Call-Off Schedule 20 (Call-Off Specification)

This Schedule sets out the characteristics of the Deliverables that the Supplier will be required to make to the Buyers under this Call-Off Contract

THE DEPARTMENT'S REQUIREMENT

The Master Servicer Agreements for Sale 1 and Sale 2 require HMG, as seller of the ICR Loans, to provide, on an annual basis, a forecast model for use by current and potential investors in the loan sales. The model shows how the repayments that are collected each year are shared between investors and the fees required to service the loans. The model is viewed by the market as a government model, and it is necessary for the model to undergo an independent audit by an external organization.

The model, known as "TERM" (Transition-based Earning and Repayment Model), was originally set up by UKGI (United Kingdom Government Investments) and Barclays Bank, who oversaw the sales. It is a complex stochastic model using input data from SLC and HMRC and uses a set of complex assumptions to forecast individual earnings under a set of predesignated scenarios. The DfE have been building their understanding of the model iteratively since it was passed on from UKGI and plan to have analytical support dedicated to supporting your knowledge development, but it should be noted that DfE was not the originator of the model, and it is not possible to talk to the staff who originally built the model. There are also areas that still require development.

The model is used by investors and potential investors to make financial decisions and to understand the level of risk. Whilst the department has no ultimate liability for forecasts holding true, if the forecast was to vary widely from the actual available receipts, it could pose a reputational risk to HMG.

We require the supplier to follow the Aqua Book: guidance on producing quality analysis available here: www.gov.uk/government/publications/the-aqua-book-guidance-on-producing-quality-analysis-for-government

The TERM model is formed of a suite of modules, in addition data processing and assumption setting is done using R software:

Model Suite	Module Objective

Earnings Module (Excel, VBA)	To project each borrower's earning using a Markov transition model
Repayments Module (Excel, VBA)	To project borrowers' repayments based in their projected earnings, repayment status, loan balance and projected payment terms. It also applies macroeconomic assumptions.
User Interface (Excel, VBA)	To provide a user interface through which the user can run scenarios on the selected Earning Module and Repayments Module and the Liability Modules and save and compare the results.
Liabilities Module (Excel, VBA)	To distribute forecast cashflows under a Securitisation acquisition structure for the ICR portfolio.

This contract is for the role of Audit and Assurance Provider and will cover 2 related workstreams. DfE will require annually:

- Assumptions AUP Report covering both the Assumptions AUP (one report to cover both sales). It will include auditing the Transition Matrices (TMs) used within the Earnings Module and Payment Adjustment Factors (PAFs) used in the Repayments Module.

- A Model Audit Report (one report per sale): Audit of the complex financial model used to forecast student loan cashflows. This should focus on any changes made to the model annually. It will include audit of any methodological changes, analytical review of TERM to make sure the model reacts to economic variations in an expected manner, and audit of the Liabilities Module. The type of methodological change could include (but not be limited to): a change in the indexation of a Note in the Liabilities module, a change in the source macroeconomic variables, how we forecast individual earnings.

Complexity of the Model

We will share the model with you via a secure platform, once you have signed and returned your Non-Disclosure Agreement. This will enable you to explore the complexity of the model and number/type of calculations directly.

A summary of the process is:

1. Data cleaning and preparation: annually updated earnings and repayments data are processed from loan to customer level. The following data is used in the model:
   - SLC data containing everyone that has received a Plan 1 student loan, covering around 3.7m individuals and 6m loans.
   - SLC sold borrower data containing the sold borrower data for those with open loans at the start of the year, covering around 600k individuals

- HMRC data containing a 10% sample of earnings information of UK tax-payers, around 6.47m individuals.
- We check and clean the data (removing duplicate records), then process the SLC data from loan level to customer level using R software. Analytical review is performed to identify any potential data issues that need resolved.

2. Assumption setting: the cleaned and processed SLC and HMRC data are processed into the key modelling assumptions using R software. This is done by:
   - assigning borrowers into earnings bands
   - aggregating data by earnings bands, age and gender
   - performing exclusions
   - calculating raw and smoothed transition rates
   - carrying out extrapolation calculations to calculate final rates.
   - We also calculate "repayment frictions" that account for the difference between the repayments we would expect based off individuals' earnings, and the actual repayments that are made.
   - Macroeconomic assumptions are applied to earnings growth and to include changes in interest rates and inflation.

3. Modelling: Data for sold borrowers are processed into equally balanced data cuts and the cuts are run through the Excel earnings module where the Markovian TMs are applied and stochastic "coin tosses" generate unique earnings pathways. The repayment policy and repayments threshold are applied to the earnings forecasts, repayment frictions are applied at this stage. The repayments module outputs annual total repayments for each year until 2060 when all loans are forecast to either be repaid in full or written off.

4. Liabilities module: the total annual repayment amounts are fed into the securitisation structure (Excel). Any monies coming in from the A2 cash account are added to the total available receipts, then the cash is distributed to different Notes as set out in the sale Transaction documents, having first removed money for the Master Servicer fee and other annual fees.

Limitations to the scope of work

The supplier shall be required to:

- Ensure that the services and deliverables are of a high standard,
- Ensure that the audit work is thorough,
- Analysts doing the work are competent in the software used in the model (R, VBA and Excel),
- Deliverables are thoroughly peer reviewed and;

- The supplier shall implement procedures to maintain these standards throughout the delivery of the contract.

The supplier shall not be required to perform any of the following:
- Verify any of the assumptions judgement and commercial risks associated with the project nor comment upon the possibility of the financial predictions being achieved.
- Review any input configurations other than the base case and the designated sensitivities.
- Review comments included in cell notes embedded in the model to ensure that they are consistent with the model.
- Except as otherwise agreed, review any legal agreements or documents in relation to the project
- The provision of recommendations or remedial solutions in relation to the model.

Annual Timings for audit process

- February – DfE will share the initial version of the model for audit if an initial model audit is required (for example if there has been a change in methodology).
- April/May– DfE will provide the processed data and DfE Assumptions (TMs and PAFS) for the Assumptions AUP, the supplier will re-perform the assumptions calculations and provide feedback. Any issues will be reported immediately so that DfE can recalculate the assumptions if required.
- June – DfE will provide the interim version of the model (with updated and audited assumptions) for audit. Supplier will provide DfE a draft report on the AUP Audit, to cover both sales.
- June – DfE will provide supplier with the final Model (with sensitivities run and the liabilities module with estimated final balances), the supplier will audit and provide a draft report (including assessment of all sensitivities). Supplier to inform DfE immediately of any issues discovered and discuss next steps (e.g. do DfE need to correct and resubmit). This will include commenting on whether the model is materially consistent with the descriptions contained in the agreed documentation files.
- July – DfE receive the final balances and SONIA rate from the cash manager Citi and add these final data items to the Liabilities Module.
- July – Supplier to provide DfE with formal reports detailing the audit findings (One final Model Audit report per sale and one AUP report to cover both sales), for DfE to share with Rating Agencies and the SPV (Special Purpose Vehicle) auditor.

- September to December – carry out lessons learned session, agree any improvements for the following year, review spending and agree any efficiencies for subsequent years.

BASE LOCATION

It is expected that all aspects audit report will be carried out remotely.

PAYMENT

The Department will operate a policy of milestone payments for this procurement to ensure value for money. Milestone completion will be dependent on the Department acceptance of milestones completed, based on the discretion of the Department's Contract Manager.

The Key Milestones are detailed further below in this section and weighted as follows against yearly payment value:

1. Transition Period for any new supplier	Monthly invoicing from the start of the contract following monthly approved interim reports.
2. Initial Model Audit	[redacted]
3. Assumptions AUP	[redacted]
4. Interim Model Audit	[redacted]
5. Final Model Audit	[redacted]
6. Submit final reports	[redacted]
7. Review	[redacted]

Per-annum base fee: Your per-annum base fee should be quoted as a capped fee exclusive of VAT and based on full delivery of work on a per annum basis as per the breakdown in Attachment 4 – Pricing Schedule. Please state any assumptions you have made in preparing your fixed cap fee.

Expenses: all rates must be inclusive of travel (if required) and related expenses to the base location as required by the framework terms. Reasonable travel and related expenses incurred when attending additional locations will be payable. As all aspects are carried out remotely, it is not expected that travel expenses will need to be incurred.

KEY MILESTONES

The potential provider should note the following project milestones that the Authority will measure the quality of delivery against:

Milestone Phase	Dates	Deliverables
1. Transition Period for any new supplier	May/June 2025 – Feb 2026	Agree timeline plan to develop sufficient knowledge to build testing methodology for delivery to start in Feb 2026: • Initial onboarding and training • Deep dive into modelling approach • Development of audit methodology • Testing and refinement • Final methodology agreed • Preliminary reports drafted and reviewed using dummy data. Interim Checks: • Monthly Check-ins: Regular meetings to discuss progress, address challenges, and provide support. • Milestone Reviews: At the end of each phase, review deliverables and ensure they meet the required standards. • Feedback Loops: Continuous feedback from peers and supervisors to refine understanding and approach.
2. Initial Model Audit	February	• Initial review in first year of contract, and every year where there has been a change in methodology. If there has not been a methodology change, the Initial Model Audit may not be required.
3. Assumptions AUP	April/May	• Supplier to re-perform the assumptions calculations and provide feedback to DfE. • Supplier to work with DfE to troubleshoot any divergences and agree a solution. • Milestone: Supplier to provide regular updates on results and money spent. • Milestone: Supplier matches both DfE's Transition Matrices and Payment Adjustment Factors to 10 decimal places. Early May, before the start of the interim audit.

		• Milestone: Supplier provides DfE draft AUP report. End of May.
4. Interim Model Audit	May - June	• Supplier to audit the model with updated Sold Borrower data, macro-economic assumptions and updated and signed off model assumptions. • Milestone: Supplier to provide DfE with interim results and notify DfE immediately if any issues are identified.
5. Final Model Audit	June-July	• Supplier to audit the model with the sensitivities run and linked to the updated Liabilities Module. The Final audit will check that the model is performing as expected in response to variation in macro-economic inputs and that the money is being distributed as expected across the securitization structure. • Milestone: Supplier to provide DfE with interim results and notify DfE immediately if any issues are identified. Supplier to provide DfE with a presentation explaining findings and their interpretation. • Milestone: Supplier to provide DfE with draft Model Audit reports (one per sale) (end of June). • Milestone: Supplier to provide DfE with regular updates on spending against agreed budget.
6. Submit final reports	July	• Two final Model Audit reports (one per sale) • One AUP report to cover both sales.
7. Review	September to December	• Carry out a lessons learned session, agree any improvements for the following year. Review total spending against agreed total budget.

REPORTING

All timings are estimates and may be subject to change. Exact timings will be agreed as part of the planning stage with the supplier.