



Department  
for Education

**CONTRACT FOR CHILDREN OF THE 2020S  
PROJECT REFERENCE NO: DFERPPU/ 2019/039**

This Contract is dated 31 March 2021

**Parties**

- 1) The Secretary of State for Education whose Head Office is at Sanctuary Buildings, Great Smith Street, LONDON, SW1P 3BT ("the Department"); and
- 2) UNIVERSITY COLLEGE LONDON whose registered office is Gower Street, London WC1E 6BT ("the Contractor").

**Recitals**

The Contractor has agreed to undertake the Project on the terms and conditions set out in this Contract. The Department's reference number for this Contract is **DFERPPU/ 2019/039**.

**Commencement and Continuation**

The Contractor shall commence the Project on the date the Contract was signed by the Department (as above) and, subject to Schedule Three, Clause 10.1 shall complete the Project on or before **end of December 2026**.

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# 1. Interpretation

## 1.1 In this Contract the following words shall mean:-

"the Project"	the project to be performed by the Contractor as described in Schedule One;
"the Project Manager"	██████████
"the Contractor's Project Manager"	██████████
"the Act and the Regulations"	means the Copyright Designs and Patents Act 1988 and the Copyright and Rights in Databases Regulations 1997;
"Affiliate"	in relation to a body corporate, any other entity which directly or indirectly Controls, is Controlled by, or is under direct or indirect common Control with, that body corporate from time to time;
"BPSS" "Baseline Personnel Security Standard"	a level of security clearance described as pre-employment checks in the National Vetting Policy. Further Information can be found at: <a href="https://www.gov.uk/government/publications/government-baseline-personnel-security-standard">https://www.gov.uk/government/publications/government-baseline-personnel-security-standard</a> ;
"CC" "Common Criteria"	the Common Criteria scheme provides assurance that a developer's claims about the security features of their product are valid and have been independently tested against recognised criteria;
"CCP" "Certified Professional"	is a NCSC scheme in consultation with government, industry and academia to address growing need for specialists in the cyber security profession and building a community of recognised professionals in both the UK public and private sectors. See website: <a href="https://www.ncsc.gov.uk/scheme/certified-professional">https://www.ncsc.gov.uk/scheme/certified-professional</a> ;
"CCSC" "Certified Cyber Security Consultancy"	is NCSC's approach to assessing the services provided by consultancies and confirming that they meet NCSC's standards. This approach builds on the strength of CLAS and certifies the competence of suppliers to deliver a wide and complex range of cyber security consultancy services to both the public and private sectors. See website: <a href="https://www.ncsc.gov.uk/scheme/certified-cyber-consultancy">https://www.ncsc.gov.uk/scheme/certified-cyber-consultancy</a> ;
"Commercially Sensitive Information"	information of a commercially sensitive nature relating to the Contractor, its IPR or its business or which the Contractor has indicated to the Department that, if disclosed by the Department, would cause the Contractor significant commercial disadvantage or material financial loss;
"Confidential Information"	means all information which has been designated as

	confidential by either party in writing or that ought to be considered as confidential (however it is conveyed or on whatever media it is stored) including but not limited to information which relates to the business, affairs, properties, assets, trading practices, services, developments, trade secrets, Intellectual Property Rights, know-how, personnel, customers and suppliers of either party and commercially sensitive information which may be regarded as the confidential information of the disclosing party;
"Contracting Department"	any contracting authority as defined in Regulation 5(2) of the Public Contracts (Works, Services and Supply) (Amendment) Regulations 2000 other than the Department;
"Contractor Personnel"	all employees, agents, consultants and contractors of the Contractor and/or of any Sub-contractor;
"Contractor Software"	software which is proprietary to the Contractor, including software which is or will be used by the Contractor for the purposes of providing the Services;
"Control"	means that a person possesses, directly or indirectly, the power to direct or cause the direction of the management and policies of the other person (whether through the ownership of voting shares, by contract or otherwise) and " <b>Controls</b> " and " <b>Controlled</b> " shall be interpreted accordingly;
"Controller"	take the meaning given in the GDPR;
"Copyright"	means any and all copyright, design right (as defined by the Act) and all other rights of a like nature which may, during the course of this Contract, come into existence in or in relation to any Work (or any part thereof);
"Copyright Work"	means any Work in which any Copyright subsists;
"CPA"	is an 'information assurance scheme' which evaluates commercial off the shelf (COTS)
"Commercial Product Assurance" [formerly called "CESG Product Assurance"]	products and their developers against published security standards. These CPA certified products Can be used by government, the wider public sector and industry. See website: <a href="https://www.ncsc.gov.uk/scheme/commercial-product-assurance-cpa;">https://www.ncsc.gov.uk/scheme/commercial-product-assurance-cpa;</a>
"Crown Body"	any department, office or agency of the Crown;
"Cyber Essentials"	Cyber Essentials is the government backed,
"Cyber Essentials Plus"	industry supported scheme to help organisations protect themselves against common cyber-attacks. Cyber Essentials and Cyber Essentials Plus are levels within the scheme;  There are a number of certification bodies that can be approached for further advice on the scheme; the link below points to one of these providers

	<a href="https://www.iasme.co.uk/apply-for-self-assessment/">https://www.iasme.co.uk/apply-for-self-assessment/</a>
"Data"	means all data, information, text, drawings, diagrams, images or sound embodied in any electronic or tangible medium, and which are supplied or in respect of which access is granted to the Contractor by the Department pursuant to this Contract, or which the Contractor is required to generate under this Contract;
"Data Loss Event"	any event that results, or may result, in unauthorised access to Personal Data held by the Contractor under this Contract, and/or actual or potential loss and/or destruction of Personal Data in breach of this Contract, including any Personal Data Breach;
"Data Protection Impact Assessment"	an assessment by the Controller of the impact of the envisaged processing on the protection of Personal Data;
"Data Protection Legislation"	(i) the GDPR, the LED and any applicable national implementing Laws as amended from time to time (ii) the DPA 2018 [subject to Royal Assent] to the extent that it relates to processing of personal data and privacy; (iii) all applicable Law about the processing of personal data and privacy;
"Data Protection Officer"	take the meaning given in the GDPR;
"Data Subject"	take the meaning given in the GDPR;
"Data Subject Access Request"	a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data;
"Department Confidential Information"	all Personal Data and any information, however it is conveyed, that relates to the business, affairs, developments, trade secrets, know-how, personnel, and suppliers of the Department, including all IPRs, together with all information derived from any of the above, and any other information clearly designated as being confidential (whether or not it is marked "confidential") or which ought reasonably be considered to be confidential;
"Department's Data"	is any data or information owned or retained
"Department's Information"	in order to meet departmental business objectives and tasks, including:
	(a) the data, text, drawings, diagrams, images or sounds (together with any database made up of any of these) which are embodied in any electronic, magnetic, optical or tangible media, and which are:
	(i) supplied to the Contractor by or on behalf of the Department; or
	(ii) which the Contractor is required to generate, process, store or transmit pursuant to this Contract; or

	(b) any Personal Data for which the Department is the Controller;
"DfE"	means the Department for Education;
"Department"	
"Department Security Standards"	means the Department's security policy or any standards, procedures, process or specification for security that the Contractor is required to deliver;
"Digital Marketplace/GCloud"	the Digital Marketplace is the online framework for identifying and procuring cloud technology and people for digital projects. Cloud services (e.g. web hosting or IT Health checks) are on the G-Cloud framework;
"DPA 2018"	Data Protection Act 2018;
"Effective Date"	the date on which this Contract is signed by both parties;
"Environmental Information Regulations"	the Environmental Information Regulations 2004 together with any guidance and/or codes of practice issues by the Information Commissioner or relevant Government Department in relation to such regulations;
"FIPS 140-2"	this is the Federal Information Processing Standard (FIPS) Publication 140-2, (FIPS PUB 140-2), entitled 'Security Requirements for Cryptographic Modules'. This document is the de facto security standard used for the accreditation of cryptographic modules;
"FOIA"	the Freedom of Information Act 2000 and any subordinate legislation made under this Act from time to time together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government Department in relation to such legislation;
"GDPR"	the General Data Protection Regulation (Regulation (EU) 2016/679);
"Good Industry Practice"	means the exercise of that degree of skill, care, prudence, efficiency, foresight and timeliness as would be expected from a leading company within the relevant industry or business sector;
"Industry Good Practice"	
"Good Industry Standard"	means the implementation of products and solutions, and the exercise of that degree of skill, care, prudence, efficiency, foresight and timeliness as would be expected from a leading company within the relevant industry or business sector;
"Industry Good Standard"	
"GSC" "GSCP"	means the Government Security Classification Policy which establishes the rules for classifying HMG information. The policy is available at: <a href="https://www.gov.uk/government/publications/government-security-classifications">https://www.gov.uk/government/publications/government-security-classifications</a> ;
"HMG"	means Her Majesty's Government;

"ICT"	means Information and Communications Technology (ICT) used as an extended synonym for Information Technology (IT), used to describe the bringing together of enabling technologies used to deliver the end-to-end solution;
"ICT Environment"	the Department's System and the Contractor System;
"Information"	has the meaning given under section 84 of the Freedom of Information Act 2000;
"Intellectual Property Rights"	means patents, trade marks, service marks, design (rights whether registerable or otherwise), applications for any of the foregoing, know-how, rights protecting databases, trade or business names and other similar rights or obligations whether registerable or not in any country (including but not limited to the United Kingdom);
"ISO/IEC 27001" "ISO 27001"	is the International Standard describing the Code of Practice for Information Security Controls;
"ISO/IEC 27002" "ISO 27002"	is the International Standard describing the Code of Practice for Information Security Controls;
"IT Security Health Check (ITSHC)" "IT Health Check (ITHC)" "Penetration Testing"	means an assessment to identify risks and vulnerabilities in systems, applications and networks which may compromise the confidentiality, integrity or availability of information held on the IT system;
"LED"	Law Enforcement Directive (Directive (EU) 2016/680);
"Malicious Software"	any software program or code intended to destroy, interfere with, corrupt, or cause undesired effects on program files, data or other information, executable code or application software macros, whether or not its operation is immediate or delayed, and whether the malicious software is introduced wilfully, negligently or without knowledge of its existence;
"Need-to-Know"	the Need-to-Know principle is employed within HMG to limit the distribution of classified information to those people with a clear 'need to know' in order to carry out their duties;
"NCSC"	The National Cyber Security Centre (NCSC) formerly CESG Is the UK government's National Technical Authority for Information Assurance. The NCSC website is <a href="http://www.ncsc.gov.uk">http://www.ncsc.gov.uk</a> ;
"OFFICIAL" "OFFICIAL SENSITIVE"	the term 'OFFICIAL' is used to describe the baseline level of 'security classification' described within the Government Security Classification Policy (GSCP) which details the level of protection to be afforded to information by HMG, for all routine public sector business, operations and services. the 'OFFICIAL-SENSITIVE' caveat is used to identify a limited subset of OFFICIAL information

	that could have more damaging consequences (for individuals, an organisation or government generally) if it were lost, stolen or published in the media, as described in the Government Security Classification Policy;
"Original Copyright Work"	means the first Copyright Work created in whatever form;
"Personal Data"	take the meaning given in the GDPR;
"Personal Data Breach"	take the meaning given in the GDPR;
"Processor"	take the meaning given in the GDPR;
"Protective Measures"	appropriate technical and organisational measures which may include: pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the such measures adopted by it;
"Regulatory Bodies"	those government departments and regulatory, statutory and other entities, committees and bodies which, whether under statute, rules, regulations, codes of practice or otherwise, are entitled to regulate, investigate, or influence the matters dealt with in this Contract or any other affairs of the Department and <b>"Regulatory Body"</b> shall be construed accordingly;
"Request for Information"	a request for information or an apparent request under the Code of Practice on Access to Government Information, FOIA or the Environmental Information Regulations;
"Secure Sanitisation"	Secure sanitisation is the process of treating data held on storage media to reduce the likelihood of retrieval and reconstruction to an acceptable level. Some forms of sanitisation will allow you to re-use the media unuseable. Secure sanitisation was previously covered by "Information Assurance Standard No.5 – Secure Sanitisation" ("IS5") issued by the former CESG. Guidance can be found at: <a href="https://www.ncsc.gov.uk/guidance/secure-sanitisation-storage-media">https://www.ncsc.gov.uk/guidance/secure-sanitisation-storage-media</a> ;  The disposal of physical documents and hardcopy materials advice can be found at: <a href="https://www.cpni.gov.uk/secure-destruction">https://www.cpni.gov.uk/secure-destruction</a> ;
"Security and Information Risk Advisor"	the Security and Information Risk Advisor (SIRA)
"CCP SIRA"	is a role defined under the NCSC Certified Professional (CCP) Scheme. See also:
"SIRA"	<a href="https://www.ncsc.gov.uk/articles/about-certified-professional-scheme">https://www.ncsc.gov.uk/articles/about-certified-professional-scheme</a> ;
"SPF"	This is the definitive HMG Security Policy which
"HMG Security Policy Framework"	describes the expectations of the Cabinet Secretary



	and Government's Official Committee on Security on how HMG organisations and third parties handling HMG information and other assets will apply protective security to ensure HMG can function effectively, efficiently and securely. <a href="https://www.gov.uk/government/publications/security-policy-framework">https://www.gov.uk/government/publications/security-policy-framework</a>
"Staff Vetting Procedures"	the Department's procedures and departmental policies for the vetting of personnel whose role will involve the handling of information of a sensitive or confidential nature or the handling of information which is subject to any relevant security measures, including, but not limited to, the provisions of the Official Secrets Act 1911 to 1989;
"Sub-Contractor"	the third party with whom the Contractor enters into a Sub-contract or its servants or agents and any third party with whom that third party enters into a Sub-contract or its servants or agents;
"Sub-processor"	any third Party appointed to process Personal Data on behalf of the Contractor related to this Contract;
"Third Party Software"	software which is proprietary to any third party [other than an Affiliate of the Contractor] which is or will be used by the Contractor for the purposes of providing the Services, and
"Work"	means any and all works including but not limited to literary, dramatic, musical or artistic works, sound recordings, films, broadcasts or cable programmes, typographical arrangements and designs (as the same are defined in the Act) which are created from time to time during the course of this Contract by the Contractor or by or together with others at the Contractor's request or on its behalf and where such works directly relate to or are created in respect of the performance of this Contract or any part of it;
"Working Day"	any day other than a Saturday, Sunday or public holiday in England and Wales.
1.2	References to "Contract" mean this contract (and include the Schedules). References to "Clauses" and "Schedules" mean clauses of and schedules to this Contract. The provisions of the Schedules shall be binding on the parties as if set out in full in this Contract.
1.3	Reference to the singular include the plural and vice versa and references to any gender include both genders. References to a person include any individual, firm, unincorporated association or body corporate.



## SCHEDULE ONE

### THE CONSORTIUM

The consortium shall comprise of University College London, Ipsos MORI and the University of Oxford. The lead contractor shall be University College London who shall be responsible for sub-contracting with Ipsos MORI, the University of Oxford, and the University of Iowa, FullStack and Criteria. University College London (“the contractor”) shall be responsible to the Department for Education, and responsible for all subcontractors.

### 1 BACKGROUND

The department requires an early years to primary school longitudinal study to provide statistical evidence that will help inform policy development. This contract specifies how and when this study will be delivered and by whom (The Contractor).

The policy areas that this study will provide evidence for are set out below by the relevant phase of life.

**Babies and infants:** Our primary interest here is in the home environment and to build on evidence showing that experiences during this phase of life affect children’s development, their start to early education, and their later life course. DfE also regulates childcare that can cover this age group and DHSC/PHE fund postnatal support services that support cross departmental objectives.

**Early childhood education and care (ECEC):** Disadvantaged 2-year-olds, and nearly all 3- and 4-year-olds, will have received government funded ECEC offered weekly by a range of early years providers. DfE’s foundation stage curriculum is followed to help children be school ready. We also have a policy interest in understanding the nature and influence of the home environment during this phase, including parenting and the home learning environment.

**Primary School:** Nearly all children will enter primary school at age 4/5, where they are assessed and settled into a more formal educational environment during Reception Year. They are then taught the national curriculum, homework is introduced, phonics ability is checked, and teachers formally assess English and maths ability at the end of key stage 1 (age 6/7).

**Disadvantage policy:** Mainstream provision, sometimes supported by additional resources (e.g. Pupil Premium funding in early years settings and schools), is differentiated to address varied rates at which children progress including when deficits stem from the child being materially, psychologically or culturally disadvantaged.

### 2 AIM

The Contractor shall use all reasonable endeavours to collect data that address the following topics and research questions:

**Babies and infants:** How does the home environment and children’s experiences in the earliest years influence their attainment and wellbeing? What are the variations in parenting style and relationships, circumstances, health and lifestyles To what extent do these factors mediate physical, socio-emotional, behavioural and cognitive development (e.g. gross/fine motor control, emotional attachment, language acquisition, emerging executive function)?

Early childhood education and care (ECEC): What are the differing levels of development among children arriving in ECEC and what explains this? What is the relative influence of background, home environment and of ECEC in relation to various cognitive and socio-emotional measures? How and when is ECEC taken up and experienced, what is the setting type(s) used and intensity of usage, and how do these mediate impact? What additional needs are emerging at this phase and are they sufficiently identified and supported? How are parent outcomes (e.g. employment, mental health) affected by different child raising experiences and arrangements, and how do these in turn effect their child's development?

Primary school: What are the differing levels of school readiness, what explains this? What is the relative influence of background, home environment and ECEC and schooling in relation to EYFSP, Phonics Screening Test and KS1 results and wellbeing? Do different types of school and school experience matter? What are parent and pupil attitudes towards education, their school and teachers? Have dispositions and attitudes towards certain subjects emerged, when and why? When are homebased activities being set, are they being supported and completed? What are the effects? How does the balance between school work and play influence socio-emotional development and wellbeing?

Disadvantage: Does the disadvantage attainment 'gap' widen during ECEC and primary phases and if so why? Are there parental or child attitudes and behaviours that seem to drive better progress/attainment amongst disadvantaged pupils? What are the elements of multiple disadvantage, do they act cumulatively and which are most important? What drives differences in progress and attainment? Which children from disadvantaged backgrounds do not have lower attainment and why? How does the wellbeing of disadvantaged children compare and change over time?

### 3 OBJECTIVES

The Contractor shall use all reasonable endeavours to achieve the following objectives:

- Design and deliver a new longitudinal research study that tracks a cohort of 9 month old babies and their families over five waves of data collection through to the first year of primary school. This will include the following:
  - testing via a thorough longitudinal pilot
  - production of questionnaires and interviews that enable the data and analyses required. This will include ensuring that data collection is coherent and sequenced across the course of the study
  - augmenting the main data collection waves with data gathered through the smartphone system BabySteps, to capture rich developmental and home environment measures including video-recordings of parent-child interaction and video and audio-recordings of language and motor development
  - collecting data on structural quality from ECEC providers via telephone survey and the Teacher Tapp app
  - ensuring the main study is delivered in a way that can facilitate the delivery of the optional sub-study of ECEC providers, should the Department decide to contract this study
  - deploying an effective attrition strategy. The contractor shall work to make sure the study is of interest to the cohort throughout the life of the study, keep in touch with participants so that they remain engaged, and re-contact those lost to the study — including underrepresented groups
  - producing high-quality, cleaned and fully weighted datasets with an corresponding, accessible technical report for each wave of the study.

- producing a non-response report at the end of Wave 1 that analyses non-response to the study, and details the weighting system applied to compensate for both differential selection probabilities and differential non-response. This report will be updated across the life of the study, to ensure that the impact of differential non-response is assessed and documented at each wave.
- clear research reports covering basic descriptive analyses of each wave of data as specified by the department.
- Missing data analysis and reporting at each wave of the study
- delivering dissemination activities to maximise the value of the research findings and ensure broad external awareness of the study

## 4 COVID-19 PANDEMIC IMPLICATIONS

The ongoing COVID-19 pandemic has implications for the delivery of the contract objectives. Tasks up to and including the delivery of first wave pilot are likely to take place whilst the pandemic is ongoing and we cannot yet know whether later stages of the project will be affected. In the tasks section below, wherever relevant the impact of COVID-19 will be considered and options set out to mitigate this impact. Risks from COVID-19 are also reflected in the project risk register with appropriate mitigations in place. The Department and the Contractor shall continue to monitor the developing situation of the pandemic and work closely to identify emerging risks and where necessary adjust contract activities and timings.

## 5 TASKS

### 5.1 SAMPLING & WEIGHTING

#### 5.1.1 Sample frame and study population

The sample frame for the study will be the HMRC child benefit register. The study population is defined as children that are eligible and registered for Child Benefit that are living in England and will be aged nine months during the eligibility period. Assuming a fieldwork period of January to May 2022, the study population will be children who become nine months old between 1st April and 30<sup>th</sup> of June 2021.

Because the study population is defined by Child Benefit registration, it does not perfectly cover the actual population of nine-month-olds in England. This is because:

- (i) some parents simply do not register for Child Benefit. Some of this under-coverage is related to the High Income Child Benefit Charge (HICBC); however, even prior to the introduction of the HICBC in 2013 there was a relatively small percentage of children who were not registered for a variety of reasons, not necessarily related to income.
- (ii) children flagged as sensitive cases on the register will be excluded by HMRC prior to drawing the sample. These children fall into the following groups: those taken into care or put up for adoption; those not living at the same address as the claimant; and those whose families are the subject of correspondence between the benefit recipient and the Child Benefit Centre (because the reason for correspondence cannot be ascertained and may be sensitive).

All cases issued for Wave 1 of the study will remain eligible for future waves as long as they are still living in England, although some participants may withdraw from the survey over time.

#### 5.1.2 Sample sizes

The contractor will deliver a total of five study waves, with the first and third wave (when the child is nine months old and three years old respectively) administered face-to-face, and the second, fourth and fifth waves (when the child is aged two, four and five respectively) taking place using a sequential mixed mode online-telephone methodology. Table 1 below gives an overview of the sample sizes that the contractor will deliver at each wave, response rates, and attrition. It is expected that the following response rates and sample sizes shall be achieved by the contractor. These are based on the best estimates available at the time of writing. Following the completion of each wave of fieldwork, the contractor will provide updated estimates for the subsequent wave based on final response at the previous wave.

**Table 1. Summary of sample sizes and key study features across all five waves**

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5
Age of child	9 months	2	3	4	5
Issued sample	17,986	8,518	8,433	8,124	8,043
Achieved interviews	8,518	5,482	6,044	4,947	4,142
Response rate (of issued)	48%	65%	73%	61%	51%
Response rate (of previous wave completes)	n/a	64%	81%	74%	74%
Attrition (vs Wave 1)	n/a	36%	29%	42%	51%
Attrition (vs previous wave)	n/a	36%	-10%	18%	16%

### Wave 1 Sample sizes

At Wave 1, the contractor shall sample 745 Primary Sampling Units (PSUs), with an average of 24 children sampled per PSU. Under the study design, postcode sectors, merged where necessary, will constitute the Primary Sampling Units (PSUs). PSUs will be defined as Small, Medium, or Large depending on the number of children in the PSU turning nine months old during the fieldwork period. The PSUs will be used to produce an issued sample of 17,986 from which we expect to achieve 8,518 interviews. This equates to an overall response rate (interviews as a proportion of total eligible sample) of 48%. The contractor shall make every effort to achieve a higher response rate, the approach to maximising response rates is set out in detail in section 5.4.4.

**Table 2. Wave 1 sample size**

	N	% of sampled	% of issued	% of issued and eligible
PSUs sampled	745			
Children sampled per PSU (avg)	24			
Children sampled	17,986	100%		
Opting out	1,439	8%		

Issued to face-to-face	16,547	92%	100%	
Ineligible	165		2%	
Eligible	16,381		98%	100%
<b>Achieved interviews</b>	<b>8,518</b>		51%	52%
<i>Unadjusted RR</i>	<i>47%</i>			
<i>Reported RR (excl. ineligibles)</i>	<i>48%</i>			

### Wave 2 Sample sizes

At Wave 2, the contractor shall issue all those taking part in Wave 1, less a small number who will opt out between the waves. The contractor expects 65% of those issued to complete the Wave 2 survey, equating to 5,482 interviews and an overall response rate of 64%, and therefore an attrition of 36% from Wave 1.

**Table 3. Wave 2 sample sizes**

	<b>N</b>	<b>% of sampled</b>	<b>% of issued</b>
Children sampled	8,518	100%	
Opting out between waves	85	1%	
Issued to online-telephone	8,433	99%	100%
<b>Achieved interviews</b>	<b>5,482</b>		65%
<i>Overall RR</i>	<i>64%</i>		
<i>Attrition (vs Wave 1)</i>	<i>36%</i>		

### Wave 3 sample sizes

At Wave 3 the contractor shall issue all those taking part in Wave 2, as well as those who last took part in Wave 1. This Wave will be carried out face-to-face, with an expected response rate of 81% among those taking part in Wave 2, broadly in line with wave-on-wave response rates to other cohort studies. Among those who were interviewed in Wave 1 but who did not take part in Wave 2, the contractor has estimated a response rate of 58%.

The contractor will aim to achieve a minimum total of 6,044 interviews at Wave 3, with an attrition of 29% since Wave 1.

**Table 4. Wave 3 sample sizes**

	<b>N</b>	<b>% of sampled</b>	<b>% of issued</b>	<b>% of issued and eligible</b>
<b>Last interviewed: Wave 2</b>				
Sampled children	5,482	100%		
Opting out between waves	55	1%		
Issued to face-to-face	5,427		100%	
Ineligible	109	99%	2%	
Eligible	5318		98%	100%

<b>Achieved interviews</b>	<b>4,361</b>		80%	82%
<i>Unadjusted RR</i>	80%			
<i>Overall RR</i>	81%			
<b>Last interviewed: Wave 1</b>				
Sampled children	2,952	100%		
Opting out between waves	89	3%		
Issued to face-to-face	2,863	97%	100%	
Ineligible	57		2%	
Eligible	2,806		98%	100%
<b>Achieved interviews</b>	<b>1,683</b>		59%	60%
<i>Unadjusted RR</i>	57%			
<i>Overall RR</i>	58%			
<b>TOTAL</b>				
Sampled children	8,433	100%		
Opting out between waves	143	2%		
Issued to face-to-face	8,290	98%	100%	
Ineligible	166		2%	
Eligible	8,124		98%	100%
<b>Achieved interviews</b>	<b>6,044</b>		73%	74%
<i>Unadjusted RR</i>	72%			
<i>Overall RR</i>	73%			
<i>Attrition (vs Wave 1)</i>	29%			
<i>Attrition (vs Wave 2)</i>	-10%			

#### Wave 4 sample sizes

At Wave 4 the contractor shall issue all those taking part Wave 3, as well as those who last took part in Wave 2 or Wave 1. The contractor estimates a response rate of 74% among those taking part in Wave 3, slightly lower than the 81% of Wave 2 respondents taking part in Wave 3 given the move away from face-to-face approach. The contractor estimates a response rate of 24% among those who last took part in Wave 2, and a response rate of 20% among those who last took part in Wave 1.

The contractor will aim to achieve a minimum total of 4,947 interviews at Wave 4, with an attrition of 42% since Wave 1.

**Table 5. Wave 4 sample sizes**

	<b>N</b>	<b>% of sampled</b>	<b>% of issued</b>
<b>Last interviewed: Wave 3</b>			
Sampled children	6,044	100%	

Opting out between waves	60	1%	
Issued to online-telephone	5,984	99%	100%
Achieved interviews	4,488		75%
<i>Overall RR</i>	74%		
<b>Last interviewed: Wave 2</b>			
Sampled children	957	100%	
Opting out between waves	10	1%	
Issued to online-telephone	948	99%	100%
Achieved interviews	237		25%
<i>Overall RR</i>	24%		
<b>Last interviewed: Wave 1</b>			
Sampled children	1,122	100%	
Opting out between waves	11	1%	
Issued to online-telephone	1,111	99%	100%
Achieved interviews	222		20%
<i>Overall RR</i>	20%		
<b>TOTAL</b>			
Sampled children	8,124	100%	
Opting out between waves	81	1%	
Issued to online-telephone	8,043	99%	100%
<b>Achieved interviews</b>	<b>4,947</b>		61%
<i>Overall RR</i>	61%		
<i>Attrition (vs Wave 1)</i>	42%		
<i>Attrition (vs Wave 3)</i>	18%		

### Wave 5 sample sizes

At Wave 5 the contractor shall issue to all those taking part Wave 4, as well as those who last took part in Wave 3, Wave 2, or Wave 1. The contractor estimates a response rate of 74% among those taking part in the mode-equivalent Wave 4, a response rate of 20% among those who last took part in Wave 3, a response rate of 12% among those who last took part in Wave 2, and a response rate of 10% among those who last took part in Wave 1.

The contractor will aim to achieve a total of 4,142 interviews at Wave 5, with an attrition of 51% since Wave 1.

**Table 6. Wave 5 sample sizes**

	<b>N</b>	<b>% of sampled</b>	<b>% of issued</b>
<b>Last interviewed: Wave 4</b>			
Sampled children	4,947	100%	



Opting out between waves	49	1%	
Issued to online-telephone	4,898	99%	100%
Achieved interviews	3,673		75%
<i>Overall RR</i>	74%		
<b>Last interviewed: Wave 3</b>			
Sampled children	1,496	100%	
Opting out between waves	15	1%	
Issued to online-telephone	1,481	99%	100%
Achieved interviews	296		20%
<i>Overall RR</i>	20%		
<b>Last interviewed: Wave 2</b>			
Sampled children	711	100%	
Opting out between waves	7	1%	
Issued to online-telephone	704	99%	100%
Achieved interviews	84		12%
<i>Overall RR</i>	12%		
<b>Last interviewed: Wave 1</b>			
Sampled children	889	100%	
Opting out between waves	9	1%	
Issued to online-telephone	880	99%	100%
Achieved interviews	88		10%
<i>Overall RR</i>	10%		
<b>TOTAL</b>			
Sampled children	8,043	100%	
Opting out between waves	80	1%	
Issued to online-telephone	7,962	99%	100%
<b>Achieved interviews</b>	<b>4,142</b>		<b>51%</b>
<i>Overall RR</i>	51%		
<i>Attrition (vs Wave 1)</i>	51%		
<i>Attrition (vs Wave 4)</i>	16%		

### 5.1.3 Sample design

The contractor shall select and issue the sample as follows:

- Any postcode sector with fewer than 20 children turning nine months old between January and March 2022 will be merged with its nearest neighbouring postcode sector. The resulting merged postcode sectors will define the primary sampling units (PSUs).

- Each PSU will be allocated to one of three groups based on the size of its eligible sample: Small (20 to 30 children); Medium (31 to 50 children); and Large (50+ children) .
- The full list of PSUs will be stratified, and a total of 745 PSUs will be selected. The approach to stratification is detailed in the following section.
- For small PSUs, every child turning nine months old between the 1<sup>st</sup> of January and 31<sup>st</sup> of March 2022 will be sampled, with cases issued across these three months such that each child will be issued in the month in which he or she turns nine months old. For Medium PSUs, those children turning nine months old in a random two-month period (either between January and February 2022, or between February and March 2022) will be sampled, with cases issued accordingly across these two months. And for Large PSUs, those children turning nine months old in a single randomly selected month (either January, February or March 2022) will be sampled, with all cases issued in the relevant month.
- The contractor will aim to complete fieldwork for each monthly sample within a two-month period. Under this approach, interviews will be carried out when children are as close to nine months old as is feasibly possible.
- In order to generate an equal probability sample, the three groups of PSUs will be sampled with different sampling fractions. Large PSUs will have three times the chance of selection as Small PSUs, and twice the chance of selection as Medium PSUs. The higher chance of selection for Large vs Small PSUs (by a factor of three to one), combined with just one month (vs three months) of cases being selected, balances such that the combined probability of selection for children in Large PSUs will be equal those in Small PSUs. The result is an equal probability clustered sample, with the samples in each PSU issued over the minimum number of months required to generate an average sample size of 24.
- Based on the method described above, the contractor will sample 745 PSUs, with 191 defined as Small, 358 as Medium and 196 as Large. This means that the sample would be issued in 1,484 allocations representing all the PSU and month combinations. On average about 24.1 cases will be sampled in each PSU, given a total issued sample of 17,986.

#### **5.1.4 Sample stratification**

The contractor will agree with the Department the appropriate variables for stratifying PSUs prior to selection, but is likely to include region, a measure of disadvantage and population density. An additional level of stratification based on the proportion of the PSU from a BAME background could also be incorporated, as was done for the Millennium Cohort Study.

The contractor will over-sample more disadvantaged families via the area-level measures using components of the Index for Multiple Deprivation (IMD), and therefore this will need to be the first level of stratification. Note that as IMD is published at Lower Layer Super Output Areas (LSOA) level, the contractor will produce an aggregated measure for the PSUs.

#### **5.1.5 Boost of disadvantaged families**

The design for the sampling is to use a clustered approach with the sample issued within primary sampling units (PSUs) defined either as postcode sectors or groups of postcode sectors merged to have a minimum sample size of 20. The contractor will generate PSU scores of the Income Deprivation Affecting Children Index (IDACI) using a weighted average of the scores for the LSOAs within the PSUs. The PSUs will then be allocated to quintiles based on their aggregated IDACI score. When selecting the sample of PSUs for the study, the contractor will boost the number sampled in the most deprived quintile by 50%, and reduce the numbers in the other quintiles accordingly. This will not impact how the survey is actually carried out in the field however it will boost the sample of families living in the most deprived quintile.

### 5.1.6 Sample specification, receipt and storage

The contractor will work with the Department and HMRC to draw the sample for the study. At the time of writing the Department has already submitted an application to HMRC for the study and sample, received high level approval and HMRC have identified the resource required to deliver the request. The Department will facilitate a meeting between the contractor and HMRC once the study contract is in place. The contractor shall then be responsible for delivering the following actions;

- Agree a detailed sample specification with the Department and provide it to HMRC.
- Request that HMRC provide a list of all postcode sectors in England, alongside a count of the number of children who will turn 9-months-old in each month of the three months of the fieldwork period.
- Utilise data provided by HMRC to merge postcode sectors with fewer than 20 children with adjacent postcode sectors to form the small, medium and large Primary Sampling Units.
- Send HMRC the list of selected PSUs with the months in which the sample will be required, with instructions to sample (after exclusions): all children who will turn 9-months-old during the fieldwork period in the small PSUs; only those children who will turn 9-months-old in a specified two-month period during fieldwork in the medium PSUs; and only those children who will turn 9-months-old in a single specified month during the fieldwork period in the large PSUs.
- Agree a formal “Data Security Plan” with HMRC for the project detailing the specific data security steps to be followed at each stage, as well as details of Ipsos MORI’s overall security procedures. The contractor will be responsible for receiving, storing, and processing personal data in accordance with the General Data Protection Regulation (GDPR).
- Receive personal data from HMRC via a secure electronic portal. This is likely to be via an HMRC-owned secure workspace set-up specifically for this study which HMRC will use to send the sampled children to the contractor securely.
- The contractor will also request from HMRC a reserve sample, drawn to the same specification, to be used if required.
- The contractor will be responsible for all personal data being stored securely in data centres and servers within the United Kingdom, and only making data available to those researchers and interviewers from Ipsos MORI who need to see it for the express purpose of carrying out the survey. Personal data will be securely destroyed by the contractor once there is no further justification to retain it.

### 5.1.7 Ongoing sample management

The contractor will be responsible for maintaining the sample across all study waves. Throughout the course of the study, the sample will need to be updated in a wide variety of ways. This will include changes to addresses as well as to other contact details such as telephone numbers, email addresses, and stable contacts. It will also include changes to names and titles, such as in the case of marriage. And it will include requests from parents to opt-out of the study, whether to specific waves or to all future waves. The contractor will take requests for sample updates and changes from a range of channels, including from contacts to the survey email address or phoneline, from parents informing face-to-face or telephone interviewers directly, from change of details cards which are returned to them, and from replies to online and SMS survey invitations. Some parents may contact the Department directly with requests, in this event the Department will pass requests to the contractor for action.

The contractor will maintain a version of the original master sample used for Wave 1 to provide a full record of all original details. Within this sample, the contractor will include additional fields to log all changes and by which channel they were received. The contractor

will ensure that the sample is both fully up to date for the purposes of issuing sample, but also contains a full log of previous details which can be matched all the way back to the initial Wave 1 sample.

The contractor will include fields in the sample to flag outcomes at each wave. These fields will include variables to signify whether a case was productive or non-productive at each wave, as well as more detailed fields to flag specific outcome codes, the mode of completion, and the date of completion. These fields will be used to draw the appropriate sample for later waves. The file will also contain the incentive provided for each case at each wave. Feed-forward data to be used in subsequent waves for the purposes of routing and text-fills will be held in a separate data-file and merged as required.

### **5.1.8 Weighting strategy for wave 1**

The detail of the weighting strategy will need to be developed once the survey data has been collected, with consideration given to the balance between bias reduction and variance inflation. The contractor will produce a detailed weighting report analysing non-response and setting out their weighting proposals. The contractor will agree with the Department the approach to the weighting analyses (e.g. which terms are to be included in the non-response model) during the fieldwork period. The contractor will subsequently provide the weights alongside the draft Wave 1 dataset.

The contractor will conduct a three stage strategy: selection weighting, non-response weighting and calibration weighting.

At the first stage (selection weighting) the contractor will generate the selection weights that correct for the disproportionate sample design. This will be for disadvantaged children, from area-level over-sampling based on IMD.

At the second stage (non-response weighting) the contractor will fit non-response models to compare participating household to all eligible ones. This information will be at the family-level which will be available from the CRB. There is also a range of standard area-level information available, including measures from the 2011 Census, IMD scores, and indicators of urbanity and rurality. The contractor will scope out other area-level measures that might be available in addition to these standard ones and agree with the Department which measures to use. The non-response model will be calculated from fitting a logistic regression model with an outcome measure of participation or non-participation, with the range of family-level and area-level measures included as covariates. The aim of the non-response model will be to identify those measures associated with participation, and hence those which will reduce the bias of the survey estimates if included in the weights. The non-response weights will be calculated as the inverse of the predicted probabilities of participation estimated from the non-response model.

The final stage of weighting will be to combine the selection weights with the non-response weights and calibrate them to known population estimates. This information available for calibration would be limited to what is available in the Child Benefit Records (CBR) dataset, so will include measures such as the number of children in the household, the age of the oldest child, and region. These will be the counts for all children that would have turned nine months old during the study eligibility period.

The contractor will also check whether there were any measures with relatively large levels of item non-response that might require additional weighting. For item non-response weighting the contractor will include measures from the survey to increase the predictive power of the non-response model and hence generate weights that maximise bias reduction.

### **5.1.9 Weighting strategy for Waves 2-5**

The detailed approach for weighting waves 2-5 of the study will be developed towards the start of the study, and the contractor will include a discussion of this in the their wave 1 weighting report.

For each wave 2-5, the contractor will provide sets of weights that facilitate longitudinal analysis (comprising all cases who have responded at each wave) and cross-sectional analysis (making use of all cases responding at a given wave).

At the time of writing the current thinking is that the wave 2-5 weighting strategy will match that used in the ELSA (English Longitudinal Study of Ageing). This would be the weighting strategy for a longitudinal study that only issued the participants at the previous wave, fitting a logistic regression model to generate the non-response weights for the attrition between waves. The weights for the fully participating sample at each wave are then calculated as the combination of those non-response weights with the final weights from the previous wave. The approach to generate the weights for the full sample for the wave is to use a technique called calibration weighting for two-phase sampling.

Following receipt of the wave 1 weighting report, the Department will discuss and agree with the contractor the most appropriate weighting strategy for waves 2- 5. The contractor will update the wave 1 weighting report across the life of the study, to ensure that the impact of differential non-response is assessed and documented at each wave.

## 5.2 RESEARCH INSTRUMENTS AND DATA COLLECTION TOPICS

### General principles

The contractors have recommended measures and data collection (specified below) on the basis that two face to face waves are feasible within the funding envelope. These will take place at wave 1 (9 months) to help with engagement and wave 3 (age 3) to enable fieldworkers to facilitate data collection where participants need to be present. Age three is recommended by the contractors to be best time to collect such data in relation to the child's development all other project aspects considered.

It should be noted here that there may be potential in due course to apply for DfE funding for a third face to face fieldwork wave, most likely at age 5, should it be agreed between the project manager and the contractors that the measures planned then (such as Foundation Stage Profile Results, which is presently being reworked) are most likely to be insufficient for important analyses. This decision will require a review by the contractors of the project objectives and data available for collection or linking nearer the time.

The contractors and DfE recognise the importance of mode effect given the other waves of the study will involve online and phone data collection. Mode effect is where the same question results in different answers as a result of the means by which the question is delivered (in person, via computer or over the phone).

There will be no issue of mode effects in the developmental tests undertaken with the children themselves, which will only be done face-to-face (at age 3). For most question areas, especially those requiring factual reports, mode effects are also unlikely to be to be a major issue.

However the contractor will carefully select and design the questions for more subjective question areas, particularly those susceptible to so-called 'social desirability bias'. This includes parent-reported child development (both cognitive and broader) measures at each sweep. Self-completion modules (CASI) within the face-to-face interview will be used where possible to limit likely mode effects between face-to-face and online completion, but where telephone follow-up is required some mode effects (compared to CASI and online) may be inevitable. The contractor will quantify these, using clearly spelled out assumptions, in their reporting to the Department, specifically when providing information so that data collection

questionnaires/instruments can be agreed in advance of each wave. Following data collection the contractor will also provide an assessment of the actual mode effects on the instruments where effects were present.

### **Measurement protocol for the main study**

The contractor will collect data covering the following topics:

- Child developmental outcomes
- The home environment
- Background and context: Parental mental health, wellbeing, relationship quality, social support, demographics and contextual/community variables
- Provision of services: early childhood education and care, community provision, NHS, social care and third sector service-use
- Experiences and life events

The following table specifies which data collection topic and/or tool the contractor will be able to collect robustly on behalf of the department if selected for inclusion. The contractor will make recommendations to the department which of these measures should be prioritised and administered within the limited duration of the data collection time with participants. (See section 5.4.1 for fieldwork duration per wave.) The department will make a final decision on which data to collect after considering additional advice from the steering and advisory groups.

### **Table 7 Proposed research instruments**



	Respondent	Mode	9 m	2 yrs	3 yrs	4 yrs	5 yrs
<b>Child socio-emotional functioning</b>							
Strengths and Difficulties Questionnaire (SDQ)	Parent	F2F/online		X	X	X	X
Adaptive Social Behaviour Inventory (ASBI)	Parent	F2F/online		X	X	X	X
Brief Infant and Toddler Social Emotional Assessment Scale (BITSEA)	Parent	Online		X			
Infant Characteristics Questionnaire (ICQ)	Parent	F2F	X				
Ages and Stages Questionnaire	Parent	app	X	X	X	X	X
<b>Child speech, language, cognition and executive function</b>							
Words and Gestures short form	Parent	F2F	X				
Words and Sentences forms	Parent	F2F/online		X			
Language Use Inventory Short-Form	Parent	F2F/online			X	X	
	Direct						
British Ability Scales-III (4 sub-tests)	assessment	F2F			X		
Childhood Executive Functioning Inventory (CHEXI)	Parent	F2F/online			X	X	X
	Direct						
EF Touch Toolkit (sub-tests)	assessment	F2F			X		
Motor Control Tests	Parent	app			X	X	X
Early Years Foundation Stage Profile (EYFSP)	Record linkage	Record linkage					X
<b>Home learning and routines</b>							
HOME Opportunities for Variety in Daily Stimulation	Parent	F2F/online	X	X	X	X	X
EPPE Home Learning Environment Scale	Parent	F2F/online		X	X	X	X
Sleep/bedtime routines	Parent	F2F/online/app		X	X	X	X
<b>Economic and social circumstances</b>							
Family income	Parent	F2F/online	X	X	X	X	X
Parental highest level of education and occupation	Parent	F2F/online	X				
Disadvantage indicators	Parent	F2F/online	X	X	X	X	X
Ethnicity	Parent	F2F/online	X				
Religious affiliation	Parent	F2F/online	X				
Social Support Questionnaire (SSQ)	Parent	F2F/online	X	X	X	X	X
<b>Family relationships</b>							
Couples Satisfaction Index (CSI-16)	Parent	F2F/online	X	X	X	X	X
Parent Problem Checklist (PPC)	Parent	F2F/online			X	X	X
<b>Parenting and Parent-child Interaction</b>							
Maternal Bonding Questionnaire	Parent	F2F	X				
Parent/Carer-child relationship questionnaire	Parent	F2F/online		X	X	X	X
Confusion, Hubbub and Order (CHAOS)	Parent	F2F/online		X	X	X	X
Parental Attitudes to Childrearing Questionnaire	Parent	F2F/online		X	X	X	X

Table 7 continued



Mother-infant interaction (Cognitive Sensitivity Scales)	Video recording	F2F	X					
<b>Child Height and weight</b>	Parent	F2F/online	X	X	X	X	X	
<b>Parental mental health</b>								
Patient Health Questionnaire (PHQ)-9	Parent	F2F/online	X	X	X	X	X	
Parental Stress	Parent	App	X	X	X	X	X	
Generalised Anxiety Disorder Assessment (GAD-7)	Parent	F2F/online	X	X	X	X	X	
Alcohol use and smoking (adapted from MCS)	Parent	F2F/online		X	X	X	X	
Substance misuse (adapted from Offending, Crime and Justice Survey and HBSC)	Parent	F2F/online		X	X	X	X	
<b>Service use</b>								
Client Services Receipt Inventory (adapted)	Parent	F2F/online	X	X	X	X	X	
<b>Early education and care/ reception provision</b>								
Attendance (mix, duration, intensity, time of day)	Parent	F2F/online	X	X	X	X	X	
Parent attitudes to/involvement in education	Parent	F2F/online	X	X	X	X	X	
Parent perceptions of provider/teacher responsiveness	Parent	F2F/online	X	X	X	X	X	
Parent-provider involvement and relationships (incl. PTIQ)	Parent	F2F/online	X	X	X	X	X	
Services accessed by parents via ECEC provider	Parent	F2F/online	X	X	X	X	X	
Primary (formal) provider to be attended	Parent	In person/remote			X	X		
Provider structural quality (incl. pedagogical structure)	ECEC provider	Remote/phone/app			X	X		
Staff factors e.g. workload, self-efficacy, knowledge	ECEC provider	App			X	X		
	ECEC provider	App						
Staff beliefs and attitudes to education	ECEC provider				X	X		
Parent engagement and perceived parent-provider relationship	ECEC provider	App			X	X		

The above table is not an exclusive list of measures and data collection topics and alternatives instruments can be identified through advisory group suggestion or other means and be requested for inclusion by DfE so long as this does not exceed project budget.

The process for signing off data collection tools will involve the contractor providing a summary of recommended measures to the department in advance of each wave and for this to be subject to steering and advisory group comments regarding any revisions and improvements that might be made. Once this topline specification has been agreed, the contractor will provide a draft version of actual questionnaire (with clear annotation concerning scripting and routing) which again will be subject to review by DfE and advisors in terms of technicalities rather than scope. Once the content has been agreed with DfE the contractors will cognitively test and pilot the questionnaire in advance of each mainstage (as per below) and according to the timetable (see section 5.9). The questionnaires for each wave will be signed-off by the project manager once these processes are resolved to the extent that DfE agrees that the data collected will be sufficient to meet the aims of the study.

### **Specific details on data collection and measures/instruments that the contractor will deliver should they be selected for inclusion**

#### *Child development Socio-Emotional Functioning*

At 9 months, Infant Characteristics Questionnaire (ICQ) has the advantage of focusing on temperamental characteristics that are most relevant to the challenges of parenting, is quite brief and has been used very widely in development research.

At age 2 years the two the Brief Infant and Toddler Social Emotional Assessment Scale (BITSEA) has the advantage of having been specifically designed for the youngest toddlers and being considerably shorter than the CBCL.

At 3, 4 and 5 years, socio-emotional functioning will be assessed using the Strengths and Difficulties Questionnaire (SDQ).

At 3 and 5 years, the Adaptive Social Behaviour Inventory (ASBI) assess social competence.

From 9 months to age 5 years primary caregivers should be asked to complete the Ages and Stages Questionnaire (ASQ). The contractors have advised that this instrument would be well suited to obtaining repeatedly using the BabySteps smartphone app, which makes it possible to obtain more detailed information about the timing of achievement of different milestones and reduces participant burden by prompting parents to update their child's developmental profile using the app at regular intervals in-between formal waves of data collection.

To assess language and communication the English-Language Child Development Inventories are the best choice. Accordingly,

- a) At 9 months, the contractors suggest the Words and Gestures short form (Level I) be completed.
- b) At 2 and 3 years the contractors recommend the Words and Sentences forms (Level IIA and Level IIB) of the Child Development Inventories.
- c) At ages 2, 3 and 4 the contractors also suggest that we assess social communication using the Language Use Inventory Short-Form. A parent completed tool, it assesses pragmatic language and children's interaction and communication abilities, which are not covered by standard measures of language ability, but are crucial aspects of communicative competence particularly in the school and peer environment.
- d) At age 3, using 4 sub-tests of the British Ability Scales-III to assess non-verbal cognitive ability (picture similarities and matrices) and structural language (naming vocabulary and comprehension).
- e) We believe it is crucial to measure executive function in this study, given its critical role in supporting early learning and behaviour at school. At ages 3, 4 and 5 the contractors recommend the Childhood Executive Functioning Inventory (CHEXI) 22 for assessing children's Executive Function.
- f) At age 3 the contractors recommend the use of selected subtests of the EF Touch Toolkit23, because parental reports of EF have important limitations. EF Touch is a validated touch-screen based system for assessing early childhood EF.
- g) The contractors recommend that during the study they explore the possibility of adapting well-known EF tests and tests of motor control (e.g., Head-toes-knees-shoulders task, child standing on one leg, hopping on one leg, walking a straight line and running) to be delivered remotely using the video recording functions of the BabySteps smartphone app.
- h) At age 5 the Early Years Foundation Stage Profile (EYFSP) be obtained, to provide a standardized teacher assessment of children's development and readiness for school (including physical, personal social and emotional, communication and language, literacy, maths, understanding of the world, expressive arts and design).

### *The home environment*

- a) From 9 months onwards, the contractors suggest that the HOME Opportunities for Variety in Daily Stimulation questions be used to capture indicators of the home learning environment. From age 2 onwards these items could be supplemented with the EPPE Home Learning Environment Scale.

- b) At age 3 the contractors suggest exploring the possibility that researchers visiting the home complete the HOME provision of appropriate play materials and responsiveness scales.
- c) From age 2 onwards the contractors suggest that it is important to assess infants' and children's Sleep/bedtime routines. Although this can be reliably captured using questionnaires (the contractors recommend the items devised Kitsaras et al.,<sup>25</sup> for example), the contractors advise that this is an additional set of questions that would be very productively delivered via the BabySteps smartphone app.
- d) The contractors advise it would be valuable to capture information about young children's screen time, and suggest piloting a newly devised measure based on instruments for older children (e.g., Problematic Media Use Questionnaire<sup>26</sup>, and Tech-U-Q27) with appropriate modifications.

### *Economic circumstances*

- a) In addition to obtaining data on parental highest level of education and occupation, at each assessment point the contractors advise that the surveys ask/provide updates to questions from the 'Social Life of Britain's Five Year Olds' <sup>28</sup> which is part of the Social Disadvantage Index. This tool is considered a more effective way of describing disadvantage than SES: it includes indicators of deprivation of neighbourhood as defined by IMD, type of accommodation, tenure of accommodation, person per room ratio, availability of bathroom, highest educational qualification of either parent.
- b) Respondents would be asked to report their ethnicity and that of their partner/the biological father of the child, as well as their religious affiliation – we suggest using items derived from the ONS Troubled Families evaluation, but many such standard forms are available.
- c) It will be important to capture receipt of benefits, for which standard items used in the MCS can be used. The contractors recommend collecting data on equivalised net family income based on self-reported total family income and family composition.

### *Family relationships*

- a) Parental conflict and relationship quality are key areas of influence on child development and on the child's capacity to engage productively with sources of support for home learning. From 9 months the contractors suggest that couple relationship quality is assessed. The Couples Satisfaction Index (CSI-1629) is a well validated measure.
- b) From age 3 onwards the contractors also suggest the use of the Parent Problem Checklist (PPC31) to look at parental agreement regarding parenting/discipline.

### *Parenting and Parent-child Interaction*

- a) At 9 months the contractors recommend the Maternal Bonding Questionnaire, which assesses mothers' enjoyment of their baby, and maternal confidence.
- b) To measure parent-child relationship quality via parental report, the contractors suggest the Parent/Carer-Child Relationship Questionnaire<sup>32</sup> from age 2 years onwards.
- c) At ages 2, 3, 4 and 5 parents the contractors recommend the Confusion, Hubbub and Order (CHAOS<sup>33</sup>) scale which captures household disorder/unpredictability.
- d) As well as relationship quality, it is important to look at childrearing practices. Parental Attitudes to Childrearing Questionnaire can be used from age 2 onwards. The measure has two subscales - Warmth and Strictness.

e) The contractors have advised that it is critical to capture objective information about the quality of parent-child interactions in the home. For this study, they propose to observe structured play interactions between parents and children at 9 months. Caregivers would be recorded interacting with their infant for 5-minutes using age-appropriate toys (stacking bricks and a shared book reading). The recordings would then be coded by two trained raters using a rating system developed by Prime et al., focused on parental responsive support for cognitive development. This tool can be completed in 5-6 minutes making it feasible for two research assistants to complete all coding and reliability assessments for the 9-month data collection wave within 6 months. The assessment captures parental communicative clarity, mind-reading, and mutuality-building during learning interactions, and is robustly predictive of language, executive function and cognitive outcomes at preschool age as well as being sensitive to differences in family socio-economic disadvantage (Prime et al., 2015).

f) Capturing relationship support outside the family is important when considering parental wellbeing and their capacity to provide optimal parenting. At 9 months, 2, 3, 4 and 5 years the contractors recommend assessing perceived social support using an abbreviated version of the Social Support Questionnaire (SSQ).

g) A further option is LENA (Language Environment Analysis: <https://www.lena.org/>). Often known as the 'talk pedometer' LENA is worn by children in a specially-adapted vest and captures all talk directed at that child, e.g. over the course of a day.

### *Child Nutrition and growth*

a) The contractors suggest asking nutrition-related questions using the BabySteps smartphone app at regular intervals between 9 months and 5 years using items from the Child Dietary Questionnaire (CDQ).

b) Height and weight should be recorded at each wave of data collection. To limit the complexity of assessment we suggest that the surveys rely on information reported by parents.

### *Parental mental health*

a) Anxiety and depression: recommend the use of the PHQ-9 42 for depressive symptoms and the GAD-7 43 for anxiety. These two should be assessed at 9 months, 2, 3, 4 and 5 years.

b) Questions about alcohol use and smoking are important to consider, and the contractors have suggested the items used in the Millennium Cohort Study (MCS1) questionnaire for the sake of comparability.

c) Questions about substance misuse should also be considered at all measurement points. The contractors suggest either the Life Events List<sup>44</sup>, which is a short 12-item checklist that corresponds well with the gold-standard interview based Life Events and Difficulties Schedule, or the life events checklist used as part of ALSPAC<sup>45</sup>. This latter instrument has 44 items, so careful piloting would be needed to ensure that the protocol is not overly burdensome. The contractor expects these will need some consultation and adjustment to specifically capture experiences of parents of infants and young children (e.g. related to impacts on childminding/ childcare, disruptions to schooling of older siblings, home working etc).

### *Service Use*

The contractors will work closely with the Department to design this aspect of service use data collection. At each measurement wave the contractors suggest asking questions about the use of hospital services, community health, social services and legal services using questions adapted from the validated Client Services Receipt Inventory originally developed by the Personal Social Services Research Unit, University of Kent. These items could be supplemented by specific questions about whether the child has any learning difficulties, long-term illnesses or disabilities and any social worker involvement using items taken from the Troubled Families evaluation and Millennium Cohort Study (MCS1) questionnaire. Critically, we would aim to capture awareness and use of key early years programming, including Hungry Little Minds, the Nuffield Language Intervention, any early years input from health visitors, use of family support services at Family Hubs and children's centres, etc.

#### *Online survey for non-primary caregivers*

For each stage of data collection the contractors will create a core subset of survey instruments that would be provided to non-primary caregivers online. This would cover demographic information, child development (ASQ), behavioural difficulties (SDQ), level of parental involvement and/or contact, parental mental health, the home learning environment, parenting, relationship quality, and life events, including covid-related impacts. Non-primary caregivers will also be invited to download the BabySteps app, and participate in that way.

#### *Smartphone-based data capture (Baby Steps App)*

The contractor will use smartphone technology to support the data collection specified above and collect detailed observations of parent-child interaction and development in a nationally-representative sample.

The contractors will subcontract the University of Iowa, who, with the tech company FullStack, have developed an innovative smartphone app called BabySteps, which was specifically designed for studying infant and early child development. This system embeds data collection tools that can sample at high temporal resolution (e.g., several times in a given week) and technologies for capturing rich home environment data at low cost, through audio and video recording, with an engaging and dynamic user-interface to maintain interest and motivation.

Parents are encouraged via the app to complete data collection with reward points that can be redeemed online for shopping vouchers. Parents are also able to use the standardized developmental data collected via the app to chart their baby's developmental milestones and even to use the information to discuss any concerns they might have with a health professional.

The components of the app include:

- 1) An introductory tour of the app features and study design
- 2) a process for obtaining informed consent to enrol in the study and allow future research access to electronic health data and data collected from the smartphone app (questionnaire and video/audio data)
- 3) a list of developmental milestones to record dates and video/audio footage (e.g. sound of baby's babbling, video of baby's first steps or words, parent-child play, saying goodbye on first day of nursery, etc.),
- 4) A virtual "baby book" record of important events and milestones that can be shared via social media and
- 5) developmental milestone questionnaire and other bespoke measurement instruments.



The mother will also be asked to complete app-based questionnaires about their pregnancy and childbirth (parity, delivery mode, birthweight), breastfeeding status, childcare experience, family history (including ASD and speech delays), and demographic information.

Response rates and attrition: it is important to acknowledge that as a new technology the contractors do not currently know with certainty what proportion of families will continue to use the app regularly over time. An in-built incentive system to maintain engagement will be applied by the contractors as well as reminding participants during the in-person visit at age 3 how valuable the app is for the research, as well as through intermittent SMS reminders.

During the piloting phase of the project the contractors will look at uptake and short-term retention rates closely and gain feedback from groups of parents to maximise its acceptability.

### *BabySteps App production and responsibility*

A fully customized version of BabySteps will be developed (including adjustments, maintenance and monitoring) by the contractor via a subcontract with FullStack and the University of Iowa and in close collaboration with the contractor and the DfE.

Customization will include adjustments to the branding to reflect the project partners, adjustments to the measurement tools and data collection schedules and changes to the privacy notices and consent procedures to meet UK policies. Piloting and user focus groups will be undertaken to fine-tune the app prior to launch. The final app will be fully functional on IOS and Android and made available to participating families to download from the Apple Store and Google Play. In order to maintain interest and engagement in the app, BabySteps updates will be released at least quarterly, based on user feedback and ratings. Usage of the app will be monitored and participants will be sent reminders if engagement stops for any reason.

### **Assessing the effects of early education and care (ECEC), including reception**

Capturing the effects of ECEC will be central to the study. ECEC factors influencing children's development can be broadly divided into:

1. ECEC attendance (mix, duration, intensity)
2. the structural quality factors (e.g. qualifications, ratios) which enable/constrain the responsive and educational interactions required for high process quality
3. internal staff or parent or child factors such as dispositions, attitudes or knowledge, which can act as moderators of ECEC effects or (in the case of staff) directly influence process quality.

Gathering information at all levels will be important to inform policy and practice. Some of the most pressing questions relate to the effects of process and structural quality, and relationships between these. Direct assessment of process quality – i.e., the child's immediate experience of early years teaching and responsive care – will not be measured in the main study, but the commissioning of a separate quality substudy is being considered by DfE.

### *An overview of data collection in the main study*

The contractor will collect data on the following topics using remote (and thus COVID-secure) methods:

- ECEC attendance (from parents, at all waves);
- provider structural quality (from ECEC providers at Waves 3/4) – including use of innovative app technology to extend beyond traditional structural measures;

- provider staff, parent and child characteristics which may mediate or moderate ECEC effects (from parents, providers and children) - e.g. teacher workload/ stress, parent-provider relationships, attitudes to education.

These will be gathered for the whole sample, enabling meaningful associations to be identified for factors which may have small but important effects, due to their malleability via policy.

#### *Detail on data collection methods*

##### *Data from parents:*

Data supporting analysis of attendance effects (mix, duration, intensity) will be gathered at all waves on multiple childcare arrangements and patterns. At face-to-face data collection points these will form part of the interview. For remote waves, data will be gathered via the online survey, using the same question format to ensure consistency between modes.

The contractor will gather data on the time of day children attend, on the basis of recent evidence showing that quality reduces across the day. This may be an important moderating factor in understanding ECEC effects on children's learning.

Data collection will support highly nuanced analysis of children's ECEC multiple care 'pathways' to school and their different effects on child outcomes: recent studies have examined the extent to which different ECEC profiles across multiple care arrangement are associated with child outcomes. This would build on and extend the approach taken by SEED in examining cumulative ECEC effects over the preschool period.

Data will also be gathered on factors such as parent attitudes to education, parent perceptions of provider responsiveness, parent-provider involvement/relationships and parental involvement in children's schooling, all which have been shown to predict school-readiness. In addition to direct effects on child outcomes, this will enable examination of the degree to which parent dispositions and home-provider relationships influence or interact with the effects of ECEC or the home learning environment. (Should data on process quality be gathered via the sub-study, it would also enable us to explore the extent to which parent-provider relationship quality relates to children's actual experiences in ECEC.)

The exact data collection tools will be agreed with the department but examples of measures with promise include:

- Items from the US FACES study - 11 items on parent-school involvement and 9 on relating to parent perceptions of provider responsiveness – both used successfully in Powell (2010) study cited below;
- the 11-item Quality of the Parent–Teacher Relationship subscale from the Parent–Teacher Involvement Questionnaire (PTIQ; Kohl et al, 2000);
- the contractor will also gather data on other services accessed by parents via their ECEC provider/school, to provide a full picture of the ECEC and schooling package.

##### *Data from providers*

Data will be gathered directly by the contractor from providers at ages 3-4 (nursery) and ages 4-5 (reception), with the aim of predicting children's progress between 3 and 5 years. Where individual data is collected on a target child through provider surveys, these will be linked using both classroom/room IDs and providers details.

As noted, effect sizes are likely to be small, and recent evidence indicates that ECEC effects are best detected through examination of cumulative effects over multiple consecutive years.



The inclusion of both nursery and reception in this study will enable a full picture to be gained of children's EYFS experience, and enable important policy questions to be answered regarding early schooling effects.

The contractors will:

- gather details at the age 3 interview on the main (formal) provider to be attended at age 3-4 and consent to make contact;
- conduct telephone interviews with providers (2108 interviews assumed). Interviews would be relatively brief (15-20 mins) but preceded by a questionnaire sent to providers for completion prior to the interview. This is an approach which has yielded excellent results in numerous prior studies, as it allows the interview to be used largely for checking and refining responses. The option for providers to return fully completed questionnaires after the interview will also be available;
- gather details via the age 4 remote wave on the primary (formal) provider to be attended at age 4-5 and repeat the above process (2,070 interviews assumed). The contractor shall capture and refine the standard structural quality measures used in prior studies (e.g. qualifications, ratios, SEND provision, CPD, staff turnover), focusing on staff working 10 hours or more per week in the relevant room on the basis that they will have most influence on children's experiences.

Particular attention will be paid to gathering policy-relevant details on graduate qualifications to enable meaningful differences to be examined, e.g. comparing effects of QTS, EYT and EYPS, or primary QTS (3-11yrs) vs an early years QTS (3-7 years); on school type and relevant characteristics.

The number of planned interviews is based on the following assumptions:

- Age 3:
  - 6,044 achieved interviews
  - 84% of children assumed to be in formal provision = 5,076 providers
  - 90% of providers identifiable from parent report = 4,569 providers
  - 1.3 children per provider assumed = 3,515 providers (attended by 4,569 ch)
  - 60% assumed achieved interviews = 2,108 providers (attended by 2,740 ch)
- Age 4:
  - 4,947 achieved interviews
  - 93% of children assumed to be in formal provision = 4,600 providers
  - 90% of providers identifiable from parent report = 4,140 providers
  - 1.2 children per provider assumed = 3,451 providers (attended by 4,140 children)
  - 60% assumed achieved interviews = 2,070 providers (attended by 2,484 children)

Power calculations indicate that effects (delta r-squared) of .003 (equivalent to a partial r of .05) would have 80% power at n=2,352. For a larger effect (partial r of .06), 80% power would be achieved at n=1,776. This indicates that the proposed data collection strategy is appropriate for detecting even modest structural quality effects.

In addition, one or more staff members working directly with the study child/ren will be encouraged to sign up to the second element of the provider study. This will involve using an adapted version of an existing innovative and widely-used app Teacher Tapp to gather data every week for half a term.

Teacher Tapp is currently used by 8,000+ teachers across the UK. Teachers are asked three multiple choice questions at 3.30pm each day (e.g. "How many conversations have you had with a colleague today about children's learning?"). The following day they receive a summary of responses from the whole cohort. This feedback feature is popular with current app users and is likely to greatly enhance study engagement and response.

Early years practitioners will use a modified version of Teacher Tapp created for the purposes of this study. Questions would be asked on three days each week for the 6 weeks of the relevant half-term. This would enable data to be gathered on a range of factors identified through prior research as influencing the quality of relational and instructional interactions with children, including:

- staff factors such as workload and stress, professional confidence and self-efficacy, or pedagogical knowledge;
- beliefs and attitudes to education;
- parent engagement and perceived parent-provider relationships;
- richer 'pedagogical structure' quality indicators e.g. include time spent in large groups/small groups/free play, whether shared reading has taken place that day, which specific curricula or evidence-based intervention programmes have been used.

The use of multiple data collection points over a half term will enable much richer data to be gathered than is possible in a single interview (or indeed, observation).

The app will also present an ideal opportunity to answer ad hoc policy questions of interest. Questions would be designed using a mix of validated measures (e.g. Bandura's Teacher Self-Efficacy Scale, the OLP measure of pedagogical knowledge developed by Mathers) and bespoke questions.

#### AN OPTIONAL INTEGRATED ECEC SUBSTUDY

Additional data concerning process quality (and so its effects) may be collected in a substudy should the department assess the investment as being good value for money. The contractors currently propose conducting live observations in 610 providers (covering n=1,220 children from the main study) at age 3-4 and 667 providers (n=1,000 children) at age 4-5 (i.e. Reception Year), resulting in an estimated achieved sample at age 5 of 800 children with quality data at both time-points.

A detailed proposal focusing on this substudy will be presented to the department and, if the proposal is carried forward, Research Board approval will be sought as the substudy will require additional, separate funding (indicative est. £1-1.2m). The decision about whether or not to fund the substudy will be made by DfE by the end of 2021.

In the meantime, the contractor will give due regard for, and communicate to the department, any interdependencies between the main study and the substudy so that the latter is successful should it be commissioned.

#### DATA LINKING

Study data collected through primary research will be substantially enhanced when it is linked to data already collected on study participants. The existing data will largely be from government administrative databases, and so the department will lead on data linkage with support and guidance from the contractors, working with other government departments to ensure matching is done efficiently, securely and legally.

The administrative data sets will include: those held by DfE in relation to early years and school attendance, the national pupil database and children's social care; those held by DHSC or NHS Digital regarding birth, health, service receipt such as primary care and hospital episodes; and those held by DWP regarding benefit eligibility and receipt.

As set out in section 5.4.2, the contractor will devise and recommend how consent should be sought and established so that maximum number of participants agree to have their personal data linked to a range of administrative data so it can be analysed to produce aggregated, statistical reports. The contractor will not be required to match, store, analyse or disseminate linked datasets as part of this contract, although this work may be subject to competitive tender. However, the contractor will be required to ensure that study documentation refers to any linked data where appropriate, this will include, for example describing the dataset to make users aware of it and providing instructions on how to link it to survey data in the user guide.

### 5.3 PILOTING AND QUESTIONNAIRE DEVELOPMENT

#### 5.3.1 Cognitive testing

At each wave, the contractor shall undertake 10 cognitive testing interviews in person with parents lasting approximately 60 minutes. If in person fieldwork is not possible due to Covid-19 the contractor will carry out interviews via online video interviewing. The contractor and the Department will take a collective decision by as to whether the cognitive testing can be done in person.

The cognitive testing will focus on new questions, agreed with the department, rather than validated tools (which can't be changed). The contractor will explore respondents' comprehension of questions and their ability to recall the information being sought and provide recommendations to the Department on changes to question wording and/or format.

#### Sample composition

The contractor will set quotas for fieldwork to ensure new questions are tested with the full range of parents on key characteristics that are likely to impact on how they respond. An example of the characteristics to be considered is shown in the table below. The contractor will agree the sample quotas and final composition with DfE based on the questions to be tested.

**Table 8: Example sample composition**

Group	Subgroup	Minimum quota
Parent gender	Female	4
	Male	4
Number of children under 5	One	4
	Two or more	4
Parent disability	Has a disability	2
	Does not have a disability	6
Parent social grade	ABC1	2
	C2DE	6
Parent ethnicity	White	5
	BME	3

## Recruitment and fieldwork

The contractor will use their specialist recruitment partner, Criteria, who have undertaken successful recruitment on other DfE surveys such as the DfE Omnibus Survey of Pupils and Parents/Carers. The contractor will remain responsible to the Department for this work. The contractor will gain informed consent from all participants. The contractor shall conduct interviews in three different locations in England and interviews will be conducted in the parents' home if in-person fieldwork is possible.

To ensure we achieve the right mix of parents for the testing, the contractor will pay each parent a thank you incentive of £40 which is standard in research like this. The interviews will be carried out using paper questionnaires/materials. This is the most effective approach as it allows for revisions to be made in a more cost-effective way (as no re-scripting is required) and the overall purpose of the testing is to explore comprehension, rather than the format of each survey. Information will be emailed to respondents in advance if in-person testing is not possible.

Interviews will be conducted by core members of the Ipsos MORI research team who will have been involved in the development of the new questions (and so fully understand the background and the context, what the questions are trying to achieve, and how they fit in to the questionnaire as a whole). The contractor will use a guide document during the interviews which will be developed for DfE to review and sign-off.

## Analysis and reporting

The contractor will take the following steps to analyse the interviews;

- A summary of each interview will be written up into a structured pro-forma after each interview and coded into an anonymised analysis spreadsheet. The analysis spreadsheet will include key demographics for each respondent (such as their age, gender, social grade and so on) and findings for each test question.
- A data management matrix will be created which lists the test questions and areas under investigation as themes and subthemes
- Data from each case will then be synthesised with the appropriate parts of the thematic framework.
- Cases will also be sorted by factors of interest, for example participant characteristics or by a certain attitude. This will allow comparison of answer strategies at different questions.

The contractor will provide DfE with a report setting out the key findings and recommendations from the cognitive testing. This will contain key evidence from the cognitive interviews around question performance and make suggestions for any required actions such as revisions to the wording of the questions, or whether to use a question or an alternative.

### 5.3.2 Pilot

The contractor shall conduct a pilot survey prior to each wave of the study. The pilot will replicate mainstage procedures as far as possible and will be used to test all fieldwork procedures to inform changes prior to the mainstage. The elements that will be tested in the face-to-face waves and online/telephone waves are shown in the table below.

A decision will have to be taken as to whether the first wave pilot can take place face to face, as a consequence of COVID-19. If face to face fieldwork is not possible, a knock to nudge approach will be taken. This will involve interviewers visiting addresses in a socially

distanced way and collecting some basic information. This would include asking questions to establish whether a 9-month old is living at the address, who is the main carer for the child, the number of people living in household and their age, gender, ethnicity. Interviewers would gather contact details for the main parent (including mobile phone number and email address) so the main parent can be asked to complete the pilot survey online.

The table below sets out the elements that each pilot wave will cover. Items with an asterisk represent those that the contractor would not be able to cover at wave 1, should face to face fieldwork not be possible.

**Table 9: Pilot coverage**

<b>Face-to-face pilots (Waves 1 and 3)</b>	<b>Online/telephone pilots (Waves 2, 4 and 5)</b>
Sample/contact details: <ul style="list-style-type: none"> <li>Quality of contact details from CBRs</li> <li>Interviewer approaches to identify the correct person to interview.</li> <li>Feedforward contact details in Wave 3.</li> </ul>	Sample/contact details: <ul style="list-style-type: none"> <li>Quality of contact details used for follow-up in the online/telephone surveys.</li> </ul>
Overall response rates:* <ul style="list-style-type: none"> <li>Procedures for maximising response</li> </ul>	Overall response rates: <ul style="list-style-type: none"> <li>Efficacy of the reminder strategy.</li> <li>Impact of the telephone follow-ups.</li> </ul>
Fieldwork procedures:* <ul style="list-style-type: none"> <li>Doorstep introductions</li> <li>Setting up appointments</li> <li>Telephone calls at Wave 3</li> <li>Consent processes (including data linkage)</li> </ul>	Fieldwork procedures:* <ul style="list-style-type: none"> <li>Sending out online survey/setting up telephone survey procedures.</li> </ul>
Fieldwork management: <ul style="list-style-type: none"> <li>Electronic Contact Sheet (ECS) set-up and functionality for interviewers and office teams to monitor sample.</li> </ul>	Fieldwork management: <ul style="list-style-type: none"> <li>Fieldwork monitoring systems</li> </ul>
Communication materials: <ul style="list-style-type: none"> <li>Letters/leaflets</li> </ul>	Communication materials: <ul style="list-style-type: none"> <li>Letters/emails</li> <li>Survey introduction</li> </ul>
Interviewer briefing: <ul style="list-style-type: none"> <li>Quality of training</li> <li>Areas where further explanation/training needed/too much information provided.</li> </ul>	Interviewer briefing (telephone interviewers): <ul style="list-style-type: none"> <li>Quality of training</li> <li>Areas where further explanation/training needed/too much information provided.</li> </ul>
Length of visit* <ul style="list-style-type: none"> <li>Length of time in household broken down by different elements (main respondent, cognitive assessments etc) and modules.</li> </ul>	Questionnaire length <ul style="list-style-type: none"> <li>Time taken to complete the online/telephone survey (broken down by modules)</li> </ul>
Experience of the interviewer visit* <ul style="list-style-type: none"> <li>What aspects are engaging/disengaging?</li> </ul>	Experience of completing the questionnaire <ul style="list-style-type: none"> <li>What aspects are engaging/disengaging?</li> </ul>
Functionality of the questionnaires: <ul style="list-style-type: none"> <li>Any issues with the questionnaires/routing etc?</li> </ul>	Functionality of the questionnaires: <ul style="list-style-type: none"> <li>Any issues with the questionnaires/routing etc?</li> </ul>
Data quality: <ul style="list-style-type: none"> <li>Are there questions which elicit lots of 'don't knows', 'refusals'?</li> <li>Routing issues.</li> </ul>	Data quality: <ul style="list-style-type: none"> <li>Break-offs in the online survey?</li> <li>Are there questions which elicit lots of 'don't knows', 'refusals'?</li> <li>Routing issues.</li> </ul>

### Pilot approach: longitudinal and top-up sample

The contractor will deliver a large pilot prior to wave 1 to allow for testing of fieldwork procedures and response rates. This will also allow follow-up of the longitudinal sample at subsequent pilots to test response rates and engagement procedures as far as possible, although attrition will reduce the size of the longitudinal sample in each wave.

The contractor will top up the longitudinal pilot sample with freshly recruited sample (i.e. recruited from screening and not part of the sample for this cohort study) to increase the achieved number of interviews from wave 3 onwards to ensure key aspects of the approach (such as interview length) can still be tested.

The contractor will boost the pilot sample at wave 3 given the extra length and importance of this wave (it will be a longer face-to-face interview involving child cognitive assessments). This boost will also enable the contractor to pilot the childcare provider telephone interviews as part of the childcare quality assessments.

The contractor will take all reasonable actions to deliver the pilot sample size and response rates shown in the table below.

**Table 10: Pilot sample sizes and response rates**

<b>Wave</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Age of child	<b>9 months</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Mode	<b>Face-to-face</b>	<b>Online/telephone</b>	<b>Face-to-face</b>	<b>Online/telephone</b>	<b>Online/telephone</b>
Issued longitudinal sample	438	175	87	52	21
Issued top up sample (from screening)	-	-	53	36	55
Response rate (longitudinal sample)	40%	50%	60%	40%	30%
Response rate (top up sample)	-		90%	80%	80%
Achieved interviews - longitudinal	175	87	52	21	6
Achieved interviews - top-up	-	-	48	29	44
<b>Achieved interviews - total</b>	<b>175</b>	<b>87</b>	<b>100</b>	<b>50</b>	<b>50</b>
<b>Pilot of interviews with provider to assess childcare quality (core approach)</b>					
Using formal childcare	-	-	84%	93%	-

Consent to providing details	-	-	90%	90%	-
Contact details available	-	-	56	42	-
Interviews conducted (60% RR) + Questionnaires and Teacher Tapp	-	-	34	32	-

Should a knock to nudge approach be required for the pilot a reduced response rate of 30% is anticipated and therefore the contractor shall issue a larger starting sample of 583.

### Pilot evaluation

The contractor shall gain pilot feedback from interviewers in the following ways:

#### *Waves 1 and 3 (Face-to-face waves)*

- Two interviewer debriefs via Teams for 14 interviewers in total to provide detailed feedback on the pilot.
- Pilot feedback forms (one for respondents and one for interviewers).
- Five interviewer accompaniments by members of the project team and the Department.

#### *Waves 2, 4 and 5 (Online/telephone waves)*

- A small number of questions included in the online/telephone questionnaire to gather feedback from respondents on their experiences of completing the questionnaire.
- Members of the project team will listen into at least 5 telephone interviews per wave in addition to real-time listen-in quality assurance undertaken by the contractor's Telephone fieldwork team. The contractor will carry out more listen-in if substantive issues are identified early on in the pilot.

Following each pilot the contractor will produce a written report with recommended amendments to the main survey. The contractor shall hold a debrief with DfE to discuss the pilot further and agree amendments prior to the mainstage of each wave of data collection.

### Piloting the Babysteps app

As a novel form of data collection, it will be vital to explore parents' views and experiences of the BabySteps app as part of the pilot. From earlier research the contractor has highlighted that common concerns are likely to centre around the involvement of a third party, or the frequency in which they will be asked to engage with the app. The contractor will aim to provide reassurances to these concerns through their materials, app branding and interviewer contact. The contractor will collect feedback regarding the app directly from parents within the study cohort via a short telephone survey. The contractor assumes 50% of the total pilot cohort will download the app so will aim for an app pilot sample of 87 respondents.

The contractor will ask all pilot participants permission to recontact them to form a group for ongoing piloting at each wave. This will also allow invited participants to take part in a follow-up qualitative interview about the app (either over the telephone or a video conferencing



software such as MS Teams, depending on their preference). To explore acceptability in depth, the contractor will speak to parents with varied views and experiences of the app, including: parents who downloaded the app and engaged with the activities, parents who downloaded the app but had limited engagement with the activities, and parents who chose not to download the app.

The contractor will explore the following topics in the pilot:

<b>Clarity</b>	Did participants understand why they were being asked to download the app, and what taking part in the app would involve? Were the consent requirements and data security clear?
<b>Downloading the app</b>	Views / acceptability of downloading the BabySteps app Motivations/barriers
<b>Usability</b>	Overall, how easy or difficult did participants find navigating the app? Probe on the interface Probe by activity, e.g. completing study tasks, logging milestones Who was using the app? (e.g. mother, father)
<b>Tasks</b>	Views on the types of tasks they were asked to complete - which tasks did they choose to take part in? Why not the other tasks? Which did they enjoy the most/least? Why?
<b>Frequency</b>	Views on frequency of different activities Is there anything they would like to do more/less often?
<b>Motivations</b>	What motivated them to take part? Was their engagement sustained? Why/why not? Views on benefits, such as the virtual baby book
<b>Barriers</b>	Any suggestions for improvements? Did they encounter any technology or other difficulties? Any concerns using the app? Probe on views around sharing personal data

As a result of the pilot, the contractor will review how best to communicate the app to participants, as well as the types of activities participants are asked to complete. The contractor will subsequently adjust participant communications and the activities participants are asked to complete, if required.

As with all other instruments, the app will be considered and checked by the contractor and department for issues of an ethical nature, such as it being upsetting for parents who may be struggling with mental health or those with children who are developmentally delayed. The potential of sign-posting participants to resources and/or services via the app will be explored during the pilot.

#### *Decision whether to discontinue BabySteps*

The decision whether to proceed with the innovative BabySteps app will be reviewed after it has been piloted and again after initial take up and data quality has become known. The contractor will provide regular monitoring information and the department reserves the right to discontinue the app unless certain performance indicators are met. These PIs will be agreed and incorporated into this contract in a timely way via contract variation. Should PIs not be agreed and met and the app be discontinued, the contractor will deduct any costs related to use of the Babysteps app in future waves and the Department will not be invoiced for these costs.

#### **Piloting the childcare quality assessments process**

The contractor shall pilot the childcare quality assessments process. These are planned to take place following the age 3 and age 4 surveys. The contractor will ask the pilot participants for details of any formal childcare providers, and will conduct a small-scale pilot (see table 10 for numbers) to test the survey procedures (sending out information about the survey in the post so that providers know what information is required, and then phoning providers to collect that information). The contractor will agree the sample of types of provider that would be included in the pilot with the Department beforehand and include a mix of types of providers, providers with more than one 'cohort child' attending, size of provider and any other variables which may affect how providers participate in the study that will be important to test in the pilot. The pilot will look at:

- The quality of provider contact details provided by parents.
- Fieldwork processes for contacting providers. Providers' ability and willingness to provide the information being requested.
- The quality of the data given by providers, including whether there is a high proportion of missing answers and don't know responses.
- Uptake and user-experience of Teacher Tapp, interview and questionnaire

We will include a few questions to assess providers' experience of the survey and engagement. We will also include feedback from telephone interviewers regarding the process of contacting and speaking to providers. Written findings from the pilot along with suggested changes for the mainstage will be provided to DfE.

### **5.3.3. Scripting**

#### **Scripting the research instruments**

The contractor will use Dimensions (UNICOM Intelligence) software to script the research instruments for all study modes (face-to-face, online, and telephone). Dimensions is the multi-mode scripting and data processing platform used by Ipsos globally, and which has been used to deliver other cohort studies successfully in recent years, including Wave 7 of MCS.

Once the research instruments are agreed, the contractor will create a Computer Assisted Interviewing (CAI) specification from which their programmers will create the survey scripts. The contractor will use a template in which all scripting elements are strictly defined to avoid problems such as ambiguity in routing statements leading certain questions being under- or over-asked; single-code questions being incorrectly scripted as multi-coded (or vice versa);

errors with randomisations or rotations; and text-fills leading to awkward or grammatically incorrect question wordings which may not be understood or which may elicit an incorrect answer.

### Checking the scripted research instruments

The contractor will check the scripted research instruments using both automated and manual checks. Automated checks will include:

- Stress Testing (whereby software makes repeated runs through the script, selecting answers at random, and using feed-forward information that is randomly selected from a list of permitted values, to identify any catastrophic script errors which the script cannot bypass),
- Pathfinder Analysis (which checks dummy data created via Stress Testing for any evidence of incorrectly programmed routing conditions).

Manual checks will include:

- question text;
- interviewer and respondent instructions;
- response labels;
- text-fills;
- routing;
- the handling of feed-forward information;
- the “look and feel” of the questionnaire;
- sense checks to identify anything unexpected with the potential to confuse or mislead.

In carrying out the manual checks the contractor will create a “dummy sample” of cases, designed to cover all major routes through the script. The sample will specify both variables relating to the child (name, gender, date of birth), as well as (for waves 2-5) feed-forward data from previous waves. The contractor will include landing pages for each instrument that present all feed-forward information used by the script. These landing pages will be removed from the final version of the script, so will not be seen by interviewers / respondents.

The contractor will also test the online script on several devices, with different screen sizes, to check the script is displaying appropriately and make appropriate alternations if it is not.

## 5.4 FIELDWORK

### 5.4.1 Fieldwork approach for each Wave

The table below provides a summary of the survey design for each wave. The following sections set out the approach the contractor will take to response rate maximisation; protocols for obtaining informed consent for both the survey and data linkage; fieldwork management including managing the potential impact of Covid-19 at wave 1; and between-wave sample management.

**Table 11. Fieldwork approaches**

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5
Age of child	9 months	2	3	4	5

Mode	Face-to-face	Online-Tel.	Face-to-face	Online-Tel.	Online-Tel.
Interview length	45 mins	30 mins	90 mins	30 mins	30 mins
Incentivisation	London £20 All other: £10	4 highest IMD quintiles: £5  Lowest IMD quintile: £10	London & most deprived IDACI quintile £25  All other: £15	4 highest IMD quintiles: £5  Lowest IMD quintile: £10	4 highest IMD quintiles: £5  Lowest IMD quintile: £10
Issued sample	17,986	8,518	8,433	8,124	8,043
Achieved interviews	8,518	5,482	6,044	4,947	4,142
Response rate (of issued)	48%	64%	73%	61%	51%
Response rate (of previous wave completes)	n/a	64%	81%	74%	74%
Attrition (vs Wave 1)	n/a	36%	29%	42%	51%
Attrition (vs previous wave)	0%	36%	-10%	18%	16%

#### 5.4.2 Mitigating the impact of COVID-19 (Face to face waves 1 and 3)

The COVID-19 pandemic is currently having a significant impact on face-to-face fieldwork and this impact may still be present when wave 1 fieldwork is launched in January 2022. At present, many Official and National Statistic surveys that use face-to-face interviewing are suspended, or are using alternative approaches. As Market Research Society Company Partners, the contractor's for this study abide by their guidelines. The contractor shall continue ongoing dialogue with MRS to ensure that study fieldwork is in line with the latest guidance.

At this point, it is difficult to predict the precise impact of COVID-19 on wave 1 fieldwork. For the purposes of this contract, we have assumed that there will be a return to business as usual at some point prior to the launch of this survey and that surveys can be implemented as normal. The approach for Children of the 2020s assumes that fieldwork at Waves 1 and 3 will be carried out face-to-face inside participants' homes, and that the remaining waves (and any between-waves survey measures that might be included) will take place primarily online with a telephone follow-up interview for non-responders to the online survey.

However, it may be that face-to-face in-home interviewing is still not possible during the planned fieldwork periods in 2021 and early 2022, either nationally or in certain areas subject to local lockdowns. Alternative approaches are set out below should this be the case. The contractor and the Department shall continue to monitor the situation closely and will take a decision at an appropriate point as to whether the main stage fieldwork can go ahead in a face to face mode.

## COVID interview protocols

The contractor's current protocols that should enable in-home interviewing to take place safely are set out below. Given the dynamic situation of the pandemic, the contractor will regularly review and update these protocols to reflect the latest Government advice and MRS guidance.

Current protocols include the following:

- individual risk assessments on all the projects where face-to-face interviewers will be visiting households and, as a result of that, appropriate control measures (such as appropriate PPE, social distancing measures etc) are implemented to ensure the safety of interviewers and respondents.
- all interviewers undergo a mandatory COVID-19 Health and Safety briefing which covers;
  - safe usage and disposal of PPE
  - doorstep processes to manage usage of PPE and the provision of any materials.
  - the role that interviewer behaviour plays in reassuring respondents and maximising cooperation
  - incident reporting protocols
  - social distancing from the respondent at all times (2m apart from the respondent on the doorstep).
- all interviewers complete a screening questionnaire every day that they work stating that they are fit to work (have no symptoms). They can't work until the questionnaire is completed.
- All interviewers are issued with gloves, wipes, hand sanitiser, a Hi-Viz jacket and PPE instructions. Currently, wearing face coverings outside is not mandatory and therefore the contractor does not provide them. When in-home interviewing is allowed, the contractor will consider carefully whether to mandate the wearing of facemasks while interviewing in the home.
- Potential respondents are provided with a leaflet designed to reassure them about the contractor's COVID-19 secure practices.

## Alternative approach if face-to-face in-home interviews are not possible

If interviewing inside homes is not possible at the time of the Wave 1 fieldwork, the contractor will employ the "knock to nudge" approach also put forward for the pilot.

The initial contact stage is the same as it would be for an in-home approach. The interviewer will visit the address (using the standard call pattern) and introduces the study on the doorstep, following the COVID-19 secure processes that the contractor will have in place. On the doorstep they carry out a short household interview in order to identify the main parent, and to collect contact details for them. The contractor will then invite the main parent to complete the survey using another mode (online, telephone or video call via Teams).

Interviewers would book appointment times to conduct telephone or Teams based interviews. Participants who opt for an online approach would be followed up in person if they do not complete the survey, to help encourage participation.

Should this approach be required, the contractor will conduct an exercise to assess the potential mode effects of using wave 1 research instruments and measures across online and video interview formats. The contractor will provide advice to the Department on which research instruments and measures can be effectively used and the Department will have final sign off of the instruments and measures used.

The contractor will also provide revised costs for fieldwork and related activity should the contractor and the Department agree to move to an alternative non face-to-face approach.

#### **5.4.3 Who to interview?**

At Wave 1, the contractor shall carry out the main interview with the primary care giver of the cohort member (the 9 month old child), and attempt to conduct a short online interview with the other parent. The contractor will take the following actions in different potential scenarios;

- In households where there are two parents/parent figures, the main interview will be conducted with the parent who spends the most time with the child. If both parents spend the same amount of time with the child, either can complete the main interview, and the interviewer will record which person is completing it.
- If the interviewer is completing this initial section with the parent/carer who is not identified as the primary caregiver, the interviewer will arrange a time to return to interview that person.
- If there is a resident partner, the interviewer will ask them to complete an online survey. If they are present the interviewer will ask them directly to complete this, and provide them with the relevant details (the URL and their access code).
- If they aren't, the interviewer will leave a leaflet behind for them, outlining the contents of the online survey and explaining the purpose. A unique link to the online survey for the partner will be generated for each sampled child in advance.
- If the other parent lives in a different household, the contractor will still attempt to get them to complete the online survey. Interviewers will ask the primary parent to pass on the leaflet and survey link to the non-resident parent to ask them to take part.
- If the resident partner is not the biological father of the child, the contractor will still interview them (as, being resident, they will have an impact on the child's development). However, if it is felt that a biological parent who is not resident but has contact with the child is more appropriate, the contractor will agree with the Department who to interview.

#### **5.4.4 Maximising responses**

The contractor will deliver a comprehensive set of actions to minimise non-response, as detailed below.

##### **Effective survey materials**

###### *Waves 1 and 3 (face to face)*

Advance letters and survey leaflets will be professionally designed by the contractor's in-house Studio team to maximise respondent engagement and minimise refusals. The contractor will agree the design of the survey materials with the Department.

Opt-out letter: The Department will require an opt-out letter to be sent to all respondents for waves 1 and 3. The opt-out letters will be despatched centrally by the contractors, in a single batch, around two weeks before fieldwork is due to begin. This opt-out letter will request the respondent's help with the survey, contain details about the survey content and purpose, describe how they have been chosen, and explain why the study is important and why they



should take part. The letter will also contain privacy notice information, stipulated by the department, setting out how any personal data would be collected, stored, accessed and used.

**Advance Materials:** Immediately before interviewers start making calls to their addresses, the contractor will post an advance letter and leaflet to each address, informing recipients that they will be calling shortly. The advance materials will contain key information about Children of the 2020s and how the study will have impact. To maximise the effectiveness of the materials the contractor will utilise their Behaviour Science Consultant and in-house graphic design team in the development of the materials.

**Branding of the survey:** The contractor will develop a communications strategy for the study including creating a consistent brand for the study and developing a participant website. Further details of this are included in section 5.8.

#### *Waves 2,4 and 5 (online)*

**Invitation letter :** The invitation letter (and subsequent reminder letter where applicable) will ask participants to go online to take part in the survey. This mailing will draw on best practice guidelines (e.g. Dillman's Tailored Design Method) as well as behavioural science principles (e.g. Cialdini's principles of persuasion). Drawing on their extensive experience of 'push-to-web' approaches, the contractor will adopt the following principles for the invitation letter:

- Envelope design – personalised mailing and inclusion of the DfE logo
- Appropriate branding – the contractor will include the graphically-designed survey logo and branding from all the survey partners (Ipsos MORI, UCL and DfE)
- Clear signposting – ensuring that invitation and reminder letters draw the eye to what we want the respondents to do
- Easy access to the survey – to make it as easy as possible for people to move from the paper letter to logging into the questionnaire, the URL (link to the landing page) will be easy to type in and the unique access code will be as short and simple as possible

**SMS invitations/reminders:** will provide a link through which the survey could be accessed. The helpline number/mail address will be provided for anyone who has any questions, or would like help completing their questionnaire. The SMS invitations will be set up to come from a named source (rather than just a number). The contractor will link the name to the branding used at Wave 1 to ensure continuity across the waves. The contractor will work with the Department to agree the best name to use for the survey overall as well as the emails and SMS invitations and reminders.

**Email invites/reminders:** will also be sent from an address that appears as a specific "name" to cohort members and will be branded to help with response.

**Postcard reminders:** The contractor will send all non-respondents a postcard reminder to 'nudge' them to take part. Similar to the postal letters, this mailing will ask participants to go online to take part. For data protection purposes, the postcard will be sent in an envelope (white in colour, with the DfE logo, to differentiate it from the previous postal mailings).

Where possible, the contractor will make final contact by a telephone chase. Participants will be contacted by telephone and offered the opportunity to complete the survey by telephone (either at that current time or at another scheduled time), or to complete the survey online.

Survey usability: The contractor will adopt a 'mobile-first' approach, which means considering the look, feel and usability of the survey on a smartphone first, and then looking at other devices. The contractor will ensure that questionnaire design is consistent across devices.

The contractor will work to the following principles when designing the survey for maximum usability.

- Minimise clutter – remove or reduce all non-essential, non-question content.
- Keep it concise – this refers to the length of question stems, response codes, and the number of response options offered.
- Keep it consistent – harmonise the visual appearance of the questionnaire, and standardise the question text and response options.
- Minimise respondent burden – ensure the survey is 'finger-friendly', avoid horizontal scrolling, use text and numeric entry sparingly, and ensure validation parameters are realistic.
- Use mobile-friendly formats – display scales vertically to fit a mobile screen, and use mobile-friendly grid formats (see <https://ipsos.uk/demogrids>) or replace with separate questions.
- Comprehensively test the survey – including on a smartphone in portrait mode, across different operating systems (iOS, Android, Windows), across browsers, and with older and smaller versions of smartphones.

## Maximising contact with sample members

### *Wave 1 (face to face)*

In order to increase the chances of getting hold of someone in the address/household, the contractor will require each interviewer to make a minimum up to six face-to-face calls for each address with:

- at least two calls in the evening
- at least two calls at the weekend
- and with the first and last call spread across at least a three-week period.

Calling cards and appointment cards: Where an interviewer has been unable to make contact at a given address after three calls, they will leave (at their discretion) a 'calling card', letting the household know that they have attempted to make contact.

Interviewers will also use appointment cards to confirm appointments they have made with respondents, and to serve as a reminder for the respondent.

### *Wave 3 (face to face)*

At wave 3 the contractor will utilise existing information they have collected about the respondents, both contact details and information about their prior response, to tailor the initial approach.

Using the ECS (Electronic Contact Sheet) the contractor will tailor the call requirements for each household, providing telephone numbers and instructions to make telephone calls for some households, and restricting contact to face-to-face for others, as appropriate.

Interviewers will make at least 5 telephone calls to the participant (at different times of the day and on different days of the week) and if they have not made contact at that stage, they

will to revert to face-to-face visits. As at Wave 1 interviewers will be asked to make at least 6 face to face visits at different times of the day and different days of the week.

The contractor will also consider tailoring the advance materials where appropriate, to make efforts to engage groups of respondents we feel might require it, for example, those who refused to take part or could not be contacted at Wave 2.

#### *Waves 2,4 and 5 (online)*

The contractor will, wherever possible, use a mixture of contact modes for the invitation and reminders. The mix and sequence of modes will depend on what contact details are available and prior mode preferences expressed by individual respondents.

All primary caregivers who consented to recontact will be sent an invitation letter, asking them to take part in an online survey. Alongside this invitation letter, the contractor will schedule an invitation email or SMS (depending on the availability of contact details) to arrive at a similar time. Following the invitation to take part, all participants will receive up to three reminders before the case is passed to the contractors telephone unit. The mode of these will depend on the contact details the contractor has previously collected, and any preferences expressed at Wave 1:

- Email address and mobile number are available but mobile is the preferred mode of contact: Invitation letter (with SMS follow-up), SMS reminder, postcard reminder, telephone chase.
- Email address and mobile number are available, but email is the preferred mode of contact: Invitation letter (with email follow-up), email reminder, postcard reminder, telephone chase.
- Email address but no mobile number: Invitation letter (with email follow-up), email reminder, postcard reminder.
- Mobile number but no email address: Invitation letter (with SMS follow-up), SMS reminder, postcard reminder, telephone chase.
- No valid email or mobile number: Invitation letter, reminder letter, postcard reminder.

These communications will be sent around 5-6 days apart and will be scheduled to arrive on different days of the week. For all non-responders at the end of this contact regime, the contractor will send a letter to the respondent's stable contact (where this information has previously been collected) asking them to pass an invitation letter on. Before implementing this approach, the contractor will test this idea as part of the pilot to see if participants feel that this is overly intrusive. The contractor will also contact stable contacts where the contact details we have for the parent are found to be wrong (e.g. letter returned by Royal Mail and email bounce backs).

#### **Maximising co-operation**

At the interviewer briefings (full details later in this section), the contractor will ensure interviewers are familiar with the nature of the survey, and are aware of, and able to respond satisfactorily to, the questions that are likely to be asked of them on the doorstep.

The contractor will ensure briefings will cover the following techniques that are positively related to survey co-operation:

- Tailoring the introduction to the respondent.
- Maintaining interaction. The longer the interaction continues, the more information the interviewer receives, and this can be used to tailor responses and to persuade the individual to take part.

- Mentioning that the survey is for the UK government and wider research community, and its ultimate purpose is to build evidence on how families and services might help children from various backgrounds to learn and be happy
- Making an appeal personal
- Emphasising the flexibility of setting an appointment time for the visit.
- Making it easy for the respondent to change his or her mind and agree to take part.

## **Incentives**

Incentives are an important part of a successful, cost-effective response maximisation strategy. Based upon their review of the evidence of the effectiveness and use of incentives, the contractor will use a tailored conditional incentive approach for this study as set out below.

The contractor will offer monetary incentives in the form of gift cards that can be easily spent across a wide range of retailers on the high street and online.

The incentives will be conditional and offered upon completion of the survey.

Incentives will be tailored so that respondents in London are offered higher incentives than respondents in all other locations as evidence shows they need to be higher in London to be equally as effective as other regions. Incentives will also be higher for those in the most deprived IMD quintile in waves 2 – 5 as these groups are of particular importance (being both disproportionately affected by services and more likely to drop out of the study) and the evidence indicates that they are more sensitive to incentives.

For online waves (2,4 and 5) the contractor will work with SVM Global, to administer the incentives which will be delivered via an online voucher portal. Respondents can select the voucher of their choice. Vouchers are offered for a number of different online retailers, including Amazon, John Lewis, Tesco, Marks and Spencer, and Pizza Express. The contractor will remain responsible to the Department for the delivery of these incentives.

For respondents who do not provide an email address the contractor will be responsible for delivering a physical gift card to their home address via post.

Incentives will also be offered to encourage use of the 'Baby Steps' application. The contractor will offer participants £10 to download the app, sign up and to do the first app based data collection activity (a video of a parent/child interaction). From then participants will be offered a small incentive for each research activity that they do (around £1 each), which will enable participants to claim around £8-£10 per year if they take part in all activities. Participants will be able to claim these incentives whenever they wish, and they will be provided in the form of e-vouchers that can be easily redeemed at a range of retailers that are typically of interest to respondents.

Following wave 1, the incentive strategy will be reviewed and if required, the contractor will suggest changes to the strategy to the Department.

Details of incentive amounts for each wave are detailed in section 5.4.1.

## **Reissuing strategy**

At Wave 1, addresses that result in a situational refusal shall be considered by the contractor for re-issue to an experienced interviewer or supervisor for attempted conversion. With the exception of hard refusals where interviewer safety is potentially threatened, the large

majority of addresses with an outcome of refusal at original issue shall be re-issued if necessary to achieve the target response rates.

At wave 3 the contractor will issue to interviewers all cases from Wave 1, whether or not they took part at Wave 2.

The contractor will also issue all Wave 1 cases at Wave 4 and 5, as it is helpful to maximise the sample size even if some data is missing, to allow analysts the choice of who they include or exclude in their analyses.

### **Dealing with movers**

The contractor will be responsible for ensuring that interviewers ask the current occupier to pass on a tracing letter to the required participant. The tracing letter will include details about the study and contact details for the contractor including a pre-printed reply slip and a pre-paid return envelope. Any contact details received in the office via tracing letters (or advance mailings) will be allocated to an interviewer.

Subject to final discussions with HMRC an alternative approach is being investigated to enable the contractor to pass back records to HMRC to match to their latest address information to enable more efficient tracing of movers.

### **Prospective tracing and the collection of contact information**

The contractor will collect high quality contact information from the main carer and partner (where applicable) to maximise response at future waves. This will include mobile phone numbers and email addresses. At each subsequent wave, interviewers will check if the contact details held are still correct and will update them with any changes. It will be explained to respondents that the contact details collected will be used in the future to help the study team contact them, and they will have the opportunity to refuse to provide them if they wish. The contractor will also include a question at each wave about intention to move and collect known future addresses. Also, interviewers will leave a change of details card (for all contact details) at the end of the household visit. This will include a link to the study webpage where contact details can be updated. The contractor will ensure that contact details can also be updated via the app.

The contractor will also collect 'stable contact' information from respondents – the name and contact details of someone (a family member or close friend) who would know where the family were if they had moved.

## **5.4.5 Fieldwork management and progress reporting**

*Waves 1 and 3 (face to face)*

### **Meeting fieldwork targets**

Given the need to interview families when the children are c. 9 months of age, it is important that interviews are achieved within the specified 2 month fieldwork period. In order to ensure that fieldwork targets are met, the contractor will set and monitor further targets at a regional, sample point and interviewer level.

Interviewers will be set key targets:

- First contact achieved within no later than 2 weeks of sample issue date.
- Completing all the contact and tracing procedures within 4-6 weeks; there is flexibility on this for extra visits to non-contact cases and cohort members who are difficult to pin down and this provides an extra window in which to finalise those.

- Target for mover tracing - 6 weeks from issue date.
- Re-issues to be completed within three weeks of being issued.

### Cost deductions for reduced numbers of interviews

The contractor shall re-imburse the Department once the achieved number of interviews falls more than 500 interviews below the target (set out in section 5.1.2) for waves 1 and 3. The 500 interview buffer is to take account of the uncertainty over response rates caused by the COVID-19 pandemic. After this point, the contractor shall re-imburse the Department £[REDACTED] for each interview not achieved. The tables below set out how this will work for both face to face waves. The sample sizes for wave 3 will be dependent on what is achieved at waves 1 and 2.

**Table 12 – Wave 1 interview cost deductions.**

Interviews achieved	Short by	% to target	RR	Billing reduced by (fieldwork)
8500	0	100.0%	47.0%	[REDACTED]
8000	500	94.1%	44.2%	[REDACTED]
7999	501	94.1%	44.2%	[REDACTED]
7900	600	92.9%	43.7%	[REDACTED]
7899	601	92.9%	43.7%	[REDACTED]
7800	700	91.8%	43.1%	[REDACTED]
7799	701	91.8%	43.1%	[REDACTED]
7700	800	90.6%	42.6%	[REDACTED]
7699	801	90.6%	42.6%	[REDACTED]
7600	900	89.4%	42.0%	[REDACTED]
7599	901	89.4%	42.0%	[REDACTED]
7500	1000	88.2%	41.4%	[REDACTED]
7499	1001	88.2%	41.4%	[REDACTED]
7400	1100	87.1%	40.9%	[REDACTED]

**Table 13 – Wave 3 interview cost deductions.**

WAVE 3				
Interviews achieved	Short by	% to target	RR	Billing reduced by (fieldwork)
6000	0	100.0%	71.8%	[REDACTED]
5500	500	91.7%	65.8%	[REDACTED]
5499	501	91.7%	65.8%	[REDACTED]
5400	600	90.0%	64.6%	[REDACTED]
5399	601	90.0%	64.6%	[REDACTED]
5300	700	88.3%	63.4%	[REDACTED]
5299	701	88.3%	63.4%	[REDACTED]



5200	800	86.7%	62.2%	
5199	801	86.7%	62.2%	
5100	900	85.0%	61.0%	
4999	901	83.3%	59.8%	
4900	1000	81.7%	58.6%	
4899	1001	81.7%	58.6%	

### Reporting progress to the Department

The contractor shall provide weekly reporting on the following aspects of fieldwork to the Department:

- number of interviewers active
- number of addresses called on
- number of households contacted
- number called on but not yet contacted
- number with more than two weeks since first call but not yet contacted;
- progress against targets for response and coverage including by agreed subgroups
- final outcomes
- forecast for the coming week
- details of complaints

The contractor will provide this data for the week immediately preceding, and the cumulative total, and will break it down by region. The contractor will also provide written commentary outlining emerging issues and resolutions should they arise. Reports will be in Excel format.

During the first month of fieldwork, the contractor will hold weekly fieldwork review meetings with the Department to consider progress to date, and to discuss any measures that might need to be implemented going forwards. After the first month, the appropriate frequency of future fieldwork meetings will be agreed between the contractor and the Department.

#### *Waves 2,4 and 5 (online)*

The contractor will carefully monitor fieldwork progress against agreed response targets. Following discussion with the Department to understand what information would be most helpful, the contractor will develop a bespoke progress report for the online survey in Excel, which will be updated weekly (or upon request). Final content will be signed off by the Department but is likely to include; a breakdown of response rates by key subgroups of interest as well as the number of cases that have 'not started', 'started' or 'completed' the online survey to date.

In the absence of an interviewer, the contractor will take the following steps to manage the online survey as effectively as possible:

A hyperlink at the bottom of the screen for 'Helpful Contact Details'; this document would contain a list of support helplines the participant can contact should they feel they would benefit from talking to someone. This hyperlink will be signposted within the survey itself as well as the invites/reminders.

Handling opt outs during the telephone chase - telephone interviewers will be briefed on how to handle this specific circumstance, ensuring they clearly understand the difference between a refusal for the wave in question and a refusal for all future waves of the study.

Keeping contact details as up-to-date as possible – existing contact details will be fed in to the online surveys and participants will be asked to confirm if these are still correct. Participants will also be asked whether they have plans to move in the near future, and a

new address (and home telephone number) will be collected if this is the case.

Following the completion of each wave of fieldwork the contractor will hold a review meeting with the Department to discuss lessons learned to feed into future planning.

### **Cost deductions for reduced use of incentives (all waves)**

Should the number of interviews be lower than expected, the contractor shall give the Department back the precise incentive savings based on the final number of achieved interviews for each wave. This will be calculated at the end of the fieldwork period and will be based on the incentive strategy outlined in section 5.4.4.

### **5.4.6 Interviewer selection and security clearances**

The contractor will train 220 of their random probability sample interviewers to work on Wave 1 of this project. The contractor shall make all reasonable endeavours to ensure that where possible the same interviewers will also work on Wave 3 of the study.

All interviewers selected will have extensive experience of other longitudinal or random probability surveys. Interviewer selection will be undertaken by Regional Co-ordinators as they hold the best knowledge about individual interviewers they manage.

The contractor follows the HM Government Baseline Personnel Security Standard and will carry out a range of checks on all employees engaged to carry on this study: this includes an identity check and declaration of unspent criminal convictions.

The Contractor will carry out the fullest level of checks legally allowable on all interviewers. These checks are in line with HMG Baseline Personnel Security Standard and include checks on identity, employment history, nationality and immigration status and a declaration of any “unspent” criminal convictions.

### **5.4.7 Interviewer training**

#### *Briefing and debriefing*

The contractor will ensure that all interviewers working on Children of the 2020s are experienced in carrying out random probability surveys. For Wave 1, the contractor will hold 15 one day face-to-face briefings. For Wave 3, the contractor will hold 15 face to face briefings with each briefing lasting two days.

The contractor will deliver the Wave 1 briefings across one day, and will aim to brief no more than 15 interviewers at each session. The training will be led by the research team supported by a Field Manager (responsible for central co-ordination), a Field Region Manager (responsible for regional co-ordination), and a Field Trainer. The contractor will deliver longer 2 day briefings at Wave 3 which will be longer to reflect the fact that the data collection will involve some non-standard instruments that the interviewers will need to be trained and accredited on.

The Department will attend briefings to meet interviewers, describe the background to the study and how the data will be used. Where this is not possible the Department will provide appropriate materials to support this element of the briefing.

#### *Briefing content*

The contractor will produce a detailed training specification covering all aspects of the training process and their dependencies e.g. the briefing structure, timings, venues, instructions, slides etc.

The exact content of the briefing will be agreed with the Department but will cover:

- the background to the study;
- each of the data collection instruments (focusing on any non-standard elements);
- familiarisation with survey materials, contact and tracing protocols;
- sample management;
- data security;
- participant engagement, including how best to engage participants in the app element.
- Refusal avoidance techniques

#### *Post-briefing tasks, resources and support*

The contractor will require interviewer to complete a full practice interview involving all survey elements before they start work on the survey. The contractor will provide interviewers with detailed written project instructions containing the information covered in the briefing and they will also be provided with contact details for the research and field teams in case of further questions. The contractor will be provide support to interviewers on an ongoing basis via ad hoc support and coaching sessions incorporating regular telephone and one-off face-to-face accompaniments in the field where necessary.

#### *Post fieldwork debrief*

In order to learn from the experience of interviewers, and to make adaptations for subsequent waves, the contractor will conduct a post-fieldwork debrief with a small number of interviewers. The contractor will ask c.40 interviewers to complete a feedback form, collecting information about all aspects of the survey including the briefing, training materials, interviewer materials, data collection instruments and survey processes.

The contractor will conduct a two-hour virtual debrief with c.10 of the interviewers providing feedback, using MS Teams, where members of the Research and Field teams will discuss their feedback with them. The feedback forms from the remaining c.30 interviewers will be examined by the research team and, together with the results of the virtual debrief, will be used to assess if any changes should be made. The contractor will provide recommendations for any changes to the Department for their input before they are operationalised, and members of the Department's research team will be invited to attend the debrief session.

### **5.4.8 Interview quality control and supervision**

This section outlines the standard procedures that the contractor will adhere to, and the survey-specific measures that the contractor will implement to ensure that the work carried out by interviewers, and hence the data collected, is of the highest quality.

#### *Interviewer accompaniments and validations*

As the face to face accompaniment process is not currently possible, the contractor has reviewed and redesigned the supervision process, ensuring that it still addresses the requirements of the ISO 20252 standards

Prior to COVID-19, all interviewers were regularly appraised through supervisory accompaniments every 12 months. The assessments covered the following areas: interviewer preparation, introduction skills, interviewing skills, demographics and reassurance, behaviours, and general approach. The accompaniment provided an opportunity to assess interviewing techniques, identify training needs and provide support accordingly, as well as discussing feedback from completed validations

(backchecking). Interviewers also had informal telephone performance reviews every six months. Provided it is possible in the context of COVID 19, the contractor will return to standard accompaniments for this study.

The contractor will make arrangements for Department staff to accompany interviewers during mainstage fieldwork to observe a sample of interviews. If it's not possible for Department staff to attend an interview in person due to covid-19 restrictions, the contractor will consider alternative methods for them to receive feedback from both interviewers and participants.

#### *Validations*

ISO20252 specifies that 10% of all completed interviews should be validated (back-checked) on each project and that interviewers should be validated on a regular basis. The contractor will deliver these requirements as a minimum. If an attempt to call results in a wrong or unobtainable number, validations are conducted by post. The validation process is managed by a dedicated Field Quality Team and validations are carried out by a specially trained team, using computer assisted telephone interviewing (CATI). 10% of validation calls are listened in on for each project by a CATI supervisor.

If immediate follow-up is required from any validation results, the contractor's Regional Manager will provide feedback to the interviewer, discuss its implications and an appropriate course of action. Help and support can be provided following these conversations and any remedial action can be taken (e.g. arranging further accompaniment, re-briefing, retraining, more frequent validation, mentoring or disciplinary warnings).

### **5.4.9 Survey specific quality measures**

#### *Checking of work*

Once interviewers indicate in their ECS that they have completed their assignment, the contractor's field team will check that they have followed all necessary tracing steps, that outcome codes are assigned correctly and that the calling pattern has been followed correctly (for non-contact cases). If the tracing steps or calling pattern have not been adhered to, the case will be returned to the interviewer for them to complete the work.

#### *Computer Assisted Personal Interviewing (CAPI)*

The contractor will build consistency checks into the script including "hard checks" where some answers are not permitted (e.g. entries outside a given range) and "soft checks" triggered by implausible answers with interviewers invited to confirm the answer given.

#### *Exception reporting*

The contractor will analyse survey data and paradata recorded by CAPI at the interviewer level to help identify any instances where interviewers are not implementing the survey properly, or are not performing at a high level. Exact checks will be agreed with the Department but will likely include:

- the time of the visit
- overall response rates
- levels of data linkage consent for cohort members and their partner
- overall speed of interview
- levels of refusals and non-response on sensitive questions such as income.

Once these checks are agreed, the contractor will create an automated process using SPSS syntax. This will be run monthly, or more frequently if required, checking particular questions

by interviewer against the average and against appropriate threshold levels. The contractor will compare reports in order to track interviewer performance and will take remedial action where necessary.

#### *Reduced length face-to-face interviews*

Where respondents are unable to undertake a full interview, for example due to special educational needs, learning difficulties, disability or language problems, the contractor will offer a reduced length interview in order that these cases are properly represented in the sample.

#### *Interviews in languages other than English*

The contractor will take the following steps to ensure non-english speakers can participate in the survey;

- Each interviewer will carry a laminated 'Language sheet' to identify the language the resident speaks where the interviewer cannot establish this.
- Where possible, interviewers will use another adult household member (aged 16 or over) to translate the survey into English. Failing this, they will ask whether there is someone else, such as a friend or neighbour, who can do the translation. If someone is acting as an interpreter, the most sensitive questions will not be asked.
- If this is not possible, the interviewer will note the parent's mother-tongue, and the address will be reissued to another interviewer who speaks the language where possible

#### **5.4.10 Inclusion and accessibility**

The contractor will take the following steps to ensure inclusion and accessibility of the study for respondents.

##### *Inclusion*

Offering telephone follow ups for those not comfortable or capable completing the survey online. The contractor will add a flag to the data to record mode of completion, so that the potential implications of mixing modes can be reviewed.

- On the survey invites/reminders, participants will be signposted to contact the team (via the study email address or Freephone number) if they need any further assistance. The contractor will arrange for a Project Administrator to take ownership of the respondent communications process so that dedicated support is available during work hours and an answer phone is available for out-of-hours.
- Allow the survey to be completed with assistance (e.g. with another member of the household to provide support or to translate the survey for them). The contractor will add a question at the start of the survey to capture whether someone else is helping them complete the survey. In this case, particularly personal or sensitive questions will be excluded.

##### *Accessibility*

- Set up the script to have a function to change background colour (e.g. a yellow background is easier for those with cognitive impairments) and to increase font size if required.
- An accessible online survey template that conforms to the highest level – AAA.

- As far as possible, making the questionnaire compatible with JAWS, which is the most popular screen reader software.
- Colour contrast must be considered as part of the design.
- Within the questionnaire;
  - Clear, simple language will be used.
  - Positional references such as 'click here' or 'the link on the right' will be avoided
  - Abbreviations will be avoided.

#### **5.4.11 Provider surveys**

In addition to the main survey waves, following Waves 3 and 4 the contractor will carry out a telephone survey of childcare providers, using details provided by parents who are using formal childcare providers during the interview. The contractor will send some information to the provider in advance of a telephone interviewer calling them, so that the provider knows what the interview will cover. Full details of the approach are provided in section 5.2.

#### **5.4.12 Protocols for obtaining overall consent and consent for data linkage**

##### *Written or verbal consents*

The contractor will ensure that consent is obtained verbally for all interviewer administered data collection (face to face or telephone interviews), and electronically for the online surveys. Consent will be recorded within the interview script.

At each wave of the survey the contractor will send written communications to provide appropriate information about the survey and what it involves. The contractor will provide all information required by participants for fully informed consent in the advance mailing. Providing advance information will allow the participant time to consider their participation. These materials will:

- Be carefully designed to ensure they are as engaging as possible, setting out clearly the benefits of participation.
- Be carefully drafted to ensure they are easy to understand, regardless of participant background or educational level.
- Make it clear that the study will take place over 5 years with a number of different surveys taking place in that time.
- Provide clear information (a privacy notice) on confidentiality, anonymity and storage of data. This will include providing details on who will be able to access the data and how data will be shared between organisations (e.g. Ipsos MORI, DfE and CLS).
- Inform respondents they can refuse participation at any time, or for any particular instrument or at any question item.

The contractor will ensure that any verbal consent obtained by interviewers is obtained in a standardised manner.

At the end of the Wave 1 survey, the contractor will ask participants if they would be willing to give their consent to be re-contacted. The contractor will take a phased approach to consent, ensuring at each wave full informed consent to that stage of the study is collected.

##### *Consent to data linking*

Data linkage will be a very important aspect of the study, as it will allow the Department to include a range of useful data, most likely over a longer time period than the five waves proposed (e.g. ongoing school attainment).



The contractor will work closely with the Department to devise the optimum approach to requesting consent to data linkage. The Department expects to draw on the contractors extensive experience in this area including in relation to itemised consent (agreement for matching to each individual data set) or blanket consent (agreement to match to any government held dataset after some information on what this is likely to entail has been provided) and trade-offs.

#### **5.4.13 Between-wave micro surveys**

The Department may require between-wave micro surveys delivered by SMS and so the contractor will arrange to have the ability to provide this service. For each wave, the Department will confirm to the contractor whether micro surveys are required, allowing the contractor adequate time for development and delivery of the surveys. The contractor will work with the Department to specify the survey requirements and provide a cost.

### **5.5. DATA PROCESSING & DOCUMENTATION**

#### **Standard coding**

The contractor will code up to four open-ended and 10 other specifics for the main respondent and code one open-ended and three other specifics for the partner interviews, per wave.

Coding will be undertaken by Ipsos MORI's specialist coding team. The contractor will also deliver to the Department the raw verbatim responses for open-ended questions as a separate file with an ID link to the survey data.

#### **Specialist coding**

The contractor will code SOC for the primary caregiver and resident partner at Wave 1, and will provide a new variable for any update to this in subsequent waves where changes occur. The contractor will code to the SOC2020 standard.

The contractor will use the Cascot computer programme, developed by the University of Warwick, for this type of coding. NS-SEC standard codes are derived automatically from SOC and employment status. The contractor will check two percent of cases manually to ensure accuracy, will report any systematic issues and ensure they are re-checked within the NS-SEC database.

#### **Quality Assurance of data & checks**

The contractor will write the data checks using SPSS syntax. These checks will be set up within two weeks of fieldwork starting and will be run regularly until fieldwork closes. The contractor will report results in data quality reports and where necessary these will be used to either reissue CAI programs or highlight additional training needs for interviewers. Should any additional checks be required, these will be discussed and agreed between the Department and the contractor.

The contractor will establish a suite of data checking syntaxes that will be run regularly on the data prior to delivering to DfE. These checks will include:

- Identifying any issues with the CAI scripts by running data checks designed to quality assure the internal validity of the questionnaire;
- Identifying any logical inconsistencies and establishing an "edits log";
- Reviewing interviewer comments/feedback from interviewers (for relevant waves) and the proportion of times soft checks have been triggered;

- Checking sensitive questions which may be difficult to answer, monitoring whether there are high numbers of non-responders and flagging any unusual answers; and
- Checking household composition.
- Checking the data at the interviewer level based on an exception reporting specification which the contractor will agree with the Department

The contractor will also perform the following standard checks on the data against the specifications:

- checking whether variables are included in the correct file,
- whether they are named correctly according to the project conventions,
- whether labels are complete and clear and follow the conventions,
- whether values and associated labels (including those for don't know, refused and not applicable) are consistent and
- whether missing values are specified.

### **Data specifications**

The contractor will work closely with the Department to produce detailed specifications for the final data and structure the data to the Department's requirements. This will include incorporating the correct variable naming and labelling conventions to comply with specific longitudinal conventions, ensuring household grids and event histories are structured correctly with one row per person or activity, ensuring that any differences between modes are clear in the data specifications (and the final data), and ensuring that all SPSS files map to each other with a clearly defined unique serial number. For the final data specifications the contractor will also agree with the Department what derivations are required and create a derivation specification.

### **Post-interviewing edits**

There may be a need for some small-scale data cleaning to resolve any inconsistencies within the survey data. The contractor will apply editing only when a clear and obvious error has been made, and only in consultation with the Department.

The contractor will review all interviewer comments and make recommendations for edits to the Department. For example, if an interviewer realised they had made a mistake when coding a question. Where recommendations are made, the contractor will provide the original verbatim comment, along with their suggestion for which variables should change, how they were originally recorded and what new value they should take. For online waves, it will be possible for a respondent to provide an answer which is routed to the next question but then they may go back and change an earlier response. This can mean that the post-survey data looks like they did not answer a routed question. The contractor will set up a range of checks to identify cases like this – some will require simple editing to show the correct route they intended. Other cases will require discussion with the Department, if a meaningful answer has been given but the respondent has given a contradictory answer elsewhere for example.

The contractor will implement all recommended edits that receive approval from the Department in the final data, along with a log of all edits made, and flag variables will be created to indicate any cases where an edit has been made.

### **Data preparation for future waves – feed forward data**

Feed forward data will be required for the subsequent waves after Wave 1. The contractor will ensure that these variables are derived at the end of the fieldwork and maintained in a

data file which can be merged with the sample, ensuring that all updates to the sample are fed through in an accurate and timely manner. Any relevant feed forward data from the survey questions will be specified with the Department and derived accordingly. These variables will form part of the subsequent data delivery at each following wave to enable users to track the routing in the instrument longitudinally.

### **Data documentation**

For all data provided, the contractor will accompany this data with appropriate documentation explaining its content, origin and provenance. All documentation will be provided in a way that is easily understandable by the research community. The contractor will provide the following documentation:

- Word questionnaire specifications
- Data specifications
- Contact information specifications
- Survey process data specifications
- Data edits log (including flags)
- Code frames
- Technical report
- Data Quality report
  - CAI issues report
  - Data dictionary.

The contractor will work with the Department to ensure that all data documentation is created in a clear and workable format and to ensure the technical report produced meets all criteria.

The contractor will hold a planning meeting with the Department to clarify the purpose of the document, an overview of contents and ideal length. Once agreed, the contractor will provide DfE with a detailed specification of the report, including a breakdown of structure, content, and data to be included. The Department will have final sign off of the report.

At the end of project, the contractor will provide a data dictionary which lists all data outputs, along with detailed notes to accompany each file. This will contain information on any inconsistencies or errors in the data, including those identified during fieldwork that prompted changes to the script. Additionally, the contractor will provide finalised data specifications to match the re-mapped data files, detailed documentation of all edits made to each data set (including the syntax used), and clear details of any flags that were added to the data.

### **Data delivery requirements**

The contractor will provide the following;

- High quality, cleaned, and fully weighted datasets for each wave in SPSS format. The data sets will include all agreed derived variables, and the contractor will archive them in the ONS SRS or UKDS as specified by the Department. The contractors will allow for up to 5 complex derivations (that require the combination of a series of variables to create intricate level information around relationships, birth order or event history information around episodes of employment, mobility etc) and 45 basic derivations that re-band within variables or combine two variables together. Depending on data requirements the amount of complex derivations may be increased and basic derivations decreased provided the resource commitment is the same. Derivation requirements will be specified upon review of the questionnaire for each wave, additional variables may result in extra

charges depending on number and complexity. Any extra charges will be reflected in a contract variation.

- Comprehensive data documentation and guidance to allow the datasets to be used by DfE. This will include paradata items for including for example; interview start and end times and the number of times the interview was started and ended for online surveys
- missing data analysis to accompany the datasets delivered at each wave, which will include underlying analysis (developing and testing the optimal missing data model for each wave), preparation of a summary report, writing user guides and annotated analysis scripts for public usage. The contractors will hold at least two public online training workshops on missing data analysis for users of the COT2020 data,
- At the end of each wave the contractor will provide an anonymised dataset, to an agreed specification, suitable for archiving, in accordance with the UK Statistics Authority Code of Practice. The contractor will provide a User Guide and a Derivation Guide to enable users in the wider research and academic community with the best tools to use this dataset.

The contractor and the Department will hold early discussions about the final data specifications to enable the final structures to be embedded at an early stage.

### **Data receipt and transfer**

The contractor will use Ipsos Transfer to transfer sample and survey data between Ipsos MORI and the Department for this project. Ipsos Transfer generates single-use links that are locked to a recipients' email address ensuring only the intended recipient can use it. All files stored on the portal are securely deleted automatically after 7 days to HMG standards. Files uploaded to Ipsos Transfer will be protected using a secure password and encrypted to a minimum standard of AES-256. Passwords will be shared with recipients by telephone.

### **Data generated by BabySteps App**

The BabySteps App will be hosted on Amazon Web Services (AWS) secure web servers. AWS is a secure, durable technology platform with industry-recognized certifications and audits: PCI DSS Level 1, ISO 27001, FISMA Moderate, FedRAMP, HIPAA, and SOC 1 (formerly referred to as SAS 70 and/or SSAE 16) and SOC 2 audit reports. AWS' services and data centers have multiple layers of operational and physical security to ensure the integrity and safety of project data. The physical site of the data storage facilities will be in the UK, and no will be transferred outside the UK. Periodically, data from AWS will be downloaded securely to UCL's Data Safe Haven, which has been certified to the ISO27001 information security standard and conforms to NHS Digital's Information Governance Toolkit. A file transfer mechanism enables information to be transferred into the walled garden simply and securely. All access to the Safe Haven is secured through a two-step authentication process. Data within held within AWS and the UCL Safe Haven will not be anonymised. All datasets produced during the study will be de-identified prior to release from these two secure data hubs.

The BabySteps app generates three forms of data: 1) traditional survey data in a standardized format, 2) time-intensive experience sampling data, which is similar in form to survey data but captured at more frequent time intervals (3-5 questions, asked 1-5 times per week), and digital video/audio data. The questionnaire data will address developmental milestones and structured information regarding childcare type, timing and intensity. Time-sampling data will include questions related to parental mood states and to infant sleep. Additional topics, including policy-oriented questions may be included as agreed with DfE. All planned data collection via BabySteps is designed to enhance potential for insights, and

will not be used for data collection that addresses a central question of the contracted research.

### **Data generated by the Teacher Tapp App**

The Teacher Tapp app will provide quantitative survey data from specific staff in ECEC settings attended by study children. The national TeacherTapp app uses a multiple-choice format to ask questions of staff at a specific time of day. Study participants will use the standard national app but have access to a bespoke question panel, accessible only to research participants. Questions will be asked on three days each week for half a term. Data from Teacher Tapp will be linked to provider and child-level data using the class/room and providers IDs. Data collected will include a range of indicators dependent on future consultation and feasibility testing and subject to agreement with the Department. These could include staff workload and stress, professional confidence and self-efficacy, pedagogical knowledge, beliefs and attitudes to education, parent engagement and perceived parent-provider relationships, time spent in large groups/small groups/free play, reading activities, and which specific curricula or evidence-based intervention programmes have been used. The app may also be used to address ad hoc policy questions. Data security and anonymisation procedures will be agreed with the Department in advance of use of the app in waves 3 and 4 of the study'

### **5.6 ANALYSIS OF STUDY DATASETS AND PRODUCTION OF RESEARCH REPORTS**

The following section sets out the department's plans for analyses of the study datasets - these plans will be broadly similar for each wave of the study.

The department will receive from the contractor the finalised datasets along with supporting documentation (as specified in prior sections and timetables) so that statisticians and researchers unfamiliar with the project are able to analyse the data. Ad hoc, internal analyses of the datasets will begin within DfE upon receipt.

The contractor will produce one headline descriptive report per wave. This will be the first research output for each wave and will be specified in detail in advance of data being available so that it can be delivered quickly. This report will cover the basic, headline findings (weighted percentages, distributions etc) from the main data collection topics rather than address more complex study research questions. Some reporting of results by key subgroups may be required.

The wave 1 descriptive report will be no more than 100 pages, be written in accordance with DfE research report template and guidance, and will cover the following topics:

#### **Sample composition:**

- Geographic and demographic
- Economic and social circumstances

#### **Parents:**

- Family relationships
- Mental health
- Home learning and routines
- Parenting and parent-child interaction

#### **Child:**

- Maternity events
- Height, weight and health
- Child characteristics
- Child development

#### **Service use:**

Health service useage  
 Childcare useage and views  
 Other service usage

A high-standard, first draft will be submitted to DfE for comment and the contractor will make revisions in accordance to feedback until a third draft of the report has been signed off as final and of a publishable standard. The department will aim to publish the report on gov.uk within 12 weeks of sign off in accordance with GSR guidance.

The first descriptive reports for each wave will be specified (by DfE and the contractor) once data collection topics/instruments have been decided upon for the relevant wave. This contract will be varied to reflect these arrangements once specifications have been agreed. Separately, DfE will produce a long-term plan for analysis covering the duration of the project and from this comission research as data becomes available addressing the main research questions. Other ad hoc research questions and commissions are also likely to occur. All these external comissions will be put to competitive tender to help ensure best value for money for the department. The contractor will be encouraged to bid for this work. This contract may be varied to cover this work should it be awarded to the contractor.

## 5.7 STUDY GOVERNANCE

The project manager will convene a steering group and technical advisory group that will meet on a number of occasions throughout the life of the study according to input required for various stages of the project.

The steering group will provide direction on what the study should aim to achieve within the scope of the objectives set out in this contract and monitor progress, efficiency and impact. The technical group will comprise of academic and sector experts who will advise on how best to achieve study aims within the methodological approach set out above.

Terms of reference for the groups will be produced by DfE and the contractor will be consulted on and abide by these terms.

The contractor will send appropriate representation for each of these groups and all meetings in line with requirements of an agenda that will be agreed at least two weeks in advance. The contractor will provide written and verbal progress updates and/or project notes/ materials as required by the project manager in order to support these meetings.

All final decisions will be taken by DfE with advice fully considered. Such decisions will include the following (although this is not an exhaustive list): membership of governing groups; data collection topics and instruments; all stakeholder comms and publicity; sign off of research reports; datasets to be made available for onward sharing; and allowance of presentations, journal articles etc. (that are not based on published datasets).

## 5.8 COMMUNICATIONS STRATEGY AND DATA DISSEMINATION

The contractor will be responsible for developing and implementing a holistic communications plan for the study, which will be comprised of two key strands;

1. *Recruitment and ongoing engagement with study participants – the primary aim of this strand will be maximising response rates and minimising attrition.*

The contractor will ensure that a sense of identity around the study is created by taking a consistent approach to engagement and communications from the outset and throughout all aspects of the study. This will include the following actions;



- creating a study logo
- creating a study website – exact content will be agreed with the Department but will include information about the study and its purpose, copies of communication materials, FAQ's and contact details for enquiries about the study
- ensuring that high quality, consistent and appropriate branding and design is incorporated in to all materials such as advance booklets, leaflets and thank you mailings across all formats used. Full details of the materials sent to participants are included in section 5.4.4.
- ensuring a strong focus in communications with participants on providing reassurances about confidentiality, data protection and security to ensure study members feel 'safe' at all times.

The contractor will work with the Department to agree the logo, website and branding and design approach and this will be signed off by the Department prior to external use.

*2.Communication and engagement with external stakeholders e.g. the academic community, interest groups, the third sector and practitioners – this will cover raising awareness of the study, ongoing developments and dissemination/availability of findings and data.*

The contractor will work closely with a wide network of stakeholders to promote the study. The study lead, Professor Pasco Fearon is a member of the Senior Leadership Team for Early Years at the Anna Freud National Centre for Children and Families (AFNCCF). AFNCCF has established partnerships with Yale University, the Parent Infant Foundation, Association of Infant Mental Health, Institute of Health Visitors, Home-Start and others. The contractor will work with the Department to utilise this network and other stakeholders, to bring the vision and findings from the Children of the 2020s to a broad and policy/practice-focused audience. The contractor will also take the following specific actions;

- create a national group of 'Supporters of the Children of the 2020s Study' who would receive regular updates and could also be used to consult on the content of future waves of data collection through online surveys
- Disseminate headline findings on public platforms and direct to the AFNCCF network, through the following methods;
  - findings shared on the study website for each wave
  - podcasts with the study team (at least 2 per year)
  - livestreamed webinars with round table discussion of emerging implications for practice (at least once a year)
  - infographics (at least one for each wave)
  - newsletters (2 per year)

The contractor and the Department will work together to agree the objectives and key deliverables of the Communications Plan. An initial planning meeting will be held before 31<sup>st</sup> March 2021. The meeting will involve communications staff from DfE, UCL and Ipsos MORI as well as the relevant research representatives. The meeting will cover communication objectives and deliverables, agree roles and responsibilities, sign-off processes and when further communications meetings might be needed.

## 5. 9 SCHEDULE OF WORK

<b>Wave 1 (9 months)</b>	<b>Key Milestone Dates (Apr-June 21 births)</b>
Study design and preparation	Nov 20 - June 21
Pilot stage preparation	July 21 - Aug 21
Pilot fieldwork	Sept. 21
Mainstage preparation	Nov - Dec 21
Mainstage fieldwork	Jan. 22 to May. 22
Draft dataset and technical report to DfE	July. 22
Final dataset and technical report to DfE	Aug. 22
Wave 1 substantive report	Sep. 22
<b>Wave 2 (age 2)</b>	
Study design and preparation	July 22 - Sept 22
Pilot stage preparation	Oct 22 - Nov 22
Pilot fieldwork	Dec. 22
Mainstage preparation	Feb - Mar 23
Mainstage fieldwork	Apr. 23 to Aug. 23
Draft dataset and technical report to DfE	Oct. 23
Final dataset and technical report to DfE	Nov. 23
Wave 2 substantive report	Dec. 23
<b>Wave 3 (age 3 years, 2 months)</b>	
Study design and preparation	Sept 23 - Nov 23
Pilot stage preparation	Dec 23 - Jan 24
Pilot fieldwork	Feb. 24
Mainstage preparation	Apr - May 24
Mainstage fieldwork	June. 24 to Oct. 24
Provider survey	Sep. 24 to Jan 25
Draft dataset and technical report to DfE	Dec. 24
Final dataset and technical report to DfE	Jan. 25
Draft provider dataset and technical report to DfE	Mar. 25
Final provider dataset and technical report to DfE	Apr. 25
Wave 3 substantive report	Apr. 25
Wave 3 substantive report provider addendum	Jun. 25
<b>Wave 4 (age 4)</b>	
Study design and preparation	July 24 - Sept 24
Pilot stage preparation	Oct 24 - Nov 24
Pilot fieldwork	Dec. 24
Mainstage preparation	Feb - Mar 25
<b>Mainstage fieldwork</b>	<b>Apr. 25 to Aug. 25</b>
Provider survey	Sep. 25 to Jan 26
Draft dataset and technical report to DfE	Oct. 25
Final dataset and technical report to DfE	Nov. 25
Draft provider dataset and technical report to DfE	Mar. 26
Final provider dataset and technical report to DfE	Apr. 26
Wave 4 substantive report	Jan 26
Wave 4 substantive report provider addendum	Jun. 26
<b>Wave 5 (age 5)</b>	
Study design and preparation	July 25 - Sept 25
Pilot stage preparation	Oct 25 - Nov 25
Pilot fieldwork	Dec. 25
Mainstage preparation	Feb - Mar 26
<b>Mainstage fieldwork</b>	<b>Apr. 26 to Aug. 26</b>
Draft dataset and technical report to DfE	Sept. 26
Final dataset and technical report to DfE	Oct. 26
Wave 5 substantive report	Oct. 26

## 6. STAFFING

A summary of the core team members roles and experience is below.

Team member	Role in study
	Overall Study Director (Lead Researcher) <ul style="list-style-type: none"> <li>Overall responsibility for the study</li> <li>Key point of contact with DfE.</li> <li>Provide overall quality control and sign off key documents (e.g. study design, final questionnaires)</li> </ul>
	Study operational group <ul style="list-style-type: none"> <li>Provide expertise on design and delivery of longitudinal studies.</li> <li>Additional quality control of study design, sampling, fieldwork, data delivery.</li> </ul>
	Scientific advisor <ul style="list-style-type: none"> <li>Input expertise on key outcomes to be measured in the questionnaires at each wave.</li> <li>Specific expertise in language development.</li> </ul>
	Scientific advisor <ul style="list-style-type: none"> <li>Input expertise on key outcomes to be measured in the questionnaires at each wave.</li> <li>Specific expertise in child development/health.</li> </ul>
	Fieldwork, Project Director <ul style="list-style-type: none"> <li>Overall responsibility for successful delivery against the project plan including performance standards, resourcing and risk management.</li> <li>Leads on development of fieldwork set up, timings, monitoring and quality metrics.</li> <li>Ensures the survey development, fieldwork and data strands are joined-up.</li> <li>Participate in the study operational group.</li> <li>Attend regular meetings with DfE.</li> </ul>
	Fieldwork Quality Director <ul style="list-style-type: none"> <li>Ensure quality procedures are followed in all aspects of design and implementation and act as a critical friend</li> <li>Assisting the team in mitigating and addressing project risks.</li> </ul>
	Fieldwork Project Manager <ul style="list-style-type: none"> <li>Implementation of fieldwork, design of fieldwork materials, regular monitoring of fieldwork progress</li> <li>Production of fieldwork reports.</li> </ul>
	Fieldwork, Statistician

	<ul style="list-style-type: none"> <li>• Sample design and sampling from Child Benefit Records.</li> <li>• Design and implementation of weighting strategies for each wave.</li> </ul>
	Fieldwork, Data Processing <ul style="list-style-type: none"> <li>• Overall responsibility for implementing data management processes</li> <li>• Preparing and delivering the final data outputs</li> <li>• Ensuring they meet the agreed data specifications and quality standards.</li> </ul>
	Fieldwork (Face-to-Face) <ul style="list-style-type: none"> <li>• Responsible for delivering fieldwork to specification and on-time.</li> <li>• Responsible for project delivery and management of the field projects team including implementing best practice in the field department, staff recruitment, training, fieldwork costing, scheduling and quality assurance.</li> </ul>
	Director, Childcare Quality Assessments
	Dr. Calderwood will work closely with the PI to provide oversight on all aspects of survey design and implementation.
	Prof. Ploubidis will provide academic oversight to the project on applied statistical methods, including the approach to missing data (weights), and mode.

In addition to the core study team the contractor will hire a study coordinator at UCL who will also work closely with Ipsos MORI and the operational team. This post will be full-time for the full duration of the project to support all aspects of study delivery other than direct fieldwork. A part-time data manager will be hired at UCL to manage the smartphone data collection infrastructure and security, including management of the Safe Haven and the storage and processing of audio and video data. The data manager will also work with Ipsos MORI on the preparation of datasets to facilitate smooth transition to the publicly accessible data platform at the Centre for Longitudinal Studies. Two trained full-time research assistants will be based at the Anna Freud National Centre for Children and Families, and will undertake 8 months of coding work on the 9 months parent-child interaction data.

The following table outlines the minimum number of day key staff are expected to work on the study across the five waves.

Name	Minimum number of days
	220
	55
	55

	55
	220
	50
	300
	50
	80
	55
	55
	55
	33

## 7. RISK MANAGEMENT

The contractor will create a risk register during project initiation to ensure all risks are captured in one place. This document will be reviewed regularly throughout the project, both by the contractor and with the Department at progress meetings, to ensure that any risks that rise beyond an acceptable threshold are immediately highlighted and actioned. Key risks to the successful completion of the project, and the person responsible for them, will be identified, inter-dependencies, countermeasures, contingencies, and whether escalation is required will be outlined. An initial assessment of the risks, likelihood and impact and mitigations is included below.

Identified risk	Likelihood of risk (high, medium, low)	Impact of risk (high, medium, low)	Risk management strategy
COVID – 19 pandemic affects fieldwork modes	Medium	Medium	The contractor and the Department will monitor the ongoing situation closely.  Alternative fieldwork approaches have been developed and will be deployed if necessary. Decision time points will be agreed to ensure that adequate time is allowed to switch to alternative modes if necessary.
Questions do not work as expected in field	Low	Medium	Prior to each wave we will carry out cognitive testing and piloting to ensure that questions are well-designed and work effectively.  If fieldwork monitoring suggests that there is a problem with a specific question which is having an adverse impact on the survey (e.g. it has a high level of break offs or non-response), we can change the question during fieldwork to minimise the impact on the overall survey.
Interviews take longer than expected to complete in the main	Medium	Medium	We will test the length rigorously during the pilots (including time stamps for specific modules) so will have a good idea of the length questionnaire prior

fieldwork			<p>to mainstage fieldwork.</p> <p>We will monitor time of completion and levels of breakoff throughout fieldwork to assess if an increased length is impacting levels of completion and could remove modules/questions if necessary during fieldwork.</p>
Errors found in the data collection tools once fieldwork has begun	Low	High	<p>We have built thorough checking of the questionnaire into our timings and will have piloted each survey prior to the main launch.</p> <p>We will check early interim data from the survey to check that the questionnaire is working as it should.</p> <p>The questionnaire would be updated as soon as an error is identified, and a new version uploaded immediately and we would discuss with DfE how to deal with the data that has the error within the final dataset, or if the error is very major, whether we should increase the sample to ensure correct data is collected for sufficient numbers.</p>
Large proportion of people do not complete the whole questionnaire/interview	Low	High	<p>Ongoing monitoring of break offs and other quality measures to identify problems early.</p> <p>Discuss impact with DfE and potentially redesign questionnaire at the point breakoffs occur.</p>
Response rates for face-to-face surveys at waves 1 and 3 much lower than anticipated	Low	High	<p>Large pilot at both waves (including longitudinal sample) will test response before the main survey.</p> <p>First waves of longitudinal surveys are essential for longer term engagement. We will follow experience from conducting other studies such as wave 1 of the Troubled Families and Flying Start evaluations where high responses achieved to first waves.</p> <p>Using our ECS system will mean information about response rates will be available quickly. We will discuss response regularly with DfE.</p>
Response rates for online/telephone surveys at waves 2, 4 and 5 much lower than anticipated	Low	High	<p>Sufficiently large pilot (including longitudinal sample) will allow response rates to be tested prior to mainstage.</p> <p>Drawing on extensive experience of maximising response to longitudinal surveys e.g. MCS.</p> <p>Constant monitoring of response to identify problems early.</p> <p>Consider a redesign of the invitations and a change to the incentive strategy.</p>
Dropout between waves much higher than anticipated	Medium	High	<p>Wide range of measures in place to maximise response, e.g. keeping in touch activities, incentives and appealing study identity and branding.</p>



			Regular reviews of progress and reporting to DfE.
DfE decide to delay the study	Medium	Low	If DfE want to do the survey later, then it is possible to draw the sample later – we can work with any reference period.
Contact details are not kept up to date across waves and participants are lost	Medium	High	Sample management and tracing plan in place to ensure contact details are kept up to date.  Ipsos MORI project contact details will be included on all materials for participants to get in touch about changes of address.
Sample becomes biased towards particular groups over time	Low	High	Sample and survey response distribution will be closely monitored and any concerns will be discussed with DfE.  Targeted reminders, and potentially incentives, can be used to boost response from groups with low response if required.
Errors/inconsistencies in data, data quality issues	Low	Medium	Thorough initial checking of the script and scanning set-up.  Full data checking at an early stage; testing full data procedures for initial batch of interviews.  Agreeing and implementing a range of consistency checks.  Liaison with DfE to identify solutions.  Clear documentation of any errors or inconsistencies.
Data security breach or data loss	Low	High	Full data back-up systems in place.  Restricted access to personal data within Ipsos MORI.  ISO 27001 accreditation ensures procedures and policies are regularly audited and checked.  Immediate notification of DfE.
Problems in producing outputs to the agreed deadlines	Low	High	Development of realistic timetable based on experience, understanding of critical path.  Clear milestones set and communicated to all operational staff within Ipsos MORI  Communication of progress with DfE against timetable through updates, teleconferences etc.  Review the timetable with DfE, identify any flexibility in the timing for specific outputs.
Key members of the project team are unavailable, for example the project director, project manager, or other key	Medium	High	Forward planning for research and other staff capacity and absence.  Sufficient number in team to cover for absence.  Our quality assurance requires complete documentation of all work, to ensure staff changes cause minimal loss of knowledge or disruption to

team members.			<p>clients.</p> <p>Have shadow staff in place for some of the key roles to ensure continuity. New team members will receive a full briefing from the project director. The core team will meet weekly to discuss the study, ensuring any lessons are passed on to everyone working on the contract.</p> <p>Large number of similarly experienced staff available.</p> <p>In the event of DfE team absences, we would offer video or telephone briefing to any new or temporary team members. Our written weekly updates will also cover a comprehensive list of the latest completed tasks, upcoming tasks and deadlines, actions for DfE and key risks, helping new DfE team members get up to speed.</p>
Business continuity e.g. disaster leading to IT failure or inability to use a building	Low	High	<p>Regular data back ups.</p> <p>Regular testing of business continuity plans.</p> <p>Rackspace have excellent controls to ensure service continuity.</p> <p>Ipsos MORI has comprehensive business continuity plans.</p>

## 8 DATA COLLECTION

The Department seeks to minimise the burdens on Schools, Children's Services and Local Authorities (LAs) taking part in surveys.

When assessing the relative merits of data collection methods the following issues should be considered;

- only data essential to the project shall be collected;
- data should be collected electronically where appropriate/preferred;
- questionnaires should be pre-populated wherever possible and appropriate;
- schools must be given at least four working weeks to respond to the exercise from the date they receive the request; and
- LAs should receive at least two weeks, unless they need to approach schools in which case they too should receive 4 weeks to respond;

The Contractor shall clear any data collection tools with the Department before engaging in field work.

The Contractor shall check with the Department whether any of the information that they are requesting can be provided centrally from information already held.

## 9. CONSENT ARRANGEMENTS

The Department and the contractor shall agree in advance of any survey activity taking place the consent arrangements that shall apply for each of the participant groups. All participants should be informed of the purpose of the research, that the Contractor is acting on behalf of the Department and that they have the option to refuse to participate (opt out). Contact details should be provided including a contact person at the Department. Children who are 16 or over will usually be able to give their own consent but even where this is so, the Contractor, in consultation with the Department, should consider whether it is also appropriate for parents, guardians or other appropriate gatekeepers (e.g. schools, Local Authorities) to be informed when a child has been invited to participate in research.

## **10. PROJECT COMMUNICATION PLAN**

The Contractor shall work with the Project Manager and Steering Group to agree the content of the Project Communication Plan on the standard Department Communication Plan Template at the start of the Project, and to review and update at agreed key points in the Project and at the close of the Project. The Communication Plan shall set out the key audiences for the Project, all outputs intended for publication from the Project, the likely impact of each output, and dissemination plans to facilitate effective use by the key audiences.

End of Schedule One

**SCHEDULE TWO****1 Eligible expenditure**

1.1 The Department shall reimburse the Contractor for expenditure incurred for the purpose of the Project, provided that:-

- (a) the expenditure falls within the heading and limits in the Table below; and
- (b) the expenditure is incurred, and claims are made, in accordance with this Contract.

Project Milestone	Payment Amount	Payment Date
Completion of pilot study and wave 1 fieldwork prep		Sep-21
Wave 1 interviewer briefings started		Jan-22
Wave 1 fieldwork complete		Jun-22
Wave 1 data delivered		Aug-22
Wave 2 pilot complete		Jan-23
Wave 2 fieldwork complete		Sep-23
Wave 3 set up		Feb-24
Wave 3 interviewer briefings underway		Jun-24
Wave 3 fieldwork complete, data delivered		Dec-24
Wave 4 set up, Wave 3 provider survey complete		Apr-25
Wave 4 fieldwork complete		Sep-25
Wave 5 set up, Wave 4 provider survey complete		Apr-26
Wave 5 fieldwork complete		Sep-26
All data delivered		Nov-26

**Costs for development and use of Babysteps App**

Please note that the costs in this section are not additional and are already included within the project milestones and the expenditure set out below. These costs are set out separately in the event that this element of the project is discontinued, it is clear what costs can be deducted from the expenditure. Please note these are ceiling costs for each financial year and actual costs would be calculated at the point that this element of the project was discontinued.

2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	Total

**Total study costs**

Expenditure for the financial year 2021-2022 shall not exceed >exclusive of VAT.  
 Expenditure for the financial year 2022-2023 shall not exceed >exclusive of VAT.  
 Expenditure for the financial year 2023-2024 shall not exceed >exclusive of VAT.

Expenditure for the financial year 2024-2025 shall not exceed [REDACTED] exclusive of VAT.  
 Expenditure for the financial year 2025-2026 shall not exceed [REDACTED] exclusive of VAT.  
 Expenditure for the financial year 2026-2027 shall not exceed [REDACTED] exclusive of VAT.

Total Project expenditure shall not exceed **£5,949,690** exclusive of VAT.

- 1.2 All amounts payable to the Contractor under this Agreement (unless marked otherwise) are exclusive of VAT (or any similar tax) which the Department will pay at the rate from time to time prescribed by law
- 2 The allocation of funds in the Table may not be altered except with the prior written consent of the Department.
- 3 The Contractor shall maintain full and accurate accounts for the Project against the expenditure headings in the Table. Such accounts shall be retained for at least 6 years after the end of the financial year in which the last payment was made under this Contract. Input and output VAT shall be included as separate items in such accounts.
- 4 The Contractor shall permit duly authorised staff or agents of the Department or the National Audit Office to examine the accounts at any reasonable time and upon seven days notice in writing and shall furnish oral or written explanations of the accounts if required. The Department reserves the right to have such staff or agents carry out examinations into the economy, efficiency and effectiveness with which the Contractor has used the Department's resources in the performance of this Contract.
- 5 Invoices shall be submitted on the invoice dates specified in the Table, be detailed against the task headings set out in the Table and must quote the Department's Order Number. **The Purchase order reference number shall be provided by the department when both parties have signed the paperwork.** The Contractor or his or her nominated representative or accountant shall certify on the invoice that the amounts claimed were expended wholly and necessarily by the Contractor on the Projects in accordance with the Contract and that the invoice does not include any costs being claimed from any other body or individual or from the Department within the terms of another contract.
- 6 Invoices shall be sent by email to AccountsPayable.OCR@education.gov.uk. Invoices submitted by email must be in PDF format, with one PDF file per invoice including any supporting documentation in the same file. Multiple invoices may be submitted in a single email but each invoice must be in a separate PDF file. The Department undertakes to pay correctly submitted invoices within 10 days of receipt. The Department is obliged to pay invoices within 30 days of receipt from the day of physical or electronic arrival at the nominated address of the Department. Any correctly submitted invoices that are not paid within 30 days may be subject to the provisions of the Late Payment of Commercial Debt (Interest) Act 1998. A correct invoice is one that: is delivered in timing in accordance with the contract; is for the correct sum; in respect of goods/services supplied or delivered to the required quality (or are expected to be at the required quality); includes the date, supplier name, contact details and bank details; quotes the relevant purchase order/contract reference and has been delivered to the nominated address. If any problems arise, contact the Department's Project Manager. The Department aims to reply to complaints within 10 working days. The Department shall not be responsible for any delay in payment caused by incomplete or illegible invoices.

- 7 The Contractor shall have regard to the need for economy in all expenditure. Where any expenditure in an invoice, in the Department's reasonable opinion, is excessive having due regard to the purpose for which it was incurred, the Department shall only be liable to reimburse so much (if any) of the expenditure disallowed as, in the Department's reasonable opinion after consultation with the Contractor, would reasonably have been required for that purpose.
- 8 If this Contract is terminated by the Department due to the Contractor's insolvency or default at any time before completion of the Projects, the Department shall only be liable under paragraph 1 to reimburse eligible payments made by, or due to, the Contractor before the date of termination.
- 9 On completion of the Project or on termination of this Contract, the Contractor shall promptly draw-up a final invoice, which shall cover all outstanding expenditure incurred for the Project. The final invoice shall be submitted not later than 30 days after the date of completion of the Projects.
- 10 The Department shall not be obliged to pay the final invoice until the Contractor has carried out all the elements of the Projects specified as in Schedule 1.
- 11 It shall be the responsibility of the Contractor to ensure that the final invoice covers all outstanding expenditure for which reimbursement may be claimed. Provided that all previous invoices have been duly paid, on due payment of the final invoice by the Department all amounts due to be reimbursed under this Contract shall be deemed to have been paid and the Department shall have no further liability to make reimbursement of any kind.
12. At the end of the study design and preparation stage for each wave of the project, the requirement for the forthcoming fieldwork stage will be reviewed in the context of government and/or departmental policy and spending reviews. If the forthcoming fieldwork is no longer viable in light of current policy plans or budgets, the project may be terminated with effect at the end of the payment milestone by notice in writing by the department following the termination process laid out in Clause 8 of schedule 2 above.

If this Contract is terminated by the Department by exercising this break clause, the Department shall be liable under paragraph 1 to pay to the Contractor for all expenditure incurred by the Contractor for the purpose of the Project (and for the avoidance of doubt, including all costs associated with time spent by the Contractor and its Sub-contractors) up to the date of termination, irrespective of whether, at the date of termination, the Project Milestone to which the work relates has been completed and termination of the Contract shall be without prejudice to any rights, remedies or obligations accrued under the Contract prior to termination and nothing in the Contract shall prejudice the right of either Party to recover any amount outstanding at the time of such termination.

End of Schedule Two



## **SCHEDULE THREE**

### **1. Contractor's Obligations**

- 1.1 The Contractor shall promptly and efficiently complete the Project in accordance with the provisions set out in Schedule One.
- 1.2 The Contractor shall comply with the accounting and information provisions of Schedule Two.
- 1.3 The Contractor shall comply with all statutory provisions including all prior and subsequent enactments, amendments and substitutions relating to that provision and to any regulations made under it.
- 1.4 The Contractor shall inform the Department immediately if it is experiencing any difficulties in meeting its contractual obligations.

### **2. Department's Obligations**

- 2.1 The Department will comply with the payment provisions of Schedule Two provided that the Department has received full and accurate information and documentation as required by Schedule Two to be submitted by the Contractor for work completed to the satisfaction of the Department.

### **3. Changes to the Department's Requirements**

- 3.1 The Department shall notify the Contractor of any material change to the Department's requirement under this Contract.
- 3.2 The Contractor shall use its reasonable endeavours to accommodate any changes to the needs and requirements of the Department provided that it shall be entitled to payment for any additional costs it incurs as a result of any such changes. The amount of such additional costs to be agreed between the parties in writing.

### **4. Management**

- 4.1 The Contractor shall promptly comply with all reasonable requests or directions of the Project Manager in respect of the Services.
- 4.2 The Contractor shall address any enquiries about procedural or contractual matters in writing to the Project Manager. Any correspondence relating to this Contract shall quote the reference number set out in the Recitals to this Contract.

## 5. Contractor's Employees and Sub-Contractors

5.1 Where the Contractor enters into a contract with a supplier or contractor for the purpose of performing its obligations under the Contract (the "Sub-contractor") it shall ensure prompt payment in accordance with this clause 5.1. Unless otherwise agreed by the Department in writing, the Contractor shall ensure that any contract requiring payment to a Sub-contractor shall provide for undisputed sums due to the Sub-contractor to be made within a specified period from the receipt of a valid invoice not exceeding:

5.1.1 10 days, where the Sub-contractor is an SME; or 30 days where international payments are required, as agreed with the Department for Education project manager.

5.1.2 30 days either, where the sub-contractor is not an SME, or both the Contractor and the Sub-contractor are SMEs,

The Contractor shall comply with such terms and shall provide, at the Department's request, sufficient evidence to demonstrate compliance.

5.2 The Department shall be entitled to withhold payment due under clause 5.1 for so long as the Contractor, in the Department's reasonable opinion, has failed to comply with its obligations to pay any Sub-contractors promptly in accordance with clause 5.1. For the avoidance of doubt the Department shall not be liable to pay any interest or penalty in withholding such payment.

5.3 The Contractor shall immediately notify the Department if they have any concerns regarding the propriety of any of its sub-contractors in respect of work/services rendered in connection with this Contract.

5.4 The Contractor, its employees and sub-contractors (or their employees), whilst on Departmental premises, shall comply with such rules, regulations and requirements (including those relating to security arrangements) as may be in force from time to time.

5.5 The Contractor shall ensure the security of all the Property whilst in its possession, during the supply of the Project, in accordance with the Department's reasonable security requirements as required from time to time.

5.6 If the Department notifies the Contractor that it considers that an employee or sub-contractor is not appropriately qualified or trained to perform the Project or otherwise is not performing the Project in accordance with this Contract, then the Contractor shall, as soon as is reasonably practicable, take all such steps as the Department considers necessary to remedy the situation or, if so required by the Department, shall remove the said employee or sub-contractor from

performing the Project and shall provide a suitable replacement (at no cost to the Department).

- 5.7 The Contractor shall take all reasonable steps to avoid changes of employees or sub-contractors assigned to and accepted to perform the Project under the Contract except whenever changes are unavoidable or of a temporary nature. The Contractor shall give at least four week's written notice to the Project Manager of proposals to change key employees or sub-contractors

**6. Ownership of Intellectual Property Rights, Copyright & Licence to the Department**

- 6.1 Ownership of Intellectual Property Rights including Copyright, in any guidance, specifications, instructions, toolkits, plans, data, drawings, databases, patents, patterns, models, designs or other materials prepared by or for the Contractor on behalf of the Department for use, or intended use, in relation to the performance by the Contractor of its obligations under the Contract shall belong to the Contractor
- 6.2 The Contractor hereby grants to the Department a non-exclusive license without payment of royalty or other sum by the Department in the Copyright to:
- 6.2.1 to do and authorise others to do any and all acts restricted by the Act as amended from time to time or replaced in whole or part by any statute or other legal means in respect of any Copyright Work in the United Kingdom and in all other territories in the world for the full period of time during which the Copyright subsists; and
- 6.2.2 to exercise all rights of a similar nature as those described in Clause 6.2.1 above which may be conferred in respect of any Copyright Work by the laws from time to time in all other parts of the world
- 6.3 The Contractor now undertakes to the Department as follows:
- 6.3.1 not to assign in whole or in part the legal or beneficial title in any Copyright to any person, firm or company without the prior written consent of the Department the granting of which consent shall be at its absolute discretion.
- 6.3.2 to procure that the Contractor is entitled both legally and beneficially to all Copyright.
- 6.3.3 to record or procure the recording on each and every Copyright Work the name of the author or authors and the date on which it was created and retain safely in its possession throughout the duration of the Copyright all Original Copyright Works.
- 6.3.4 in respect of the Original Copyright Works to:
- 6.3.5 supply copies on request to the Department the reasonable

- costs in respect of which the Department will pay; and
- 6.3.6 allow inspection by an authorised representative of the Department on receiving reasonable written notice;
- 6.3.7 to take all necessary steps and use its best endeavours to prevent the infringement of the Copyright by any person, firm or company which shall include an option, but not the obligation on the part of the Contractor to commence and prosecute legal proceedings for any threatened or actual infringement where there is a reasonable chance of success and account to the Department after the deduction of all legal expenses incurred in any such proceedings for one half of all damages paid whether by order, settlement or otherwise.
- 6.3.8
- 6.3.9 not to demand and to procure that where any further licences are granted by the Contractor otherwise than to the Department the Licensees thereof do not demand any payment in whatever form and from any person, firm or company directly or indirectly for the undertaking of any of the acts restricted by the Copyright (as defined in section 16 of the Act) in relation to any Copyright Work except in so far as any demand or payment received represents only the reasonable costs which might normally be incurred in respect of such an act.
- 6.4 The Contractor now warrants to the Department that all Works:
- 6.4.1 will not infringe in whole or in part any copyright or like right or any other intellectual property right of any other person (wheresoever) and agrees to indemnify and hold harmless the Department against any and all claims, demands, proceedings, damages, expenses and losses including any of a consequential nature arising directly or indirectly out of any act of the Department in relation to any Work, where such act is or is alleged to be an infringement of a third party's copyright or like right or other intellectual property rights (wheresoever).
- 6.5 The warranty and indemnity contained in Clause 6.4.1 above shall survive the termination of this Contract and shall exist for the life of the Copyright.
7. Data Protection Act
- 7.1 The Parties acknowledge that for the purposes of the Data Protection Legislation, the Customer is the Controller and the Contractor is the Processor unless otherwise specified in Schedule 4. The only processing that the Processor is authorised to do is listed in Schedule 4 by the Controller and may not be determined by the Processor.
- 7.2 The Processor shall notify the Controller immediately if it considers that any of the Controller's instructions infringe the Data Protection

Legislation.

- 7.3 The Processor shall provide all reasonable assistance to the Controller in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Controller, include:
- (a) a systematic description of the envisaged processing operations and the purpose of the processing;
  - (b) an assessment of the necessity and proportionality of the processing operations in relation to the Services;
  - (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
  - (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- 7.4 The Processor shall, in relation to any Personal Data processed in connection with its obligations under this Contract:
- (a) process that Personal Data only in accordance with Schedule 4, unless the Processor is required to do otherwise by Law. If it is so required the Processor shall promptly notify the Controller before processing the Personal Data unless prohibited by Law;
  - (b) ensure that it has in place Protective Measures, which are appropriate to protect against a Data Loss Event, which the Controller may reasonably reject (but failure to reject shall not amount to approval by the Controller of the adequacy of the Protective Measures), having taken account of the:
    - (i) nature of the data to be protected;
    - (ii) harm that might result from a Data Loss Event;
    - (iii) state of technological development; and
    - (iv) cost of implementing any measures;
  - (c) ensure that:
    - (i) the Processor Personnel do not process Personal Data except in accordance with this Contract (and in particular Schedule 4);
    - (ii) it takes all reasonable steps to ensure the reliability and integrity of any Processor Personnel who have access to the Personal Data and ensure that they:
      - (A) are aware of and comply with the Processor's duties under this clause;
      - (B) are subject to appropriate confidentiality undertakings with the Processor or any Sub-processor;
      - (C) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third Party unless directed in writing to do so by the Controller or as otherwise permitted by this Contract; and
      - (D) have undergone adequate training in the use, care, protection and handling of Personal Data; and

- (d) not transfer Personal Data outside of the EU unless the prior written consent of the Controller has been obtained and the following conditions are fulfilled:
  - (i) the Controller or the Processor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Controller;
  - (ii) the Data Subject has enforceable rights and effective legal remedies;
  - (iii) the Processor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Controller in meeting its obligations); and
  - (iv) the Processor complies with any reasonable instructions notified to it in advance by the Controller with respect to the processing of the Personal Data;
- (e) at the written direction of the Controller, delete or return Personal Data (and any copies of it) to the Controller on termination of the Contract unless the Processor is required by Law to retain the Personal Data.

7.5 Subject to clause 7.6, the Processor shall notify the Controller immediately if it:

- (a) receives a Data Subject Access Request (or purported Data Subject Access Request);
- (b) receives a request to rectify, block or erase any Personal Data;
- (c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
- (d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Contract;
- (e) receives a request from any third Party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or
- (f) becomes aware of a Data Loss Event.

7.6 The Processor's obligation to notify under clause 7.5 shall include the provision of further information to the Controller in phases, as details become available.

7.7 Taking into account the nature of the processing, the Processor shall provide the Controller with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause 7.5 (and insofar as possible within the timescales reasonably required by the Controller) including by promptly providing:

- (a) the Controller with full details and copies of the complaint,



- communication or request;
  - (b) such assistance as is reasonably requested by the Controller to enable the Controller to comply with a Data Subject Access Request within the relevant timescales set out in the Data Protection Legislation;
  - (c) the Controller, at its request, with any Personal Data it holds in relation to a Data Subject;
  - (d) assistance as requested by the Controller following any Data Loss Event;
  - (e) assistance as requested by the Controller with respect to any request from the Information Commissioner's Office, or any consultation by the Controller with the Information Commissioner's Office.
- 7.8 The Processor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Processor employs fewer than 250 staff, unless:
  - (a) the Controller determines that the processing is not occasional;
  - (b) the Controller determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; and
  - (c) the Controller determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- 7.9 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.
- 7.10 Each party shall designate a data protection officer if required by the Data Protection Legislation.
- 7.11 Before allowing any Sub-processor to process any Personal Data related to this Contract, the Processor must:
  - (a) notify the Controller in writing of the intended Sub-processor and processing;
  - (b) obtain the written consent of the Controller;
  - (c) enter into a written agreement with the Sub-processor which give effect to the terms set out in this clause such that they apply to the Sub-processor; and
  - (d) provide the Controller with such information regarding the Sub-processor as the Controller may reasonably require.
- 7.12 The Processor shall remain fully liable for all acts or omissions of any Sub-processor.
- 7.13 The Controller may, at any time on not less than 30 Working Days' notice, revise this clause by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an

applicable certification scheme (which shall apply when incorporated by attachment to this Contract).

7.14 The Parties agree to take account of any guidance issued by the Information Commissioner's Office. The Controller may on not less than 30 Working Days' notice to the Processor amend this Contract to ensure that it complies with any guidance issued by the Information Commissioner's Office.

7.15 *Where the Parties include two or more Joint Controllers as identified in Schedule 4 in accordance with GDPR Article 26, those Parties shall enter into a Joint Controller Agreement based on the terms outlined in Schedule 4 in replacement of Clauses 7.1-7.14 for the Personal Data under Joint Control.*

## **8. Departmental Security Standards**

8.1 The Contractor shall comply with Departmental Security Standards for Contractors which include but are not constrained to the following clauses.

8.2 Where the Contractor will provide ICT products or services or otherwise handle information at OFFICIAL on behalf of the Department, the requirements under Cabinet Office Procurement Policy Note – Use of Cyber Essentials Scheme certification - Action Note 09/14 25 May 2016, or any subsequent updated document, are mandated; that “contractors supplying products or services to HMG shall have achieved, and retain certification at the appropriate level, under the HMG Cyber Essentials Scheme”. The certification scope must be relevant to the services supplied to, or on behalf of, the Department.

8.3 The Contractor shall be able to demonstrate conformance to, and show evidence of, such conformance to the ISO/IEC 27001 (Information Security Management Systems Requirements) standard, including the application of controls from ISO/IEC 27002 (Code of Practice for Information Security Controls).

8.4 The Contractor shall follow the UK Government Security Classification Policy (GSCP) in respect of any Departmental Data being handled in the course of providing this service, and will handle this data in accordance with its security classification. (In the event where the Contractor has an existing Protective Marking Scheme then the Contractor may continue to use this but must map the HMG security classifications against it to ensure the correct controls are applied to the Departmental Data).

8.5 Departmental Data being handled in the course of providing an ICT solution or service must be segregated from all other data on the Contractor's or sub-contractor's own IT equipment to protect the

Departmental Data and enable the data to be identified and securely deleted when required. In the event that it is not possible to segregate any Departmental Data then the Contractor and any sub-contractor shall be required to ensure that it is stored in such a way that it is possible to securely delete the data in line with Clause 8.14.

- 8.6 The Contractor shall have in place and maintain physical security, in line with those outlined in ISO/IEC 27002 including, but not limited to, entry control mechanisms (e.g. door access) to premises and sensitive areas
- 8.7 The Contractor shall have in place and maintain an access control policy and process for the logical access (e.g. identification and authentication) to ICT systems to ensure only authorised personnel have access to Departmental Data.
- 8.8 The Contractor shall have in place and shall maintain procedural, personnel, physical and technical safeguards to protect Departmental Data, including but not limited to: physical security controls; good industry standard policies and process; anti-virus and firewalls; security updates and up-to-date patching regimes for anti-virus solutions; operating systems, network devices, and application software, user access controls and the creation and retention of audit logs of system use.
- 8.9 Any data in transit using either physical or electronic transfer methods across public space or cyberspace, including mail and couriers systems, or third party provider networks must be protected via encryption which has been certified to FIPS 140-2 standard or a similar method approved by the Department prior to being used for the transfer of any Departmental Data.
- 8.10 Storage of Departmental Data on any portable devices or media shall be limited to the absolute minimum required to deliver the stated business requirement and shall be subject to Clause 8.11 and 8.12 below.
- 8.11 Any portable removable media (including but not constrained to pen drives, flash drives, memory sticks, CDs, DVDs, or other devices) which handle, store or process Departmental Data to deliver and support the service, shall be under the control and configuration management of the contractor or (sub-)contractors providing the service, shall be both necessary to deliver the service and shall be encrypted using a product which has been certified to FIPS140-2 standard or another encryption standard that is acceptable to the Department.
- 8.12 All portable ICT devices, including but not limited to laptops, tablets, smartphones or other devices, such as smart watches, which handle, store or process Departmental Data to deliver and support the service,

shall be under the control and configuration management of the contractor or sub-contractors providing the service, and shall be necessary to deliver the service. These devices shall be full-disk encrypted using a product which has been certified to FIPS140-2 standard or another encryption standard that is acceptable to the Department.

- 8.13 Whilst in the Contractor's care all removable media and hardcopy paper documents containing Departmental Data must be handled securely and secured under lock and key when not in use and shall be securely destroyed when no longer required, using either a cross-cut shredder or a professional secure disposal organisation.
- 8.14 When necessary to hand carry removable media and/or hardcopy paper documents containing Departmental Data, the media or documents being carried shall be kept under cover and transported in such a way as to ensure that no unauthorised person has either visual or physical access to the material being carried. This clause shall apply equally regardless of whether the material is being carried inside or outside of company premises.
- 8.15 At the end of the contract or in the event of equipment failure or obsolescence, all Departmental information and data, in either hardcopy or electronic format, that is physically held or logically stored on the Contractor's ICT infrastructure must be securely sanitised or destroyed and accounted for in accordance with the current HMG policy using a NCSC approved product or method. Where sanitisation or destruction is not possible for legal, regulatory or technical reasons, such as a Storage Area Network (SAN) or shared backup tapes, then the Contractor or sub-contractor shall protect the Department's information and data until the time, which may be long after the end of the contract, when it can be securely cleansed or destroyed.
- 8.16 Access by Contractor or sub-contractor staff to Departmental Data shall be confined to those individuals who have a "need-to-know" in order to carry out their role; and have undergone mandatory pre-employment screening, to a minimum of HMG Baseline Personnel Security Standard (BPSS); or hold an appropriate National Security Vetting clearance as required by the Department. All Contractor or sub-contractor staff must complete this process before access to Departmental Data is permitted.
- 8.17 All Contractor or sub-contractor employees who handle Departmental Data must have annual awareness training in protecting information.
- 8.18 The Contractor shall, as a minimum, have in place robust Business Continuity arrangements and processes including IT disaster recovery plans and procedures that conform to ISO 22301 to ensure that the delivery of the contract is not adversely affected in the event of an incident. An incident shall be defined as any situation that might, or

could lead to, a disruption, loss, emergency or crisis to the services delivered. If a ISO 22301 certificate is not available the supplier will provide evidence of the effectiveness of their ISO 22301 conformant Business Continuity arrangements and processes including IT disaster recovery plans and procedures. This should include evidence that the Contractor has tested or exercised these plans within the last 12 months and produced a written report of the outcome, including required actions.

- 8.19 Any suspected or actual breach of the confidentiality, integrity or availability of Departmental Data being handled in the course of providing this service, or any non-compliance with these Departmental Security Standards for Contractors, or other Security Standards pertaining to the solution, shall be investigated immediately and escalated to the Department by a method agreed by both parties.
- 8.20 The Contractor shall ensure that any IT systems and hosting environments that are used to handle, store or process Departmental Data shall be subject to independent IT Health Checks (ITHC) using a NCSC approved ITHC provider before go-live and periodically (at least annually) thereafter. The findings of the ITHC relevant to the service being provided are to be shared with the Department and all necessary remedial work carried out. In the event of significant security issues being identified, a follow up remediation test may be required.
- 8.21 The Contractor or sub-contractors providing the service will provide the Department with full details of any storage of Departmental Data outside of the UK or any future intention to host Departmental Data outside the UK or to perform any form of ICT management, support or development function from outside the UK. The Contractor or sub-contractor will not go ahead with any such proposal without the prior written agreement from the Department.
- 8.22 The Department reserves the right to audit the Contractor or sub-contractors providing the service within a mutually agreed timeframe but always within seven days of notice of a request to audit being given. The audit shall cover the overall scope of the service being supplied and the Contractor's, and any sub-contractors, compliance with the clauses contained in this Section.
- 8.23 The Contractor shall contractually enforce all these Departmental Security Standards for Contractors onto any third-party suppliers, sub-contractors or partners who could potentially access Departmental Data in the course of providing this service.
- 8.24 The Contractor and sub-contractors shall undergo appropriate security assurance activities as determined by the Department. Contractor and sub-contractors shall support the provision of appropriate evidence of assurance and the production of the necessary security documentation such as completing the DfE Security Assurance Model (DSAM)

process or the Business Service Assurance Model (BSAM). This will include obtaining any necessary professional security resources required to support the Contractor's and sub-contractor's security assurance activities such as: a NCSC Certified Cyber Security Consultancy (CCSC) or NCSC Certified Professional (CCP) Security and Information Risk Advisor (SIRA).

## 9. Warranty and Indemnity

- 9.1 The Contractor warrants to the Department that the obligations of the Contractor under this Contract will be performed by appropriately qualified and trained personnel with reasonable skill, care and diligence and to such high standards of quality as it is reasonable for the Department to expect in all the circumstances. The Department will be relying upon the Contractor's skill, expertise and experience in the performance of the Project and also upon the accuracy of all representations or statements made and the advice given by the Contractor in connection with the performance of the Project and the accuracy of any documents conceived, originated, made or developed by the Contractor as part of this Contract. The Contractor warrants that any goods supplied by the Contractor forming part of the Services will be of satisfactory quality and fit for their purpose and will be free from defects in design, material and workmanship.
- 9.2 Without prejudice to any other remedy, if any part of the Project is not performed in accordance with this Contract then the Department shall be entitled, where appropriate to:
  - 9.2.1 require the Contractor promptly to re-perform or replace the relevant part of the Project without additional charge to the Department; or
  - 9.2.2 assess the cost of remedying the failure ("the assessed cost") and to deduct from any sums due to the Contractor the Assessed Cost for the period that such failure continues.
- 9.3 The Contractor shall be liable for and shall indemnify the Department in full against any expense, liability, loss, claim or proceedings arising under statute or at common law in respect of personal injury to or death of any person whomsoever or loss of or damage to property whether belonging to the Department or otherwise arising out of or in the course of or caused by the performance of the Project.
- 9.4 Without prejudice to any other exclusion or limitation of liability in this Contract, the liability of the Contractor for any claim or claims under this Contract shall be limited to twice the price of the Contract.
- 9.5 All property of the Contractor whilst on the Department's premises shall be there at the risk of the Contractor and the Department shall accept no liability for any loss or damage howsoever occurring to it.



- 9.6 The Contractor shall ensure that it has adequate insurance cover with an insurer of good repute to cover claims under this Contract or any other claims or demands which may be brought or made against it by any person suffering any injury damage or loss in connection with this Contract. The Contractor shall upon request produce to the Department, its policy or policies of insurance, together with the receipt for the payment of the last premium in respect of each policy or produce documentary evidence that the policy or policies are properly maintained.

## **10. Termination**

- 10.1 This Contract may be terminated by either party giving to the other party at least 90 days notice in writing.
- 10.2 In the event of any breach of this Contract by either party, the other party may serve a notice on the party in breach requiring the breach to be remedied within a period specified in the notice which shall be reasonable in all the circumstances. If the breach has not been remedied by the expiry of the specified period, the party not in breach may terminate this Contract with immediate effect by notice in writing.
- 10.3 In the event of a material breach of this Contract by either party, the other party may terminate this Contract with immediate effect by notice in writing.
- 10.4 This Contract may be terminated by the Department with immediate effect by notice in writing if at any time:-
- 10.4.1 the Contractor passes a resolution that it be wound-up or that an application be made for an administration order or the Contractor applies to enter into a voluntary arrangement with its creditors; or
  - 10.4.2 a receiver, liquidator, administrator, supervisor or administrative receiver be appointed in respect of the Contractor's property, assets or any part thereof; or
  - 10.4.3 the court orders that the Contractor be wound-up or a receiver of all or any part of the Contractor's assets be appointed; or
  - 10.4.4 the Contractor is unable to pay its debts in accordance with Section 123 of the Insolvency Act 1986.
  - 10.4.5 there is a change in the legal or beneficial ownership of 50% or more of the Contractor's share capital issued at the date of this Contract or there is a change in the control of the Contractor, unless the Contractor has previously notified the Department in

writing. For the purpose of this Sub-Clause 10.4.5 “control” means the power of a person to secure that the affairs of the Contractor are conducted in accordance with the wishes of that person by means of the holding of shares or the possession of voting power.

10.4.6 the Contractor is convicted (or being a company, any officers or representatives of the Contractor are convicted) of a criminal offence related to the business or professional conduct

10.4.7 the Contractor commits (or being a company, any officers or representatives of the Contractor commit) an act of grave misconduct in the course of the business;

10.4.8 the Contractor fails (or being a company, any officers or representatives of the Contractor fail) to fulfil his/their obligations relating to the payment of Social Security contributions;

10.4.9 the Contractor fails (or being a company, any officers or representatives of the Contractor fail) to fulfil his/their obligations relating to payment of taxes;

10.4.10 the Contractor fails (or being a company, any officers or representatives of the Contractor fail) to disclose any serious misrepresentation in supplying information required by the Department in or pursuant to this Contract.

10.5 Nothing in this Clause 10 shall affect the coming into, or continuance in force of any provision of this Contract which is expressly or by implication intended to come into force or continue in force upon termination of this Contract.

## **11. Status of Contractor**

11.1 In carrying out its obligations under this Contract the Contractor agrees that it will be acting as principal and not as the agent of the Department.

11.2 The Contractor shall not say or do anything that may lead any other person to believe that the Contractor is acting as the agent of the Department.

## **12. Freedom of information**

12.1. Each of the Parties:

12.1.1. acknowledges that the other Party (and in the case of the Contractor, the Consortium Members) is subject to the requirements of the Freedom of Information Act 2000 (hereafter the “FOIA”) and the Environmental Information Regulations 2004 (hereafter the “EIR”); and

- 12.1.2. will provide the other Party (and in the case of the Contractor, the Consortium Members) with all reasonably necessary assistance requested by that Party to enable that Party to comply with its obligations under FOIA and EIR.
- 12.2. Each Party shall share with the other Party all Requests for Information that it receives concerning this Contract and the subject matter thereof as soon as practicable.
- 12.3. The Parties will:
  - 12.3.1. work together to identify any information in its possession or control that is the subject of the Request for Information referred to in clause 12.2;
  - 12.3.2. share that information, where appropriate, with the Party that received the Request for Information as soon as reasonably practicable; and
  - 12.3.3. consider the appropriate application of any exemptions under FOIA or EIR.
- 12.4. Neither party shall respond directly to a Request for Information received by the other Party unless authorised to do so in writing by that party.
- 12.5. The recipient of the Request for Information referred to in clause 12.4 shall determine in its absolute discretion and notwithstanding any other provision in this Agreement or any other agreement whether any information is exempt from disclosure in accordance with the provisions of the FOIA and/or the EIR.

### **13. CONFIDENTIALITY**

- 13.1 Except to the extent set out in this clause or where disclosure is expressly permitted elsewhere in this Contract, each party shall:
  - 13.1.1 treat the other party's Confidential Information as confidential and safeguard it accordingly; and
  - 13.3.2 not disclose the other party's Confidential Information to any other person without the owner's prior written consent.
- 13.2 Clause 13 shall not apply to the extent that:
  - 13.2.1 such disclosure is a requirement of Law placed upon the party making the disclosure, including any requirements for disclosure under the FOIA, Code of Practice on Access to Government Information or the Environmental Information Regulations pursuant to clause 12 (Freedom of Information);

- 13.2.2 such information was in the possession of the party making the disclosure without obligation of confidentiality prior to its disclosure by the information owner;
  - 13.2.3 such information was obtained from a third party without obligation of confidentiality;
  - 13.2.4 such information was already in the public domain at the time of disclosure otherwise than by a breach of this Contract; or
  - 13.2.5 it is independently developed without access to the other party's Confidential Information.
- 13.3 The Contractor may only disclose the Department's Confidential Information to the Contractor Personnel who are directly involved in the provision of the Services and who need to know the information, and shall ensure that such Contractor Personnel are aware of and shall comply with these obligations as to confidentiality.
- 13.4 The Contractor shall not, and shall procure that the Contractor Personnel do not, use any of the Department's Confidential Information received otherwise than for the purposes of this Contract.
- 13.5 At the written request of the Department, the Contractor shall procure that those members of the Contractor Personnel identified in the Department's notice signs a confidentiality undertaking prior to commencing any work in accordance with this Contract.
- 13.6 Nothing in this Contract shall prevent the Department from disclosing the Contractor's Confidential Information:
- 13.6.1 to any Crown Body or any other Contracting Department. All Crown Bodies or Contracting Authorities receiving such Confidential Information shall be entitled to further disclose the Confidential Information to other Crown Bodies or other Contracting Authorities on the basis that the information is confidential and is not to be disclosed to a third party which is not part of any Crown Body or any Contracting Department;
  - 13.6.2 to any consultant, contractor or other person engaged by the Department or any person conducting an Office of Government Commerce gateway review;
  - 13.6.3 for the purpose of the examination and certification of the Department's accounts; or
  - 13.6.4 for any examination pursuant to Section 6(1) of the National Audit Act 1983 of the economy, efficiency and effectiveness with which the Department has used its resources.
- 13.7 The Department shall use all reasonable endeavours to ensure that any government department, Contracting Department, employee, third party or Sub-contractor to whom the Contractor's Confidential Information is disclosed pursuant to clause 13 is made aware of the

Department's obligations of confidentiality.

- 13.8 Nothing in this clause 13 shall prevent either party from using any techniques, ideas or know-how gained during the performance of the Contract in the course of its normal business to the extent that this use does not result in a disclosure of the other party's Confidential Information or an infringement of IPR.
- 13.9 The parties acknowledge that, except for any information which is exempt from disclosure in accordance with the provisions of the FOIA, the content of this Contract is not Confidential Information. The Party in receipt of an FOIA notice shall be responsible for determining in its absolute discretion whether any of the content of the Contract is exempt from disclosure in accordance with the provisions of the FOIA.
- 13.10 Subject to Clause 13.9, the Contractor hereby gives his consent for the Department to publish the Contract in its entirety, including from time to time agreed changes to the Contract, to the general public.
- 13.11 The Department may consult with the Contractor to inform its decision regarding any redactions but the Department shall have the final decision in its absolute discretion.
- 13.12 The Contractor shall assist and cooperate with the Department to enable the Department to publish this Contract.

#### **14. Access and Information**

- 14.1 The Contractor shall provide access upon the giving of seven (7) days advance notice including all relevant details to the Department's internal auditors or other duly authorised staff or agents to inspect such documents as the Department considers necessary in connection with this Contract and where appropriate speak to the Contractors employees.
- 14.2 Any audit or inspection permitted hereunder is not intended to include (i) any information related to the Contractor's provision of services to other clients or other client data residing on Contractor's computer systems or (ii) Contractor's general operating costs, overhead costs, or salary, timecards or other employee, personnel, and/or individual compensation records, or Contractor's profit and loss reports or other corporate financial records of Contractor; provided however, that if the Customer pays the Contractor on a time and materials basis, the audit shall include relevant timecards. The Customer agrees that any audit or access to Contractor's premises will be in a manner that minimises interference with the Contractor's business operations, and that any request by the Customer for an audit or access to the Contractor's premises may not be granted by the Contractor more than once in any 12 month period

#### **15. Transfer of Responsibility on Expiry or Termination**

- 15.1 The Contractor shall, at no cost to the Department, promptly provide such assistance and comply with such timetable as the Department may reasonably require for the purpose of ensuring an orderly transfer of responsibility upon the expiry or other termination of this Contract. The Department shall be entitled to require the provision of such assistance both prior to and, for a reasonable period of time after the expiry or other termination of this Contract.
- 15.2 Such assistance may include (without limitation) the delivery of documents and data in the possession or control of the Contractor which relate to this Contract, including the documents and data, if any, referred to in the Schedule.
- 15.3 The Contractor undertakes that it shall not knowingly do or omit to do anything that may adversely affect the ability of the Department to ensure an orderly transfer of responsibility.

## **16. Tax indemnity**

- 16.1 Where the Contractor is liable to be taxed in the UK in respect of consideration received under this contract, it shall at all times comply with the Income Tax (Earnings and Pensions) Act 2003 (ITEPA) and all other statutes and regulations relating to income tax in respect of that consideration.
- 16.2 Where the Contractor is liable to National Insurance Contributions (NICs) in respect of consideration received under this contract, it shall at all times comply with the Social Security Contributions and Benefits Act 1992 (SSCBA) and all other statutes and regulations relating to NICs in respect of that consideration.
- 16.3 The Department may, at any time during the term of this contract, ask the Contractor to provide information which demonstrates how the Contractor complies with Clauses 16.1 and 16.2 above or why those Clauses do not apply to it.
- 16.4 A request under Clause 16.3 above may specify the information which the Contractor must provide and the period within which that information must be provided.
- 16.5 The Department may terminate this contract if-
  - (a) in the case of a request mentioned in Clause 16.3 above if the Contractor:
    - (i) fails to provide information in response to the request within a reasonable time, or
    - (ii) provides information which is inadequate to demonstrate either how the Contractor complies with Clauses 16.1 and 16.2 above or why those Clauses do not apply to it;



- (b) in the case of a request mentioned in Clause 16.4 above, the Contractor fails to provide the specified information within the specified period, or
- (c) it receives information which demonstrates that, at any time when Clauses 16.1 and 16.2 apply, the Contractor is not complying with those Clauses.

16.6 The Department may supply any information which it receives under Clause 16.3 to the Commissioners of Her Majesty's Revenue and Customs for the purpose of the collection and management of revenue for which they are responsible.

16.7 The Contractor warrants and represents to the Department that it is an independent contractor and, as such, bears sole responsibility for the payment of tax and national insurance contributions which may be found due from it in relation to any payments or arrangements made under this Contract or in relation to any payments made by the Contractor to its officers or employees in connection with this Contract.

16.8 The Contractor will account to the appropriate authorities for any income tax, national insurance, VAT and all other taxes, liabilities, charges and duties relating to any payments made to the Contractor under this Contract or in relation to any payments made by the Contractor to its officers or employees in connection with this Contract.

16.9 The Contractor shall indemnify Department against any liability, assessment or claim made by the HM Revenue and Customs or any other relevant authority arising out of the performance by the parties of their obligations under this Contract (other than in respect of employer's secondary national insurance contributions) and any costs, expenses, penalty fine or interest incurred or payable by Department in connection with any such assessment or claim.

16.10 The Contractor authorises the Department to provide the HM Revenue and Customs and all other departments or agencies of the Government with any information which they may request as to fees and/or expenses paid or due to be paid under this Contract whether or not Department is obliged as a matter of law to comply with such request.

## **17. Amendment and variation**

17.1 No amendment or variation to this Contract shall be effective unless it is in writing and signed by or on behalf of each of the parties hereto. The Contractor shall comply with any formal procedures for amending or varying contracts that the Department may have in place from time to time.

## **18. Assignment and Sub-contracting**

18.1 The benefit and burden of this Contract may not be assigned or sub-contracted in whole or in part by the Contractor without the prior written

consent of the Department. Such consent may be given subject to any conditions which the Department considers necessary. The Department may withdraw its consent to any sub-contractor where it no longer has reasonable grounds to approve of the sub-contractor or the sub-contracting arrangement and where these grounds have been presented in writing to the Contractor.

## **19. The Contract (Rights of Third Parties) Act 1999**

19.1 This Contract is not intended to create any benefit, claim or rights of any kind whatsoever enforceable by any person not a party to the Contract.

## **20. Waiver**

20.1 No delay by or omission by either Party in exercising any right, power, privilege or remedy under this Contract shall operate to impair such right, power, privilege or remedy or be construed as a waiver thereof. Any single or partial exercise of any such right, power, privilege or remedy shall not preclude any other or further exercise thereof or the exercise of any other right, power, privilege or remedy.

## **21. Notices**

21.1 Any notices to be given under this Contract shall be delivered personally or sent by post or by facsimile transmission to the Project Manager (in the case of the Department) or to the Head of Research Contracts at the address set out in this Contract (in the case of the Contractor). Any such notice shall be deemed to be served, if delivered personally, at the time of delivery, if sent by post, forty-eight hours after posting or, if sent by facsimile transmission, twelve hours after proper transmission.

## **22. Dispute resolution**

22.1 The Parties shall use all reasonable endeavours to negotiate in good faith and settle amicably any dispute that arises during the continuance of this Contract.

22.2 Any dispute not capable of resolution by the parties in accordance with the terms of Clause 21 shall be settled as far as possible by mediation in accordance with the Centre for Dispute Resolution (CEDR) Model Mediation Procedure.

22.3 No party may commence any court proceedings/arbitration in relation to any dispute arising out of this Contract until they have attempted to settle it by mediation, but any such mediation may be terminated by either party at any time of such party wishing to commence court proceedings/arbitration.

## **23. Law and Jurisdiction**

- 23.1 This Contract shall be governed by and interpreted in accordance with English Law and the parties submit to the jurisdiction of the English courts.

## **24. Discrimination**

- 24.1 The Contractor shall not unlawfully discriminate within the meaning and scope of any law, enactment, order, or regulation relating to discrimination (whether in race, gender, religion, disability, sexual orientation or otherwise) in employment.
- 24.2 The Contractor shall take all reasonable steps to secure the observance of Clause 24.1 by all servants, employees or agents of the Contractor and all suppliers and sub-contractors employed in the execution of the Contract.

## **25. Safeguarding children who participate in research**

- 25.1 The Contractor will put in place safeguards to protect children from a risk of significant harm which could arise from them taking part in the Project. The Contractor will agree these safeguards with the Department before commencing work on the Project.
- 25.2 In addition, the Contractor will carry out checks with the Disclosure and Barring Service (DBS checks) on all staff employed on the Project in a Regulated Activity. Contractors must have a DBS check done every three years for each relevant member of staff for as long as this contract applies. The DBS check must be completed before any of the Contractor's employees work with children in Regulated Activity. Please see <https://www.gov.uk/crb-criminal-records-bureau-check> for further guidance.

## **26. Project outputs**

- 26.1 Unless otherwise agreed between the Contractor and the Project Manager, all outputs from the Project shall be published by the Department on the Department's research website.
- 26.2 The Contractor shall ensure that all outputs for publication by the Department adhere to the Department's Style Guide and MS Word Template, available to download from: <https://www.gov.uk/government/publications/research-reports-guide-and-template>.
- 26.3 Unless otherwise agreed between the Contractor and Project Manager, the Contractor shall supply the Project Manager with a draft for comment at least eight weeks before the intended publication date, for interim reports, and eight weeks before the contracted end date, for final reports.

- 26.4 The Contractor shall consider revisions to the drafts with the Project Manager in the light of the Department's comments. The Contractor shall provide final, signed off interim reports and other outputs planned within the lifetime of the Project to the Department by no later than four weeks before the intended publication date, and final, signed off reports and other outputs at the end of the Project to the Department by no later than the contracted end date for the Project.
- 26.5 Until the date of publication, findings from all Project outputs shall be treated as confidential, as set out in the Clause 13 above. The Contractor shall not release findings to the press or disseminate them in any way or at any time prior to publication without approval of the Department.
- 26.6 Where the Contractor wishes to issue a Press Notice or other publicity material containing findings from the Project, notification of plans, including timing and drafts of planned releases shall be submitted by the Contractor to the Project Manager at least three weeks before the intended date of release and before any agreement is made with press or other external audiences, to allow the Department time to comment. All Press Notices released by the Department or the Contractor shall state the full title of the research report, and include a hyperlink to the Department's research web pages, and any other web pages as relevant, to access the publication/s. This clause applies at all times prior to publication of the final report.
- 26.7 Where the Contractor wishes to present findings from the Project in the public domain, for example at conferences, seminars, or in journal articles, the Contractor shall notify the Project Manager before any agreement is made with external audiences, to allow the Department time to consider the request. The Contractor shall only present findings that will already be in the public domain at the time of presentation, unless otherwise agreed with the Department. This clause applies at all times prior to publication of the final report.

End of Schedule Three

**SCHEDULE FOUR****Schedule 4 Processing, Personal Data and Data Subjects**

This Schedule shall be completed by the Controller, who may take account of the view of the Processors, however the final decision as to the content of this Schedule shall be with the Controller at its absolute discretion.

1. The contact details of the Controller's Data Protection Officer are: [REDACTED]
2. The contact details of the Processor's Data Protection Officer are: [REDACTED]
3. The Processor shall comply with any further written instructions with respect to processing by the Controller.

Any such further instructions shall be incorporated into this Schedule.

Description	Details
Identity of the Controller and Processor	The Parties acknowledge that for the purposes of the Data Protection Legislation, the Customer is the Controller and the Contractor is the Processor in accordance with Clause 7.1.
Subject matter of the processing	For the administration and analysis of the Children of the 2020s longitudinal study.
Duration of the processing	From the outset of the contract on 31 March 2021 until the end of the contract (currently end of December 2026)
Nature and purposes of the processing	<p>Collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure and secure destruction of personal and sensitive data on:</p> <ul style="list-style-type: none"> <li>• Children of the 2020s sample members</li> <li>• Parents of Children of the 2020s sample members</li> <li>• Members of staff at childcare providers/schools of sample members</li> </ul>
Type of Personal Data being processed	The primary data subject within the Children of the 2020's study is the sample member. Additional data subjects are parents of the sample member, other residents in the household in which the sample member lives throughout the duration of the study, sample members' nominated 'stable contact' and members of staff at childcare providers/schools of sample members.

	<p>Data on sample members gathered via survey instruments, assessments and app based collection of audio and video recordings on the following topic areas;</p> <ul style="list-style-type: none"> <li>• Child socio-emotional functioning</li> <li>• Child speech, language, cognition, and executive function</li> <li>• Home learning and routines</li> <li>• Economic and social circumstances</li> <li>• Family relationships</li> <li>• Parenting and parent-child interaction</li> <li>• Child height and weight</li> <li>• Service use e.g. health visitors and children's centres</li> <li>• Formal/informal childcare and reception provision</li> </ul> <p>Owing to the age of sample members (9 months at start of study) the majority of this information will be collected via the sample members parents and also relates directly to their role as parents. In addition to the above the following specific information will also be gathered about sample members parents;</p> <ul style="list-style-type: none"> <li>• personal contact details (name, address, telephone number, email address etc)</li> <li>• mental health</li> <li>• substance use</li> </ul>
Categories of Data Subject	Young people within the Children of the 2020s sample and, to a limited extent, their parents, other members of their household and members of staff at childcare providers/schools of sample members
Plan for return and destruction of the data once the processing is complete UNLESS requirement under union or member state law to preserve that type of data	<p>Data will be retained until the end of the contract and until after data has been returned to DfE through a secure transfer route for archival and statistical and historic research purposes including the potential extension of the study to further waves.</p> <p>After receipt of data is confirmed by the Department, the contractor will destroy their copy of the data in accordance with standards and procedures laid out in ISO 27001.</p>

End of Schedule Four



Authorised to sign for and on  
behalf of the Secretary of  
State for Education

Authorised to sign for and on  
behalf of the Contractor

**Signature**

**Signature**

[Redacted Signature]

**Name**

[Redacted Name]

**Name**

[Redacted Name]

**Position and Address**

[Redacted Position and Address]

Department for Education  
Agora, 6 Cumberland Place,  
Nottingham,  
NG1 6HJ

**Position and Address**

[Redacted Position and Address]

UCL  
Gower Street, London  
WC1E 6BT

**Date**

31 March 2021

**Date**

31 March 2021