; SCF0107) and commercial work for a range of clients we have developed an in depth understanding of the emissions associated with the management of land. Our soils team have also completed a range of projects (e.g., assessing the impacts of tree planting in grassland) that support our understanding of soil carbon deposition and loss under different management systems. ADAS were involved in much of the early research into production of biomass crops in the UK, especially miscanthus, and have continued to deliver a range of consultancy projects over the years to support the uptake of biomass crops, such as the Refining Estimates of Land available for Biomass project run for the Energy Technologies Institute in collaboration with ICON and others. We also have the expertise to advise on all aspects of woodland and forestry management from site selection and grant advice, through to woodland establishment and valuations (e.g., East Yorkshire Estate – 10-year management plan). We bring this expertise together alongside consultancy skills for rapid evidence assessment, analysis of data, modelling of scenarios and provision of clear reports that can present messages to a range of audiences from technical to public facing.

We will be supported by Imperial Consultants (ICON) and Water Research Centre (WRc), who will be subcontractors in this project. ICON is a self-funding, wholly owned subsidiary of Imperial College London, providing practical and innovative solutions for external organisations by facilitating access to the expertise, facilities and equipment based at the College. ICON offer technical consultancy and expert witness services carried out by the world leading academics based at the College. With over 30 years' experience in facilitating consultancy projects undertaken by the academic community at Imperial, the team provides support to the consultant community from the project scoping/pre-contractual phase through contracting, project delivery and project closure. WRc, which sits within the wider RSK group, are providers of consultancy, technical services, accreditation schemes, research, innovation and training to customers in the water, waste and environment sectors. They will provide technical steer within WP3, which assesses the sustainability of using wastes as bioenergy and biofuels.

Delivery Team

A summary of the core project team who would be involved in the main delivery of the project are outlined in Table 2. CVs are provided as an annex to this document.

Table 2. Proposed project team.

Name and Title	Experience	Role
<div>This information has been redacted</div>	<div>This information has been redacted</div>	Project Director & Quality Assurance of deliverables
<div>This information has been redacted</div>	<div>This information has been redacted</div>	Project Manager
<div>This information has been redacted</div>	<div>This information has been redacted</div>	WP1 Lead: Indirect land use change WP2: Expert panel
<div>This information has been redacted</div>	<div>This information has been redacted</div>	WP1: Indirect land use change WP3: Expert panel

<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP2 Lead: Soil carbon</div> <div>WP3: Environmental impact assessment</div>
<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP2: REA/ modelling delivery</div>
<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP2: Forest management</div>
<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP3 Lead: Policy</div>
<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP3: Policy</div>
<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP3: Waste expertise</div>
<div>This information has been redacted</div> <div></div>	<div>This information has been redacted</div>	<div>WP3: Waste Management Specialist</div>

Table 3. Members of the Expert Panel.

Name and Title	Experience	Expertise
This information has been redacted	This information has been redacted	WP1, 2 & 3: Industry perspective
This information has been redacted	This information has been redacted	WP1, 2 & 3: Overview of UK bioenergy
This information has been redacted	This information has been redacted	WP1: Indirect land use change
This information has been redacted	This information has been redacted	WP2: Soil carbon stocks
This information has been redacted	This information has been redacted	WP3: Waste policy & resource management
This information has been redacted	This information has been redacted	WP2&3: Guidance on soil carbon & waste

Track record

Table 4. Example track record.

Projects relevant across all three work packages
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ADAS: Assessing Carbon Leakage Risk of Agri-Commodities [Defra] – 2022

The development of a framework for assessment of agri-commodity carbon leakage. Involved the collation of information on trade, economics and climate impacts (including production and land-use change emissions) of commodities produced in the UK as well as imported, followed by modelling of the changes in overall climate impact from the imposition of climate policies and its subsequent impact on UK production of that commodity and changes in imports. This included a review of policy mechanisms for mitigating the risk of carbon leakage.

ICON: This information has been redacted – 2022

This information has been redacted

ICON: This information has been redacted – 2021

This project addressed the challenge of how we can make sure that rapid and extensive action to mitigate climate change can be leveraged to deliver both Agenda 2030 and a well below 1.5°C world. The project takes a whole system perspective. It used the sustainable development goal framework to analyse (i) how interactions between human development and the environment change with rapid and extensive climate mitigation, and (ii) how policy and practice interventions informed by a better understanding of enabling interactions can come together to create transformational change.

ADAS: This information has been redacted – 2016

To build and articulate a clearer shared understanding of the investments, actions and policy interventions required by 2030 to unlock the low carbon potential of bioenergy in the UK. ADAS with Pöyry and NNFCC.

Projects relevant to WP1

This information has been redacted

ICON: This information has been redacted – 2014-2018

This project focused on demonstrating an integrated industrial scale biorefinery based on dedicated crops and agricultural residues. In WP7 we were responsible for the sustainability assessment of the biorefinery including an environmental Life-Cycle Assessment, a water footprint analysis and an assessment of Indirect Land Use Changes.

ADAS: This information has been redacted – 2016

To review the evidence-base and relevant literature to develop understanding of how land is currently used in the UK, and the implications of any future changes for climate change mitigation and adaptation. In order to do this, ADAS assessed current metrics of land use as well as indicators of the environmental quality of land.

ADAS/ICON: This information has been redacted – 2015-2016

In this ADAS led consortium (including ICON), the area of UK land available for bioenergy production was assessed, as well as the opportunities and barriers that affect whether land is converted to bioenergy and forestry crops. This involved sense checking current modelled estimates of available UK land for the production of 1st generation (1G) crops (wheat, oilseed rape and maize) and 2nd generation (2G) crops (miscanthus, short rotation coppice) and Forestry (short rotation forestry and long rotation forestry).

ICON: This information has been redacted – 2014-16

This project addressed landscape level impacts of biofuel production on ecosystem services and land use. It provided a land management toolkit based on a spatially explicit, dynamic model of ecosystem services, biodiversity and human well-being able to support decision making.

Projects relevant to WP2

ADAS: This information has been redacted – 2022

In 2010 ADAS produced a carbon calculator for This information has been redacted. Since creating the initial tool, ADAS have updated it frequently to make sure that emissions factors are current. ADAS have built new modules into the tool that determine the carbon

sequestration of planting woodland, in line with the Woodland Carbon Code, and the avoided carbon losses when changing peatland management, in line with the Peatland Carbon Code. The most recent updates set the land management carbon factors to be in line with the 2021 Natural England report on habitats. A hedgerow carbon calculator module was also added to the tool.	
ADAS: Capturing cropland and grassland management impacts on soil carbon in the UK LULUCF Inventory [Defra] – 2013-2014	
An REA identifying the key cropland and grassland management activities operating in each country of the UK, and associated research into soil carbon stock changes.	
ADAS: Best practices for managing soil organic matter in agriculture [Defra] – 2009	
An REA assessing practices for managing soil organic matter in both lowland and upland agriculture, identifying which practice or combination of practices, achieve the greatest benefit for soil organic matter in England. Including cost-benefit assessment of each measure and result translation to guide farmers and land managers.	
ADAS: The effects of reduced tillage practices and organic material additions on the carbon content of arable soils [Defra] – 2007-2008	
An REA to assess the potential for increasing soil organic carbon by reduced tillage (including zero tillage) and organic matter additions (farm manures, biosolids, composts, paper waste etc), in England and Wales. It included an evaluation of other environmental and economic implications of the adoption of such practices, and the overall GHG balance.	
ADAS: This information has been redacted – 1999-2016	
The restoration of over 75 hectares of Ancient Semi Natural Woodland across the This information has been redacted Estate to deliver biodiversity enhancements. Forestry product from harvesting operations was utilised to provide biomass chip for inclusion in sludge product from waste treatment centres.	
Projects relevant to WP3	
ADAS: Design of a post Brexit Regulation and Compliance Framework [Defra] – 2021-2022	
Designing a post Brexit Regulation and Compliance framework for the agricultural community. A detailed review and assessment of the current system, including an analysis of efficacy and proposed methods for monitoring and measuring future compliance of unmitigated impacts, is currently being undertaken.	
ADAS: The Economics of providing livestock with Health and Welfare Enhancements via a Payment by Results Scheme [Defra] – 2020-2021	
ADAS, in collaboration with the University of Bristol and The Royal Agricultural University worked closely with Defra to inform policy development, specifically a payment-by-results (PbR) scheme to reward demonstrable welfare improvement, and a capital grants scheme for investments known to raise welfare.	
ADAS: This information has been redacted – 2019	
Conducting a comprehensive market analysis to support understanding of the renewable energy from feedstock market (wheat and barley). A comprehensive assessment of the straw market with some additional work on wood fuel.	
ADAS: This information has been redacted – 2010-2016	
Conducting field experiments to provide a robust evidence base to support the confident use of digestates and composts by farmers and growers as renewable fertilisers. Effects on soil & crop quality (incl. soil organic carbon) and N supply & environmental emissions (incl. N ₂ O & CH ₄) were measured.	

E03 - PROJECT MANAGEMENT, QUALITY ASSURANCE, RISK MANAGEMENT AND MITIGATION

The project will be led by ADAS with subcontractors Imperial Consultants (ICON) providing support.

Details of the project management team, including their experience, skills and suitability for the project, are outlined in E02 (Expertise and Experience of Project Team). In summary, key personnel are:

- **Project Director (PD)** This information has been redacted, This information has been redacted of the ADAS Climate & Sustainability team – she will provide overall quality control of deliverables and ensure that quality procedures are followed.

- **Project Manager (PM)** [redacted] – ADAS Climate & Sustainability, will manage the project and will engage in day-to-day communications with the BEIS project manager.
- **Expert Panel:** The technical experts as outlined in E02 (Table 3), will guide the strategic direction and priorities of the project and provide expert interpretation of the project findings.

Project Management and communication with BEIS

A project management work package (WP0) will run throughout the project to manage the day-to-day distribution of tasks and priorities; and to ensure effective communication with BEIS; that the project runs to time and budget; that client requirements are fully met; and that all outputs meet the required standards and are quality assured. The ADAS project manager will be [redacted] (see E02 delivery team section), supported by [redacted] (ICON - WP1 leader), [redacted] (ADAS - WP2 leader), and [redacted] (ADAS - WP3 leader), with [redacted] providing overall project direction and quality control of deliverables.

The PM, [redacted] will be the main point of contact for BEIS and be ultimately responsible for overall project delivery, deadlines and quality. If problems arise in relation to the deliverables, these will be confirmed in writing (by email) to the PM and promptly actioned. The BEIS project officer will be provided with confirmation of actions taken and contacted to ensure satisfaction with the response and a clear audit trail. The PM will:

- Be responsible for ensuring resource is available to deliver the project to timescales, quality criteria and budget required by the client.
- Be the key contact point with the customer's project officer and provide regular updates (email or video conference) in accordance with the reporting requirements.
- Liaise with all delivery teams and the client throughout the project to ensure the project objectives are met.
- Provide a clear communications plan.

Key meetings and reporting points are anticipated to include:

- **Task 0.1 – Inception meeting** between the ADAS Project Manager, the work package leaders and BEIS to gain clarification on all aspects of the project and to agree the research plan.
- **Task 0.2 – Progress reports every two months** – written summaries and presentation to BEIS steering group (via video conference) at the midpoint of the project.
- **Task 0.3 – Bi-weekly updates with BEIS PM** – calls/email updates between the ADAS Project Manager and BEIS if required. Additional technical staff will join these meetings where applicable.
- **Task 0.4 – Expert panel meetings** to review and offer interpretation at key stages of the project, such as REA outputs.
- **Task 0.5 – Dissemination meeting** between the ADAS team, ICON and the BEIS steering group. An end of project meeting to disseminate the findings and outputs from the project will be held either as a face-to-face meeting or via videoconference. This will enable BEIS colleagues to understand what was done and what the research shows.

Utilisation of resources

Table 5. Proposed project team and estimated days.

Work package	Team member	Organisation	Project Role	Allocated days
ALL	[redacted]	ADAS	Project Director & QA of deliverables	12
	[redacted]	ADAS	Project management	18.5
	Expert panel (x7)	Various	Expert guidance & input (2-4 days each) WP1 - (5 days) WP2 - (9.5 days) WP3 - (9.5 days)	24

WP1	This information has been redacted	ICON	WP1 joint lead - Indirect land use change expertise (Additional support on WP2 via expert panel)	27
	This information has been redacted	ICON	WP1 joint lead - Indirect land use change expertise (Additional support on WP3 via expert panel)	30
WP2	This information has been redacted	ADAS	WP2 lead – soil carbon & modelling expertise (Additional support on WP3)	36
	This information has been redacted	ADAS	REA and modelling support	35
	This information has been redacted	ADAS	Forest management expertise	5
WP3	This information has been redacted	ADAS	WP3 lead – Policy expertise	10
	This information has been redacted	ADAS	REA and policy expertise	26.5
	This information has been redacted	ADAS	Waste expertise	5
	This information has been redacted	WRc	Waste Management Specialist	5
TOTAL				234

Quality Assurance

ADAS is committed to achieving a high level of safety, health, environmental and quality (SHEQ) performance and has therefore a documented SHEQ management system (SHEQMS), which is implemented throughout the company. The primary aim of the SHEQMS is to ensure that safety, health, environmental and quality risks are identified, assessed and controlled. Within the company we have a SHEQ Director who holds overall responsibility for SHE and Quality management and is assisted on a day-to-day basis by the SHEQ Team. However, all company employees have SHEQ responsibilities. At the core of SHEQMS are our policy statements for health and safety, environmental and quality as well as an extensive range of Standard Operating Procedures prescribing internal business processes and technical methodologies. Delivery to clients is subject to risk assessment and subsequent risk management and is controlled via the use of effective project planning to meet milestones, specifications, time frames and budget. Rigorous quality checks are carried out before release of output to ensure technical soundness and compliance with contractual requirements and ADAS standards. Effective implementation of SHEQ is assessed by scheduled internal audits carried out by independent Quality Assurance staff.

All deliverables for this project will be quality assured (QA) by [redacted] (Managing Director of the Climate and Sustainability business). [redacted] has over 19 years of experience working in agriculture, with much of that time spent on understanding the environmental impact of agricultural production systems. [redacted] regularly provides QA for project outputs as well as technical guidance on the delivery of project activities. Initial draft deliverables will be sent for QA, with comments then addressed and rechecked in a second round of QA before submission to BEIS for review. Where appropriate, sections will be reviewed by members of the expert panel as part of this QA process. Comments on the draft deliverables provided by BEIS will then be addressed by the project team, with the final deliverable then undergoing a second round of internal QA prior to final submission to BEIS.

Risk Management and Mitigation

Risk management is integral to the ADAS Safety, Health, Environment and Quality (SHEQ) management system. Effective management of risk is critical to project success. The project manager will have overall responsibility for risk management and will be supported by individual deliverers who are best placed to identify, develop and implement risk management strategies and monitor progress. Risk ownership will be a crucial element in effective management of risk across this contract. There are a number of risks that could negatively impact on the proposed delivery of the project if not managed correctly. The specific risks envisaged for this project and the challenges they present to the delivery of tasks are presented below. We have assessed the level of risk and impact and provided a suggested response strategy to mitigate or reduce the risk occurring. A number of actions to be implemented are defined which will effectively manage and/or mitigate the risks and challenges foreseen.

The risk matrix below outlines the main foreseeable project risks, with an assessment of the likelihood and impact, rated as low (L), moderate (M) or high (H). For each risk, mitigation actions are outlined, which aim to avoid or reduce the risks to the delivery of the project.

Table 6. Project risks and mitigating actions.

Risk	Likelihood	Impact	Mitigating actions
Staff absence or unavailability	L	M	The project relies on the appropriate staff skills and practical experience. If any staff are unavailable to work, the project team have sufficient breadth and expertise to cover all activities, with an assigned lead and deputy. ADAS has over 400 staff and can draw in additional resources where required.
Insufficient technical capability to undertake the work	L	H	Delivery requires specific expertise to ensure quality outputs. We have carefully selected specialist and experienced deliverers to work on this project, with the skills, expertise, and motivation to perform their appointed role.
Loss of data / IT Failure	L	H	The project relies on the collection of data. Protocols are in place to ensure that reports and data on are stored on cloud-based storage systems as part of the Office 365 package. Systems are regularly backed up and protected by antivirus software and malware. We have protocols in place to facilitate the recovery of data via our specialist IT support team. ADAS's Internet-facing infrastructure has been certified for meeting organisational cyber security levels. These demonstrate that ADAS undertakes essential precautions to minimise risk of data disclosure.
Project slippage	M	H	Delays in identification of data, and staff availability to deliver tasks. The time availability of the staff has been checked prior to the selection of individuals for participation in this project to ensure that they have sufficient time available to deliver.
Change to Government guidance in relation to COVID-19	L	L	The project will be completed following all COVID-19 guidance. The bulk of the work will be desk-based and the key personnel working on the project are currently home-based to prevent spread of the disease. If individuals are required to self-isolate due to being pinged by Track & Trace, their work can continue as planned through homeworking. These can take place either face to face or remotely depending on the perceived risk level at the time.
Inappropriate analysis or reporting of evidence	L	H	A lack of rigour could result in unreliable outputs reported to BEIS. The team includes researchers who are experienced in qualitative and quantitative data analysis and collection. All outputs will be subject to QA review by the Project Manager and project director and other relevant technical specialists before publication.
Difficulty keeping to deadlines	L	M	Any delays in the delivery of tasks within work packages will influence subsequent tasks, increasing the risk that the project will not keep to the timescales. ADAS has a track record of effective project management and is well practiced at meeting deadlines. Regular meetings will continually check progress against the project plan to ensure all key deliverables are met. Regular contact with BEIS will ensure that progress against plan will be monitored and that any problems are resolved as soon as they arise. Due to the work packages running in parallel, the overall risk is reduced.
Availability of evidence	M	H	This is a desk-based evidence review and requires the identification of published and grey literature to fulfil the brief. Several steps have been identified to minimise gaps in the data: use of multiple search engines, multiple levels of data searching, and a range of evidence (review papers, specific papers, grey literature)

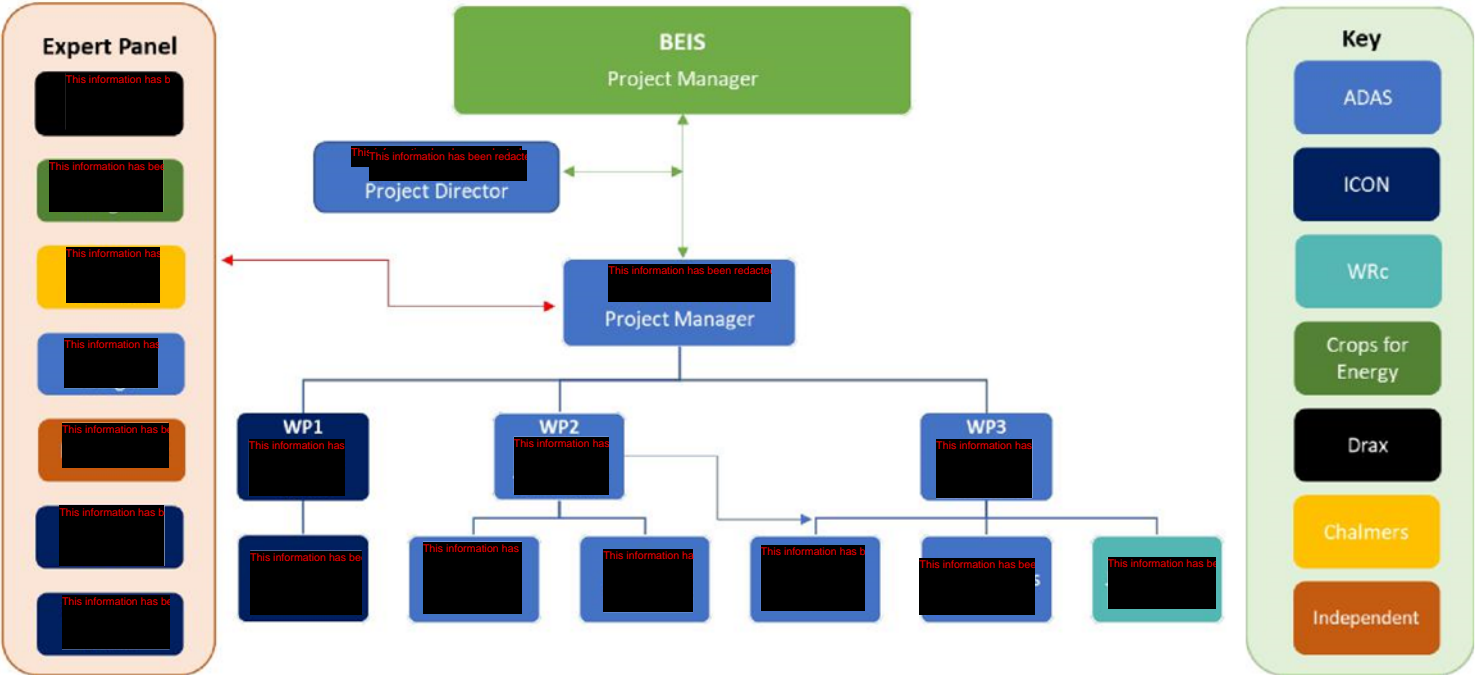
			and, where necessary, direct industry contact). Where no evidence is found for a particular area, this will be discussed with the BEIS project manager.
Subcontractor unavailability	L	H	WP1 is reliant on the use of subcontractors. ICON have other experienced staff members who can support on the project if the named individuals become unavailable. ADAS has a long history of working with and managing subcontractors to ensure projects run smoothly and meet client specification. The PM will keep in regular contact with ICON.
Scope creep	M	M	These are complex, inter-connected topics and there is risk that the quality of the work and project timelines will be compromised by consideration of areas outside of the project scope. The initial scope of the project will be clearly defined at the kick-off meeting. Constraints (e.g., search terms, no. of papers collected) on the REAs will be defined after initial scoping exercises to focus searches on relevant topics and will be discussed with BEIS. The project scope will only be expanded where it has been identified that this will not compromise deadlines.

Progression towards the implementation of ISO27001 is underway, with a certification route map to 2022 for full implementation to ensure that adequate security controls are in place to protect information and data from being accessed, corrupted, lost or stolen. In support of the planned certification toward ISO27001, RSK has appointed a Head of Business Systems and Information Security, who is ISACA CISM certified and a qualified ISO27001 Internal Auditor. They are also acting in the role of Data Protection Officer (DPO) / GDPR Owner. It is not anticipated that any personal data will need to be collected or held as part of this project.

COVID-19: Whilst ADAS routinely considers risk management and mitigation at the outset of projects and throughout delivery, it is particularly important at present as the government may impose further guidelines in relation to coronavirus. ADAS has managed the response to Covid-19 pro-actively by following guidance from HM Government as well as minimising risk to our staff, clients and collaborators. In periods of increased risk, staff will work from home where possible and are able to communicate via Microsoft Teams, other video software and telephone.

Project Plan and Gantt chart

The graphic below sets out how ADAS envisages the project will be delivered each work package and main task will have a lead. Internal project meetings will be held on a regular basis to ensure that the project team is communicating well; these will be facilitated by the project manager.



Gantt Chart & Project Timeline												
WP/Task	Description	Month	9	10	11	12	1	2	3	4	5	6
WP0	Project management											
0.1	Inception meeting											
0.2	Progress reports every two months											
0.3	Bi-weekly updates with BEIS PM											
0.4	Expert panel meetings/ review											
	Invoicing milestones											M1
WP1	Minimising current uncertainties relating to ILUC (Indirect land use change) factors											
1.1	Identify current methodologies for estimating ILUC impacts		D1									
1.2	Rapid Evidence Assessment (REA) of ILUC impacts					D2-3						
1.3	Critical evaluation of key ILUC assessment methods							D4				
1.4	Options for methodological development to improve ILUC estimates								D5		D6&7	
WP2	Impacts of increased UK demand of imported feedstocks on soil carbon stocks in land used for production											
2.1	Define project scope, key terms and research questions		D8									
2.2	REA to gather quantitative data on soil carbon stocks					D9						
2.3	Analysis of trends								D10&11			
2.4	Report									D12		D13&14
WP3	Waste Exemptions – is the use of wastes as bioenergy and biofuels sustainable?											
3.1	Review of sustainability criteria and exemptions			D15								
3.2	REA to synthesise evidence on sustainability of wastes							D16				
3.3	Expert analysis and interpretation								D17			
3.4	Report									D18		D19&20
	Deliverables											
	Milestones											

E04 - SOCIAL VALUE

ADAS recognises the importance of social value and has developed procedures and policies to ensure a legacy of wider social value, low environmental impact and enhanced equality and diversity within our organisation. ADAS work with Building People to build an aggregated supplier's model for corporate social responsibility (CSR) and linking beneficiaries and candidates within the communities to a wider pool of potential employers through a digital platform. We have worked with organisations like Build Force (ex -military), Black Training and Enterprise Group (BTEG) and Black, Asian and minority ethnic (BAME) communities, Construction Youth Trust (Youth), and others, to form a collaborative and integrated approach, including the development of local business that sought to provide a 4:1 Social Return on Investment into CSR.

Method Statement and Action Plan: Throughout this project, ADAS will fully comply with our company's Equality and Diversity Policy to ensure any individuals from under-represented backgrounds are provided opportunities to continually develop themselves and their career via active participation in the project. In addition, to further support team members development and progress their careers whilst actively engaged with this project, staff exposure to all elements of the project will be encouraged. This will provide opportunity for team members to develop their skills profile and build upon current skills and experience. Monitoring of staff development will be achieved through a monthly communications feedback system. This feedback system will be achieved through regular open, transparent discussions across the project delivery team which aim to identify any areas team members are seeking to develop. Progress will be monitored through a log completed by the project manager, who will collate feedback and monitor against key metrics monthly. Metrics will include the proportion of male/females working on the project, the proportion of different grades working on the project etc., to maintain a representative and diverse balance. An action plan for staff development will be discussed in the feedback sessions and confirmed in writing to ensure transparency throughout the feedback reporting process. Our method statement is supported by our commitments, procedures, and activities in the following areas:

Equality and Diversity Policy: We are committed to being an equal opportunities employer and to never use gender, sexual orientation, marital status, race, age, ethnicity, religion, or disability as a criterion for decisions regarding employment, promotion, training, or professional advancement. We have published a formal equal opportunities policy that has been communicated to all our employees and implemented active controls to monitor the composition of the workforce and take appropriate action if it appears that this policy is not fully effective. We always make sure our company literature and documentation are written without gender or racial bias and in such a way that no qualified person is deterred from applying. We are proud of the many talented women in leadership positions throughout the company. Our gender pay gap of 12.2% is below the industry average and we are highly committed to reducing it further by offering flexible working opportunities, promoting our female employees as role models, and actively engaging with schools to promote careers in our industry. We offer flexible and part-time working opportunities to help our employees manage their professional and family lives. It is our intention to maintain a progressive equal opportunities policy. The Company's Equal Opportunities Policy is aimed at ensuring equal treatment for all employees, irrespective of race, creed, colour, sexual orientation, nationality, national origins, disability, age, religion, trade union membership, sex, or marital status.

Engaging Local Communities and Supporting Charities: We want to support the communities in which we operate through charitable donations and environmental education. The CR&S representative in each office is responsible for community outreach and engagement with the office staff on local issues and fundraising. In 2017, RSK Group (which includes RSK ADAS Ltd) began a partnership with Cheshire Connect, a charity local to our head office in Helsby, that matches the skills and expertise of local businesses with the needs of the local charities. Through this partnership, members of our staff have provided marketing and financial systems support to Stick 'n' Step, a charity for children with cerebral palsy, and the Cheshire Down's Syndrome Support Group.

Developing Local Capacity: The RSK group emphasises local recruitment in all its operations and is committed to developing local capacity. We aim to maximise the value of our local presence by sharing competencies, experience, and knowledge. Our activities often require a multidisciplinary team with specific technical skills. In many of the countries where RSK has operated, the required skill sets are not readily available. In these cases, where the local workforce has not had access to relevant education, we have developed solid training systems that build up necessary skill levels on the job.

Recruitment: ADAS has an ongoing programme of recruiting staff with a range of expertise and experience, a training and skills-based culture, supporting staff throughout their careers with internal and external training, to gain appropriate accredited qualifications and maintain their continuing professional development (CPD). ADAS recruits new employees every year and provides many pathways into employment, education and training for non-graduates and graduates early in their careers, for mid-career changers and returners to work. The company is accredited to Investor in People status and is proud of the diversity of employment, system of career development reviews and training opportunities that it provides.

Continuous Improvement: ADAS operates an open and relaxed management ethos that nurtures continuous improvement and innovation. We encourage employees to develop their skills through further education, coaching and mentoring. We support individuals towards chartered status where appropriate, we have an ongoing programme of technical courses which are not covered by accredited qualifications and encourage attendance at conferences, as well as technical and training events. The CPD of our staff is integral to the company's continuing success, and high-quality training is key to ensuring that we continue to deliver high-quality services, meet the needs of our clients, and adapt to new challenges. We use training as an ongoing learning process throughout the careers of all our employees and keep a record of their skills on a competency matrix. The competency matrix is updated following annual PDRs at which line managers review performance against the annual objectives from the previous year and identify individual training requirements.

ANNEX A – CVS IN RELATION TO E02

Please see the following pages – All CVs have been redacted

Annex A: Pricing Schedule

Part A – Staff/project team charges

Set up Costs – please specify	
Expenses	

Work Package 1

*Grade/level of staff	Daily rate (ex VAT)	No. days offered over course of contract	Tasks to be undertaken on this project	Total price offered per staff member
Director	This information has been redacted			
Principal Consultant	This information has been redacted			
Specialist (estimated blended rate for expert panel)				
Senior Consultant	This information has been redacted			
Consultant	This information has been redacted	This information has been redacted		-
Sub-total				£79,830.33

[*Suppliers should also include sub-contractors]

Work Package 2

*Grade/level of staff	Daily rate (ex VAT)	No. days offered over course of contract	Tasks to be undertaken on this project	Total price offered per staff member
Director	This information has been redacted			
Principal Consultant	This information has been redacted			
Specialist (estimated blended rate for expert panel)	This information has been redacted			
Senior Consultant	This information has been redacted			
Consultant	This information has been redacted			
Sub-total				£59,890.83

[*Suppliers should also include sub-contractors]

Work Package 3

*Grade/level of staff	Daily rate (ex VAT)	No. days offered over course of contract	Tasks to be undertaken on this project	Total price offered per staff member
Director/	This information has been redacted			
Principal Consultant	This information has been redacted			
Specialist (estimated blended rate for expert panel)	This information has been redacted			
Senior Consultant	This information has been redacted			
Consultant	This information has been redacted			
Sub-total				£59,810.83

[*Suppliers should also include sub-contractors]

Part A – Total for all work packages

TOTAL (Sub-total + VAT)	£199,532.00
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Part B – Non-staff/project team charges

Item	No. of items	Price per item (ex VAT)	Total price per offered
		£	£
		£	£
		£	£
		£	£
		£	£
Sub-total			£

Part C – Full price offered

Sub-total (Part A + Part B)	£199,532.00
VAT*	£39,906.40
TOTAL (Sub-total + VAT)	£239,438.40

* Total price subject to change if the prevailing VAT rate changes.



Department for
Business, Energy
& Industrial Strategy

Schedule 3

The Authority's Terms & Conditions of Contract for Supplies/Services

**BEIS DPF31 - BEIS STANDARD TERMS AND CONDITIONS OF CONTRACT
FOR SERVICES**
(including Hire, Lease and Facilities Management)

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BEIS STANDARD TERMS AND CONDITIONS OF CONTRACT FOR SERVICES

(including Hire, Lease and Facilities Management)

1. Definitions and Interpretation

(1) In these terms and conditions of contract for services (“Conditions”):

“Annex 1” means the Annex 1 (Processing, Personal Data and Data Subjects) attached to the Authority’s specification of requirements which forms part of this Contract;

“Authority” means the Secretary of State for Business, Energy and Industrial Strategy, acting as part of the Crown;

“Authority’s Premises” means land or buildings owned or occupied by the Authority; “Confidential Information”:

- a) means all information obtained by the Contractor from the Authority or any other department or office of Her Majesty's Government relating to and connected with the Contract and the Services; but
- b) does not include the Contract itself and the provisions of the Contract where, or to the extent that, the Authority publishes them by virtue of Condition 40;

the “Contract” means the agreement concluded between the Authority and the Contractor for the supply of Services, including without limitation these Conditions (to the extent that they are not expressly excluded or modified), all specifications, plans, drawings and other documents which are incorporated into the agreement;

the “Contract Period” means the period from the date of this Contract to the date of expiry of this Contract set out in the DPF41 Contract offer letter or such earlier date as this Contract is terminated in accordance with its terms;

the “Contract Year” means a period of 12 consecutive months starting on the date of this Contract and each anniversary thereafter;

the “Contractor” means the person who agrees to supply the Services and includes any person to whom all or part of the Contractor’s obligations are assigned pursuant to Condition 4;

“Contractor Personnel” means all directors, officers, employees, agents, consultants and contractors of the Contractor and/or of any sub-contractor engaged in the performance of its obligations under this Contract, pursuant to Condition 4;

“Contracts Finder” means the Government’s publishing portal for public sector procurement opportunities;

“the Charges” means the price agreed in respect of the Services, excluding Value Added Tax;

“Data Controller” shall have the same meaning as given in the Data Protection Legislation;

“Data Loss Event” means any event that results, or may result, in unauthorised access to Personal Data held by the Contractor under this Contract and/or actual or potential loss and/or alteration and/or destruction of Personal Data in breach of this Contract, including any Personal Data Breach;

“Data Protection Legislation” means (i) the General Data Protection Regulation (GDPR)(Regulation (EU) 2016/679), the Law Enforcement Directive (LED) (Directive (EU) 2016/680) 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 Processor” shall have the same meaning as given in the Data Protection Legislation;

“Data Protection Impact Assessment” means an assessment by the Data Controller of the impact of the envisaged processing on the protection of Personal Data;

“Data Protection Officer” shall have the same meaning as given in the Data Protection Legislation;

“Data Subject” shall have the same meaning as given in the Data Protection Legislation;

“Data Subject Request” means 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;

“Government Property” means anything issued or otherwise furnished in connection with the Contract by or on behalf of the Authority, including but not limited to documents, papers, data issued in electronic form and other materials;

“Intellectual Property Rights” means patents, trade marks, service marks, design rights (whether registrable or not), applications for any of those rights, copyright, database rights, trade or business names and other similar rights or obligations, whether registrable or not, in any country, including but not limited to, the United Kingdom;

“Law” means any law, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, bye-law, enforceable right within the meaning of Section 2 of the European Communities Act 1972, regulation, order, regulatory policy, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements with which the Contractor is bound to comply;

“MI Reporting Template” means the document (included as an annex to the DPF41 Contract offer letter) as amended in accordance with Condition 41;

“Party” means a Party to this Contract, and “Parties” shall mean both of them;

“Personal Data” shall have the same meaning as given in the Data Protection Legislation;

“Personal Data Breach” shall have the same meaning as given in the Data Protection Legislation;

“Protective Measures” means any appropriate technical and organisational measures which may include: pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the such measures adopted by it;

“Purchase Order” means the document so described by the Authority to purchase the Services which makes reference to the Conditions;

the “Services” means the services to be supplied under the Contract;

“SME” means an enterprise falling within the category of micro, small and medium-sized enterprises defined by the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises;

“Sub-Processor” means any third Party appointed to process Personal Data on behalf of the Contractor related to this Contract;

“VCSE” means a non-governmental organisation that is value-driven and which principally reinvests its surpluses to further social, environmental or cultural objectives.

(2) The interpretation and construction of the Contract shall be subject to the following provisions:

- (a) a reference to any statute, enactment, order, regulation or similar instrument shall be construed as a reference to the statute, enactment, order, regulation or instrument as subsequently amended or re-enacted;
- (b) the headings in these Conditions are for ease of reference only and shall not affect the interpretation or construction of the Contract;

- (c) references to “person”, where the context allows, includes a corporation or an unincorporated association.

2. Acts by the Authority

Any decision, act or thing which the Authority is required or authorised to take or do under the Contract may be taken or done by any person authorised, either expressly or impliedly, by the Authority to take or do that decision, act or thing.

3. Service of Notices and Communications

Any notice or other communication that either party gives under the Contract shall be made in writing and given either by hand, first class recorded postal delivery or facsimile transmission. Notice given by hand shall be effective immediately, notice given by recorded postal delivery shall be effective two working days after the date of posting, notice given by facsimile transmission shall be effective the working day after receipt by the notifying party of a transmission slip showing that the transmission has succeeded.

4. Assignment and Sub-contracting

(1) The Contractor shall not give, bargain, sell, assign, sub-contract or otherwise dispose of the Contract or any part thereof without the previous agreement in writing of the Authority.

(2) The Contractor shall not use the services of self-employed individuals in connection with the Contract without the previous agreement in writing of the Authority.

(3) If the Contractor uses a sub-contractor for the purpose of performing the Services or any part of it, the Contractor shall include in the relevant contract a provision which requires the Contractor to pay for those goods or services within 30 days of the Contractor receiving a correct invoice from the sub-contractor.

(4) The Contractor shall be responsible for the acts and omissions of his sub-contractors as though they were his own.

(5) The Authority shall be entitled to assign any or all of its rights under the Contract to any contracting authority as defined in Regulation 2(1) of the Public Services Contracts Regulations 2006, provided that such assignment shall not materially increase the burden of the Contractor's obligations under the Contract.

(6) Where the Authority notifies the Contractor that it estimates the Charges payable under this Contract are due to exceed £5 million in one or more Contract Years the Contractor shall:

- (a) subject to Condition 4(9), advertise on Contracts Finder all subcontract opportunities arising from or in connection with the provision of the Goods and/or Services and/or Works above a minimum threshold of £25,000 that arise during the Contract Period;

- (b) within 90 days of awarding a subcontract to a subcontractor, update the notice on Contracts Finder with details of the successful subcontractor;
- (c) monitor the number, type and value of the subcontract opportunities placed on Contracts Finder advertised and awarded in its supply chain during the Contract Period;
- (d) provide reports on the information in Condition 4(6)(c) to the Authority in the format and frequency as reasonably specified by the Authority; and
- (e) promote Contracts Finder to its Contractors and encourage those organisations to register on Contracts Finder.

(7) Each advert referred to in Condition 4(6)(a) above shall provide a full and detailed description of the subcontract opportunity with each of the mandatory fields being completed on Contracts Finder by the Contractor.

(8) The obligation in Condition 4(6)(a) shall only apply in respect of subcontract opportunities arising after the contract award date.

(9) Notwithstanding Condition 4(6), the Contracting Authority may, by giving its prior written approval, agree that a subcontract opportunity is not required to be advertised on Contracts Finder.

5. Entire Agreement

The Contract constitutes the entire agreement and understanding between the parties and supersedes all prior written and oral representations, agreements or understandings between them relating to the subject matter of the Contract provided that neither party excludes liability for fraudulent misrepresentations upon which the other party has relied.

6. Waiver

(1) The failure by either party to exercise any right or remedy shall not constitute a waiver of that right or remedy.

(2) No waiver shall be effective unless it is communicated to the other party in writing.

(3) A waiver of any right or remedy arising from a breach of the Contract shall not constitute a waiver of any right or remedy arising from any other breach of the Contract.

7. Severability

If any Condition, clause or provision of the Contract not being of a fundamental nature is held to be unlawful, invalid or unenforceable by a court or tribunal in any proceedings relating to the Contract, the validity or enforceability of the remainder of the Contract shall not be affected. If the court finds invalid a provision so fundamental as to prevent the accomplishment of the purpose of the Contract, the parties shall immediately commence negotiations in good faith to remedy the invalidity.

8. Confidentiality

(1) The Contractor agrees not to disclose any Confidential Information to any third party without the prior written consent of the Authority. To the extent that it is necessary for the Contractor to disclose Confidential Information to its staff, agents and sub-contractors, the Contractor shall ensure that such staff, agents and sub-contractors are subject to the same obligations as the Contractor in respect of all Confidential Information.

(2) Condition 8(1) shall not apply to information which:

- (a) is or becomes public knowledge (otherwise than by breach of these Conditions or a breach of an obligation of confidentiality);
- (b) is in the possession of the Contractor, without restriction as to its disclosure, before receiving it from the Authority or any other department or office of Her Majesty's Government;
- (c) is required by law to be disclosed;
- (d) was independently developed by the Contractor without access to the Confidential Information.

(3) The obligations contained in this Condition shall continue to apply after the expiry or termination of the Contract.

(4) The Contractor shall not handle or examine any document or thing bearing a Government security classification of “Confidential”, “Secret” or “Top Secret” other than in a Government establishment and the Contractor shall not remove any such document or thing from such Government establishment without the prior written consent of the Authority.

(5) The Contractor shall not communicate with representatives of the general or technical press, radio, television or other communications media, with regard to the Contract, unless previously agreed in writing with the Authority.

(6) Except with the prior consent in writing of the Authority, the Contractor shall not make use of the Contract or any Confidential Information otherwise than for the purposes of carrying out the Services.

9 Freedom of Information

(1) The Contractor acknowledges that the Authority is subject to the requirements of the Freedom of Information Act 2000 (“FOIA”) and the Environmental Information Regulations SI 2004 No. 3391 (“EIR”) and shall assist and cooperate with the Authority, at the Contractor’s expense, to enable the Authority to comply with these information disclosure requirements.

(2) In this Condition:-
“Information” has the meaning ascribed to it in section 84 of the FOIA;

“Request for Information” has the meaning ascribed to it in section 8 of the FOIA, or any apparent request for information under the FOIA or EIR.

- (3) The Contractor shall (and shall procure that its subcontractors shall):-
- (a) Transfer any Request for Information to the Authority as soon as practicable after receipt and in any event within two working days;
 - (b) Provide the Authority with a copy of all Information in its possession or power in the form that the Authority requires within five working days (or such other period as the Authority may specify) of the Authority requesting that Information;
 - (c) Provide all necessary assistance as reasonably requested by the Authority to enable it to respond to a Request for Information within the time for compliance set out in section 10 of the FOIA or regulation 5 of the EIR.
- (4) The Authority shall be responsible for determining, at its absolute discretion, whether any Information:-
- (a) is exempt from disclosure in accordance with the provisions of the FOIA or the EIR;
 - (b) is to be disclosed in response to a Request for Information.

In no event shall the Contractor respond directly to a Request for Information unless expressly authorised to do so in writing by the Authority.

(5) The Contractor acknowledges that the Authority may, acting in accordance with the Secretary of State for Constitutional Affairs’ Code of Practice on the discharge of public authorities’ functions under Part 1 of the FOIA (issued under section 45 of the FOIA in November 2004), be obliged under the FOIA or the EIR to disclose Information unless an exemption applies. The Authority may at its discretion consult the Contractor with regard to whether the FOIA applies to the Information and whether an exemption applies.

(6) The Contractor shall ensure that all Information produced in the course of the Contract or relating to the Contract is retained for disclosure and shall permit the Authority to inspect such records as requested from time to time.

(7) The Contractor acknowledges that any lists or schedules provided by it outlining information it deems confidential or commercially sensitive are of indicative value only and that the Authority may nevertheless be obliged to disclose information which the Contractor considers confidential in accordance with Conditions 9(4) and (5).

10. Amendments and Variations

Subject to Condition 18(7) no amendment or variation to the terms of the Contract shall be valid unless previously agreed in writing between the Authority and the Contractor.

11. Invoices and Payment

(1) The Contractor shall submit invoices at times or intervals agreed by the Authority in the Contract or otherwise. The Contractor shall ensure that any invoice it submits sets out the Authority's Purchase Order or contract number, the Charges and, where not all of the Services have been completed, the relevant part of the Charges with an appropriate breakdown of time worked, the part of the Services (if all the Services have not been completed) and period to which the invoice relates, and its confirmation that the Services (or relevant part of the Services referred to on the invoice) have been fully performed.

(2) In consideration of the provision of the Services by the Contractor, the Authority shall pay the Charges after receiving a correctly submitted invoice as set out in Condition 11(1). Such payment shall normally be made within 30 days of receipt of the correctly submitted invoice.

(3) The Contractor shall not be entitled to charge for the provision of any services that are not part of the Services agreed within the Contract, unless the Contract has been properly varied in advance in accordance with Condition 10.

(4) The Authority may reduce payment in respect of any Services that the Contractor has either failed to provide or has provided inadequately, without prejudice to any other rights or remedies of the Authority.

(5) If the Contractor believes that payment for a correctly submitted invoice is overdue, he should, in the first instance, speak to the named contact on the face of the Contract. In the event that the problem is not resolved to his satisfaction, he should write to the Head of Procurement at the Department for Business, Energy and Industrial Strategy setting out his case. The Head of Procurement shall ensure that the complaint is dealt with by an official who is independent of the main contact and that the Contractor is not treated adversely in future for having made a complaint.

(6) For the purpose of calculating any statutory interest under the Late Payment of Commercial Debts (Interest) Act 1998, the relevant date for the payment of the debt shall be deemed to be the last day of a period of 30 days commencing on the day when the Authority received the invoice, or, if the Contractor had not completed the Services (or the part of the Services to which the invoice relates) before submitting the invoice, the last day of a period of 30 days commencing on the day when the Contractor completed the Services, (or the part of the Services to which the invoice relates).

12. Accounts

(1) The Contractor shall keep full and proper accounts, records and vouchers relating to all expenditure reimbursed by the Authority and all payments made by the Authority in respect of the Services.

(2) The Contractor shall permit the Authority acting by its officers, servants and agents or independent auditor on request and at all reasonable times to examine all accounts, records and vouchers at the offices of the Contractor or at such other places as the Authority shall direct, and to take copies of such accounts, records and vouchers and

the Contractor shall provide the Authority or its independent auditor with such explanations relating to that expenditure as the Authority may request.

(3) The Contractor shall ensure that the said accounts, records and vouchers are available for a period of six years after termination or expiry of the Contract.

13. Recovery of Sums Due

(1) Whenever under the Contract any sum of money shall be recoverable from or payable by the Contractor, such sum may be deducted from any amount then due, or which at any time thereafter may become due, to the Contractor under this Contract or any other agreement or arrangement with the Authority or with any other department or office of Her Majesty's Government.

(2) Any over-payment by the Authority to the Contractor whether in respect of the Charges or Value Added Tax shall be a sum of money recoverable from the Contractor pursuant to Condition 13(1) above or otherwise.

14. Value Added Tax

(1) The Authority shall pay to the Contractor, in addition to the Charges, a sum equal to the Value Added Tax chargeable on the value of the Services provided in accordance with the Contract.

(2) Any invoice or other request for payment of monies due to the Contractor under the Contract shall, if he is a taxable person, be in the same form and contain the same information as if the same were a tax invoice for the purposes of Regulations made under the Value Added Tax Act 1994.

(3) The Contractor shall, if so requested by the Authority, furnish such information as may reasonably be required by the Authority relating to the amount of Value Added Tax chargeable on the Services.

15. Provision of Services

(1) The Contractor shall provide the Services in accordance with and as specified in the Contract to the satisfaction of the Authority whose decision shall be final and conclusive. The Authority shall have the power to inspect and examine the performance of the Services at the Authority's Premises at any reasonable time or, provided that the Authority gives reasonable notice to the Contractor, at any other premises where any part of the Services is being performed.

(2) If the Authority informs the Contractor that the Authority considers any part of the Services to be inadequate or in any way differing from the Contract, and this is other than as a result of default or negligence on the part of the Authority, the Contractor shall at his own expense re-schedule and perform the work correctly within such reasonable time as may be specified by the Authority.

(3) The Authority may at any time demand that the Contractor suspend the provision of the Services. If the Authority exercises such right to suspend the provision of the Services or any part of them, or if the Contractor is delayed in proceeding with the provision of the Services by the Authority (otherwise than as a consequence of a breach of the Contract, or a breach of duty or fault or negligence on the part of the Contractor), the Authority shall be responsible for loss incurred by the Contractor as a result of such suspension or delay. Subject to the Contractor taking reasonable steps to mitigate its loss, the Contractor will be able to recover from the Authority under this Condition only for those losses which:

(a) were reasonably foreseeable by the Authority as arising as a direct result of the suspension or delay; and

(b) relate to the cost of any commitments entered into by the Contractor which cannot be met as a result of the suspension or delay and in respect of which the Contractor cannot obtain a refund (where the Contractor has already paid in relation to the commitment) or is obliged to pay (where the Contractor has not already paid in relation to the commitment).

The provisions of this Condition shall not apply where the reason for the suspension of the Services arises from circumstances beyond the control of the Authority.

(4) If the performance of the Contract by the Contractor is delayed by reason of any act on the part of the Authority or by industrial dispute (other than by an industrial dispute occurring within the Contractor's or its sub-contractor's organisation) or any other cause which the Contractor could not have prevented then the Contractor shall be allowed a reasonable extension of time for completion. For the purposes of this Condition, the Contractor shall be deemed to have been able to prevent causes of delay that are within the reasonable control of the Contractor's staff, agents and sub-contractors.

(5) Timely provision of the Services shall be of the essence of the Contract, including in relation to commencing the provision of the Services within the time agreed or on a specified date.

(6) The Contractor warrants that it shall provide the Services with all due skill, care and diligence, and in accordance with good industry practice and legal requirements.

(7) Without prejudice to the provision of Condition 13(1), the Contractor shall reimburse the Authority for all reasonable costs incurred by the Authority which have arisen as a direct consequence of the Contractor's delay in the performance of the Contract which the Contractor had failed to remedy after being given reasonable notice by the Authority.

16. Progress Report

(1) Where formal progress reports are required by the Contract, the Contractor shall render such reports at such time and in such form as may be specified by the Authority, or as otherwise agreed between the Contractor and the Authority.

(2) The submission and acceptance of progress reports shall not prejudice any rights of the Authority under the Contract.

17. Contractor's Personnel

(1) The Authority reserves the right to refuse to admit to the Authority's Premises any person employed by the Contractor or its sub-contractors, whose admission would be undesirable in the opinion of the Authority.

(2) If and when requested by the Authority, the Contractor shall provide a list of the names and addresses of all persons who may at any time require admission in connection with the performance of the Services to the Authority's Premises, specifying the role in which each such person is concerned with the Contractor and giving such other particulars as the Authority may require.

(3) If and when requested by the Authority, the Contractor shall procure from each person identified by the request, a signed statement that he understands that the Official Secrets Acts 1911 to 1989 applies to him both during the carrying out and after expiry or termination of the Contract and that he will comply with the provisions of those Acts in so far as they apply to the work he is performing under the Contract.

(4) If and when requested by the Authority the Contractor agrees that it will submit any person employed by the Contractor or its sub contractors to the Authority's security vetting procedure. The Contractor further agrees that any individual who refuses to submit to such vetting procedure or does not attain the clearance it affords will not carry out any work on the Contract which the Authority certifies as suitable only for people who have passed its security vetting procedure.

(5) If the Contractor fails to comply with paragraph (2) (3) or (4) of this Condition and the Authority decides that such failure is prejudicial to its interests, the Authority may immediately terminate the Contract by notice in writing to the Contractor, provided that such termination shall be without prejudice to any accrued rights of, or to any rights that shall accrue thereafter to, the Authority.

18. Indemnities and Insurance

(1) The Contractor shall hold harmless and indemnify the Authority on demand from and against all claims, demands, proceedings, actions, damages, costs (including legal costs), expenses and any other liabilities arising from claims made by the Authority's staff or agents, or by third parties, in respect of any death or personal injury, or loss or destruction of or damage to property, or any other loss, destruction or damage, including but not limited to financial losses which are caused, whether directly or indirectly, by the breach of contract or breach of duty (whether in negligence, tort, statute or otherwise) of the Contractor, its employees, agents or sub-contractors.

(2) The Contractor shall be liable to the Authority for any loss, damage, destruction, injury or expense, whether direct or indirect, (and including but not limited to loss or destruction of or damage to the Authority's property, which includes data) arising from

the Contractor's breach of contract or duty (whether arising in negligence, tort, statute or otherwise).

(3) The Contractor shall effect with a reputable insurance company a policy or policies of insurance providing an adequate level of cover in respect of all risks which may be incurred by the Contractor in respect of the indemnities provided under the Contract, which in any event shall not be less than £1,000,000, and shall at the request of the Authority produce the relevant policy or policies together with receipt or other evidence of payment of the latest premium due there under.

(4) Nothing in these Conditions nor in any part of the Contract shall impose any liability on any member of the staff of the Authority or its representatives in their personal capacity.

(5) The Contractor shall indemnify the Authority against all proceedings, actions, claims, demands, costs (including legal costs), charges, expenses and any other liabilities arising from or incurred by reason of any infringement or alleged infringement of any third party's Intellectual Property Rights used by or on behalf of the Contractor for the purpose of the Contract, providing that any such infringement or alleged infringement is not knowingly caused by, or contributed to, by any act of the Authority.

(6) The Authority shall indemnify the Contractor against all proceedings, actions, claims, demands, costs (including legal costs), charges, expenses and any other liabilities arising from or incurred by reason of any infringement or alleged infringement of any third party's Intellectual Property Rights used at the request of the Authority by the Contractor in the course of providing the Services, providing that any such infringement or alleged infringement is not knowingly caused by, or contributed to by, any act of the Contractor.

(7) Except in relation to death or personal injury as referred to in Condition 18(1), and subject to Conditions 18(5) and 30(15) the amount of liability under this clause shall be limited to a sum of £4,000,000 or twice the contract value, whichever is the greater, or such other sum as may be agreed in writing between the Head of Procurement on behalf of the Authority and the Contractor.

19 Termination for Insolvency or Change of Control

- (1) The Contractor shall notify the Authority in writing immediately upon the occurrence of any of the following events:
 - a) where the Contractor is an individual, if a petition is presented for his bankruptcy, or he makes any composition or arrangement with or for the benefit of creditors, or makes any conveyance or assignment for the benefit of creditors, or if an administrator is appointed to manage his affairs; or
 - b) where the Contractor is not an individual but is a firm or a number of persons acting together, if any event in Condition 19(1)(a) or (c) occurs in respect of any partner in the firm or any of those persons, or if a petition is presented for the Contractor to be wound up as an unregistered company; or

- c) where the Contractor is a company or limited liability partnership, if the company or limited liability partnership enters administration or passes a resolution to wind up or the court makes an administration order or a winding-up order, or the company makes a composition or arrangement with its creditors, or an administrative receiver, receiver or manager is appointed by a creditor or by the court, or possession is taken of any of its property under the terms of a floating charge; or
- d) the Contractor undergoes a change of control, where “control” is interpreted in accordance with Section 1124 of the Corporation Tax Act 2010.

(2) After receipt of the notice under paragraph (1) above or earlier discovery by the Authority of the occurrence of any of the events described in that paragraph, the Authority may, by notice in writing to the Contractor, terminate the Contract with immediate effect without compensation to the Contractor and without prejudice to any right or action or remedy which may accrue to the Authority thereafter. The Authority’s right to terminate the Contract under Condition 19(1)(d) will exist until the end of a period of three months starting from receipt of the notice provided by the Contractor pursuant to Condition 19(1), or such other period as is agreed by the parties.

20. Termination for Breach of Contract

If either party commits a material breach of the Contract which is either not capable of remedy, or, if it is capable of remedy, he fails to remedy such breach within 28 days of being notified by the other party in writing to do so, that other party shall be entitled to terminate the Contract with immediate effect by notice in writing to the party that committed the material breach and without prejudice to any other rights or remedies of either party in respect of the breach concerned or any other breach of the Contract.

21. Cancellation

The Authority shall be entitled to terminate the Contract, or to terminate the provision of any part of the Services, by giving to the Contractor not less than 28 days' notice in writing to that effect. Once it has given such notice, the Authority may extend the period of notice at any time before it expires, subject to agreement on the level of Services to be provided by the Contractor during the period of extension.

22. Dispute Resolution

- (1) The parties shall attempt in good faith to negotiate a settlement to any dispute between them arising out of or in connection with the Contract.
- (2) If the parties cannot resolve the dispute pursuant to paragraph (1) of this Condition, the dispute may, by agreement between the parties, be referred to mediation pursuant to paragraph (4) of this Condition.
- (3) The performance of the Services shall not cease or be delayed by the reference of a dispute to mediation pursuant to paragraph (2) of this Condition.
- (4) If the parties agree to refer the dispute to mediation:

(a) in order to determine the person who shall mediate the dispute (the “Mediator”) the parties shall by agreement choose a neutral adviser or mediator from one of the dispute resolution providers listed by the Government Procurement Service on its website or in its printed guidance on dispute resolution within 30 days after agreeing to refer the dispute to mediation;

(b) the parties shall within 14 days of the appointment of the Mediator meet with him in order to agree a programme for the exchange of all relevant information and the structure to be adopted for negotiations to be held. If considered appropriate, the parties may at any stage seek assistance from the Government Procurement Service to provide guidance on a suitable procedure;

(c) unless otherwise agreed, all negotiations connected with the dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the parties in any future proceedings;

(d) if the parties reach agreement on the resolution of the dispute within 60 days of the Mediator being appointed, or such longer period as may be agreed between the parties, the agreement shall be reduced to writing and shall be binding on the parties once it is signed by both the Authority and the Contractor;

(e) failing agreement within 60 days of the Mediator being appointed, or such longer period as may be agreed between the parties, either of the parties may invite the Mediator to provide a non-binding but informative opinion in writing. Such an opinion shall be provided on a without prejudice basis and shall not be used in evidence in any proceedings relating to the Contract without the prior written consent of both parties.

(5) If the parties do not agree to refer the dispute to mediation, or if the parties fail to reach agreement as to who shall mediate the dispute pursuant to Condition 22(4)(a) or if they fail to reach agreement in the structured negotiations within 60 days of the Mediator being appointed or such longer period as may be agreed by the parties, then any dispute or difference between them may be referred to the courts.

23. Bribery and corruption

(1) The Contractor shall not, and shall ensure that its staff, sub-contractors and agents do not:

- a) offer or promise, to any person employed by or on behalf of the Authority any financial or other advantage as an inducement or reward for the improper performance of a function or activity, or for showing or not showing favour or disfavour to any person in relation to this Contract or any other contract with the Authority;
- b) agree to receive or accept any financial or other advantage as an inducement or reward for any improper performance of a function or activity in relation to this Contract or any other contract with the Authority; or

- c) enter into the Contract or any other contract with the Authority or any other department or office of Her Majesty's Government in connection with which commission has been paid, or agreed to be paid by him or on his behalf, or to his knowledge, unless, before the Contract is made, particulars of any such commission and the terms and conditions of any agreement for the payment thereof, have been disclosed in writing to any person duly authorised by the Authority to act as its representative for the purpose of this Condition.

Nothing contained in this Condition shall prevent the Contractor paying such commission or bonuses to his own staff in accordance with their agreed contracts of employment.

(2) Any breach of this Condition by the Contractor, or by any person employed or engaged by him or acting on his behalf (whether with or without his knowledge), or any act or omission by the Contractor, or by such other person, in contravention of the Bribery Act 2010 or any other anti-corruption law, in relation to this Contract or any other contract with the Authority, shall entitle the Authority to terminate the Contract with immediate effect by notice in writing and to recover from the Contractor the amount of any loss resulting from such termination and the amount of the value of any such gift, consideration or commission as the Authority shall think fit.

(3) Where the Contract has been terminated under paragraph (2) of this Condition, there shall be deemed to be a failure to commence the provision of the Services, enabling the Authority to terminate the Contract with immediate effect and the Authority will not be obliged to pay the Charges.

(4) In any dispute, difference or question arising in respect of:

- a) the interpretation of this Condition (except so far as the same may relate to the amount recoverable from the Contractor under paragraph (2) of this Condition in respect of any loss resulting from such determination of the Contract); or

- b) the right of the Authority to determine the Contract; or

- c) the amount or value of any gift, consideration or commission,

the decision of the Authority shall be final and conclusive.

24. Official Secrets

The Contractor's attention is drawn to the provisions of the Official Secrets Acts 1911 to 1989. The Contractor shall take all reasonable steps by display of notices or by other appropriate means to ensure that all persons employed in connection with the Contract have notice that these statutory provisions apply to them and will continue so to apply after the expiry or earlier termination of the Contract.

25. Special Provisions

In the case of any conflict or inconsistency between these general Conditions and any specific terms of the Contract, the latter shall prevail.

26. Conflict of Interest

(1) The Contractor shall ensure that there is no conflict of interest as to be likely to prejudice his independence and objectivity in performing the Contract and undertakes that upon becoming aware of any such conflict of interest during the performance of the Contract (whether the conflict existed before the award of the Contract or arises during its performance) he shall immediately notify the Authority in writing of the same, giving particulars of its nature and the circumstances in which it exists or arises and shall furnish such further information as the Authority may reasonably require.

(2) Where the Authority is of the opinion that the conflict of interest notified to it under paragraph (1) above is capable of being avoided or removed, the Authority may require the Contractor to take such steps as will, in its opinion, avoid, or as the case may be, remove the conflict and:

a) if the Contractor fails to comply with the Authority's requirements in this respect; or

b) if, in the opinion of the Authority, it is not possible to remove the conflict,

the Authority may terminate the Contract immediately and recover from the Contractor the amount of any loss resulting from such termination.

(3) Notwithstanding Condition 26(2), where the Authority is of the opinion that the conflict of interest which existed at the time of the award of the Contract could have been discovered with the application by the Contractor of due diligence and ought to have been disclosed as required by the tender documents pertaining to it, the Authority may terminate the Contract immediately for breach of a fundamental condition and, without prejudice to any other rights, recover from the Contractor the amount of any loss resulting from such termination.

27. Intellectual Property Rights

(1) Subject to any pre-existing rights of third parties and of the Contractor, the Intellectual Property Rights (other than copyright) in all reports, documents and other materials which are generated or acquired by the Contractor (or any of its sub-contractors or agents) (“the Contractor Materials”) in the performance of the Services shall belong to and be vested automatically in the Authority.

(2) The Contractor hereby assigns any copyright that it owns in the Contractor Materials to the Crown. The Contractor waives all moral rights relating to the Contractor Materials.

(3) The Contractor warrants to the Authority that all of their staff, agents and sub-contractors are and will be engaged in relation to the Contract on terms which do not entitle any of them to any Intellectual Property Rights in the Contractor Materials, and which require them to waive all moral rights.

(4) If the Contractor in providing the Services uses any materials in which there are pre-existing Intellectual Property Rights owned by itself, its agents, sub-contractors or third parties, it shall itself provide, or procure from such agent, subcontractor or third party a non-exclusive licence for, or, if the Contractor is itself a licensee of those Intellectual Property Rights, it shall grant a sub-licence to, the Authority to use, reproduce, modify, adapt and enhance the material as the Authority sees fit. Such licence or sub-licence shall be perpetual and irrevocable and granted at no cost to the Authority.

(5) The Authority shall have the sole right to use any information (whether or not it is Confidential Information) collected or collated pursuant to the Contract (excluding any information which in the opinion of the Authority is confidential to the Contractor or which has been communicated to the Contractor under a condition that it shall be confidential to the Contractor), and all original documents in whatever form which contain that information, including any computer tape or disk, any voice recording and any special computer program written to give access to the information, shall on request be deposited with the Authority.

(6) Nothing in this Contract or done under the Contract shall be taken to diminish any Crown copyright, patent rights or any other Intellectual Property Rights which would, apart from this Contract, vest in the Crown or Authority.

(7) The Contractor shall ensure that all royalties licence fees or similar expenses in respect of Intellectual Property Rights in materials used in connection with the Contract have been paid and are included in the Charges.

(8) If the Authority reimburses the Contractor for the cost of any equipment, such equipment shall become the property of the Authority and the Contractor shall on request deliver such equipment to the Authority. The Contractor shall keep a proper inventory of such equipment and shall deliver that inventory to the Authority on request and on completion of the Services.

28. Rights of Third Parties

It is not intended that the Contract, either expressly or by implication, shall confer any benefit on any person who is not a party to the Contract and accordingly the Contracts (Rights of Third Parties) Act 1999 shall not apply.

29. Government Property

(1) All Government Property shall remain the property of the Authority and shall be used in the execution of the Contract and for no other purpose whatsoever except with the prior agreement in writing of the Authority.

(2) All Government Property shall be deemed to be in good condition when received by or on behalf of the Contractor unless he notifies the Authority to the contrary within 14 days or such other time as is specified in the Contract.

(3) The Contractor undertakes to return any and all Government Property on completion of the Contract or on any earlier request by the Authority.

(4) The Contractor shall, except as otherwise provided for in the Contract, repair or replace or, at the option of the Authority, pay compensation for all loss, destruction or damage occurring to any Government Property caused or sustained by the Contractor, or by his servants, agents or sub-contractors, whether or not arising from his or their performance of the Contract and wherever occurring, provided that if the loss, destruction or damage occurs at the Authority's Premises or any other Government premises, this Condition shall not apply to the extent that the Contractor is able to show that any such loss, destruction or damage was not caused or contributed to by his negligence or default or the neglect or default of his servants, agents, or sub-contractors.

(5) Where the Government Property comprises data issued in electronic form to the Contractor (including Personal Data) the Contractor shall not store, copy, disclose or use such electronic data except as necessary for the performance by the Contractor of its obligations under the Contract (including its obligation to back up electronic data as provided in Condition 29(6) below) or as otherwise expressly authorised in writing by the Authority.

(6) The Contractor shall perform secure back ups of all such electronic data in its possession and shall ensure that an up to date back up copy is securely stored at a site other than that where any original copies of such electronic data are being stored.

(7) The Contractor shall, and shall procure that its sub-contractors, agents and personnel, shall observe best practice when handling or in possession of any such electronic data. By way of example if the Contractor removes any such data or information from a Government establishment, or is sent such data or information by the Authority it shall ensure that the data and any equipment on which it is stored or is otherwise being processed is kept secure at all times. The Contractor shall impress on any of its sub-contractors, agents and personnel who are required to handle or have

possession of such electronic data that they must safeguard it all times, and shall not place it in jeopardy for example by leaving it unattended in a vehicle or on public transport or by transmitting or posting it by insecure means.

(8) If at any time the Contractor suspects or has reason to believe that such electronic data has or may become corrupted, lost, destroyed, altered (other than to the extent that the Contractor alters it by lawful processing in accordance with its obligations under this contract) or so degraded as a result of the Contractor's default so as to be unusable then the Contractor shall notify the Authority immediately and inform the Authority of the remedial action the Contractor proposes to take.

(9) The Contractor shall indemnify the Authority against all claims and proceedings, and all costs and expenses incurred in connection therewith arising from the corruption, loss, destruction, alteration (other than by lawful processing permitted by this Contract) or degradation of electronic data which claims would not have arisen but for some act, omission, misrepresentation or negligence on the part of the Contractor or subcontractors, agents and personnel and hold it harmless against all costs, losses and liability whatsoever incurred by it arising out of any action or inaction on its part in relation to any of its obligations as set out in this Contract which results in such corruption, loss or degradation.

30. Data Protection

(1) The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Data Controller and the Contractor is the Data Processor. The only processing that the Contractor is authorised to do is listed in Annex 1 by the Authority and may not be determined by the Contractor.

(2) The Contractor shall notify the Authority immediately if it considers that any of the Authority's instructions infringe the Data Protection Legislation.

(3) The Contractor shall provide all reasonable assistance to the Authority in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Authority, include:

- (a) a systematic description of the envisaged processing operations and the purpose of the processing;
- (b) an assessment of the necessity and proportionality of the processing operations in relation to the Services;
- (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
- (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.

(4) The Contractor shall, in relation to any Personal Data processed in connection with its obligations under this Contract:

(a) process that Personal Data only in accordance with Annex 1, unless the Contractor is required to do otherwise by Law. If it is so required the Contractor shall promptly notify the Authority before processing the Personal Data unless prohibited by Law;

(b) ensure that it has in place Protective Measures, which have been reviewed and approved by the Authority as appropriate to protect against a Data Loss Event having taken account of the:

- (i) nature of the data to be protected;
- (ii) harm that might result from a Data Loss Event;
- () state of technological development; and
- (i) cost of implementing any measures;

The review and approval of the Protective Measures by the Authority shall not relieve the Contractor of its obligations under Data Protection Legislation, and the Contractor acknowledges that it is solely responsible for determining whether such Protective Measures are sufficient for it to have met its obligations under the Data Protection Legislation.

(c) ensure that:

- (i) the Contractor Personnel do not process Personal Data except in accordance with this Contract and in particular Annex 1;
- (ii) it takes all reasonable steps to ensure the reliability and integrity of any Contractor Personnel who have access to the Personal Data and ensure that they:

(A) are aware of and comply with the Contractor's duties under this clause;

(B) are subject to appropriate confidentiality undertakings with the Contractor or any Sub-Processor;

(C) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third Party unless directed in writing to do so by the Authority or as otherwise permitted by this Contract; and

(D) have undergone adequate training in the use, care, protection and handling of Personal Data.

(d) do not transfer Personal Data outside of the European Union unless the prior written consent of the Authority has been obtained and provided the following conditions are fulfilled:-

- (i) the Authority or the Contractor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Authority;
- (ii) the Data Subject has enforceable rights and effective legal remedies;
- (iii) the Contractor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Authority in meeting its obligations); and
- (iv) the Contractor complies with any reasonable instructions notified to it in advance by the Authority with respect to the processing of the Personal Data.

(5) Subject to clause (6), the Contractor shall notify the Authority immediately if it:

- (a) receives a Data Subject Request (or purported Data Subject 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 such request is required or purported to be required by Law; or
- (f) becomes aware of a Data Loss Event.

(6) The Contractor's obligation to notify under clause (5) shall include the provision of further information to the Authority in phases, as details become available.

(7) Taking into account the nature of the processing, the Contractor shall provide the Authority with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause (5) (and insofar as possible within the timescales reasonably required by the Authority) including by promptly providing:

- (a) the Authority with full details and copies of the complaint, communication or request;
 - (b) such assistance as is reasonably requested by the Authority to enable the Authority to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
 - (c) the Authority, at its request, with any Personal Data it holds in relation to a Data Subject;
 - (d) assistance as requested by the Authority following any Data Loss Event;
 - (e) assistance as requested by the Authority with respect to any request from the Information Commissioner's Office, or any consultation by the Authority with the Information Commissioner's Office.
- (8) The Contractor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Contractor employs fewer than 250 staff, unless:
- (a) the Authority determines that the processing is not occasional;
 - (b) the Authority determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; and
 - (c) the Authority determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- (9) The Contractor shall allow for audits of its Data Processing activity by the Authority or the Authority's designated auditor.
- (10) The Contractor shall designate a Data Protection Officer if required by the Data Protection Legislation.
- (11) Before allowing any Sub-Processor to process any Personal Data related to this Contract, the Contractor must:
- (a) notify the Authority in writing of the intended Sub-Processor;
 - (b) obtain the written consent of the Authority;
 - (c) enter into a written Contract with the Sub-Processor which give effect to the terms set out in this Condition 30 such that they apply to the Sub-Processor; and

(d) provide the Authority with such information regarding the Sub-Processor as the Authority may reasonably require.

(12) The Contractor shall remain fully liable for all acts or omissions of any Sub-Processor.

(13) The Parties agree to take account of any guidance issued by the Information Commissioner's Office in respect of the Data Protection Legislation that is applicable to this Contract and shall make such variations to this Contract as the Authority may reasonably require to give effect to such guidance in accordance with Condition 10.

(14) If the Contractor fails to comply with any provision of this Condition 30, the Authority may terminate the Contract immediately in which event the provisions of Condition 20 shall apply.

(15) The Contractor shall indemnify the Authority against all claims and proceedings, and all costs and expenses incurred in connection therewith, made or brought against the Authority by any person in respect of the Data Protection Legislation or equivalent applicable legislation in any other country which claims would not have arisen but for some act, omission, misrepresentation or negligence on the part of the Contractor, its sub-contractors and Sub-Processors and hold it harmless against all costs, fines, losses and liability whatsoever incurred by it arising out of any action or inaction on its part in relation to any of its obligations as set out in this Contract which results in the Authority being in breach of its obligations under the Data Protection Legislation or equivalent applicable legislation in any other country.

(16) Upon expiry of this Contract or termination of this Contract for whatever reason, the Contractor shall, unless specified in Annex 1, notified otherwise by the Authority or required by law, immediately cease any processing of the Personal Data on the Authority's behalf and as required by the Authority:

- (a) provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority); and
- (b) erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion.

(17) Where processing of the Personal Data continues after the expiry or termination of this Contract as specified in Annex 1, notified otherwise by the Authority or required by law, the Contractor shall comply with the provisions of this Condition 30 for as long as the Contractor continues to process the Personal Data and such provisions shall survive the expiry or termination of this Contract.

(18) Where the Contractor is required to collect any Personal Data on behalf of the Authority, it shall ensure that it provides the data subjects from whom the Personal Data are collected with a privacy notice in a form to be agreed with the Authority.

31. Payment of taxes: income tax and NICs

- (1) Where the Contractor is liable to be taxed in the UK in respect of consideration received under the Contract, the Contractor shall at all times comply with the Income Tax (Earnings and Pensions) Act 2003 and all other statutes and regulations relating to income tax in respect of that consideration.
- (2) Where the Contractor is liable to National Insurance Contributions (NICs) in respect of consideration received under the Contract, the Contractor shall at all times comply with the Social Security Contributions and Benefits Act 1992 and all other statutes and regulations relating to NICs in respect of that consideration.
- (3) The Authority may, at any time during the term of the Contract, require the Contractor to provide information to demonstrate that:
 - a) the Contractor has complied with paragraphs (1) and (2) above; or
 - b) the Contractor or its staff are not liable to the relevant taxes.
- (4) A request under paragraph (3) above may specify the information which the Contractor must provide and a reasonable deadline for response.
- (5) The Authority may supply any information which it receives under paragraph (3) to the Commissioners of Her Majesty's Revenue and Customs for the purpose of the collection and management of revenue for which they are responsible.
- (6) The Contractor shall ensure that any sub-contractors (including consultants) and agents engaged by the Contractor for the purpose of the Services are engaged on, and comply with, conditions equivalent to those in paragraphs (1) to (5) above and this paragraph (6), and the Contractor shall, on request, provide the Authority with evidence to satisfy the Authority that the Contractor has done so. Those conditions shall provide both the Contractor and the Authority with the right to require the sub-contractor or agent to provide information to them equivalent to paragraph (3), and the Contractor shall obtain that information where requested by the Authority.
- (7) The Authority may terminate the Contract with immediate effect by notice in writing where:
 - a) the Contractor does not comply with any requirement of this Condition 31; or
 - b) the Contractor's sub-contractors or agents do not comply with the conditions imposed on them under paragraph (6) above.

(8) In particular (but without limitation), the Authority may terminate the Contract under paragraph (7) above:

a) in the case of a request under paragraph (3):

- i. the Contractor fails to provide information in response to the request within the deadline specified; or
- ii. the Contractor provides information which is inadequate to demonstrate how the Contractor or (where relevant) its sub-contractors and agents have complied with the conditions set out or referred to in paragraphs (1) to (6);

or

b) the Authority receives information which demonstrates, to its reasonable satisfaction, that the Contractor, its sub-contractors or agents, are not complying with those conditions.

32. Payment of taxes: Occasions of Tax Non-compliance

- (1) This Condition 32 applies where the consideration payable by the Contractor under the Contract equals or exceeds £5,000,000 (five million pounds).
- (2) The Contractor represents and warrants that it has notified the Authority in writing of any Occasions of Tax Non-Compliance or any litigation that it is involved in that is in connection with any Occasions of Tax Non Compliance.
- (3) If, at any point during the term of the Contract, an Occasion of Tax Non-Compliance occurs, the Contractor shall:
 - a) notify the Authority in writing of such fact within 5 working days of its occurrence; and
 - b) promptly provide to the Authority:
 - i) details of the steps which the Contractor is taking to address the Occasion of Tax Non-Compliance and to prevent the same from recurring, together with any mitigating factors that it considers relevant; and
 - ii) such other information in relation to the Occasion of Tax Non-Compliance as the Authority may reasonably require.

(4) In the event that:

- a) the warranty given by the Contractor pursuant to paragraph (2) of this Condition is materially untrue;

- b) the Contractor commits a material breach of its obligation to notify the Authority of any Occasion of Tax Non-Compliance as required by paragraph (3) of this Condition; or
- c) the Contractor fails to provide details of proposed mitigating factors which, in the reasonable opinion of the Authority, are acceptable,

the Authority may terminate the Contract with immediate effect by notice in writing.

(5) In this condition 32, “Occasion of Tax Non-Compliance” means:

- a) any tax return of the Contractor submitted to a Relevant Tax Authority on or after 1 October 2012 is found on or after 1 April 2013 to be incorrect as a result of:
 - (i) a Relevant Tax Authority successfully challenging the Contractor under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle;
 - (ii) the failure of an avoidance scheme which the Contractor was involved in, and which was, or should have been, notified to a Relevant Tax Authority under the DOTAS or any equivalent or similar regime;

and/or

- b) any tax return of the Contractor submitted to a Relevant Tax Authority on or after 1 October 2012 gives rise, on or after 1 April 2013, to a criminal conviction in any jurisdiction for tax related offences which is not spent at the commencement of the Contract or to a penalty for civil fraud or evasion.

(6) For the purpose of paragraph (5):

- a) “DOTAS” means the Disclosure of Tax Avoidance Schemes rules which require a promoter of tax schemes to tell HM Revenue & Customs of any specified notifiable arrangements or proposals and to provide prescribed information on those arrangements or proposals within set time limits as contained in Part 7 of the Finance Act 2004 and in secondary legislation made under vires contained in Part 7 of the Finance Act 2004 and as extended to National Insurance Contributions by the National Insurance Contributions (Application of Part 7 of the Finance Act 2004) Regulations 2012, SI 2012/1868 made under s.132A Social Security Administration Act 1992;
- b) “General Anti-Abuse Rule” means:
 - (i) the legislation in Part 5 of the Finance Act 2013; and

- (ii) any future legislation introduced into Parliament to counteract tax advantages arising from abusive arrangements to avoid national insurance contributions;
- c) “Halifax Abuse Principle” means the principle explained in the CJEU Case C-255/02 Halifax and others; and
- d) “Relevant Tax Authority” means HM Revenue & Customs, or, if applicable, a tax authority in the jurisdiction in which the Contractor is established.

33. Equality and non-discrimination

- (1) The Contractor shall not unlawfully discriminate within the meaning and scope of the Equality Act 2010 and any other anti-discrimination legislation in relation to the provision of the Services or otherwise and shall take all reasonable steps to ensure that its staff, sub-contractors and agents do not do so
- (2) The Contractor shall comply with the Authority’s equality scheme as published on the Authority’s website, and shall take all reasonable steps to ensure that its staff, sub-contractors and agents do so.
- (3) The Authority may (without prejudice to its other rights under the Contract) terminate the Contract with immediate effect by notice in writing where the Contractor fails (or the Contractor’s staff, sub-contractors or agents fail) to comply with paragraphs (1) or (2) of this Condition.

34. Welsh Language Act

The Contractor shall for the term of the Contract comply with the principles of the Authority’s Welsh Language Scheme.

35. Sustainable Procurement

- (1) The Contractor shall comply in all material respects with all applicable environmental laws and regulations in force from time to time in relation to the Services. Without prejudice to the generality of the foregoing, the Contractor shall promptly provide all such information regarding the environmental impact of the Services as may reasonably be requested by the Authority.
- (2) The Contractor shall meet all reasonable requests by the Authority for information evidencing compliance with the provisions of this Clause by the Contractor.
- (3) All written outputs, including reports, produced in connection with the Contract shall (unless otherwise specified) be produced on recycled paper containing at least 80% post consumer waste and used on both sides where appropriate.

36. Other Legislation

The Contractor shall, and shall procure that its sub-contractors, agents and personnel, comply with all other applicable law.

37. Contractor Status

Nothing in the Contract shall create or be construed as creating a partnership, joint venture, a contract of employment or relationship of employer and employee, or a relationship of principal and agent between the Authority and the Contractor.

38. Transfer of Services

(1) Where the Authority intends to continue with services equivalent to any or all of the Services after termination or expiry of the Contract, either by performing them itself or by the appointment of a replacement contractor, the Contractor shall (both during the term of the Contract and, where relevant, after its expiry or termination):

- (a) provide all information reasonably requested to allow the Authority to conduct the procurement for any replacement services; and
- (b) use all reasonable endeavours to ensure that the transition is undertaken with the minimum of disruption to the Authority.

(2) Without prejudice to the generality of paragraph (1) of this Condition, the Contractor shall, at times and intervals reasonably specified by the Authority, provide the Authority (for the benefit of the Authority, any replacement Contractor and any economic operator bidding to provide the replacement services) such information as the Authority may reasonably require relating to the application or potential application of the Transfer of Undertakings (Protection of Employment) Regulations 2006 including the provision of employee liability information.

(3) Without prejudice to the generality of paragraph (1) of this Condition, the contractor shall co-operate fully during the transition period and provide full access to all data, documents, manuals, working instructions, reports and any information, whether held in electronic or written form, which the Authority considers necessary.

39. Law and Jurisdiction

The Contract shall be governed by and construed in accordance with English Law and shall be subject to the exclusive jurisdiction of the courts of England and Wales.

40. Transparency

(1) In order to comply with the Government's policy on transparency in the areas of procurement and contracts, the Authority will, subject to Conditions 40(2) and (3), publish the Contract and the tender documents issued by the Authority which led to its creation on a designated web site.

(2) The entire Contract and all the tender documents issued by the Authority will be published on that web site save where the Authority, in its absolute discretion, considers that the relevant documents, or their contents, would be exempt from disclosure in accordance with the provisions of the Freedom of Information Act 2000.

(3) Where the Authority considers that any such exemption applies, the Authority will redact the relevant documents to the extent that the Authority considers the redaction is necessary to remove or obscure the relevant material, and those documents will be published on the designated web site subject to those redactions.

(4) Where the Parties later agree changes to the contract, the Authority will publish those changes, and will consider any redaction, on the same basis.

(5) In Condition 40(1) the expression “tender documents” means the advertisement issued by the Authority seeking expressions of interest, the pre qualification questionnaire and the invitation to tender and the contract includes the Contractor’s proposal.

41. Monitoring and Management Information

(1) Where requested by the Authority, the Contractor shall supply to the Authority and/or to the Cabinet Office such information relating to the Services and to the Contractor’s management and performance of the Contract as they may require.

(2) The information referred to in Condition 41(1) may include, but is not limited to, the following: Line Item Amount, Invoice Line Description, Invoice Line Number, Currency Code, Order Date, VAT Inclusion Flag, VAT Rate, List Price, Number of Items, Unit of Purchase Quantity, Price per Unit, Contractor Service Code, Service description and/or name, UNSPSC Code, Taxonomy Code and/or Name, Geographical, Project Code, Project description, Project Start Date, Project Delivery Date (Estimate and Actual), Total project cost and Project Stage. The information may also, without limitation, include information relating to the capability of the Contractor (and any key sub-Contractor) to continue to perform the Contract (including information on matters referred to in regulations 23 to 27 of the Public Contracts Regulations 2006).

(3) The information referred to in Condition 41(1) shall be supplied in such form and within such timescales as the Authority or the Cabinet Office may reasonably require.

(4) The Contractor agrees that the Authority may provide the Cabinet Office, any other government department or agency or any other person or entity referred to in Condition 42(2) (Information Confidential to the Contractor), with information obtained under this Condition 41 and any other information relating to the Services procured and any payments made under the Contract.

(5) Upon receipt of the information supplied by the Contractor in response to a request under Condition 41(1) or receipt of information provided by the Authority to the

Cabinet Office under Condition 41(4) the Contractor hereby consents to the Cabinet Office (acting through the Government Procurement Service):

- a) storing and analysing the information and producing statistics; and
- b) sharing the information or any statistics produced using the information, with any person or entity referred to in Condition 42(2).

(6) The Authority may make changes to the type of information which the Contractor is required to supply and shall give the Contractor at least one calendar month's written notice of any such changes.

(7) Where the Authority notifies the Contractor that it estimates the Charges payable under this Contract are due to exceed £5 million in one or more Contract Years the Contractor agrees and acknowledges that it shall, in addition to any other management information requirements set out in this Contract, at no charge, provide such timely, full, accurate and complete SME management information (MI) reports to the Authority as the Authority shall require which incorporate the data described in the MI Reporting Template which is:

- (a) the total contract revenue received directly on a specific contract;
- (b) the total value of sub-contracted revenues under the contract (including revenues for non-SMEs/non-VCSEs); and
- (c) the total value of sub-contracted revenues to SMEs and VCSEs.

(8) The SME management information reports referred to in Condition 41(7) shall be provided in the correct format as required by the MI Reporting Template and any guidance issued by the Authority from time to time. The Contractor shall use the initial MI Reporting Template and which may be changed from time to time (including the data required and/or format) by the Authority by issuing a replacement version. The Authority shall give at least thirty (30) days' notice in writing of any such change and shall specify the date from which it must be used.

(9) The Contractor further agrees and acknowledges that it may not make any amendment to the current MI Reporting Template without the prior written approval of the Authority.

42. Information confidential to the Contractor

(1) Unless agreed expressly by both parties in writing, in a confidentiality agreement identifying the relevant information, information obtained by the Authority from the Contractor shall not constitute confidential information relating to the Contractor.

(2) Where any information held by the Authority does constitute confidential information relating to the Contractor, the Authority shall nonetheless have the right to disclose that information:

- a) on a confidential basis to any other government department or agency for any proper purpose of the Authority or of that department or agency;
 - b) to Parliament and Parliamentary Committees or if required by any Parliamentary reporting requirement;
 - c) to the extent that the Authority (acting reasonably) deems disclosure necessary or appropriate in the course of carrying out its public functions;
 - d) on a confidential basis to a professional adviser, consultant, Contractor or other person engaged by any of the entities described in subparagraph a) (including any benchmarking organisation) for any purpose relating to or connected with the Contract or the Services;
 - e) on a confidential basis for the purpose of the exercise of its rights under the Contract; or
 - f) on a confidential basis to a proposed successor body in connection with any assignment, novation or disposal of any of its rights, obligations or liabilities under the Contract.
- (3) For the purpose of paragraph (2) of this Condition, references to disclosure on a confidential basis mean disclosure subject to a confidentiality agreement.

