



Department
for Environment
Food & Rural Affairs

Order Form – Contract for Research and Development Goods and/or Services

1. Purchase Order Number	To be provided by Defra by REDACTED, Contract Manager, within 10 working days of the Contract being signed.
2. Customer	The Secretary of State for Environment, Food and Rural Affairs, acting as part of the Crown, 2 Marsham Street, London SW1P 4DF
3. Contractor(s)	The University of Exeter, Northcote House, The Queen's Drive, Exeter, Devon, EX4 4QJ, RC000653
4. Co-Funder(s)	Not applicable.
5. Defra Group Members	The following Defra Group members will receive the benefit of the Deliverables: • Defra's Farming and Countryside Programme • Defra's Land Use Division • Defra's Environment Science and Analysis division
6. The Agreement	This Order is part of the Agreement and is subject to the terms and conditions appended at Appendix 1 and shall come into effect on the Start Date. Unless the context otherwise requires, capitalised expressions used in this Order have the same meanings as in the terms and conditions. The following documents are incorporated into the Agreement. If there is any conflict, the following order of precedence applies (in descending order): a) this Order; b) the terms and conditions at Appendix 1; and c) the remaining Appendices (if any) in equal order of precedence.
7. Deliverables	Goods: None. Services As set out in Appendix 2 – Specification and Appendix 3 – Contractors Proposal. To be performed at The University of Exeter, Northcote House, The Queen's Drive, Exeter, Devon, EX4 4QJ ("the Contractor's premises"). Date(s) of Delivery: 15th September 2025 – 31 March 2027
8. Milestone Delays (Clause 18.2.10)	Not applicable.
9. Start Date	15 th September 2025

10. Expiry Date	31 March 2027
11. Extension Period (Clause 5.2)	
12. Charges	The Charges for the Deliverables shall be as set out in Appendix 4 – Charges. Unless and to the extent otherwise expressly stated in Appendix 4, the Charges are fixed for the duration of the Agreement.
13. Payment including Payment by Co-funder(s)	Payments will be made in pounds (GBP) by BACS transfer using the details provided by the supplier on submission of a compliant invoice. Invoices must be submitted to the Contract Manager upon the corresponding deliverable being received for review and sign off. Any invoices that are submitted that do not meet the following criteria will not be processed: • 1 PDF per invoice (no larger than 4mb in size) – all supporting documentation must be included in that PDF (no additional separate supporting documentation as a separate file). • Multiple invoices can be attached to one email; however, as above we can only accept 1 invoice per PDF (and no additional supporting files). • Invoices must be dated. • Invoices must quote a valid Purchase Order. • Invoices must have a breakdown of what is being billed. • Invoices must include the total before and after VAT.
14. Customer's Authorised Representative(s)	For general liaison your contact will continue to be REDACTED or, in their absence, REDACTED
15. Contractor's Authorised Representative	For general liaison your contact will continue to be REDACTED or, in their absence, Tbc upon recruitment of PDRA researcher
16. Co-funder's Authorised Representative	Not applicable.
17. Optional Intellectual Property Rights ("IPR") Clauses	The Customer has chosen Option C in respect of intellectual property rights provisions for the Agreement as set out in the terms and conditions. <i>Option C: Contractor ownership of all New IPR with Customer and Co-funder rights for the current contract and broader public sector functions</i>
18. Contractor's general liability cap	The liability of the Contractor as set out in Clause 16.2.1 of the terms and conditions is limited to: (a) an amount equal to 150% of the Charges paid or payable to the Contractor; and (b) 169,242.00

	<i>The liability of the Contractor as set out in Clause 16.2.1 of the terms and conditions is limited to: (a) an amount equal to 150% of the Charges paid or payable to the Contractor; and (b) £582,192.00</i>		
(c) Progress Meetings and Progress Reports	As set out in Appendix 2 – Specification and Appendix 3 – Contractor's Proposal.		
(d) Address for notices	Customer: Defra group Commercial, 2 Marsham Street, London, SW1P 4DF Attention: REDACTED, Defra group Commercial (DgC) Email: Network.Procurement@defra.gov.uk	Contractor: REDACTED, Lafrowda House, St German's Road, Exeter, EX4 6TJ Attention: REDACTED Email: REDACTED	
(e) Key Personnel of the Contractor	Key Personnel Role: Contractor's Project Manager PDRA Researcher	Key Personnel Name: REDACTED Tbc – Contractor to provide details to Defra upon successful recruitment.	Contact Details: REDACTED Tbc - Contractor to provide details to Defra upon successful recruitment.
(f) Procedures and Policies	For the purposes of the Agreement: The Customer's protection and security requirements are contained in Clause 15. Protection and security of data of the Research and Development Terms and Conditions. The Customer's sustainability policy can be found at: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/procurement#sustainable-procurement The Customer's equality and diversity policy can be found at: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/equality-and-diversity		
(g) Commercial Exploitation (Clause 11)	Clause 11 (Commercial Exploitation) shall apply to this Agreement: Yes: ☐ No: ☒		
(h) Special Terms	- Any new modelling carried out by the Contractor ex-novo as part of this contract will be made available to the Customer as open source by the end of the Term. Amendment to Terms & Conditions - Clause 10.13 shall include additional text: Where Option C is selected in the Order the Contractor hereby grants the Customer, each member of the Defra Group and any Co-funder(s) a non-exclusive, perpetual, royalty-free, irrevocable, transferable, worldwide licence to use, change and sub-license any New IPR which is reasonably required by the Customer, any member of the Defra Group or any Co-		

	funder to enable it to use and receive the Deliverables or for any purpose relating to the exercise of its (or, if the Customer, relevant Defra Group Member or Co-funder is a Public Sector Body, any other Public Sector Body's) business or function. For the purposes of this clause 10.13 "Public Sector Body" means a formally established organisation that is (at least in part) publicly funded to deliver a public or government service. <u>Any code delivered through this contract can be used, changed, or sub-licensed by DEFRA group.</u> • Clause 13.5 shall include additional text Notwithstanding clause 13.4 and subject to clauses 13.1 to 13.3, the Contractor and any Co-funder(s) shall not use, disclose or permit any person or organisation to use or disclose the Results for any thesis, degree, research or other educational purpose or make the Results generally available (including in scientific journals where reasonably appropriate) without the prior written agreement of the Customer <u>where information is considered confidential.</u> Any agreed publication shall acknowledge the financial support of the Customer and any Co-funder(s) including in any public statement. The Contractor and/or any Co-funder(s) shall send details of any proposed publication to the Customer at least 30 days prior to the proposed publication and shall notify the Customer immediately if approached by the media about the Services and/or Results. Any approved publication by the Contractor and/or any Co-funder(s) shall be entirely at the Contractor's and/or Co-funder's own cost and the Contractor and/or Co-funder shall, within 10 days of publication, supply the Customer free of charge with a reasonable number of copies of any publication
(i) Additional Insurance	Not applicable.
(j) Further Data Protection Provisions	The further data protection provisions as contained at Annex 1 of the Terms and Conditions are applicable to this Agreement where indicated below: Yes: ☐ No: ☒

Signed for and on behalf of the Authority:	Signed for and on behalf of the Contractor:
Authority-Signature: REDACTED	Supplier-Signature: REDACTED

Appendix 1: R&D Terms and Conditions

The Authority's Terms and Conditions **can be located on the Defra Website and which are called 'Research and Development Terms and Conditions'**

Appendix 2: Specification/Description

This section provides a summary of the outputs and deliverables needed from the contract and a summary of the requirements.

We welcome any methodological approach which complies with the following criteria:

- Draws on farm-level data for each country and map and model land tenure and land use change rights for each farm in England and Wales; identify how those rights need to be reorganised to facilitate land use change; and how much that reorganisation costs.
- Models the impact of those land tenure costs on land use change strategies and scheme designs; examining how different forms of land tenure overlap with land use change priorities; and the extent to which they influence the environmental benefits and costs of land use change, and the accompanying trade-offs.
- Create a generalised farm-level land tenure model, predicting tenure types and costs of tenure reorganisation for land use change, and incorporates it into the current Defra-LEEP (Land, Environment, Economics and Policy Institute) agricultural model. This incorporation requirement is to ensure that the outputs from this project are readily available for developing agri-environment schemes.
- Identifies land use policies and agri-environment scheme designs that facilitate land use change in priority locations, where current land tenure barriers make change infeasible.
- Ensure the results and approaches will be documented in such a way that they can be reproduced by anyone using the model. This includes annotating the model code following best practice and reporting the methodological steps in interim / final reports, and in a 'developer guide'. The code for the model, and associated tools, will be made open source by the Contractor. The research will be published in open access peer-reviewed academic journals, which will enable the transfer of new knowledge generated by the project, both in terms of findings and in terms of methodology. Caveats to the publication of the research are as follows:
 - Any personal information which may allow third parties to identify farmers / agricultural businesses will need to be anonymised before publication.
 - Policy implications from the research findings are expected to be confidential as they are likely to relate to "official-sensitive" policy development. Such implications will not be published.

We require a detailed workplan to be submitted in the proposal, detailing how the work packages below will be delivered, by who and when. The final workplan will be reviewed and agreed at the inception meeting.

Aims

The project aims to support government in delivering land-based outcomes for the Environment Act Target and Net Zero, by developing the first comprehensive (and spatially explicit) mapping and

valuation of agricultural land tenure across Great Britain. This information will help us to identify potential policy interventions and incentives which take various tenure agreements into account.

Anticipated Deliverables

Evidence, Reports & Data Layers

The outputs should include:

- Spatially explicit land tenure mapping data sets spanning England and Wales, revealing the distribution of different land tenure types across each country. These mapping datasets should also be accompanied by a report detailing land tenure trends and distributions across each country, and the nature and costs of tenure reorganisation required for land use change schemes.
- Statistical and generalised model of land tenure covering every farm registered with land parcel information services in England and Wales. The generalised model should be integrated into the Defra-LEEP agriculture model, to ensure it can be used for agri-environment scheme and policy design in the long term, and that it is fully integrated into Defra's wider land use modelling strategy and capability.
- Reports detailing the impact of land tenure and taxation considerations on key land use change strategies and agri-environment scheme designs.

Project governance

The Contract will be managed by Defra with an assigned project officer. We expect that there will be an equivalent individual within the Contractor's team responsible for the day-to-day project management. The Contractor will be expected to work closely with Defra throughout the lifetime of the project and should build in regular meetings with Defra into the project plan.

The Contractor's project manager must ensure that the R&D programme's regular 'monthly progress update meetings' are attended - these meetings provide an opportunity for the leads of the projects funded by our programme to meet with the secretariat to discuss updates, milestones, progress, and potential join up.

The Contractor will arrange calls/meetings with the Defra project officer to ensure that the Contract is being delivered to time and the quality required and discuss any emerging issues. The Contractor should make this provision clear in their bid.

A project steering group will be set up and managed by Defra, which will include representatives from Defra. The aim of this group will be to help guide the project and provide feedback on key deliverables.

We also require the Contractor to train Defra analysts in the Environmental Land Management (ELM) and in Environmental Science and Analysis (ESA) teams to use the model developed in this project and the novel uncertainty management techniques applied for the project.

Appendix 3 – Suppliers Proposal.

Our current approaches to land use and agri-environment scheme modelling typically assume universal owner-occupation of agricultural land. In reality though, a third of agricultural land across Great Britain is owned and farmed by different people. Here land ownership and occupation (land tenure) arrangements split land use change rights, such that neither owner nor occupier can pursue long-term land use change in the absence of collaboration with the other.

Reorganising land use rights between owners and occupiers, to facilitate land use change, is far from straightforward. It involves complex interactions between land tenure and tax law; and different land ownership and occupation motivations to those encountered on owner-occupied land. These factors combine to form significant barriers to tenure reorganisation, and hence land use change. Our current land use change assumptions ignore these tenure relationships, and hence the true costs of land use change. Unless explicitly addressed in strategic land use change planning and agri-environment scheme design, these barriers will effectively render large areas unavailable for land use change, with strategies and schemes ultimately delivering reducing environmental benefits at greater cost.

To incorporate land tenure considerations into policy analysis and agri-environment scheme design, we need to fill a large information gap: Land tenure has barely been studied in the UK. We lack information on where different types of land tenure occur; how their distribution overlaps with spatial priorities for land use change; how the costs of land tenure reorganisation affect the economics of land use change; and hence how policy analysis and design can represent and address the barriers that land tenure presents.

This project addresses that knowledge gap, providing the first spatially explicit, mapping and valuation of agricultural land tenure across England and Wales. We will translate that mapping into Defra's land use modelling capability, incorporating a land tenure module into the Defra-LEEP (Land Environment Economics and Policy Institute) ARTEMIS (Agricultural Economics Modelling System) whole farm model; providing a platform to study the strategic impact of land tenure on land use change ambitions, and to understand and account for the effect of land tenure on agri-environment scheme uptake and design. Finally, we will test new policy designs and agri-environment scheme mechanisms that mitigate the barriers to land use change associated with land tenure; improving the environmental benefits of land use change, whilst reducing their costs.

Land Ownership and Occupation

There are several categories of land ownership and occupation, each with different implications for land use change strategies, and with variations in each country of the UK. In general, though, UK land ownership divides into three categories:

- I. private ownership by individuals;
- II. institutional ownership (e.g. charities, church estates, utilities companies, cooperate investors, etc.);
- III. public ownership (e.g. council farms, Ministry of Defence, Crown Estates);

whilst land occupation comes in many forms, typically categorised as:

- I. owner-occupation (the current assumption of land use policy design);
- II. formal tenancies (each country in GB has two types, with vastly differing benefits and restrictions between the two)
- III. commons grazing, where multiple occupiers hold rights to graze animals on common land; rights are tied to ownership or occupation of a farm elsewhere;
- IV. short-term licenses, which allow access to land for specific purposes (e.g. cattle grazing);
- V. share farming, where owner and occupier farm the land together;

Tenure and Tax Barriers

Combinations of these different ownership and occupation types give rise to different tenure barriers to land use change, on a given farm. The greatest barriers are likely to be associated with the reorganisation of formal tenancies, since these arrangements require the greatest reallocation of property rights from occupier to owner. (They are also the most prevalent arrangement, accounting for some 30% of agricultural landⁱ.) For example, to pursue land use change on farms covered by older tenancy agreements (e.g. those under the Agricultural Holdings Act 1986, in England), the old

agreement would need to be surrendered by the tenant, with the loss of favourable conditions that aren't available under newer tenancies (e.g. loss of lower, regulated, passing rents; and the right to pass on the tenancy to subsequent generations). Furthermore, tax incentives present additional costs to tenancy change: in the above example, the landowner will double their inheritance tax (IHT) reliefs when the new tenancy comes into force. This type of tenancy change is already a common strategy pursued by landowners to gain IHT reliefs; but in those cases the tax saving is usually shared between owner and occupier (through either direct payment, investment in the farm, or other benefits) to incentivise the change. If tenure reorganisation for land use change affords the landowner the same IHT benefits, for example, then the occupier may expect similar levels of compensation. That presents further barriers to land use change, and an additional up-front cost to the landowner, that isn't considered or accommodated in current scheme designs.

The focus of this project is the split of land use change rights under different tenure arrangements; however our consideration of tax legislation means that we will also capture the impact of tax barriers to land use change more generally. Current models of land use change also fail to capture the real influence of tax barriers on owner-occupier decision making too. Planting woodland on agricultural land, for example, changes the land's status away from 'agricultural'. Although some IHT reliefs are still available on woodland, they are not as favourable or as extensive following agricultural cessation. Here the role of alternative land use change strategies, such as agroforestry or orchard planting in place of forestry creation, might offer solutions to owners worried about future tax charges (these forms of tree planting do not necessarily compromise the land's agricultural – and hence tax - status). At present we can't tell how big these tax barriers are though, because there have been no systematic, spatially explicit, valuations of tax incentives in land use change models – a critical issue that this project will address.

Methodological approach

This project will examine land tenure and related tax rules and regulations in England and Wales, identifying land use change rights of owners and occupiers under different types of land tenure. To do that, we will draw on farm-level data for each country, and map and model land tenure and land use change rights for each farm in England and Wales; identify how those rights need to be reorganised to facilitate land use change; and how much that reorganisation costs. We will model the impact of those land tenure costs on land use change strategies and scheme designs; examining how different forms of land tenure overlap with land use change priorities; and the extent to which they could influence the environmental benefits of land use change, and the accompanying trade-offs.

Appendix 4 – Charges.

Date	Deliverables	Indicative Cost (excl. VAT)
September 2025	D.1	REDACTED
November 2025	D.2	REDACTED
March 2026	D.3	REDACTED
March 2027	D.4-D.6	REDACTED