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## Part E – Full price offered

<b>Part A Sub-Total</b>		<b>£</b>	<b>1,352,680</b>
<b>Part B Sub-Total</b>		<b>£</b>	<b>96,600</b>
<b>Part C A Sub-Total</b>		<b>£</b>	<b>1,247,045</b>
<b>Part D Sub-Total</b>		<b>£</b>	<b>37,200</b>
<b>Sub-total (Part A + Part B    Part C + Part D)</b>		<b>£</b>	<b>2,733,525</b>
<b>VAT (20%)</b>		<b>£</b>	<b>546,705</b>
<b>TOTAL (Sub-total + VAT)</b>		<b>£</b>	<b>3,280,230</b>

## Schedule 4 (Tender)

### Introduction

[REDACTED]

lessons learned from Phase 1 have been applied by the team in the development of this proposal, in which we have sought to build collaborations and seek support from important partners and stakeholders, and already assembled some of the data needed to widen and deepen the National Building Database.

### The Method

In brief, the method comprises a desk-based collation and integration of existing datasets, supplemented by remote and on-site surveys to qualify these data and deliver insights into the sectors of the non-domestic building stock. The database will be extended from England and Wales to cover Scotland and it will also include a outline representation of the domestic building stock. Our proposal is informed by a deep understanding of the need that is clearly expressed in the ITT and it will be validated through stakeholder consultation and a systematic approach to transitioning the database through a collaborative process with DESNZ. A schematic illustrating the method is presented in section 2.3.1.

### The Work Plan

We have opted to adopt the work plan proposed in the ITT and add to it three work packages (*highlighted below*) to address specific activities which we believe warrant separate identification. Our plan comprises the following work packages and tasks:

*WP0 Start-up: Kick off meeting(s) with DESNZ; Complete data sharing agreements; Set-up cloud platform and cyber security; Load and test Phase 1 database; Set up Micro-site.*

WP1 Data collection design, refinement, recruitment & planning: Survey design, sample selection and test sampling with DESNZ; Questionnaire design, review and approval; Prepare database; Conduct pilot survey.

WP2 Stakeholder engagement: Engage with sector organisations already contacted and recruit from other sectors; Organise, run and report on focus groups; follow-up leads.

WP3 Data integration & engineering: Refine and agree data management plan; Identify and appraise sector specific data sets; Design and build data model for Scotland; Develop the NBD; Conduct database demonstration to DESNZ; Produce draft / final database.

WP4 Methods for updating & making data accessible: Partial updates; Full (substantial) updates;

Additional / new data sets; Sampling; Synthetic sample generation

#### WP5 Non-Domestic Data Collection, Surveys and Data Modelling

WP5a Data integration and engineering

WP5b QA remote survey

WP5c Insight remote survey

WP5d Site surveys Wave 1, 2 and 3

WP6 WP 6 – Domestic Sector Data Modelling; Develop domestic database; Compare to NEED

WP7 Handover & Documentation; Development phase; System testing phase; Acceptance testing phase; Deployment phase

*WP8 Project Management & QA*

*WP9 Reporting*

The allocation of staff time to each of these work packages is presented in section 2.2.2 and the GANTT chart showing the work package timetable is included in section 2.3.1, together with a table showing the staff allocated to work on each task.

Our response follows the sections and evaluation criteria set out in the ITT. We have defined below some terms that will be used throughout the text in case they are unfamiliar and to avoid ambiguity:

**Property:** used to mean either a premises/dwelling, building, or Self-Contained Unit (SCU).

**Premises:** an extent of contiguous or neighbouring floor space occupied by an institution, organisation or business. Premises do not always coincide with exactly one building.

**Dwelling:** similar to premises but used for domestic purposes e.g. house, flat, maisonette.

**Building:** we use Ordnance Survey Mastermap polygons which identify buildings as: “...permanent roofed constructions, usually with walls. This includes permanent roofed constructions that exceed 8.0m<sup>2</sup> in area (12.0m<sup>2</sup> in private gardens)” ([Mastermap Documentation](#), p.14) .

**SCU:** Self-Contained Unit: A contiguous boundary that ‘envelopes’ the premises or collection of premises such that no premises are split or subdivided. As a result a SCU can sometimes include multiple buildings, for example where a shop has expanded to span several adjoining addresses (e.g. 7–9 The High Street) .

**Phase 1:** refers to the Non-Domestic Building Survey project for DESNZ.

**NBD:** National Buildings Database.

**OSAB:** Ordnance Survey AddressBase (National Land and Property Gazetteer assembled by GeoPlace, with all addresses geographically located. This forms the ‘spine’ of the database).

**UPRN:** Unique Property Reference Number (within OSAB, unique identifier for all addresses in Great Britain). This formed the ‘spine’ of Phase 1 and is fully supported by the [Geospatial Commission](#) to ensure this is fully utilised by government.

**UKBuildings:** a spatial data product from Verisk which covers Great Britain and includes attribute

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information.

## 2.1.1 Database development approach

The team proposes to continue from Phase 1 to build the full database as has been set out in the ITT. This work would continue to meet the challenges that arose in Phase 1, whilst building the full 3DStock geometry and relationships for the additional CaRB3 classes. We believe this method provides a solution for issues such as how best to handle:

- Mixed-use buildings (which can be complex to disentangle and assemble).
- Missing floorspace (when the VOA does not record floorspace and replacement values are required).
- Accounting for domestic addresses when they are intertwined or proximal to nondomestic addresses.
- Disentangling the complex relationship between premises, dwellings, buildings and sites whilst maintaining a detailed level of granularity for the data.
- Dataset alignment (for example when a premises has multiple EPCs over a number of years or where multiple addresses exist for a UPRN).
- Adapting CaRB3 when required (due to changes/additions to VOA classifications or interpretations).
- Allocation of non-domestic activity to specific floor levels (in order for the 3D model to not just represent the external building envelope but also account for activity on each floor).
- A rigorous analysis of metered energy used and energy end-use disaggregation.

These and many more stock characteristics make this work non-trivial, but the UCL team is fully aware of this and has many collective years of experience in tackling these inconvenient complexities ([Evans, Liddiard and Steadman, 2017](#), [Steadman et al, 2020](#)).

Upon receiving the copy of the Phase 1 input data and database we would produce the stratified sampling to enable the surveys to begin (section 2.1.2). Following this, we would develop the database working through one CaRB3 class at a time and build the 3DStock model to cover all buildings that fall into each class. Some CaRB3 classes will be quicker to process than others and this has influenced the order in which we plan to process the sectors. Address matching routines developed in Phase 1 will be re-run as part of this process with the aim of providing 'tighter' linkages within the model. Hospitality will be the first class to be re-run to enable comparative analysis to existing data with statistical methods as QA of the new process. The database would continue to be founded on the 3DStock self-contained unit (SCU), which copes well with the interactions between premises and buildings and the various datasets associated with these. In particular, the model is able to impute floor areas for premises that occupy (parts of) buildings but have no floor area records in the VOA data, using a method of slicing the SCU across calculated floor levels, based on LiDAR data profiles



of each building footprint. However, building the full NBD database will require some fresh thinking about how to deal with situations not encountered in Phase 1, including:

[REDACTED]

**Difficult CaRB3 classes:** Floorspace is a critical attribute within the database for the calculation of energy use intensity (EUI – kWh/m<sup>2</sup>), but some activities lack floor area records (e.g. Public Houses), as was identified for Hospitality in Phase 1. Outside of Scotland (which has no SAA floor area), for this NBD work, we foresee that the following CaRB3 classes, in particular, will pose similar difficulties in terms of floor areas: Health; Education; Arts and Leisure; Transport. For each CaRB3 activity, a search for other national datasets will be carried out to both quality assure and tighten the modelling method. For Higher Education this will involve using [HESA](#), and for schools we will liaise with DfE regarding their data, which we already have experience of

using. For Health access to the Estates Returns Information Collection ([ERIC](#)) will provide essential guidance. With this in mind, we anticipate adapting the 3DStock floor-slicing method (used in Phase 1) to work differently for particular types of buildings. An example here would be State Schools or Warehouses, where floor to ceiling heights may be greater than those experienced in Office, Shop and Hospitality. For each CaRB3 activity we propose to use any other national or subnational data when this is available to help to shape any refinements of the floorspace calculations that we carry out. This will be supported by statistical analysis and reviews with DESNZ. We anticipate that these adjustments will vary by activity as well as a few other factors (like building age, building height etc). The survey results, where available will also help to inform these adjustments and provide a method to QA some of these processes.

## Domestic

The approach adopted by 3DStock has been to model both domestic and non-domestic activity alongside each other. Hence the team already has considerable experience in modelling domestic buildings ([Liddiard et al, 2021](#), [Godoy-Shimuzu et al 2021](#)). In addition, Evans and Ruyssevelt have worked on a simplified 3DStock model of social housing for the Mixed Tenure project (Social Housing Decarbonisation team at DESNZ (2022-2023)) securely using OSAB and the NEED data framework and Simons and Humphrey have separately modelled the full Welsh domestic stock as part of ABC. In addition, the Phase 1 work included domestic for those cases where the dwellings existed in close proximity to Hospitality premises. We propose to continue this method for all non-domestic CaRB3 classes before finally identifying remaining dwellings and creating a basic geometrical model for those not yet included as a by-product of the non-domestic modelling. Using NEED, EPC data, energy data and HMLR data it will be possible to produce the required variables (although we note that some variables such as ‘fabric construction’ and ‘location of gas meter’ may be incomplete or require modelling). At the same time, this process is expected to highlight additional existing datasets which might present further insights (for example via our collaboration with Verisk (UKBuildings) and GeoPlace). We anticipate that linking dwellings to other government data on domestic buildings (using UPRNs) in the future will be relatively straightforward.

## Public Sector Buildings

The UCL team proposes to continue to adopt the overall method employed in phase 1, to identify where premises/addresses are occupied by public sector organisations. They anticipate the need to adapt and develop the technique to suit new data based on prior expansions of activities they have modelled. In particular, we would be looking to improve the identification of premises occupied by central government bodies, as Phase 1 indicated that these were under-reported in the input data. Here, access to the Office of Government Property [d-NAR](#) database would assist greatly.

A number of datasets specific to Scotland have also been identified for use in pinpointing public sector occupations, such as the [Council Asset Register](#) , which would help identify local council properties. Model outputs will be checked against publications from bodies such as the [Government Property Agency](#) (p.9).

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### Partnerships which will strengthen the database

There are two collaborations in this bid which the team feels strengthen our ability to deliver a database with stronger UPRN linkages, improved attribute data and expert advice: The first is an agreement with GeoPlace LLP (a joint venture between Ordnance Survey and Local Government Association) who are the custodians of the National Address Gazetteer from which the AddressBase (referred to in this bid as 'OSAB') products are created for the OS. They will be providing a trusted advisor role to the project and helping with the analysis and audit of data linking and matching needed to support the creation and validation of content for the project. This includes technical expertise in:

- the classification of non-domestic activity within buildings
- the application and use of additional and third-party datasets with matched UPRNs
- ensuring optimum use of OSAB to produce the final database
- identifying opportunities for optimising and enriching the address and building data content which might prove beneficial to NBD

[REDACTED]

### Data integration and engineering

The team would work with DESNZ during the initial weeks to ensure that Data Sharing Agreements (DSAs) are in place and data are available to be loaded into the database (whilst following the guidance of our Data Management Plan). We will liaise with the CBAS team to both receive the existing database (into our preferred developments environment) and to establish methods and formats for the upload of the completed database. It will be possible to produce outputs in a range of formats (Excel, csv, geopackage etc) so the team will look to agree any specific required formats with DESNZ statisticians during the first three months, with the anticipation that refinements may be required through the duration of the project (within reason). This will include the cleaning and presentation of data to DESNZ in an agreed and appropriate format. The combination of these elements will provide the data engineering support for sector specific modelling as well as feeding into and receiving data from the survey processing.

We require access to all the input datasets that were available in Phase 1. There are a number of new datasets we would require access to in order to complete NBD (e.g. NEED, Scottish Assessors etc).

### Data Management Plan

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The draft Data Management Plan is based on our experience from Phase 1, with improvements from lessons learnt on that project. This is draft only and the final plan would be agreed with input from DESNZ. Data security, access and storage is based on the principles of prevent and protect to a Cyber Essentials standard as provided in our response to section 2.3.1. Data will be collected from two broad sources:

- **New raw data from surveys:** this will constrain personal data for which GDPR compliant processes are in place in the form of prior training and specific security measures around both access and storage to the government's Cyber Essentials standard.
- **Existing data from either the public realm or from the department:** these data will be given the same level of security for access and storage as the personal data. Having a single secure environment for all data will streamline the process and ensure security. This adds some complexity to access but is the same approach UCL used on Phase 1.

Further details on the draft Data Management Plan are provided in section 2.3.1.

### 2.1.2 Sector-Specific Data Collection & Surveys

In this section we set out our approach to engagement, data collection and surveys for nondomestic building sectors.

### Sector-specific engagement

Phase 1 explored the potential for using sector specific data sets and engaging sector organisations. It was concluded that, in addition to being potential data holders, sector organisations were able to provide important insights into concerns and attitudes for the relevant sector as well as being able to support survey recruitment.

[REDACTED]

### Sector-specific data sets

In a number of sectors, particularly in the public sector, datasets exist which can provide additional detail for large numbers of buildings. These datasets will be matched into the National Buildings Database to allow direct comparisons with data held for successfully matched properties. The broader UCL team have considerable experience of working with a number of sector-specific datasets and the project team has been supplemented with specialist support from colleagues with relevant expertise to facilitate integration of these datasets. Experience includes:

- [Estates Returns Information Collection](#) (ERIC) NHS
- DfE Property data survey programme (PDSP), Condition Data Collection (CDC) 1 and 2 and Edubase.
- [HESA](#): Higher Education Estates Management data
- MoD – data from the infrastructure policy team (with sensitive data redacted) would be highly desirable to complete this CaRB3 class with greater accuracy
- OGP [dNAR](#) / Insite (excluding high security assets) (Cabinet Office) – would allow the identification of government estate and other public buildings
- Datasets for Scotland: [GP Practices](#); [Hospitals](#); [Pharmacies](#); [Libraries](#); [Food Standards Scotland](#); [Recycling and Waste Facilities](#); plus several others, which cross-reference to the [Improvement Service Scotland](#).

We will actively seek additional datasets from sector stakeholders and consider the value of their inclusion. We are not anticipating the need to purchase any commercial datasets.

#### **Purpose of bespoke surveys as part of the project**

The pilot phase of this project successfully demonstrated the depth and breadth of available data on individual premises, which can be used to characterise the building stock and its energy consumption-related features. The strengths of this data driven approach and the difficulty in obtaining sufficiently large samples and response rates to achieve statistical significance in a general business survey to supplement available data, have led us to focus on the use surveys for quality assurance purposes in this current project rather than to populate the database. The surveys will extend geographic coverage of the NBD to include England, Wales and Scotland.

#### **Quality Assurance Surveys**

[REDACTED]

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[REDACTED]

Insight Surveys

[REDACTED]

Onsite surveys

[REDACTED]

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# [REDACTED]

### 2.1.3 Handover, Documentation, Training

Ensuring that the national buildings database can be easily understood and accessed by a, yet to be identified, set of users will be a critical measure of success for the project. A combination of the scale of the current project and the lessons learned from the pilot phase suggest that to achieve this, it will be necessary to integrate a structured handover programme from the earliest stages of the project. In contrast with Phase 1, which necessarily focussed on data discovery and the development and extension of the analysis approach, the current phase of the project builds on a concrete foundation of data and methods, meaning that outputs can be clearly defined and training needs understood from early in the project.

The handover process will be based on [Khan et al.'s EM3 software handover framework](#), which focusses on 5 stages: Development; System Testing; Acceptance Testing; Deployment; Maintenance.

In line with the EM3 framework, we will establish a dedicated transition team led by members of the project team with the close involvement of DESNZ staff throughout:

- 
- EM Project Manager (Rayan Azhari) - responsible for managing and planning the handover process, including:
  - Developer/Transitioner (Dominic Humphrey) - responsible for transferring the system and knowledge during handover.
  - Maintainer/Transitionee (DESNZ) - responsible for taking over the system and for providing maintenance services.
  - Software Configuration Manager - (Steve Evans and Dominic Humphrey) responsible for managing version control and configurations during the whole handover process. The team will use private [GitHub](#) repositories for versioning any code and a GitHub wiki for documentation. Using this 'restricted access' GitHub space would mean that all the steps, from the initial generation of the database, through to the modelling and analysis would be recorded as both code and within documentation (by this we mean the GitHub wiki). During the lifespan of the project, members of the Department could monitor progress on GitHub and even raise 'issues' or comment on code development or the wording of the wiki. Upon completion, the repository (code base) would be transferred to the department using GitLab to ensure usability within the secure CBAS environment.
  - Training Group (led by Pamela Fennell) - responsible for preparing training material and for providing training according to the needs of different stakeholders.
  - Documentation Manager (Rob Liddiard) - responsible for assuring that the environment required for managing system and process documentation is in place.
  - Deployment Team (led by Dominic Humphrey) - responsible for deploying the system on the customer site.
  - QA Team (led by Daniel Godoy Shimizu) - responsible for controlling the maintainability of the system to be transitioned.

The key transition activities and responsibilities in each phase are set out below:

### **Development Phase (months 1 to 13)**

- Establishment of handover teams and transition plan (Project Manager) - We will begin by using the pilot phase database as a testing tool to explore use cases and potential users during the first 12 weeks of the project. This analysis will be used to create a detailed handover strategy, identifying deliverables, timings and lead responsibility for each task. The transition strategy will be a living document which is reviewed and updated as the project progresses.
- Training needs assessment (Training team) – having identified users and use cases, we will hold 2-3 workshops with the identified users to explore in more detail how they will interact with the database and the documentation and training that they will require

- Review of maintenance environment requirements (Transitionee) - while it is anticipated that this will reflect the environment agreed for the pilot phase, this will be reviewed and likely future changes to the environment and their implications for the database will be explored
- Establishment of software control rules for version and configuration management (SCM manager), including establishing baselines.
- Establish deployment team and review deployment procedures (Deployment Team)
- Establish system documentation repository and documentation standards (Documentation Manager)
- Establish maintainability requirements and maintainability strategy (QA Team) During the development phase the transition team will meet fortnightly to review progress

### **System Testing Phase (months 14 to 16)**

- Review transition resource requirements for all parties and develop detailed transition schedule (Project Manager)
- Following transfer of refreshed test database, assess changes needed to the management arrangements (Transitionee)
- Prepare training materials and detailed training schedule (Training Team)
- Review maintainability strategy (QA Team)

During the system testing phase the transition team will continue to meet fortnightly

### **Acceptance Testing Phase (months 17 to 19)**

- Installation and testing of database including any necessary updates (Deployment Team)
- Identification and tracking of customisable configuration items (SCM)
- Delivery of training (Training Team)
- Finalisation of documentation (Documentation Manager)

During the acceptance testing phase the transition team will meet weekly

### **Deployment phase (months 20 to 21)**

The deployment phase commences with the handover of the database. Since it is likely that onboarding of users will lead to an influx of support requests, we have included resources for these tasks as set out below.

- Roll out access to users (Transitionee)
- Respond to ad hoc training needs (Deployment Team) - 2 days per week of Deployment team lead for 6 weeks.
- Review and update documentation (Documentation Team) - 1 full revision of documentation 6 weeks post handover
- Monitoring of system performance (QA team) - 0.5 days per week for 6 weeks. The transition team will continue to meet monthly during the deployment phase

During the maintenance phase the system will be the responsibility of the transitionee, the transition programme has been structured to try to avoid the need for ongoing support. However, we would be willing to provide additional support if this were to be needed as a result of post-deployment changes.

## **2.1.4 Working with DESNZ**

### **Working with the DESNZ project team**

Our experience of delivering the pilot phase reinforced the importance of continuous monitoring, effective communication, and proactive management of risks and issues. We propose to implement the same project management framework for the current project. The key aspects of this are: (1) transparent monitoring of risks and issues using shared logs at both project level and bespoke trackers for key work packages such as remote and on-site surveys, (2) weekly progress reviews between the UCL project management team and the DESNZ project team, (3) regular strategic reviews with the project steering group. A dedicated transition team will be set up as described in section 2.1.3 which will meet fortnightly during the development phase, increasing to weekly during the systems testing and acceptance testing phases.

### **Working with analysts and other teams in DESNZ**

The handover and transition process detailed in section 2.1.3 describes how we will work with the broader group of stakeholders. During the first 12 weeks of the project, we will use the pilot phase database to explore the users and use cases. As part of this we will agree a set of templates/formats for results data with DESNZ modellers and statisticians such that the data can be used to update DESNZ internal models. These will be used to create a detailed output specification. Following this we will also carry out a training needs assessment which will drive a detailed training plan. Training will be delivered during the acceptance testing phase. We plan to build the database sector by sector as set out in figure 2.1.4 below. As each phase of the database is completed we will hold a workshop with the wider stakeholder group to introduce the new data and explore any changes and data engineering support that might be needed as the project progresses. The output specification, transition plan and training plan will be reviewed and updated after each of these workshops.

### **Working with DESNZ to secure data access from other departments**

Experience on the pilot phase demonstrated the importance of working closely with DESNZ to secure access to data held by other departments. We will support the DESNZ team through the provision of briefing materials and attendance at meetings. While we are happy to engage directly with data holders, since final data sharing agreements will be between DESNZ and the relevant data holders, a co-ordinated approach will be essential. Experience of the time taken to put in place Data Sharing Agreements requires this activity to be recognised as a critical risk factor which will need to be actively managed to avoid delays that could significantly disrupt the proposed programme of work.

### **DESNZ support for survey recruitment**

Visible endorsement of the project from DESNZ and other governmental stakeholders will be critical for

recruiting survey participants. We propose to establish a micro-website with DESNZ endorsement to explain the objectives of the project, set out the broad method to be employed, answer important questions on ethics, confidentiality and the benefits for participant and the sectors. The website will also be used to provide access to online surveys to support the remote and site surveys and provide updates on the project from time to time. Early provision of a project endorsement and approval of the micro-website in the start-up stage by DESNZ will be essential to provide an easily accessed central source of reassurance for stakeholders, survey respondents and on-site survey participants alike.

## 2.1.5 Methods for updating and sampling the database

### Updates

[REDACTED]

# [REDACTED]

## Sampling

For the reporting the team anticipates generating profiles of the stock through detailed data aggregation, as employed in Phase 1, for each CaRB3 class and CaRB3 activity. However, this will be subject to agreed levels of aggregation to prevent any outputs being potentially disclosive, which is in turn dependent upon the level of heterogeneity within the stock, which is known to be huge for some combinations of characteristics, such as wall and roof type. The team would work with DESNZ statisticians to develop an agreed method that is not considered disclosive and yet provides a sufficient level of detail to be useful. In addition, staff within DESNZ with access to CBAS will be able to generate their own samples using this code template. We would look to better understand what might be required from both DESNZ staff, and beyond, by holding a workshop during the development phase of the handover process (see 2.1.3) in order to tease out the detail and granularity of

the required aggregates. Based upon the outcome of these discussions with DESNZ staff and statisticians, the team would look to produce code that could generate accessible aggregates at different levels of geographic granularity (e.g. at local authority level) whilst automatically adhering to the rules on not publishing disclosive data. Thus, for example, a local authority with only 2 'Factory' buildings would have these data suppressed whilst a neighbouring local authority with 15 'Factory' buildings would generate aggregate statistics from these buildings.

To assist us in this process the team would look to explore methods used in an existing collaboration with the Octopus Centre for NetZero and their 'Faraday tool' and also with the University of Leeds and their microsimulation approach to large datasets with their 'Spencer' model. This approach could lead to more of a synthetic sample generation.

### **Synthetic sample generation**

One of the central issues that researchers and policy makers face when modelling the impact of policy options is access to spatially representative individual-level data. By preserving statistical properties of the underlying datasets, including the co-variance structure, synthetic samples provide highly granular data without the risk of disclosure since there is no one-to-one mapping between records. We propose to extend the methods developed by Ye et al. 2009 And Nägeli et al., 2022 used for generating synthetic samples for a domestic building stock to create a spatially representative sampling algorithm for the whole building stock, both domestic and non-domestic. Access to this data would enable researchers to examine bespoke spatial and sub-group effects of interventions and policy scenarios.

Using these methods the team would aim to produce aggregates and samples that would be available to both people internal to DESNZ and in a more accessible format, for those beyond the DESNZ team. Future work might look towards producing a portal to allow more bespoke queries to be run using this method.

### **2.2.2 Resource quantity**

[REDACTED]

# [REDACTED]

## 2.2.3 Resource quality

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### Team Summary

The team has considerable experience of the resources and skills required to develop the database that will form the core of the NBD and the surveys that will support its development. The delivery of the NBD in a period of 19 months will require considerable resources, many of which will need to be deployed in parallel. To achieve this capacity, UCL has partnered with Verco and Winning Moves to apply the skilled and experienced staff necessary to successfully complete this project. In doing so we build on a solid base of collaborative working in the context of recent projects for DESNZ in the non-domestic building sector (ie: Phase 1 of the NBD and Non-domestic buildings performance-based energy rating scheme research). For this project, we have also proposed a small advisory sub-contract with GeoPlace, who manage the Ordnance Survey Address Base and related products that are vital to the development and maintenance of the NBD [REDACTED]

[REDACTED]

In section 2.2.1 we have provided 2 pages CVs for the members of staff who will be engaged on the project. These CVs explain their skills, experience and expertise and they also explain their suitability for the specific role to which they have been assigned in the project. Here we summarise the skills, experience and expertise that the partners and key members of the team bring to the project with reference to the main components of the organogram set out in section 2.2.3.

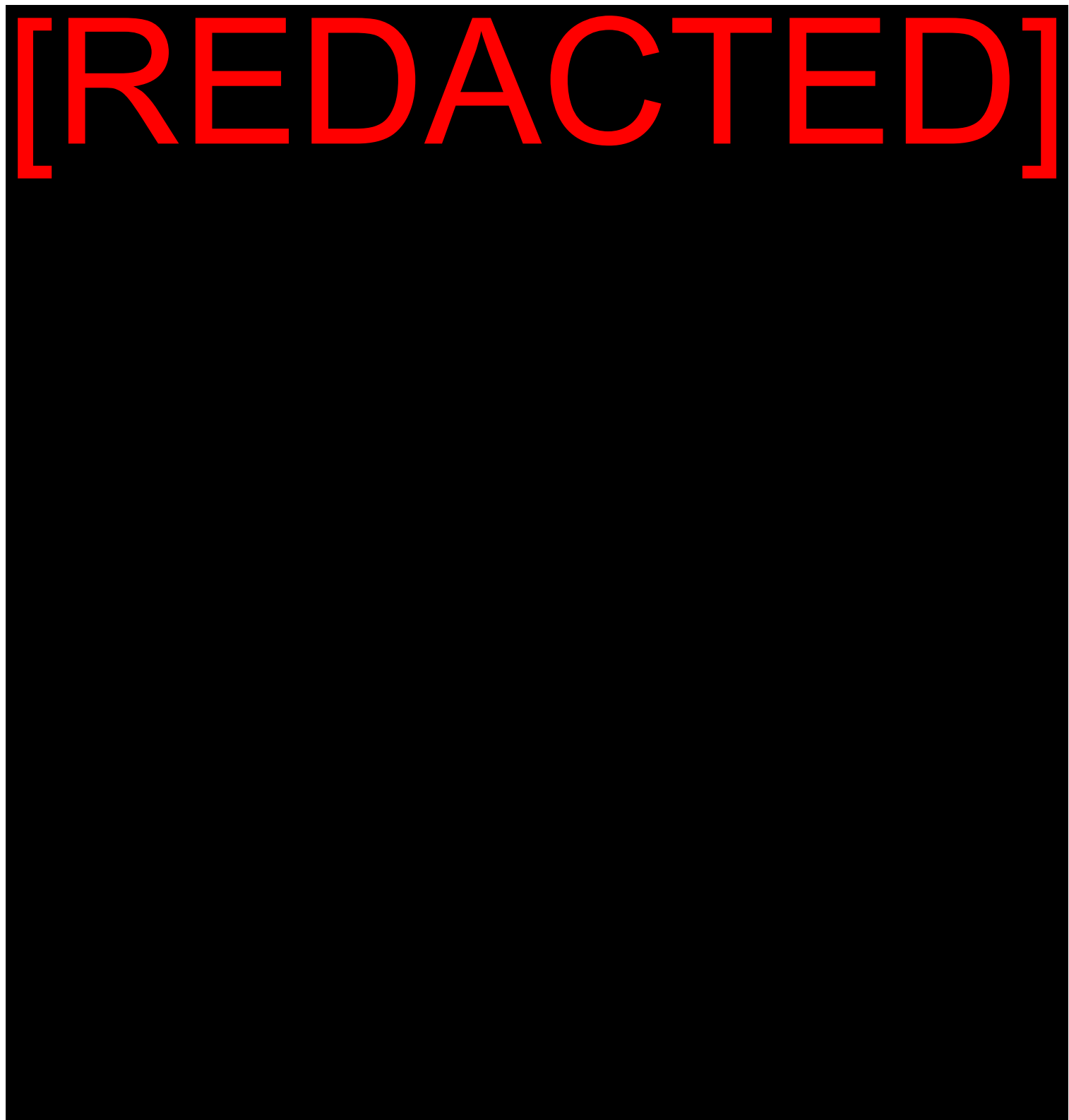
### Overall Project Management

[REDACTED]

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[REDACTED]

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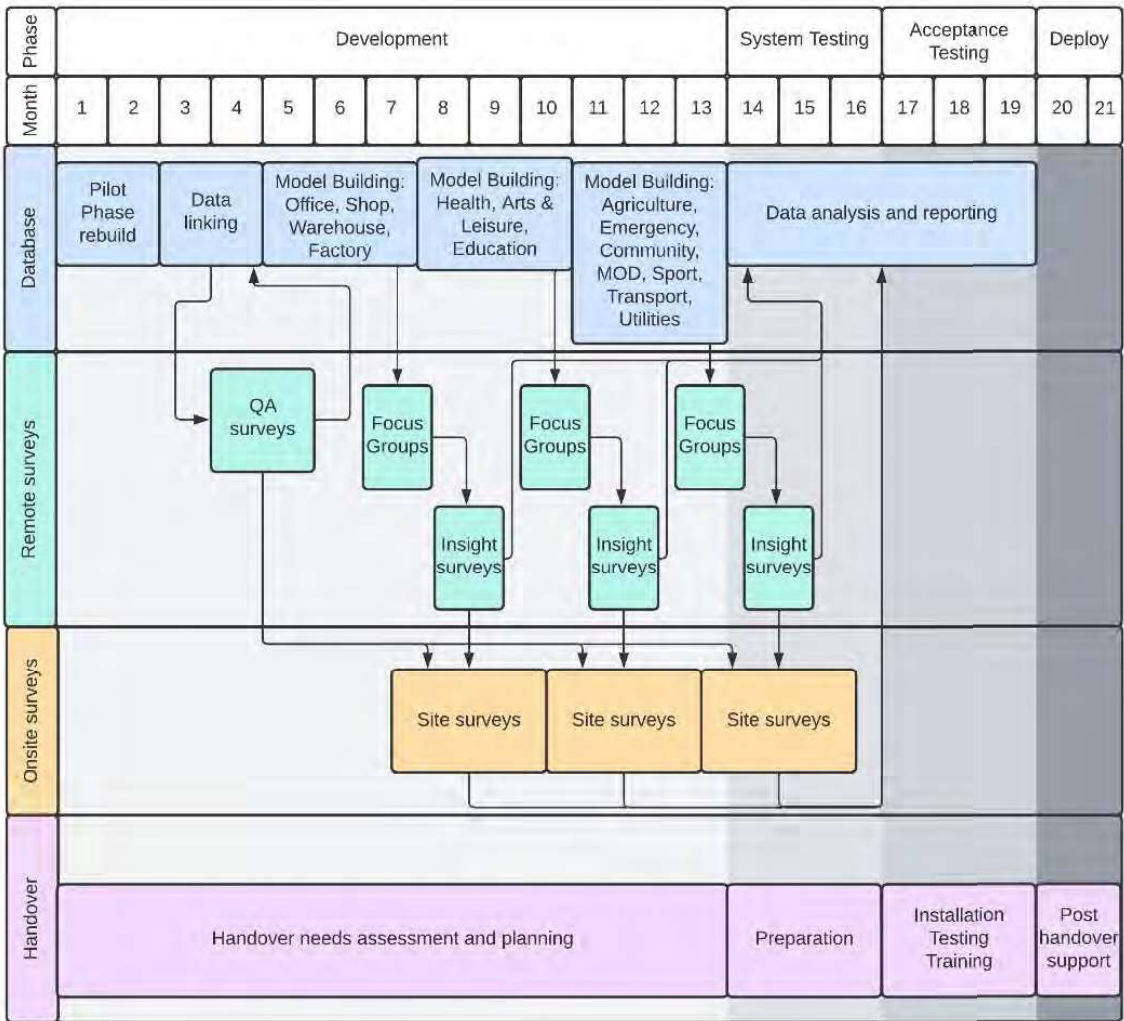
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2.3.1 Project Management and Risk

To ensure delivery by March 2025, the project has been structured into 3 phases: Development, System Testing and Acceptance Testing. Additional resource has been included for the Deployment phase following handover to support the rollout of the database among the user group. The diagram below shows the conceptual structure of the project and the key activities.



Time allocation for each work package can be found in section 2.2.2. A description of the project team’s skills and expertise can be found in section 2.2.3. The GANTT chart below breaks down the tasks in each WP and this is followed by a table that shows the allocation of members of staff to each work package and each task.

## Milestones

# [REDACTED]

Procedures will vary depending on the work package and reflect the technical requirements of each work package. A summary of arrangements for each element is set out below.

- Database - As the processing of each CaRB3 class is carried out, a search for verification data will also be initiated. For some sectors, we anticipate that there will be multiple sources of data to verify against whilst for other sectors there will be relatively few. The sector data sets identified so far are set out in 2.1.2 and others will be sought from sector stakeholders at an early stage. Key national datasets we will compare against include Verisk UK Buildings, both NEED and ND-NEED and the previous BEES work. Other published national datasets will also be explored.

- Remote surveys – All Winning Moves researchers go through a rigorous recruitment process and their performance is monitored and regulated in accordance with our quality procedures, relevant ethics guidance and the MRS Code of Conduct. Winning Moves' quality assurance procedures, are registered to ISO 20252 (an international quality standard specific to market and social research) and we are an MRS Company Partner. Adherence to these quality procedures will mean both Winning Moves and Verco senior team members will review a sample of remote survey telephone calls for quality control including the first calls for each surveyor, post training.
- Physical surveys – All site survey outputs will be quality assured in line with Verco's ISO9001 accreditation. Auditors for the off-gas grid probe audits will be accredited to one of the following standards: CIBSE Low Carbon Consultant, Registered Energy Institute Consultant, Chartered Engineer or Incorporated Engineer.
- Reports – All reports will be quality assured for technical accuracy and for compliance with DESNZ's style guide [REDACTED] will act as a single lead reviewer internally to coordinate and ensure consistency of tone and style across all outputs.

We will maintain a quality register that provides an audit trail of the quality process, documenting elements such as completion of training for telephone staff and internal quality assurance reviews.

Finally, we would like to propose five key performance indicators (KPIs) to provide an effective way for DESNZ to measure our performance. We suggest these are reviewed at each project review meeting enabling us to strengthen delivery as appropriate. We propose the following KPIs for discussion at the project kick-off meeting, each judged on a scale of 1 to 5, where 1=Unsatisfactory, 2=Weak, 3= Mostly meets the requirement, 4= Good, 5= Outstanding.

- (1) Progress to plan (% complete against plan)
- (2) Effectiveness of working relationship between delivery team and DESNZ
- (3) Quality of deliverables
- (4) Transfer of knowledge to DESNZ staff
- (5) Effectiveness of resolution of foreseen and unforeseen risks

(draft) Data Management Plan

[REDACTED]

# [REDACTED]

**Risk Management strategy**

The project team will implement a risk management strategy consistent with ISO9001. The strategy follows an identify, assess, plan, implement structure. The project manager will conduct regular systematic reviews of project risk and maintain a risk register. Risks will be assessed on impact, proximity, probability and priority. Review of the risk register will be included as part of each internal review meeting. For lower level risks, the project manager will instigate mitigation action and for high-level risk, action will be agreed with the project leads from each organisation. A preliminary risk review has been proved as an appendix to this submission and the top 3 risks we have identified are:

1. Delays in obtaining access to key datasets
2. Risk of bias from inability to append contact details to the full population for the purposes of primary research
3. Changes in dataset formats over time result in changes to database

**Management of ethical issues**

Research will be undertaken in line UCL's rigorous ethics processes for research and in compliance with the government social research code.



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[REDACTED]

[REDACTED]

### 2.5.1 Social Value

Our social value delivery plan is focussed on three key activities:

**Development of an exemplar research environmental impact strategy** A workshop at project commencement will examine the environmental impact of the proposed methodologies and explore how this can be mitigated, for example:

- Assess code for energy efficiency
- Exploring greener server architectures with providers
- Developing methods to avoid duplication of data storage
- Prioritising use of public transport
- Balancing online and face to face meetings to reduce need for travel.

Following this workshop the team will agree an environmental impact strategy. Specific success metrics will be agreed for each action in the strategy. A Social Value lead will be appointed from the team and progress will be reviewed on a quarterly basis and shared with DESNZ.

A dissemination presentation will be developed for the environmental impact strategy which will be shared with staff in UCL and subcontractors. Following project completion a final review will be prepared,

documenting progress and lessons learned. Wider dissemination of the review will be discussed with DESNZ to seek approval for an open access publication to benefit other researchers and blog posts for a wider audience.

Audience – staff within UCL, Verco, Winning Moves, DESNZ and wider research community.

### **Dissemination of Environmental Impact Case Studies**

As actions in the research environmental impact strategy are completed, case studies will be developed explaining how each action was developed and delivered and the lessons learned. These case studies will be shared with staff throughout UCL and our subcontract organisations. In agreement with DESNZ, these case studies will also be included on the project microsite detailed in section 2.1.4.

Audience – staff within UCL, Verco, Winning Moves, DESNZ and wider research community.

### **Signposting best practice to survey participants**

At the start of each wave of database development we will undertake a literature review to draw together a sector-specific summary of best practice in energy consumption. These summaries will be explored during the focus groups which are planned with sector organisations (see section 2.1.2). Following this all participants in remote surveys will receive sign-posting to the relevant information and resources to support decarbonisation of their buildings. We will also encourage the sector organisations we engage with to disseminate the information to their membership as a whole. Sign-posting information will be held on a dedicated page of the microsite for each sector and we will monitor levels of traffic and engagement with the resources.

In addition, participants in on-site surveys will receive high-level individual recommendations in the form of simple energy audit reports.

We will report to DESNZ quarterly on levels of engagement.

Audience – survey participants, sector bodies and through them to the sector.

Resources required to deliver this plan, beyond those available as an integral part of the project, will be drawn from time allocated to UCL staff for citizenship and engagement, which form part of the university's commitment to society. Resource will similarly be committed by our partners. The value of resource applied will be recorded by UCL and reported quarterly.

## **Schedule 5 (Commercially Sensitive Information)**

1. WHAT IS THE COMMERCIALLY SENSITIVE INFORMATION?

- 1.1 In this Schedule the Parties have sought to identify the Supplier's Confidential Information that is genuinely commercially sensitive and the disclosure of which would be the subject of an exemption under the FOIA and the EIRs.
- 1.2 Where possible, the Parties have sought to identify when any relevant Information will cease to fall into the category of Information to which this Schedule applies in the table below and in the Award Form (which shall be deemed incorporated into the table below).
- 1.3 Without prejudice to the Buyer's obligation to disclose Information in accordance with FOIA or Clause 20 (When you can share information), the Buyer will, in its sole discretion, acting reasonably, seek to apply the relevant exemption set out in the FOIA to the following Information:

No.	Date	Item(s)	Duration of Confidentiality
1	Contract Commencement Date	[REDACTED]	10 years from the end of the Agreement

## Schedule 6 (Transparency Reports)

- 1.1 The Supplier recognises that the Buyer is subject to PPN 01/17 (Updates to transparency principles v1.1 (<https://www.gov.uk/government/publications/procurement-policy-note-0117-update-to-transparency-principles>)). The Supplier shall comply with the provisions of this Schedule in order to assist the Buyer with its compliance with its obligations under that PPN.
- 1.2 Without prejudice to the Supplier's reporting requirements set out in the Contract, within three (3) Months of the Start Date the Supplier shall submit to the Buyer for Approval (such Approval not to be unreasonably withheld or delayed) draft Transparency Reports consistent with the content requirements and format set out in the Annex of this Schedule.
- 1.3 If the Buyer rejects any proposed Transparency Report submitted by the Supplier, the Supplier shall submit a revised version of the relevant report for further Approval within five (5) days of receipt of any notice of rejection, taking account of any recommendations for revision and improvement to the report provided by the Buyer. If the Parties fail to agree on a draft Transparency Report the Buyer shall determine what should be included. Any other disagreement in connection with Transparency Reports shall be treated as a Dispute.
- 1.4 The Supplier shall provide accurate and up-to-date versions of each Transparency Report to the Buyer at the frequency referred to in the Annex of this Schedule.

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## Annex A: List of Transparency Reports

Title	Content	Format	Frequency
Performance	<p>Transparency KPIs:</p> <ul style="list-style-type: none"> <li>KPI 1: Work commissioned under the contract is delivered to timescales agreed by BEIS;</li> <li>KPI 2: Work commissioned under the contract is delivered to quality standards acceptable to the BEIS Programme Manager;</li> <li>KPI 3: Work commissioned under the contract is delivered to the cost agreed in advance with BEIS;</li> </ul> <p>KPI 4: Social Value Commitments - To be agreed with the Supplier within twenty (20) Work Days of Start Date and determined based on the bidders response</p>	.gov.uk	Quarterly
Charges	Total contract price and any price variation	.gov.uk	Quarterly
Key Subcontractors	Names of key subcontractors	.gov.uk	Quarterly
Technical – As appropriate	[ ]	.gov.uk	Quarterly
Performance management – As appropriate	[ ]	.gov.uk	Quarterly

# Schedule 7 (Staff Transfer)

## 1. DEFINITIONS

1.1 In this Schedule, the following words have the following meanings and they shall supplement Schedule 1 (Definitions):

as defined in Part D;

**“Admission Agreement”**

**"Employee Liability"**

all claims, actions, proceedings, orders, demands, complaints, investigations (save for any claims for personal injury which are covered by insurance) and any award, compensation, damages, tribunal awards, fine, loss, order, penalty, disbursement, payment made by way of settlement and costs, expenses and legal costs reasonably incurred in connection with a claim or investigation including in relation to the following:

- (a) redundancy payments including contractual or enhanced redundancy costs, termination costs and notice payments;

- 
- (b) unfair, wrongful or constructive dismissal compensation;
- 
- (c) compensation for discrimination on grounds of sex, race, disability, age, religion or belief, gender reassignment, marriage or civil partnership, pregnancy and maternity or sexual orientation or claims for equal pay;
  - (d) compensation for less favourable treatment of part-time workers or fixed term employees;
  - (e) outstanding debts and unlawful deduction of wages including any PAYE and National Insurance Contributions in relation to payments made by the Buyer or the Replacement Supplier to a Transferring Supplier Employee which would have been payable by the Supplier or the Subcontractor if such payment should have been made prior to the Service Transfer Date and also including any payments arising in respect of pensions;



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(f) claims whether in tort, contract or statute or otherwise;

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any investigation by the Equality and Human Rights Commission or other enforcement, regulatory or supervisory body and of implementing any requirements which may arise from such investigation;

**"Fair Deal Employees"**

as defined in Part D;

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**"Former Supplier"**

a supplier supplying the Services to the Buyer before the Relevant Transfer Date that are the same as or substantially similar to the Services (or any part of the Services) and shall include any subcontractor of such supplier (or any subcontractor of any such subcontractor);

**"New Fair"**

the revised Fair Deal position set out in the HM Treasury guidance: *"Fair Deal for staff pensions: staff transfer from central government"* issued in October 2013 including:

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**Deal"**

- (a) any amendments to that document immediately prior to the Relevant Transfer Date;
- (b) any similar pension protection in accordance with the Annexes D1-D3 inclusive to Part D of this Schedule as notified to the Supplier by the Buyer;

**"Notified Subcontractor"**

a Subcontractor identified in the Annex to this Schedule to whom Transferring Buyer Employees and/or Transferring Former Supplier Employees will transfer on a Relevant Transfer Date;

**"Old Fair Deal"**

HM Treasury Guidance *"Staff Transfers from Central Government: A Fair Deal for Staff Pensions"* issued in June 1999 including the supplementary guidance *"Fair Deal for Staff pensions: Procurement of Bulk Transfer Agreements and Related Issues"* issued in June 2004;

**"Partial**

the partial termination of the relevant Contract to the extent that it relates to the provision of any part of the Services as further

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**Termination"**

provided for in Clause 14.4 (When the Buyer can end this contract) or 14.6 (When the Supplier can end the contract);

**"Replacement Subcontractor"**

a subcontractor of the Replacement Supplier to whom Transferring Supplier Employees will transfer on a Service Transfer Date (or any subcontractor of any such subcontractor);

**"Relevant Transfer"**

a transfer of employment to which the Employment Regulations applies;

**"Relevant Transfer Date"**

in relation to a Relevant Transfer, the date upon which the Relevant Transfer takes place, and for the purposes of Part D and its Annexes, where the Supplier or a Subcontractor was the Former Supplier and there is no Relevant Transfer of the Fair Deal Employees because they remain continuously employed by the Supplier (or Subcontractor), references to the Relevant Transfer Date shall become references to the Start Date;

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**“Service  
Transfer”**

any transfer of the Services (or any part of the Services), for whatever reason, from the Supplier or any Subcontractor to a Replacement Supplier or a Replacement Subcontractor;

**“Service Transfer  
Date”**

the date of a Service Transfer or, if more than one, the date of the relevant Service Transfer as the context requires;

**"Staffing  
Information"**

in relation to all persons identified on the Supplier's Provisional Supplier Staff List or Supplier's Final Supplier Staff List, as the case may be, , all information required in Annex E2 (*Table of Staffing Information*) in the format specified and with the identities of Data Subjects anonymised where possible. The Buyer may acting reasonably make changes to the format or information requested in Annex E2 from time to time.

**“Statutory Schemes”**

means the CSPA, NHSPA or LGPS as defined in the Annexes to Part D of this Schedule;

**"Supplier's Final  
Supplier  
Staff List"**

a list provided by the Supplier of all Supplier Staff whose will transfer under the Employment Regulations on the Service Transfer Date;

**"Supplier's  
Provisional  
Supplier  
Staff List"**

a list prepared and updated by the Supplier of all Supplier Staff who are at the date of the list wholly or mainly engaged in or assigned to the provision of the Services or any relevant part of the Services which it is envisaged as at the date of such list will no longer be provided by the Supplier;

**"Transferring  
Buyer  
Employees"**

those employees of the Buyer to whom the Employment Regulations will apply on the Relevant Transfer Date; and

**"Transferring  
Former  
Supplier  
Employees"**

in relation to a Former Supplier, those employees of the Former Supplier to whom the Employment Regulations will apply on the Relevant Transfer Date.

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**“Transferring  
Supplier  
Employees”**

those employees of the Supplier and/or the Supplier’s Subcontractors to whom the Employment Regulations will apply on the Relevant Transfer Date.

## **2. INTERPRETATION**

Where a provision in this Schedule imposes any obligation on the Supplier including to comply with a requirement or provide an indemnity, undertaking or warranty, the Supplier shall procure that each of its Subcontractors shall comply with such obligation and provide such indemnity, undertaking or warranty to the Buyer, Former Supplier, Replacement Supplier or Replacement Subcontractor, as the case may be and where the Subcontractor fails to satisfy any claims under such indemnities the Supplier will be liable for satisfying any such claim as if it had provided the indemnity itself.

## **3. WHICH PARTS OF THIS SCHEDULE APPLY**

Only the following parts of this Schedule shall apply to this Contract:

- 3.1 **Part C (No Staff Transfer On Start Date)**
- 3.2 **Part D (Pensions)**
- 3.3 Part E (Staff Transfer on Exit)
  - 3.3.1 Annex E1 (List of Notified Subcontractors)
  - 3.3.2 Annex E2 (Staffing Information)

## Part C: No Staff Transfer on the Start Date

### 1. WHAT HAPPENS IF THERE IS A STAFF TRANSFER

- 1.1 The Buyer and the Supplier agree that the commencement of the provision of the Services or of any part of the Services will not be a Relevant Transfer in relation to any employees of the Buyer and/or any Former Supplier.
- 1.2 Subject to Paragraphs 1.3, 1.4 and 1.5, if any employee of the Buyer and/or a Former Supplier claims, or it is determined in relation to any employee of the Buyer and/or a Former Supplier, that his/her contract of employment has been transferred from the Buyer and/or the Former Supplier to the Supplier and/or any Subcontractor pursuant to the Employment Regulations then:
  - 1.2.1 the Supplier shall, and shall procure that the relevant Subcontractor shall, within 5 Working Days of becoming aware of that fact, notify the Buyer in writing and, where required by the Buyer, give notice to the Former Supplier; and;
  - 1.2.2 the Buyer and/or the Former Supplier may offer (or may procure that a third party may offer) employment to such person, or take such other steps as it considered appropriate to resolve the matter, within 15 Working Days of receipt of notice from the Supplier or the Subcontractor, provided always that such steps are in compliance with applicable Law;
  - 1.2.3 if such offer of employment is accepted, the Supplier shall, or shall procure that the Subcontractor shall, immediately release the person from its employment;
  - 1.2.4 if after the period referred to in Paragraph 1.2.2 no such offer has been made, or such offer has been made but not accepted, the Supplier may within 5 Working Days give notice to terminate the employment of such person;

and subject to the Supplier's compliance with Paragraphs 1.2.1 to 1.2.4 and in accordance with all applicable employment procedures set out in applicable Law and subject also to Paragraph 1.5:

- a) the Buyer will indemnify the Supplier and/or the relevant Subcontractor against all Employee Liabilities arising out of the termination of the employment of any of the Buyer's employees referred to in Paragraph 1.2 provided that the Supplier takes, or shall procure that the Notified Subcontractor takes, all reasonable steps to minimise any such Employee Liabilities; and
  - b) the Buyer will procure that the Former Supplier indemnifies the Supplier and/or any Subcontractor against all Employee Liabilities arising out of termination of the employment of the employees of the Former Supplier referred to in Paragraph 1.2 provided that the Supplier takes, or shall procure that the relevant Subcontractor takes, all reasonable steps to minimise any such Employee Liabilities.
- 1.3 If any such person as is described in Paragraph 1.2 is neither re employed by the Buyer and/or the Former Supplier as appropriate nor dismissed by the Supplier and/or any Subcontractor within the 15 Working Day period referred to in Paragraph 1.2 such person shall be treated as having transferred to the Supplier and/or

the Subcontractor (as appropriate) and the Supplier shall, or shall procure that the Subcontractor shall, comply with such obligations as may be imposed upon it under Law.

- 1.4 Where any person remains employed by the Supplier and/or any Subcontractor pursuant to Paragraph 1.3, all Employee Liabilities in relation to such employee shall remain with the Supplier and/or the Subcontractor and the Supplier shall indemnify the Buyer and any Former Supplier, and shall procure that the Subcontractor shall indemnify the Buyer and any Former Supplier, against any Employee Liabilities that either of them may incur in respect of any such employees of the Supplier and/or employees of the Subcontractor.
- 1.5 The indemnities in Paragraph 1.2 shall not apply to any claim:
  - 1.5.1 for discrimination, including on the grounds of sex, race, disability, age, gender reassignment, marriage or civil partnership, pregnancy and maternity or sexual orientation, religion or belief;
  - 1.5.2 or equal pay or compensation for less favourable treatment of part-time workers or fixed-term employees,
 in relation to any alleged act or omission of the Supplier and/or Subcontractor; or
  - 1.5.3 any claim that the termination of employment was unfair because the Supplier and/or any Subcontractor neglected to follow a fair dismissal procedure; and
- 1.6 The indemnities in Paragraph 1.2 shall not apply to any termination of employment occurring later than 3 Months from the Start Date.
- 1.7 If the Supplier and/or the Subcontractor does not comply with Paragraph 1.2, all Employee Liabilities in relation to such employees shall remain with the Supplier and/or the Subcontractor and the Supplier shall (i) comply with the provisions of Part D: Pensions of this Schedule, and (ii) indemnify the Buyer and any Former Supplier against any Employee Liabilities that either of them may incur in respect of any such employees of the Supplier and/or employees of the Subcontractor.

## **2. LIMITS ON THE FORMER SUPPLIER'S OBLIGATIONS**

Where in this Part C the Buyer accepts an obligation to procure that a Former Supplier does or does not do something, such obligation shall be limited so that it extends only to the extent that the Buyer's contract with the Former Supplier contains a contractual right in that regard which the Buyer may enforce, or otherwise so that it requires only that the Buyer must use reasonable endeavours to procure that the Former Supplier does or does not act accordingly.



## Part D: Pensions

### 1. DEFINITIONS

In this Part D and Part E, the following words have the following meanings and they shall supplement Schedule 1 (Definitions), and shall be deemed to include the definitions set out in the Annexes:

<b>'Actuary'</b>	a Fellow of the Institute and Faculty of Actuaries;
<b>'Admission Agreement'</b>	means either or both of the CSPA Admission Agreement (as defined in Annex D1: CSPA) or the LGPS Admission Agreement) as defined in Annex D3: LGPS), as the context requires;
<b>'Best Value Direction'</b>	the Best Value Authorities Staff Transfers (Pensions) Direction 2007 or the Welsh Authorities Staff Transfers (Pensions) Direction 2012 (as appropriate);
<b>'Broadly Comparable'</b>	<p>(a) in respect of a pension scheme, a status satisfying the condition that there are no identifiable employees who will suffer material detriment overall in terms of future accrual of pension benefits as assessed in accordance with Annex A of New Fair Deal and demonstrated by the issue by the Government Actuary's Department of a broad comparability certificate; and</p> <p>(b) in respect of benefits provided for or in respect of a member under a pension scheme, benefits that are consistent with that pension scheme's certificate of broad comparability issued by the Government Actuary's Department,</p> <p>and <b>"Broad Comparability"</b> shall be construed accordingly;</p>
<b>'CSPA'</b>	the schemes as defined in Annex D1 to this Part D;
<b>'Direction Letter/Determination'</b>	has the meaning in Annex D2 to this Part D;

<b>'Fair Deal Eligible Employees'</b>	means each of the CSPA Eligible Employees (as defined in Annex D1 to this Part D), the NHSPA Eligible Employees (as defined in Annex D2 to this Part D) and/or the LGPS Eligible Employees (as defined in Annex D3 to this Part D) (as applicable) (and shall include any such employee who has been admitted to and/or remains eligible to join a Broadly Comparable pension scheme at the relevant time in accordance with Paragraph 10 or 11 of this Part D);
<b>'Fair Deal Employees'</b>	those: <ul style="list-style-type: none"> <li>(a) Transferring Buyer Employees; and/or</li> <li>(b) Transferring Former Supplier Employees; and/or</li> <li>(c) employees who are not Transferring Buyer Employees or Transferring Former Supplier Employees but to whom the Employment Regulations apply on the Relevant Transfer Date to transfer their employment to the Supplier or a Subcontractor, and whose employment is not terminated in accordance with the provisions of Paragraphs 2.3.4 of Parts A or B or Paragraph 1.2.4 of Part C;</li> <li>(d) where the Former Supplier becomes the Supplier those employees;</li> </ul> who at the Start Date or Relevant Transfer Date (as appropriate) are or become entitled to New Fair Deal protection in respect of any of the Statutory Schemes as notified by the Buyer;
<b>"Fair Deal Schemes"</b>	means the relevant Statutory Scheme or a Broadly Comparable pension scheme;
<b>"Fund Actuary"</b>	means Fund Actuary as defined in Annex D3 to this Part D;
<b>"LGPS"</b>	the schemes as defined in Annex D3 to this Part D;

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<b>"NHSPS"</b>	the schemes as defined in Annex D2 to this Part D;
<b>"New Fair Deal"</b>	<p>the revised Fair Deal position set out in the HM Treasury guidance: "<i>Fair Deal for Staff Pensions: Staff Transfer from Central Government</i>" issued in October 2013 including:</p> <ul style="list-style-type: none"> <li>(a) any amendments to that document immediately prior to the Relevant Transfer Date; and</li> <li>(b) any similar pension protection in accordance with the subsequent Annex D1-D3 inclusive as notified to the Supplier by the Buyer; and</li> </ul>

## 2. SUPPLIER OBLIGATIONS TO PARTICIPATE IN THE PENSION SCHEMES

- 2.1 In respect of all or any Fair Deal Employees each of Annex D1: CSPA, Annex D2: NHSPS and/or Annex D3: LGPS shall apply, as appropriate.
- 2.2 The Supplier undertakes to do all such things and execute any documents (including any relevant Admission Agreement and/or Direction Letter/Determination, if necessary) as may be required to enable the Supplier to participate in the appropriate Statutory Scheme in respect of the Fair Deal Employees and shall bear its own costs in such regard.
- 2.3 The Supplier undertakes:
  - 2.3.1 to pay to the Statutory Schemes all such amounts as are due under the relevant Admission Agreement and/or Direction Letter/Determination or otherwise and shall deduct and pay to the Statutory Schemes such employee contributions as are required; and
  - 2.3.2 subject to Paragraph 5 of Annex D3: LGPS to be fully responsible for all other costs, contributions, payments and other amounts relating to its participation in the Statutory Schemes, including for the avoidance of doubt any exit payments and the costs of providing any bond, indemnity or guarantee required in relation to such participation.
- 2.4 Where the Supplier is the Former Supplier (or a Subcontractor is a subcontractor of the Former Supplier) and there is no Relevant Transfer of the Fair Deal Employees because they remain continuously employed by the Supplier (or Subcontractor) at the Start Date, this Part D and its Annexes shall be modified accordingly so that the Supplier (or Subcontractor) shall comply with its requirements from the Start Date or, where it previously provided a Broadly Comparable pension scheme, from the date it is able to close accrual of its Broadly Comparable pension scheme (following appropriate consultation and contractual changes as appropriate) if later. The Supplier (or Subcontractor) shall make arrangements for a bulk transfer from its Broadly Comparable pension scheme to the relevant Statutory Scheme in accordance with the requirements of the previous contract with the Buyer.

### 3. SUPPLIER OBLIGATION TO PROVIDE INFORMATION

#### 3.1 The Supplier undertakes to the Buyer:

- 3.1.1 to provide all information which the Buyer may reasonably request concerning matters referred to in this Part D as expeditiously as possible; and
- 3.1.2 not to issue any announcements to any Fair Deal Employee prior to the Relevant Transfer Date concerning the matters stated in this Part D without the consent in writing of the Buyer (such consent not to be unreasonably withheld or delayed); and
- 3.1.3 retain such records as would be necessary to manage the pension aspects in relation to any current or former New Deal Eligible Employees arising on expiry or termination of this Contract.

### 4. INDEMNITIES THE SUPPLIER MUST GIVE

#### 4.1 The Supplier undertakes to the Buyer to indemnify and keep indemnified the Buyer and/or any Replacement Supplier and/or any Replacement Subcontractor on demand from and against all and any Losses whatsoever suffered or incurred by it or them which:

- 4.1.1 arise out of or in connection with any liability towards all and any Fair Deal Employees in respect of service on or after the Relevant Transfer Date which arises from any breach by the Supplier of this Part D, and/or the CSPA Admission Agreement and/or the Direction Letter/Determination and/or the LGPS Admission Agreement
- 4.1.2 relate to the payment of benefits under and/or participation in a pension scheme (as defined in section 150(1) Finance Act 2004) provided by the Supplier or a Subcontractor on and after the Relevant Transfer Date until the date of termination or expiry of this Contract, including the Statutory Schemes or any Broadly Comparable pension scheme provided in accordance with Paragraphs 10 or 11 of this Part D;
- 4.1.3 relate to claims by Fair Deal Employees of the Supplier and/or of any Subcontractor or by any trade unions, elected employee representatives or staff associations in respect of all or any such Fair Deal Employees which Losses:
  - a) relate to any rights to benefits under a pension scheme (as defined in section 150(1) Finance Act 2004) in respect of periods of employment on and after the Relevant Transfer Date until the date of termination or expiry of this Contract;
  - b) arise out of the failure of the Supplier and/or any relevant Subcontractor to comply with the provisions of this Part D before the date of termination or expiry of this Contract; and/or
- 4.1.4 arise out of or in connection with the Supplier (or its Subcontractor) allowing anyone who is not an NHSPS Fair Deal Employee to join or claim membership of the NHSPS at any time during the Term

#### 4.2 The indemnities in this Part D and its Annexes:

- 4.2.1 shall survive termination of this Contract; and
- 4.2.2 shall not be affected by the caps on liability contained in Clause 15 (How much you can be held responsible for).

### 5. WHAT HAPPENS IF THERE IS A DISPUTE

- 5.1 The Dispute Resolution Procedure will not apply to this Part D and any dispute (i) between the Buyer and the Supplier or (ii) between their respective actuaries and/or the Fund Actuary about any of the actuarial matters referred to in this Part D and its Annexes shall in the absence of agreement between the Buyer and the Supplier be referred to an independent Actuary:
  - 5.1.1 who will act as an expert and not as an arbitrator;
  - 5.1.2 whose decision will be final and binding on the Buyer and the Supplier; and
  - 5.1.3 whose expenses shall be borne equally by the Buyer and the Supplier unless the independent Actuary shall otherwise direct.
- 5.2 The independent Actuary shall be agreed by the Parties or, failing such agreement the independent Actuary shall be appointed by the President for the time being of the Institute and Faculty of Actuaries on the application by the Parties.

### 6. OTHER PEOPLE'S RIGHTS

- 6.1 The Parties agree Clause 23 (Other people's rights in this contract) does not apply and that the CRTPA applies to this Part D to the extent necessary to ensure that any Fair Deal Employee will have the right to enforce any obligation owed to him or her or it by the Supplier under this Part D, in his or her or its own right under section 1(1) of the CRTPA.
- 6.2 Further, the Supplier must ensure that the CRTPA will apply to any Sub-Contract to the extent necessary to ensure that any Fair Deal Employee will have the right to enforce any obligation owed to them by the Subcontractor in his or her or its own right under section 1(1) of the CRTPA.

### 7. WHAT HAPPENS IF THERE IS A BREACH OF THIS PART D

- 7.1 The Supplier agrees to notify the Buyer should it breach any obligations it has under this Part D and agrees that the Buyer shall be entitled to terminate its Contract for material Default in the event that the Supplier:
  - 7.1.1 commits an irremediable breach of any provision or obligation it has under this Part D; or
  - 7.1.2 commits a breach of any provision or obligation it has under this Part D which, where capable of remedy, it fails to remedy within a reasonable time and in any event within 28 days of the date of a notice from the Buyer giving particulars of the breach and requiring the Supplier to remedy it.

## 8. TRANSFERRING NEW FAIR DEAL EMPLOYEES

- 8.1 Save on expiry or termination of this Contract, if the employment of any Fair Deal Employee transfers to another employer (by way of a transfer under the Employment Regulations or other form of compulsory transfer of employment), the Supplier shall and shall procure that any relevant Subcontractor shall:
- 8.1.1 notify the Buyer as far as reasonably practicable in advance of the transfer to allow the Buyer to make the necessary arrangement for participation with the relevant Statutory Scheme(s);
  - 8.1.2 consult with about, and inform those Fair Deal Employees of, the pension provisions relating to that transfer; and
  - 8.1.3 procure that the employer to which the Fair Deal Employees are transferred (the **"New Employer"**) complies with the provisions of this Part D and its Annexes provided that references to the "Supplier" will become references to the New Employer, references to "Relevant Transfer Date" will become references to the date of the transfer to the New Employer and references to "Fair Deal Employees" will become references to the Fair Deal Employees so transferred to the New Employer.

## 9. WHAT HAPPENS TO PENSIONS IF THIS CONTRACT ENDS

- 9.1. The provisions of Part E: Staff Transfer On Exit (Mandatory) apply in relation to pension issues on expiry or termination of this Contract.
- 9.2. The Supplier shall (and shall procure that any of its Subcontractors shall) prior to the termination of this Contract provide all such co-operation and assistance (including co-operation and assistance from the Broadly Comparable pension scheme's Actuary) as the Replacement Supplier and/or NHS Pension and/or CSPS and/or the relevant Administering Authority and/or the Buyer may reasonably require, to enable the Replacement Supplier to participate in the appropriate Statutory Scheme in respect of any Fair Deal Eligible Employee that remains eligible for New Fair Deal protection following a Service Transfer.

## 10. BROADLY COMPARABLE PENSION SCHEMES ON THE RELEVANT TRANSFER DATE

- 10.1 If the terms of any of Paragraphs 4 of Annex D2: NHSPS or 3.1 of Annex D3: LGPS applies, the Supplier must (and must, where relevant, procure that each of its Subcontractors will) ensure that, with effect from the Relevant Transfer Date until the day before the Service Transfer Date, the relevant Fair Deal Employees will be eligible for membership of a pension scheme under which the benefits are Broadly Comparable to those provided under the relevant Statutory Scheme, and then on such terms as may be decided by the Buyer.
- 10.2 Such Broadly Comparable pension scheme must be:
- 10.2.1 established by the Relevant Transfer Date;
  - 10.2.2 a registered pension scheme for the purposes of Part 4 of the Finance Act 2004;
  - 10.2.3 capable of receiving a bulk transfer payment from the relevant Statutory Scheme or from a Former Supplier's Broadly Comparable pension scheme (unless otherwise instructed by the Buyer);