



Department
for Environment
Food & Rural Affairs

(1) THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

- and -

(2) NOISE CONSULTANTS LIMITED

**FRAMEWORK AGREEMENT FOR THE PROVISION OF ENVIRONMENTAL NOISE MODELLING
DESIGN AND BUILD**

THIS AGREEMENT is made on the 30 day of January 2021

BETWEEN:

- (1) THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS of Nobel House, 17 Smith Square, London, SW1P 3JR ("the Authority");
- AND
- (2) Noise Consultants Limited registered in England and Wales under number 10853764 whose registered office is situated at 23 Coldharbour Road, Bristol, BS6 7JT ("the Provider").

The Authority and the Provider being together called "the Parties".

WHEREAS:

- A The Authority placed a contract notice 2020/S 175-423974 on 09/09/2020 in the Official Journal of the European Union for providers for the design, build, and deployment of a noise modelling tool compliant with CNOSSOS-EU (Directive (EU)) 2015/996.
- B Following invitation to tender, the Provider submitted a tender on 13 October 2020 for the provision of the Services (as defined below).
- C On the basis of the Provider's tender, the Authority selected the Provider to enter into a framework agreement to provide Services to the Authority and any Contracting Body on a call-off basis in accordance with this Framework Agreement.
- D This Framework Agreement sets out the terms and conditions on which the Provider will supply the Services to the Authority and any Contracting Body and the procedure that the Authority and any Contracting Body will use to order Services from the Provider.
- E It is the Parties' intention that there will be no obligation for the Authority and/or any Contracting Body to place orders with the Provider under this Framework Agreement.

NOW IT IS HEREBY AGREED as follows:

1. Definitions

- 1.1 In this Framework Agreement, unless the context requires otherwise, the following words and phrases shall have the following meanings:

"Approval" and **"Approved"** means the prior written consent of the Authority;

"Authorised Representative" means the Authority representative named in the CCN as authorised to approve agreed Variations;

"Authority Data" means:

- (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 Provider by or on behalf of the Authority; or (ii) which the Provider is required to generate, process, store or transmit pursuant to the Framework Agreement or any Call-Off Contract; or
- (b) any Personal Data for which the Authority is the Controller;

"Bravo" is the Authority's electronic contract management system;

"Call-Off Contract" means the legally binding agreement (made pursuant to the provisions of this Framework Agreement) for the provision of Services made between a Contracting Body and the Provider Noise Consultants Limited.

"Call-Off Procedure" means the process for awarding Call-Off Contracts set out in this Framework Agreement;

"CCN" means a change control note in the form set out in Framework Annex 6;

"Commercially Sensitive Information" means the information listed in Framework Annex 9 comprising the information of a commercially sensitive nature relating to:

- (a) the Price;
- (b) details of the Provider's business and investment plans,

which the Provider has indicated to the Authority that, if disclosed by the Authority, would cause the Provider significant commercial disadvantage or material financial loss;

"Confidential Information" means any 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 information the disclosure of which would, or would be likely to, prejudice the commercial interests of any person or trade secrets or Intellectual Property Rights of either Party and all Personal Data. Confidential Information shall not include information which:

- (a) was public knowledge at the time of disclosure otherwise than by breach of clause 20;
- (b) was in the possession of the receiving Party, without restriction as to its disclosure, before receiving it from the disclosing Party;
- (c) is received from a third party (who lawfully acquired it) without restriction as to its disclosure; or
- (d) is independently developed without access to the Confidential Information.

"Contract Period" means:

- (a) in respect of the Framework Agreement, the period from the Commencement Date to:
 - (i) the date of expiry set out in clause 2.1; or
 - (ii) following an Extension, the end date of the Extension,
or such earlier date of termination or partial termination of the Framework Agreement in accordance with the Law or the Framework Agreement; and
- (b) in respect of a Call-Off Contract, the period described in Box 9 and clause 1 (Charter Period) of the Call-Off Contract, or such shorter period as the case may be in the event of earlier termination of the Call-Off Contract in accordance with the Law or the Call-Off Contract;

"Contracting Body" means the Authority and any other contracting bodies who are entitled to use the Framework Agreement as described in the OJEU Notice;

"Controller" has the meaning given in the GDPR;

"Copyright" means as it is defined in s.1 of Part 1 Chapter 1 of the Copyright, Designs and Patents Act 1988;

"Crown" means the government of the United Kingdom (including the Northern Ireland Executive Committee and Northern Ireland Departments, the Scottish Executive and the National Assembly for Wales), including, but not limited to, government ministers, government departments, government offices and government agencies and **"Crown Body"** is an emanation of the foregoing;

"Data Loss Event" means any event that results, or may result, in unauthorised access to Personal Data held by the Provider under the Framework Agreement or any Call-Off Contract, and/or actual or potential loss and/or destruction of Personal Data in breach of this Framework Agreement or the relevant Call-Off Contract, including any Personal Data Breach;

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

"Data Protection Legislation" means:

- (a) the GDPR, the LED and any applicable national implementing Laws as amended from time to time;
- (b) the DPA 2018 to the extent that it relates to processing of personal data and privacy; and
- (c) all applicable Law about the processing of personal data and privacy;

"Data Protection Officer" has the meaning given in the GDPR;

"Data Subject" has the meaning given in the GDPR;

"Data Subject Request" means a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data;

"Database Rights" means as rights in databases are defined in s.3A of Part 1 Chapter 1 of the Copyright, Designs and Patents Act 1988;

"Default" means any breach of the obligations of the relevant Party (including abandonment of the Framework Agreement or Call-Off Contract in breach of its terms, repudiatory breach or breach of a fundamental term) or any other default, act, omission, negligence or statement of the relevant Party or the Staff in connection with the subject-matter of the Framework Agreement or Call-Off Contract and in respect of which such Party is liable to the other;

"DPA 2018" means the Data Protection Act 2018;

"EIR" means the Environmental Information Regulations 2004 (SI 2004/3391) and any guidance and/or codes of practice issued by the Information Commissioner or relevant government department in relation to such regulations;

"Extension" has the meaning given in clause 2.2;

"FOIA" means the Freedom of Information Act 2000 and any subordinate legislation made under that 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;

"Framework Annex" means an annex to this Framework Agreement;

"Framework Agreement" means this framework agreement together with any annexes and appendices appended to the foregoing;

"Framework Provider" means the providers appointed as framework providers under a framework agreement pursuant to the OJEU Notice (including but not limited to the Provider under this Framework Agreement);

"Framework Tender" means the tender submitted by the Provider to the Authority in connection with the Framework Agreement;

"GDPR" means the General Data Protection Regulation (Regulation (EU) 2016/679);

"Indemnified Persons" has the meaning given in clause 23.3(b);

"Information" has the meaning given under section 84 of the FOIA;

"Intellectual Property Rights" means patents, utility models, inventions, trademarks, service marks, logos, design rights (whether registrable or otherwise), applications for any of the foregoing, copyright, database rights, domain names, plant variety rights, Know-How, trade or business names, moral rights and other similar rights or obligations whether registrable or not in any country (including but not limited to the United Kingdom) and the right to sue for passing off;

"Key Personnel" means the vessel master, the Provider's designated point of contact and any other individuals agreed in writing by the parties;

"Know-How" means all information not in the public domain held in any form (including without limitation that comprised in or derived from drawings, data formulae, patterns, specifications, notes, samples, chemical compounds, biological materials, computer software, component lists, instructions, manuals, brochures, catalogues and process descriptions and scientific approaches and methods);

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

"LED" means Law Enforcement Directive (Directive (EU) 2016/680);

"Location" means the location where the Services are to be supplied under the relevant Call-Off Contract, as set out in Box 16 of Part 1 of the relevant Call-Off Contract;

"Material Breach" means a breach (including an anticipatory breach) that is serious in the widest sense of having a serious effect on the benefit which the Authority would otherwise derive from:

(a) a substantial portion of the Framework Agreement or any Call-Off Contract; or

- (b) any of the obligations set out in clauses 6 (Conflicts of Interest), 14 (Prevention of Fraud and Bribery), 17 (Authority Data), 18 (Data Protection), 19 (Official Secrets Acts and Finance Act), 20 (Confidential Information) or 23 (Intellectual Property Rights);

"Mini-Competition Tender" means the tender submitted by the Provider to the Authority in response to a mini-competition carried out under the Call-Off Procedure;

"OJEU Notice" means the contract notice 2020/S 175-423974 published in the Official Journal of the European Union;

"Personal Data" has the meaning given in the GDPR;

"Personal Data Breach" has the meaning given in the GDPR;

"Price" means the price (excluding any applicable VAT) payable to the Provider by the Authority under the relevant Call-Off Contract, as set out in the Call-Off Contract for the full and proper performance by the Provider of its obligations under the Call-Off Contract;

"Pricing Matrix" means the pricing matrices set out in Annex 2 to this Framework Agreement;

"Processor" has the meaning given in the GDPR;

"Prohibited Act" means:

- (a) to directly or indirectly offer, promise or give any person working for or engaged by the Authority a financial or other advantage to:
 - (i) induce that person to perform improperly a relevant function or activity;
or
 - (ii) reward that person for improper performance of a relevant function or activity;
- (b) to directly or indirectly request, agree to receive or accept any financial or other advantage as an inducement or a reward for improper performance of a relevant function or activity in connection with the Framework Agreement or any Call-Off Contract;
- (c) an offence:
 - (i) under the Bribery Act 2010 (or any legislation repealed or revoked by such Act);
 - (ii) under legislation or common law concerning fraudulent acts; or
 - (iii) the defrauding, attempting to defraud or conspiring to defraud the Authority;
- (d) any activity, practice or conduct which would constitute one of the offences listed under (c) above if such activity, practice or conduct has been carried out in the UK;

"Project Officer" has the meaning given in clause 35.1;

"Protective Measures" means 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;

"Provider Solution" means the Provider's solution for the Services set out in Framework Annex 10 (Provider Solution);

"Quality Standards" means the quality standards published by BSI British Standards, the National Standards Body of the United Kingdom, the International Organisation for Standardization or other reputable or equivalent body (and their successor bodies) that a skilled and experienced operator in the same type of industry or business sector as the Provider would reasonably and ordinarily be expected to comply with, and as may be further detailed in the Specification and/or the Provider Solution;

"Receipt" means the physical or electronic arrival of the invoice at the address specified in clause 27.4 or at any other address given by the Authority to the Provider for the submission of invoices from time to time;

"Regulations" means the Public Contract Regulations 2015 (SI 2015/102);

"Regulatory Body" means a government department and regulatory, statutory and other entities, committees, ombudsmen 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 the Framework Agreement or any Call-Off Contract or any other affairs of the Authority;

"Relevant Requirements" means all applicable Law relating to bribery, corruption and fraud, including the Bribery Act 2010 and any guidance issued by the Secretary of State for Justice pursuant to section 9 of the Bribery Act 2010;

"Replacement Provider" means any third party supplier appointed by the Authority to supply any goods and/or services which are substantially similar to any of the Services in substitution for any of the Services following the expiry, termination or partial termination of the Contract.

"Request for Information" means a request for information under the FOIA or the EIR;

"Results" means any guidance, specifications, reports, studies, instructions, toolkits, plans, data, drawings, databases, patents, patterns, models, designs or other material which is:

- (a) prepared by or for the Provider for use in relation to the performance of its obligations under the Framework Agreement or any Call-Off Contract; or
- (b) the result of any work done by the Provider or the Staff in relation to the provision of the Services;

"Security Policy Framework" means the HMG Security Policy Framework (available from the Cabinet Office's Government Security Secretariat) as updated from time to time;

"Services" means any such services as are to be supplied by the Provider under any Call-Off Contract;

"Specification" means the mandatory requirements for the vessels and Services to be supplied under a Call-Off Contract as set out in Part A of Framework Annex 1 of the Framework Agreement, as may be supplemented and refined by Part 1 of the Call-Off Contract, and including, where appropriate, the Location and the Quality Standards;

"Staff" means all persons employed by the Provider to perform its obligations under the Framework Agreement or any Call-Off Contract together with the Provider's servants, agents and suppliers used in the performance of its obligations under the Framework Agreement or Call-Off Contract;

"Sub-processor" means any third party appointed to process Personal Data on behalf of the Provider related to this Framework Agreement or any Call-Off Contract;

"TFEU" means the Treaty on the Functioning of the European Union;

"Treaties" means the TFEU and the Treaty on European Union;

"Valid Invoice" means an invoice containing the information set out in clause 11.7;

"Variation" means a variation to the Specification, the Price or any of the terms or conditions of the Framework Agreement;

"VAT" means value added tax charged or regulated in accordance with the provisions of the Value Added Tax Act 1994; and

"Working Day" means a day (other than a Saturday or Sunday) on which banks are open for general business in the City of London.

1.2 In this Framework Agreement, unless the context implies otherwise:

- (a) the singular includes the plural and vice versa;
- (b) words importing the masculine include the feminine and the neuter;
- (c) reference to a clause is a reference to the whole of that clause unless stated otherwise;
- (d) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or central Government body;
- (e) the words "other", "in particular", "for example", "including" and similar words shall not limit the generality of the preceding words and shall be construed as if they were immediately followed by the words "without limitation";
- (f) headings are included for ease of reference only and shall not affect the interpretation or construction of the Framework Agreement;
- (g) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time; and
- (h) references to the Framework Agreement are references to the Framework Agreement as amended from time to time.

1.3 This Framework Agreement is comprised of the following documents:

- (a) the terms and conditions of this Framework Agreement;
- (b) Framework Annex 1 (Specification);

- (c) Framework Annex 2 (Pricing Matrix);
- (d) the remainder of the Framework Annexes (other than Framework Annex 10 (Provider Solution)); and
- (e) Framework Annex 10 (Provider Solution),

and unless otherwise provided (expressly or by necessary implication), any inconsistency between these documents shall be resolved in the descending order of priority in which they are listed above.

1.4 Each Call-Off Contract shall be comprised of the following documents:

- (a) the Specification;
- (b) the Framework Agreement terms and conditions (including the Framework Annexes but excluding Framework Annex 3 and Framework Annex 10) insofar as they are applicable to any Call-Off Contract;
- (c) Part I of the Call-Off Contract;
- (d) Part II of the Call-Off Contract; and
- (e) the Provider Solution,

and unless otherwise provided (expressly or by necessary implication), any inconsistency between these documents shall be resolved in the descending order of priority in which they are listed above.

2. Term of Framework Agreement

- 2.1 This Framework Agreement commences on 30 January 2021 (the "Commencement Date") and (unless it is otherwise extended or terminated in accordance with the terms of this Framework Agreement or it is otherwise lawfully terminated) ends on the expiry of the period of three (3) years from the Commencement Date (the "Initial Contract Period").
- 2.2 The Authority may extend the term of the Framework Agreement for a subsequent period of one (1) year (an "Extension") by executing a CCN to that effect prior to the expiry of the Initial Contract Period. The terms of the Framework Agreement will apply throughout the period of any Extension.

3. Scope of the Framework Agreement

- 3.1 This Framework Agreement governs the relationship between the Authority and the Provider in respect of the provision of the Services by the Provider to a Contracting Body.
- 3.2 A Contracting Body (subject to the following provisions of this clause 3.2) may at their absolute discretion and from time to time order Services from the Provider in accordance with the ordering procedure specified in clause 6.
- 3.3 The Provider acknowledges that there is no obligation for any Contracting Body to purchase any Services from the Provider during the term of the Framework Agreement.

4. Provider's Appointment

- 4.1 The Authority appoints the Provider as a potential provider of the Services and the Provider shall be eligible to be considered for the award of orders for such Services by a Contracting Body during the term of the Framework Agreement.
- 4.2 The Provider shall be an independent contractor and nothing in the Framework Agreement or any Call-Off Contract shall create a contract of employment, a relationship of agency or partnership or a joint venture between the Parties and accordingly neither Party shall be authorised to act in the name of, or on behalf of, or otherwise bind the other Party save as expressly permitted by the terms of the Framework Agreement or a Call-Off Contract.
- 4.3 The Provider shall not (and shall ensure that any other person engaged in relation to the Framework Agreement or any Call-Off Contract shall not) say or do anything that might lead any other person to believe that the Provider is acting as the agent or employee of the Authority.

5. Non-Exclusivity

- 5.1 The Provider acknowledges that, in entering into this Framework Agreement, no form of exclusivity or volume guarantee has been granted by any Contracting Body for Services from the Provider and that the Contracting Bodies are at all times entitled to enter into other contracts and arrangements with other providers for the provision of any or all services which are the same as or similar to the Services.

6. Conflicts of Interest

- 6.1 The Provider shall take appropriate steps to ensure that neither the Provider nor any Staff is placed in a position where, in the reasonable opinion of the Authority, there is or may be an actual conflict, or a potential conflict, between the pecuniary or personal interests of the Provider and the duties owed to the Authority under the provisions of the Framework Agreement or any Call-Off Contract. The Provider will notify the Authority without delay giving full particulars of any such conflict of interest which may arise.
- 6.2 The Authority may terminate the Framework Agreement and/or any Call-Off Contract immediately by notice and/or take or require the Provider to take such other steps it deems necessary if, in the Authority's reasonable opinion, there is or may be an actual conflict, or a potential conflict, between the pecuniary or personal interests of the Provider and the duties owed to the Authority under the provisions of the Framework Agreement or any Call-Off Contract. The actions of the Authority pursuant to this clause 6 shall not prejudice or affect any right of action or remedy which shall have accrued or shall thereafter accrue to the Authority.

7. Call-Off Contract Award Procedure

- 7.1 If a Contracting Body has a requirement for Services, the Contracting Body may award a Call-Off Contract to the Provider in accordance with the procedure set out in Part C of Framework Annex 1 of this Framework Agreement.
- 7.2 The Provider shall comply with the procedures set out in Part C of Framework Annex 1 of this Framework Agreement.
- 7.3 Each and every award of a Call-Off Contract pursuant to this Framework Agreement shall necessitate consideration as to the appropriate amendments, additions or deletions that may be required to the form of Call-Off Contract set out

in Framework Annex 4 in order to reflect the particular requirements of that award, regardless of the award procedure used.

8. Responsibility for Awards

8.1 The Provider acknowledges that each Contracting Body is independently responsible for the conduct of its award of Call-Off Contracts under the Framework Agreement and that the Authority is not responsible or accountable for and shall have no liability whatsoever in relation to:

- (a) the conduct of any Contracting Body (except the Authority) in relation to the Framework Agreement; or
- (b) the performance or non-performance of any Call-Off Contracts between the Provider and any Contracting Body (except the Authority) entered into pursuant to the Framework Agreement.

9. Warranties and Representations

9.1 The Provider warrants and represents to the Authority that:

- (a) it has full capacity and authority to enter into and perform its obligations under this Framework Agreement and any Call-Off Contracts;
- (b) this Framework Agreement is executed by a duly authorised representative of the Provider;
- (c) it has not committed and will not commit any fraud, breach of the Bribery Act 2010 or pay or have paid any commission in connection with entering into this Framework Agreement or any Call-Off Contract;
- (d) all information, statements and representations contained in its tender response for the Services are true and accurate and not misleading;
- (e) no claim is being asserted and no litigation or similar action is being taken against it that might affect its ability to provide its obligations under this Framework Agreement or any Call-Off Contract;
- (f) it is not subject to any contractual obligation that is likely to have a detrimental effect on its ability to perform its obligations under this Framework Agreement or any Call-Off Contract; and
- (g) it owns, or has obtained or is able to obtain valid licences for, all Intellectual Property Rights that are necessary for the performance of its obligations under this Framework Agreement or any Call-Off Contract.

9.2 The Provider warrants and represents to each of the other Contracting Bodies the statements in clause 9.1 above.

10. Call off Contract Performance

10.1 The Provider shall perform all Call-Off Contracts entered into with a Contracting Body in accordance with the requirements of this Framework Agreement (including the Specification and the Provider Solution) and the Call-Off Contract.

10.2 Wherever reasonably requested to do so by the Authority, the Provider shall cooperate fully with the any Contracting Body and its representatives in providing the Services.

- 10.3 Save as otherwise provided (expressly or by necessary implication), in the event of, and only to the extent of, any conflict between the terms and conditions of this Framework Agreement and the Call-Off Contract, the provisions of clause 1.4 shall apply.

11. Prices for Services

- 11.1 The prices offered by the Provider for Call-Off Contracts to Contracting Bodies for the Services shall be the prices listed in the Pricing Matrix.
- 11.2 When tendering in any Call-Off Procedure, the Provider shall not increase its prices above those set out in the Pricing Matrix, but may improve upon those prices.
- 11.3 The Provider shall submit a Valid Invoice to the Authority in accordance with the agreed payment schedule applicable to the Call-Off
- 11.4 The Authority shall, in addition to the Price and following Receipt of a Valid Invoice, pay the Provider a sum equal to the VAT chargeable on the value of the Services supplied in accordance with the relevant Call-Off Contract.
- 11.5 The Provider shall add VAT to the Price at the prevailing rate as applicable and shall show the amount of VAT payable separately on all invoices as an extra charge. If the Provider fails to show VAT on an invoice, the Authority will not, at any later date, be liable to pay the Provider any additional VAT.
- 11.6 All Provider invoices shall be expressed in sterling or such other currency as shall be permitted by the Authority in writing.
- 11.7 Valid Invoices shall meet such invoicing requirements as may be set out in the relevant Call-Off Contract, and shall include:
- (a) the Provider's full name, address and title of the relevant Call-Off Contract;
 - (b) the Purchase Order number;
- and, if requested by the Authority:
- (c) timesheets for Staff engaged in providing the Services signed and dated by the Authority's representative on the day;
 - (d) the name of the individuals to whom the timesheet relates and hourly rates for each;
 - (e) the location and the date on which work was undertaken;
 - (f) the time spent working by the individuals concerned; and
 - (g) details of the type of work undertaken by the individuals concerned.
- 11.8 If the Authority pays the Provider prior to the submission of a Valid Invoice this payment shall be on account of and deductible from the next payment to be made.
- 11.9 If any overpayment has been made or the payment or any part is not supported by a Valid Invoice the Authority may recover this payment against future invoices raised or directly from the Provider. All payments made by the Authority to the Provider shall be on an interim basis pending final resolution of an account with the Provider in accordance with the terms of this clause 11.

- 11.10 The Authority shall pay all sums due to the Provider within 30 days of Receipt of a Valid Invoice. Valid Invoices should be submitted for payment to the following address:

Accounts-payable.def@gov.sscl.com (the Authority's preferred option); or SSCL AP, Defra, PO Box 790, Newport Gwent, NP10 8FZ.

- 11.11 If a payment of an undisputed amount is not made by the Authority by the due date, then the Authority shall pay the Provider interest at the interest rate specified in the Late Payment of Commercial Debts (Interest) Act 1998.

- 11.12 The Provider shall indemnify the Authority on a continuing basis against any liability, including any interest, penalties or costs incurred, which is levied, demanded or assessed on the Authority at any time in respect of the Provider's failure to account for or to pay any VAT relating to payments made to the Provider under any Call-Off Contract. Any amounts due under this clause 11.12 shall be paid by the Provider to the Authority not less than 5 Working Days before the date upon which the tax or other liability is payable by the Authority.

- 11.13 The Authority shall not pay an invoice which is not Valid Invoice.

12. Recovery of Sums Due

- 12.1 If under any Call-Off Contract any sum of money is recoverable from or payable by the Provider to the Authority (including any sum which the Provider is liable to pay to the Authority in respect of any breach of a Call-Off Contract), the Authority may unilaterally deduct that sum from any sum then due, or which at any later time may become due to the Provider from the Authority under any Call-Off Contract or under any other agreement with the Authority or the Crown.

- 12.2 Any overpayment by either Party, whether of the Price or of VAT or otherwise, shall be a sum of money recoverable by the Party who made the overpayment from the Party in receipt of the overpayment.

- 12.3 The Provider shall make all payments due to the Authority without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise unless the Provider has a valid court order requiring an amount equal to such deduction to be paid by the Authority to the Provider.

- 12.4 All payments due shall be made within a reasonable time unless otherwise specified in this Framework Agreement or the relevant Call-Off Contract, in cleared funds, to such bank or building society account as the recipient Party may from time to time direct.

13. Statutory Requirements

- 13.1 The Provider shall be responsible for obtaining all licences, authorisations, consents or permits required in relation to the performance of this Framework Agreement and any Call-Off Contract. The Provider warrants and represents that, from the commencement date of any Call-Off Contract it shall have all necessary licences, authorisations, consents or permits and shall be fully compliant with all applicable law in supplying the Services thereunder.

14. Prevention of Fraud and Bribery

- 14.1 The Provider represents and warrants that neither it, nor to the best of its knowledge any Staff, have at any time prior to the Commencement Date:

- (a) committed a Prohibited Act or been formally notified that it is subject to an investigation or prosecution which relates to an alleged Prohibited Act; and/or

- (b) been listed by any government department or agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programmes or contracts on the grounds of a Prohibited Act.
- 14.2 The Provider shall not during the Contract Period:
- (a) commit a Prohibited Act; and/or
 - (b) do or suffer anything to be done which would cause the Authority or any of its employees, consultants, contractors, sub-contractors or agents to contravene any of the Relevant Requirements or otherwise incur any liability in relation to the Relevant Requirements.
- 14.3 The Provider shall, during the Contract Period:
- (a) establish, maintain and enforce, policies and procedures which are adequate to ensure compliance with the Relevant Requirements and prevent the occurrence of a Prohibited Act; and
 - (b) keep appropriate records of its compliance with its obligations under clause 14.3(a) and make such records available to the Authority on request.
- 14.4 The Provider shall immediately notify the Authority in writing if it becomes aware of any breach of clauses 14.1 and/or 14.2, or has reason to believe that it has or any of the Staff have:
- (a) been subject to an investigation or prosecution which relates to an alleged Prohibited Act;
 - (b) been listed by any government department or agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programmes or contracts on the grounds of a Prohibited Act; and/or
 - (c) received a request or demand for any undue financial or other advantage of any kind in connection with the performance of the Framework Agreement or any Call-Off Contract or otherwise suspects that any person directly or indirectly connected with the Framework Agreement or any Call-Off Contract has committed or attempted to commit a Prohibited Act.
- 14.5 If the Provider notifies the Authority pursuant to clause 14.4, the Provider shall respond promptly to the Authority's enquiries, co-operate with any investigation, and allow the Authority to audit any books, records and/or any other relevant documentation.
- 14.6 If the Provider is in Default under clauses 14.1 and/or 14.2, the Authority may by notice:
- (a) require the Provider to remove from performance of any Call-Off Contract any Staff those acts or omissions have caused the Default; or
 - (b) immediately terminate the Framework Agreement and/or any Call-Off Contract(s).
- 14.7 Any notice served by the Authority under clause 14.6 shall specify the nature of the Prohibited Act, the identity of the party who the Authority believes has committed the Prohibited Act and the action that the Authority has taken (including, where

relevant, the date on which the Framework Agreement and/or the relevant Call-Off Contract(s) shall terminate).

15. Discrimination

15.1 The Provider shall:

- (a) perform its obligations under the Framework Agreement and any Call-Off Contract(s) in accordance with:
 - (i) all applicable equality Law (whether in relation to race, sex, gender reassignment, age, disability, sexual orientation, religion or belief, pregnancy maternity or otherwise);
 - (ii) the Authority's equality and diversity policy as given to the Provider from time to time;
 - (iii) any other requirements and instructions which the Authority reasonably imposes in connection with any equality obligations imposed on the Authority at any time under applicable equality Law; and
- (b) take all necessary steps and inform the Authority of the steps taken to prevent unlawful discrimination designated as such by any court or tribunal, or the Equality and Human Rights Commission (or any successor organisation).

16. Environmental Requirements

16.1 The Provider shall in the performance of the Framework Agreement and any Call-Off Contract(s) have due regard to the Authority's environmental, sustainable and ethical procurement policies ("**Environmental Policies**") which require the Authority through its procurement and management of suppliers to:

- (a) conserve energy, water, wood, paper and other resources and reduce waste;
- (b) phase out the use of ozone depleting substances;
- (c) minimise the release of greenhouse gases, volatile organic compounds and other substances damaging to health and the environment;
- (d) minimise the use of products harmful to health and the environment such as hazardous substances and solvents, replacing them with more benign substances where feasible and, where such substances are necessary, to ensure that they are stored in properly labelled containers, used and disposed of in compliance with legal and regulatory requirements and any instructions from the Authority;
- (e) reduce fuel emissions wherever possible;
- (f) maximise the use of recovered materials and, if recycled materials are not suitable or not readily available, to maximise the use of materials taken from renewable sources; and
- (g) promote the design of products that are capable of reuse or remanufacture or easily separable into recyclable parts consisting of one material (e.g. steel, plastic, textile).

16.2 The Provider shall ensure that any equipment and materials used in the provision of the Services do not contain:

- (a) ozone depleting substances such as hydrochlorofluorocarbons (HCFCs), halons, carbon tetrachloride, 111 trichloroethane, bromochloromethane or any other damaging substances; and/or
- (b) HFCs and other gaseous and non-gaseous substances with a high global warming potential,

unless given written permission by the Authority to do so.

- 16.3 The Provider shall conserve energy and water; reduce carbon emissions and other greenhouse gases; minimise the use of substances damaging or hazardous to health and the environment and reduce waste by, for example, using resources more efficiently and reusing, recycling and composting and respecting biodiversity.
- 16.4 If required by the Authority the Provider shall provide the Authority with information about its compliance with its obligations under clause 16.3.
- 16.5 The Provider shall ensure that its Staff are aware of the Authority's Environmental Policies.
- 16.6 The Provider shall comply with the minimum environmental mandatory standards in the "Government Buying Standards" and in addition where required by the Authority, comply with any relevant "Best Practice" and "Class Leader" standards in relation to any goods on that list which are supplied to the Authority by or on behalf of the Provider under any Call-Off Contract.
- 16.7 The Provider shall:
 - (a) identify any risks arising from climate change and variable weather such as higher temperatures, droughts, flooding, sea and river level rises, coastal and riparian erosion, water scarcity, and loss of water quality which may disrupt and/or affect the supply of the Services; and
 - (b) if such risks have been identified, enhance the resilience of its organisation to enable it to adapt and deal with the effects of such extreme events, including by having the necessary awareness-raising, evaluation, preventive, preparatory, recovery measures and support systems in place in order to minimise any disruption to the supply of the Services.

17. Authority Data

- 17.1 The Provider shall not delete or remove any proprietary notices contained within or relating to the Authority Data.
- 17.2 The Provider shall not store, copy, disclose, or use the Authority Data except as necessary for the performance by the Provider of its obligations under this Framework Agreement or any Call-Off Contract or as otherwise expressly authorised in writing by the Authority.
- 17.3 To the extent that Authority Data is held and/or processed by the Provider, the Provider shall supply Authority Data to the Authority as requested by the Authority in the format specified in the Specification.
- 17.4 The Provider shall preserve the integrity of Authority Data and prevent the corruption or loss of Authority Data.

- 17.5 The Provider shall perform secure back-ups of all Authority Data and shall ensure that up-to-date back-ups are stored securely off-site. The Provider shall ensure that such back-ups are made available to the Authority immediately upon request.
- 17.6 The Provider shall ensure that any system on which the Provider holds any Authority Data, including back-up data, is a secure system that complies with the Security Policy Framework.
- 17.7 If Authority Data is corrupted, lost or sufficiently degraded as a result of the Provider's Default so as to be unusable, the Authority may:
- (a) require the Provider (at the Provider's expense) to restore or procure the restoration of Authority Data and the Provider shall do so promptly; and/or
 - (b) itself restore or procure the restoration of Authority Data, and shall be repaid by the Provider any reasonable expenses incurred in doing so.
- 17.8 If at any time the Provider suspects or has reason to believe that Authority Data has or may become corrupted, lost or sufficiently degraded in any way for any reason, then the Provider shall notify the Authority immediately and inform the Authority of the remedial action the Provider proposes to take.

18. Data Protection

- 18.1 The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Controller and the Provider is the Processor unless otherwise specified in Framework Annex 7. The only processing that the Provider is authorised to do is listed in Framework Annex 7 by the Authority and may not be determined by the Provider.
- 18.2 The Provider shall notify the Authority immediately if it considers that any of the Authority's instructions infringe the Data Protection Legislation.
- 18.3 The Provider shall provide all reasonable assistance to the Authority in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Authority, include:
- (a) a systematic description of the envisaged processing operations and the purpose of the processing;
 - (b) an assessment of the necessity and proportionality of the processing operations in relation to the Services;
 - (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
 - (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- 18.4 The Provider shall, in relation to any Personal Data processed in connection with its obligations under this Framework Agreement or any Call-Off Contract:
- (a) process that Personal Data only in accordance with Framework Annex 7 unless the Provider is required to do otherwise by Law. If it is so required the Provider shall promptly notify the Authority 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 Authority may reasonably reject (but

failure to reject shall not amount to approval by the Authority 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 Staff do not process Personal Data except in accordance with this Framework Agreement (and in particular Framework Annex 7);
 - (ii) it takes all reasonable steps to ensure the reliability and integrity of any Staff who have access to the Personal Data and ensure that they:
 - (A) are aware of and comply with the Provider's duties under this clause;
 - (B) are subject to appropriate confidentiality undertakings with the Provider or any Sub-processor;
 - (C) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third party unless directed in writing to do so by the Authority or as otherwise permitted by this Framework Agreement; 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 European Union unless the prior written consent of the Authority has been obtained and the following conditions are fulfilled:
- (i) the Authority or the Provider has provided appropriate safeguards in relation to the transfer (whether in accordance with the GDPR Article 46 or LED Article 37) as determined by the Authority;
 - (ii) the Data Subject has enforceable rights and effective legal remedies;
 - (iii) the Provider complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Authority in meeting its obligations); and
 - (iv) the Provider complies with any reasonable instructions notified to it in advance by the Authority with respect to the processing of the Personal Data;
- (e) at the written direction of the Authority, delete or return Personal Data (and any copies of it) to the Authority on termination of the Framework Agreement or any relevant Call-Off Contract unless the Provider is required by Law to retain the Personal Data.

- 18.5 Subject to clause 18.6 the Provider shall notify the Authority immediately if, in relation to any Personal Data processed in connection with its obligations under this Framework Agreement or any Call-Off Contract, it:
- (a) receives a Data Subject Request (or purported Data Subject Request);
 - (b) receives a request to rectify, block or erase any Personal Data;
 - (c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
 - (d) receives any communication from the Information Commissioner or any other regulatory authority;
 - (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.
- 18.6 The Provider's obligation to notify under clause 18.5 shall include the provision of further information to the Authority in phases, as details become available.
- 18.7 Taking into account the nature of the processing, the Provider shall provide the Authority with full assistance in relation to either Party's obligations under Data Protection Legislation in relation to any Personal Data processed in connection with its obligations under this Framework Agreement or any Call-Off Contract and any complaint, communication or request made under clause 18.5 (and insofar as possible within the timescales reasonably required by the Authority) including by promptly providing:
- (a) the Authority with full details and copies of the complaint, communication or request;
 - (b) such assistance as is reasonably requested by the Authority to enable the Authority to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
 - (c) the Authority, at its request, with any Personal Data it holds in relation to a Data Subject;
 - (d) assistance as requested by the Authority following any Data Loss Event;
 - (e) assistance as requested by the Authority with respect to any request from the Information Commissioner's Office, or any consultation by the Authority with the Information Commissioner's Office.
- 18.8 The Provider shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Provider employs fewer than 250 staff, unless:
- (a) the Authority determines that the processing is not occasional;
 - (b) the Authority determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; or
 - (c) the Authority determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.

- 18.9 The Provider shall allow for audits of its Personal Data processing activity by the Authority or the Authority's designated auditor.
- 18.10 Each Party shall designate its own Data Protection Officer if required by the Data Protection Legislation.
- 18.11 Before allowing any Sub-processor to process any Personal Data related to this Framework Agreement or any Call-Off Contract, the Provider must:
- (a) notify the Authority in writing of the intended Sub-processor and processing;
 - (b) obtain the written consent of the Authority; and
 - (c) enter into a written agreement with the Sub-processor which gives effect to the terms set out in this clause 18 such that they apply to the Sub-processor; and.
 - (d) provide the Authority with such information regarding the Sub-processor as the Authority may reasonably require.
- 18.12 The Provider shall remain fully liable for all acts or omissions of any of its Sub-processors.
- 18.13 The Authority 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 Framework Agreement or the relevant Call-Off Contract (as the case may be)).
- 18.14 The Parties agree to take account of any non-mandatory guidance issued by the Information Commissioner's Office. The Authority may on not less than 30 Working Days' notice to the Provider amend this Framework Agreement to ensure that it complies with any guidance issued by the Information Commissioner's Officer.
- 18.15 This clause 18 shall apply during the Contract Period and indefinitely after its expiry.

19. Official Secrets Acts and Finance Act

- 19.1 The Provider shall comply with the provisions of:
- (a) the Official Secrets Acts 1911 to 1989; and
 - (b) section 182 of the Finance Act 1989.

20. Confidential Information

- 20.1 Except to the extent set out in this clause 20 or if disclosure or publication is expressly permitted elsewhere in the Framework Agreement each Party shall treat all Confidential Information belonging to the other Party as confidential and shall not disclose any Confidential Information belonging to the other Party to any other person without the other party's consent, except to such persons and to such extent as may be necessary for the performance of the Party's obligations under the Framework Agreement or any Call-Off Contract.
- 20.2 The Provider hereby gives its consent for the Authority to publish the whole of the Framework Agreement and/or any Call-Off Contract (but with any information which is Confidential Information belonging to the Authority redacted) including

from time to time agreed changes to the Framework Agreement or relevant Call-Off Contract, to the general public.

- 20.3 If required by the Authority, the Provider shall ensure that Staff, professional advisors and consultants sign a non-disclosure agreement prior to commencing any work in connection with the Framework Agreement or any Call-Off Contract in substantially the form attached in Framework Annex 8 and, if applicable, incorporating the requirements of clause 18.11. The Provider shall maintain a list of the non-disclosure agreements completed in accordance with this clause 20.3.
- 20.4 If requested by the Authority, the Provider shall give the Authority a copy of the list and, subsequently upon request by the Authority, copies of such of the listed non-disclosure agreements as required by the Authority. The Provider shall ensure that its Staff, professional advisors and consultants are aware of the Provider's confidentiality obligations under the Framework Agreement.
- 20.5 The Provider may only disclose the Authority's Confidential Information to the Staff who are directly involved in the provision of the Services and who need to know the information, and shall ensure that such Staff are aware of and shall comply with these obligations as to confidentiality.
- 20.6 The Provider shall not, and shall procure that the Staff do not, use any of the Authority's Confidential Information received otherwise than for the purposes of this Framework Agreement or any Call-Off Contract.
- 20.7 Clause 20.1 shall not apply to the extent that:
- (a) such disclosure is a requirement of Law placed upon the Party making the disclosure, including any requirements for disclosure under the FOIA or the EIR;
 - (b) such information was in the possession of the Party making the disclosure without obligation of confidentiality prior to its disclosure by the information owner;
 - (c) such information was obtained from a third party without obligation of confidentiality;
 - (d) such information was already in the public domain at the time of disclosure otherwise than by a breach of this Framework Agreement; or
 - (e) it is independently developed without access to the other Party's Confidential Information.
- 20.8 Nothing in clause 20.1 shall prevent the Authority disclosing any Confidential Information obtained from the Provider:
- (a) for the purpose of the examination and certification of the Authority's accounts;
 - (b) for the purpose of any examination pursuant to section 6(1) of the National Audit Act 1983 of the economy, efficiency and effectiveness with which the Authority has used its resources;
 - (c) to any government department or any Contracting Body and the Provider hereby acknowledges that all government departments or Contracting Bodies receiving such Confidential Information may further disclose the Confidential Information to other government departments or other Contracting Bodies on the basis that the information is confidential and is not to be disclosed to a third party which is not part of any government department or any Contracting Body;

(d) to any consultant, contractor or other person engaged by the Authority,

provided that in disclosing information under clauses 20.8(c) and 20.8(d) the Authority discloses only the information which is necessary for the purpose concerned and requests that the information is treated in confidence and that a confidentiality undertaking is given where appropriate.

- 20.9 Nothing in clauses 20.1 to 20.6 shall prevent either Party from using any techniques, ideas or Know-How gained during the performance of its obligations under the Framework Agreement or any Call-Off Contract in the course of its normal business, to the extent that this does not result in a disclosure of the other Party's Confidential Information or an infringement of the other Party's Intellectual Property Rights.
- 20.10 The Authority shall use all reasonable endeavours to ensure that any government department, Contracting Body, employee, third party or sub-contractor to whom the Provider's Confidential Information is disclosed pursuant to clause 20.6 is made aware of the Authority's obligations of confidentiality.
- 20.11 If the Provider does not comply with clauses 20.1 to 20.6 the Authority may terminate the Framework Agreement and/or any Call-Off Contract(s) immediately on notice to the Provider.
- 20.12 In order to ensure that no unauthorised person gains access to any Confidential Information or any data obtained in the supply of the Services, the Provider shall maintain adequate security arrangements that meet the requirements of professional standards and best practice.
- 20.13 The Provider will immediately notify the Authority of any breach of security in relation to Confidential Information and all data obtained in the supply of the Services and will keep a record of such breaches. The Provider will use its best endeavours to recover such Confidential Information or data however it may be recorded. The Provider will co-operate with the Authority in any investigation as a result of any breach of security in relation to Confidential Information or data.
- 20.14 The Provider shall, at its own expense, alter any security systems at any time during the Contract Period at the Authority's request if the Authority reasonably believes the Provider has failed to comply with clause 20.12.

21. Freedom of Information

- 21.1 The Provider acknowledges that the Authority is subject to the requirements of the FOIA and the EIR.
- 21.2 The Provider shall transfer to the Authority all Requests for Information that it receives as soon as practicable and in any event within 2 Working Days of receipt and shall:
- (a) give the Authority a copy of all Information in its possession or control in the form that the Authority requires within 5 Working Days (or such other period as the Authority may specify) of the Authority's request;
 - (b) provide all necessary assistance as reasonably requested by the Authority to enable the Authority to comply with its obligations under the FOIA and EIR; and
 - (c) not respond to directly to a Request for Information unless authorised to do so in writing by the Authority.

- 21.3 The Authority shall determine in its absolute discretion and notwithstanding any other provision in the Framework Agreement or any Call-Off Contract or any other agreement whether the Commercially Sensitive Information and any other Information is exempt from disclosure in accordance with the provisions of the FOIA and/or the EIR.

22. Publicity, Media and Official Enquiries

- 22.1 Without prejudice to the Authority's obligations under the FOIA, the EIR or any obligations under the Regulations or any policy requirements as to transparency, neither Party shall make any press announcement or publicise the Framework Agreement or any Call-Off Contract or any part thereof in any way, except with the written consent of the other Party.
- 22.2 The Provider shall use its reasonable endeavours to ensure that its Staff, professional advisors and consultants comply with clause 22.1.

23. Intellectual Property Rights

- 23.1 All Intellectual Property Rights in:

- (a) the Results; or
- (b) any guidance, specifications, reports, studies, instructions, toolkits, plans, data, drawings, databases, patents, patterns, models, designs or other material which is furnished to or made available to the Provider by or on behalf of the Authority (together with the Results, the **"IP Materials"**)

shall vest in the Authority (save for Copyright and Database Rights which shall vest in Her Majesty the Queen) and the Provider shall not, and shall ensure that the Staff shall not, use or disclose any IP Materials without Approval save to the extent necessary for performance by the Provider of its obligations under the Framework Agreement or any Call-Off Contract.

- 23.2 The Provider hereby assigns:

- (a) to the Authority, with full title guarantee, all Intellectual Property Rights (save for Copyright and Database Rights) which may subsist in the IP Materials prepared in accordance with clauses 23.1(a) and 23.1(b). This assignment shall take effect on the date of this Framework Agreement or (in the case of rights arising after the date of this Framework Agreement) as a present assignment of future rights that will take effect immediately on the coming into existence of the Intellectual Property Rights produced by the Provider; and
- (b) to Her Majesty the Queen, with full title guarantee, all Copyright and Database Rights which may subsist in the IP Materials prepared in accordance with clauses 23.1(a) and 23.1(b),

and shall execute all documents and do all acts as are necessary to execute these assignments.

- 23.3 The Provider shall:

- (a) waive or procure a waiver of any moral rights held by it or any third party in copyright material arising as a result of the Framework Agreement or any Call-Off Contract or the performance of its obligations under the Framework Agreement or any Call-Off Contract;

- (b) ensure that the third party owner of any Intellectual Property Rights that are or which may be used to perform the Services grants to the Authority a non-exclusive licence or, if itself a licensee of those rights, shall grant to the Authority an authorised sub-licence, to use, reproduce, modify, develop and maintain the Intellectual Property Rights in the same. Such licence or sub-licence shall be non-exclusive, perpetual, royalty-free, worldwide and irrevocable and shall include the right for the Authority to sub-license, transfer, novate or assign to other Contracting Bodies, the Crown, the Replacement Provider or to any other third party supplying goods and/or services to the Authority ("**Indemnified Persons**");
 - (c) not infringe any Intellectual Property Rights of any third party in supplying the Services; and
 - (d) during and after the Contract Period, indemnify and keep indemnified the Authority and the Indemnified Persons from and against all actions, suits, claims, demands, losses, charges, damages, costs and expenses and other liabilities which the Authority or Indemnified Persons may suffer or incur as a result of or in connection with any breach of this clause 23.3, except to the extent that any such claim results directly from:
 - (i) items or materials based upon designs supplied by the Authority; or
 - (ii) the use of data supplied by the Authority which is not required to be verified by the Provider under any provision of the Framework Agreement or any Call-Off Contract.
- 23.4 The Authority shall notify the Provider in writing of any claim or demand brought against the Authority or Indemnified Person for infringement or alleged infringement of any Intellectual Property Right in materials supplied and/or licensed by the Provider to the Authority.
- 23.5 The Provider shall at its own expense conduct all negotiations and any litigation arising in connection with any claim, demand or action by any third party for infringement or alleged infringement of any third party Intellectual Property Rights (whether by the Authority, the Provider or Indemnified Person) arising from the performance of the Provider's obligations under the Framework Agreement or any Call-Off Contract ("**Third Party IP Claim**"), provided that the Provider shall at all times:
- (a) consult the Authority on all material issues which arise during the conduct of such litigation and negotiations;
 - (b) take due and proper account of the interests of the Authority; and
 - (c) not settle or compromise any claim without Approval (not to be unreasonably withheld or delayed).
- 23.6 The Authority shall, at the request of the Provider, afford to the Provider all reasonable assistance for the purpose of contesting any Third Party IP Claim and the Provider shall indemnify the Authority for all costs and expenses (including, but not limited to, legal costs and disbursements) incurred in doing so. The Provider shall not be required to indemnify the Authority under this clause 23.6 in relation to any costs and expenses to the extent that such arise directly from the matters referred to in clauses 23.3(d)(i) and 23.3(d)(ii).
- 23.7 The Authority shall not, without the Provider's consent, make any admissions which may be prejudicial to the defence or settlement of any Third Party IP Claim.

23.8 If any Third Party IP Claim is made or in the reasonable opinion of the Provider is likely to be made, the Provider shall notify the Authority and any relevant Indemnified Person, at its own expense and subject to Approval (not to be unreasonably withheld or delayed), shall (without prejudice to the rights of the Authority under clauses 23.3(b) and 9.1(g)) use its best endeavours to:

- (a) modify any or all of the Services without reducing the performance or functionality of the same, or substitute alternative services of equivalent performance and functionality, so as to avoid the infringement or the alleged infringement; or
- (b) procure a licence to use the Intellectual Property Rights and supply the Services which are the subject of the alleged infringement, on terms which are acceptable to the Authority

and if the Provider is unable to comply with clauses 23.8(a) or 23.8(b) within 20 Working Days of receipt by the Authority of the Provider's notification the Authority may terminate the Framework Agreement and/or any Call-Off Contract(s) immediately by notice to the Provider.

23.9 The Provider grants to the Authority and, if requested by the Authority, to a Replacement Provider, a royalty-free, irrevocable, worldwide, non-exclusive licence (with a right to sub-license) to use any Intellectual Property Rights that the Provider owned or developed prior to the Commencement Date and which the Authority (or the Replacement Provider) reasonably requires in order for the Authority to exercise its rights under, and receive the benefit of, the Framework Agreement and/or any Call-Off Contract (including, without limitation, the Services).

24. Audit

24.1 The Provider shall keep and maintain until 6 years after the end of the Contract Period, or as long a period as may be agreed between the Parties in writing, full and accurate records of the Framework Agreement and any Call-Off Contract(s) including the Services supplied under them, all expenditure reimbursed by the Authority, and all payments made by the Authority. The Provider shall on request afford the Authority or the Authority's representatives such access to those records and processes as may be requested by the Authority in connection with the Framework Agreement and any Call-Off Contract(s).

24.2 The Provider agrees to make available to the Authority, free of charge, whenever requested, copies of audit reports obtained by the Provider in relation to the Services.

24.3 The Provider shall permit duly authorised representatives of the Authority and/or the National Audit Office to examine the Provider's records and documents relating to the Framework Agreement and/or any Call-Off Contract(s) and to provide such copies and oral or written explanations as may reasonably be required.

24.4 The Provider (and its agents) shall permit the Comptroller and Auditor General (and his appointed representatives) access free of charge during normal business hours on reasonable notice to all such documents (including computerised documents and data) and other information as the Comptroller and Auditor General may reasonably require for the purposes of his financial audit of the Authority and for carrying out examinations into the economy, efficiency and effectiveness with which the Authority has used its resources. The Provider shall provide such explanations as are reasonably required for these purposes.

25. Remedies for inadequate performance

- 25.1 If the Authority reasonably believes the Provider has committed a Material Breach it may, without prejudice to its rights under clause 37.1(a) or any Call-Off Contract, do any of the following:
- (a) without terminating the relevant Call-Off Contract, itself supply or procure the supply of all or part of the Services until such time as the Provider has demonstrated to the Authority's reasonable satisfaction that the Provider will be able to supply the Services in accordance with the Specification;
 - (b) without terminating the whole of the relevant Call-Off Contract, terminate the relevant Call-Off Contract in respect of part of the Services only (whereupon a corresponding reduction in the Price shall be made) and thereafter itself supply or procure a third party to supply such part of the Services;
 - (c) withhold or reduce payments to the Provider in such amount as the Authority reasonably deems appropriate in each particular case; and/or
 - (d) terminate the Framework Agreement and/or any Call-Off Contract(s) in accordance with clause 37.
- 25.2 Without prejudice to its right under clause 12 (Recovery of Sums Due), the Authority may charge the Provider for any costs reasonably incurred and any reasonable administration costs in respect of the supply of any part of the Services by the Authority or a third party to the extent that such costs exceed the payment which would otherwise have been payable to the Provider for such part of the Services.
- 25.3 If the Authority reasonably believes the Provider has failed to supply all or any part of the Services in accordance with the Framework Agreement or the relevant Call-Off Contract, professional or industry practice which could reasonably be expected of a competent and suitably qualified person, or any legislative or regulatory requirement, the Authority may give the Provider notice specifying the way in which its performance falls short of the requirements of the Framework Agreement or the relevant Call-Off Contract or is otherwise unsatisfactory.
- 25.4 If the Provider has been notified of a failure in accordance with clause 25.3 the Authority may:
- (a) direct the Provider to identify and remedy the failure within such time as may be specified by the Authority and to apply all such additional resources as are necessary to remedy that failure at no additional charge to the Authority within the specified timescale; and/or
 - (b) withhold or reduce payments to the Provider in such amount as the Authority deems appropriate in each particular case until such failure has been remedied to the satisfaction of the Authority.
- 25.5 If the Provider has been notified of a failure in accordance with clause 25.3, it shall:
- (a) use all reasonable endeavours to immediately minimise the impact of such failure to the Authority and to prevent such failure from recurring; and
 - (b) immediately give the Authority such information as the Authority may request regarding what measures are being taken to comply with the obligations in this clause 25.5 and the progress of those measures until resolved to the satisfaction of the Authority.

- 25.6 If, having been notified of any failure, the Provider fails to remedy it in accordance with clause 25.5 within the time specified by the Authority, the Authority may treat the continuing failure as a Material Breach and may terminate the Framework Agreement and/or any Call-Off Contract(s) immediately on notice to the Provider.

26. Transfer and Sub-Contracting

- 26.1 The Framework Agreement and any Call-Off Contracts are personal to the Provider and the Provider shall not assign, novate or otherwise dispose of: (i) the Framework Agreement or any part thereof; and (ii) a Call-Off Contract or any part thereof, without the Authority's prior written approval. The Provider shall not be entitled to sub-contract any of its rights or obligations under the Framework Agreement or any Call-Off Contract.

- 26.2 The Authority shall be entitled to:

- (a) assign, novate or otherwise dispose of its right and obligations under: (i) the Framework Agreement; or (ii) any Call-Off Contract, or any part thereof, to any other Contracting Body; or
- (b) novate the Framework Agreement or a Call-Off Contract to any other body (including any private sector body) which substantially performs any of the functions that previously had been performed by the Authority provided that such assignment, novation or disposal shall not increase the burden of the Provider's obligations under the Framework Agreement or the relevant Call-Off Contract.

27. Notices and Communications

- 27.1 Subject to clause 27.3, where the Framework Agreement or any Call-Off Contract states that a notice or communication between the Parties must be "written" or "in writing" it is not valid unless it is made by letter (sent by hand, first class post, recorded delivery or special delivery) or by email or by communication via Bravo.

- 27.2 If it is not returned as undelivered, a notice served:

- (a) in a letter is deemed to have been received 2 Working Days after the day it was sent; and
- (b) in an email is deemed to have been received 4 hours after the time it was sent provided it was sent on a Working Day,

or when the other Party acknowledges receipt, whichever is the earlier.

- 27.3 Notices pursuant to clause 39 (Disputes) or to terminate the Framework Agreement or any Call-Off Contract or any part of the Services are valid only if served in a letter by hand, recorded delivery or special delivery.

- 27.4 Notices shall be sent to the addresses set out below or at such other address as the relevant Party may give notice to the other Party for the purpose of service of notices under the Framework Agreement or any Call-Off Contract:

- (a) For the Authority:

Contact Name: Hilary Notley

Address:

Noise and Statutory Nuisance Team
Department for Environment,
Food and Rural Affairs (Defra)
Ground Floor,
Seacole Building,
2 Marsham Street,
London,
SW1P 4DF

Email: Hilary.Notley@defra.gov.uk

and

Contact Name: Rhian Thomas

Address:

Noise and Statutory Nuisance Team
Department for Environment,
Food and Rural Affairs (Defra)
17 Nobel House London
SW1P 3JR; and

Email: Rhian.Thomas@defra.gov.uk

and

Contact Name: Robert Smail

Address:

Noise and Statutory Nuisance Team
Department for Environment,
Food and Rural Affairs (Defra)
17 Nobel House London
SW1P 3JR; and

Email: Robert.Smail@defra.gov.uk

(b) For the Provider:

Contact Name: James Trow

Address:

Noise Consultants Limited

23 Cold Harbour Road

Bristol

BS6 7JT

Tel: 0117 974 1086

Email: contact@noiseconsultants.co.uk

and

28. Waiver

- 28.1 The failure of either Party to insist upon strict performance of any provision of the Framework Agreement or any Call-Off Contract, or the failure of either Party to exercise, or any delay in exercising, any right or remedy shall not constitute a waiver of that right or remedy and shall not cause a diminution of the obligations established by the Framework Agreement or the relevant Call-Off Contract.
- 28.2 No waiver shall be effective unless it is expressly stated to be a waiver and communicated to the other Party in writing in accordance with clause 27.
- 28.3 A waiver of any right or remedy arising from a breach of the Framework Agreement or any Call-Off Contract shall not constitute a waiver of any right or remedy arising from any other or subsequent breach of the Framework Agreement or relevant Call-Off Contract.

29. Variations

- 29.1 If, after the Commencement Date, the Authority's requirements change, the Authority may request a Variation subject to the terms of this clause 29.
- 29.2 The Authority may request a Variation by notifying the Provider in writing of the Variation and giving the Provider sufficient information to assess the extent of the Variation and consider whether any change to the Price is required in order to implement the Variation within a reasonable time limit specified by the Authority. If the Provider accepts the Variation it shall confirm it in writing.
- 29.3 If the Provider is unable to accept the Variation or where the Parties are unable to agree a change to the Price, the Authority may:
- (a) allow the Provider to fulfil its obligations under the Framework Agreement without the Variation to the Specification; or
 - (b) terminate the Framework Agreement immediately.
- 29.4 No Variation will take effect unless and until it is recorded in a validly executed CCN.
- 29.5 A CCN takes effect on the date on which both Parties communicate acceptance of the CCN via Bravo. On the date it communicates acceptance of the CCN in this way the Provider is deemed to warrant and represent that the CCN has been executed by a duly authorised representative of the Provider in addition to the warranties and representations set out in clause 9.

- 29.6 The provisions of clauses 29.4 and 29.5 may be varied in an emergency if it is not practicable to obtain the Authorised Representative's approval within the time necessary to make the Variation in order to address the emergency. In an emergency, Variations may be approved by a different representative of the Authority. However, the Authorised Representative shall have the right to review such a Variation and require a CCN to be entered into on a retrospective basis which may itself vary the emergency Variation.
- 29.7 Any variation to a Call-Off Contract shall be dealt with in accordance with the terms of that Call-Off Contract.

30. Rights of the Third Parties

- 30.1 Except to the extent that this Framework Agreement expressly confers rights of enforcement on a Contracting Body (other than the Authority) a person who is not a Party to the Framework Agreement shall have no right to enforce any of its provisions, including those which, expressly or by implication, confer a benefit on such person, without the prior written agreement of both Parties. This clause does not affect any right or remedy of any person which exists or is available apart from the Contracts (Rights of Third Parties) Act 1999 and does not apply to the Crown.

31. Severability

- 31.1 If any provision of this Framework Agreement or any Call-Off Contract which is not of a fundamental nature is held invalid, illegal or unenforceable for any reason by any court of competent jurisdiction, such provision shall be severed and the remainder of the provisions of the Framework Agreement or the relevant Call-Off Contract shall continue in full force and effect as if the Framework Agreement or relevant Call-Off Contract had been executed with the invalid, illegal or unenforceable provision eliminated.

32. Remedies Cumulative

- 32.1 Except as expressly provided in the Framework Agreement or the relevant Call -Off Contract all remedies available to either Party for breach of the Framework Agreement and/or any Call-Off Contract(s) are cumulative and may be exercised concurrently or separately, and the exercise of any one remedy shall not be deemed an election of such remedy to the exclusion of other remedies.

33. Entire Agreement

- 33.1 This Framework Agreement including, for the avoidance of doubt, any Call-Off Contract(s) made under it, constitutes the entire agreement and understanding between the Parties in respect of the matters dealt with therein. This Framework Agreement supersedes all prior negotiations between the Parties and all representations and undertakings made by one Party to the other, whether written or oral, except that this clause shall not exclude liability in respect of any fraud or fraudulent misrepresentation.

34. Counterparts

- 34.1 This Framework Agreement or any Call-Off Contract may be executed in counterparts, each of which when executed and delivered shall constitute an original but all counterparts together shall constitute one and the same instrument.

35. Framework Management/Governance

- 35.1 The Provider will be managed by an official within the Contracting Body who will act as the project officer responsible for the day to day management of each Call-Off Agreement ("Project Officer"). The Provider will appoint a project manager who will act as the principal point of contact for the Contracting Body.
- 35.2 The Provider shall provide on a daily basis an operation update that details the vessels' operations, locations, activities, tasks and deployments. The Provider shall immediately inform the Authority if any of the Services are not being or are unable to be performed, the reasons for non-performance, any corrective action and the date by which that action will be completed.
- 35.3 The Provider shall participate in regular contract management meetings to help ensure that the Services are being delivered efficiently. The frequency and content of these meetings is set out in Framework Annex 4.
- 35.4 The Provider shall raise any operational risks and potential mitigating actions that may impact the delivery of the Framework Agreement to the Project Officer. The Project Officer will seek to work with the Provider to manage the risk, agree suitable mitigating actions and implement corrective actions.
- 35.5 Actions required to resolve shortcomings and implement improvements (either as a consequence of the Provider's failure to meet its obligations under this Contract, or those which result from the Provider's failure to meet the Authority's expectations notified to the Provider or of which the Provider ought reasonably to have been aware) shall be implemented at no extra charge to the Authority.

36. Key Personnel

- 36.1 The Provider's Key Personnel are as detailed in each Call-Off Contract.
- 36.2 The Provider shall obtain the prior written consent of the Authority or other Contracting Body (as the case may be) before appointing any person to carry out the role or functions of any Key Personnel, such consent not be unreasonably withheld or delayed.
- 36.3 The Provider shall ensure that each of the Key Personnel devotes a sufficient amount of time and effort to the performance of the Services. The Supplier shall take all reasonable steps to ensure it retains the services of its Key Personnel and shall not remove or change Key Personnel unless:
 - (a) any of the Key Personnel are on long term sick leave or leave the Provider's employment; or
 - (b) the Authority or other Contracting Body (as the case may be) gives its prior written approval.
- 36.4 If the Provider replaces any Key Personnel as a consequence of clause 36.3, the cost of effecting such replacement shall be borne by the Provider. The Provider shall use all reasonable endeavours to ensure that the role of any Key Personnel is not vacant for any longer than fourteen (14) days and that any replacement shall be fully competent to carry out the tasks assigned to the Key Personnel which he or she has replaced within fourteen (14) days.
- 36.5 Before assigning replacement Key Personnel, the Provider shall:

- (a) provide the Authority or other Contracting Body (as the case may be) with a curriculum vitae and any other information about the individual as reasonably requested by the Authority or other Contracting Body; and
- (b) introduce the individual to the Authority or other Contracting Body (as the case may be) and provide the Authority or other Contracting Body with an opportunity to interview the individual. The Authority or other Contracting Body will notify the Supplier within three (3) days after being introduced to that individual if it reasonably objects to the appointment of that individual as a member of the Key Personnel, together with its reasons for such objection.

37. Termination and Suspension

37.1 The Authority may terminate the Framework Agreement (insofar as it relates to the Provider) or any Call-Off Contract by serving written notice on the Provider with immediate effect from the date specified in such notice:

- (a) where the Provider commits a material breach in relation to this Framework Agreement or any Call-Off Contract and fails to comply with a remedial action plan specified by the Authority within thirty (30) days of agreement or such other period as may be specified by the Authority;
- (b) where there is a material detrimental change in the financial standing and/or credit-rating of the Provider which adversely impacts on the Provider's ability to supply Services under the Framework Agreement or any Call-Off Contract;
- (c) if the Framework Agreement or relevant Call-Off Contract has been subject to a substantial modification which requires a new procurement procedure pursuant to regulation 72(9) of the Regulations;
- (d) if the Provider was, at the time the Framework Agreement or relevant Call-Off Contract was awarded, in one of the situations specified in regulation 57(1) of the Regulations, including as a result of the application of regulation 57(2), and should therefore have been excluded from the procurement procedure which resulted in its award of the Framework Agreement or relevant Call-Off Contract;
- (e) if the Framework Agreement or relevant Call-Off Contract should not have been awarded to the Provider in view of a serious infringement of the obligations under the Treaties and the Regulations that has been declared by the Court of Justice of the European Union in a procedure under Article 258 of the TFEU;
- (f) if the Provider has not, in performing the Services, complied with its legal obligations in respect of environmental, social or labour law; or
- (g) in any other case where the Authority would be entitled to terminate a Call-Off Contract.

37.2 In addition to its rights to terminate under clause 37.1, the Authority shall have the right to terminate this Framework Agreement (insofar as it relates to the Provider) or any Call-Off Contract at any time by giving not less than three (3) months' written notice to the Provider.

37.3 Without prejudice to the Authority's rights to terminate the Framework Agreement or any Call-Off Contract in clauses 37.1 and 37.2, if a right to terminate this Framework Agreement arises in accordance with clauses 37.1 and 37.2, the Authority may suspend the Provider's appointment to supply Services to Contracting Bodies by giving notice in writing to the Provider. If the Authority provides notice to the Provider in accordance with this clause 37.3, the Provider's

appointment shall be suspended for the period set out in the notice or such other period notified to the Provider by the Authority in writing from time to time.

- 37.4 Termination or expiry of the Framework Agreement shall not cause any Call-Off Contracts to terminate automatically. For the avoidance of doubt, all Call-Off Contracts shall remain in force unless and until they are terminated or expire in accordance with the Call-Off Contract.
- 37.5 If the Authority terminates this Framework Agreement or any Call-Off Contract under clause 37.1(a) and makes other arrangements for the supply of the Services the Authority may recover from the Provider the cost reasonably incurred of making those other arrangements and any additional expenditure incurred by the Authority throughout the remainder of the Contract Period.
- 37.6 If this Framework Agreement or any Call-Off Contract is terminated under clause 37.1(a) the Authority shall make no further payments to the Provider (for Services supplied by the Provider prior to termination and in accordance with the relevant Call-Off Contract but where the payment has yet to be made by the Authority), until the Authority has established the final cost of making the other arrangements envisaged under this clause.
- 37.7 If the Authority terminates the Framework Agreement or any Call-Off Contract under clauses 37.1(b) to 37.1(g) or 37.2 the Authority shall make no further payments to the Provider except for Services supplied by the Provider prior to termination and in accordance with the Contract but where the payment has yet to be made by the Authority.
- 37.8 Termination or expiry of this Framework Agreement or any Call-Off Contract shall be without prejudice to any rights, remedies or obligations of either party accrued under this Framework Agreement or such Call-Off Contract prior to termination or expiry.
- 37.9 In no circumstances shall the Provider have the right to suspend the provision of the Services.

38. Disputes

- 38.1 The Parties shall attempt in good faith to negotiate a settlement to any dispute between them arising out of or in connection with this Framework Agreement or any Call-Off Contract within 20 Working Days of either Party notifying the other of the dispute and such efforts shall involve the escalation of the dispute to the finance director of the Provider and the commercial director of the Authority.
- 38.2 Nothing in this dispute resolution procedure shall prevent the Parties from seeking from any court of competent jurisdiction an interim order restraining the other Party from doing any act or compelling the other Party to do any act.
- 38.3 If the dispute cannot be resolved by the Parties pursuant to clause 38.1 either Party may refer it to mediation pursuant to the procedure set out in clause 38.5.
- 38.4 The obligations of the Parties under this Framework Agreement and any Call-Off Contract shall not cease, or be suspended or delayed by the reference of a dispute to mediation (or arbitration) and the Provider and the Staff shall comply fully with the requirements of this Framework Agreement and any Call-Off Contract at all times.
- 38.5 The procedure for mediation and consequential provisions relating to mediation are as follows:

- (a) a neutral adviser or mediator (the “**Mediator**”) shall be chosen by agreement between the Parties or, if they are unable to agree upon a Mediator within 10 Working Days after a request by one Party to the other or if the Mediator agreed upon is unable or unwilling to act, either Party shall within 10 Working Days from the date of the proposal to appoint a Mediator or within 10 Working Days of notice to either Party that he is unable or unwilling to act, apply to the Centre for Effective Dispute Resolution to appoint a Mediator with maritime expertise;
 - (b) the Parties shall within 10 Working Days of the appointment of the Mediator meet with him in order to agree a programme for the exchange of all relevant information and the structure to be adopted for negotiations. If appropriate, the Parties may at any stage seek assistance from the Centre for Effective Dispute Resolution to provide guidance on a suitable procedure;
 - (c) unless otherwise agreed, all negotiations connected with the dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the Parties in any future proceedings;
 - (d) if the Parties reach agreement on the resolution of the dispute, the agreement shall be recorded in writing and shall be binding on the Parties once it is signed by their duly authorised representatives;
 - (e) failing agreement, either of the Parties may invite the Mediator to provide a non-binding but informative written opinion. Such an opinion shall be provided on a without prejudice basis and shall not be used in evidence in any proceedings relating to this Framework Agreement without the prior written consent of both Parties; and
 - (f) if the Parties fail to reach agreement within 60 Working Days of the Mediator being appointed, or such longer period as may be agreed by the Parties, then any dispute or difference between them may be referred to the Courts unless the dispute is referred to arbitration pursuant to the procedures set out in clause 38.6.
- 38.6 Subject to clause 38.2, the Parties shall not institute court proceedings until the procedures set out in clauses 38.1 and 38.3 have been completed save that:
- (a) the Authority may at any time before court proceedings are commenced, serve a notice on the Provider requiring the dispute to be referred to and resolved by arbitration in accordance with clause 38.7;
 - (b) if the Provider intends to commence court proceedings, it shall serve notice on the Authority of its intentions and the Authority shall have 21 days following receipt of such notice to serve a reply on the Provider requiring the dispute to be referred to and resolved by arbitration in accordance with clause 38.7; and
 - (c) the Provider may request by notice to the Authority that any dispute be referred and resolved by arbitration in accordance with clause 38.7, to which the Authority may consent as it sees fit.
- 38.7 If any arbitration proceedings are commenced pursuant to clause 38.6,
- (a) the arbitration shall be governed by the provisions of the Arbitration Act 1996 and the Authority shall give a notice of arbitration to the Provider (the “**Arbitration Notice**”) stating:
 - (i) that the dispute is referred to arbitration; and

- (ii) providing details of the issues to be resolved;
- (b) the London Court of International Arbitration (“**LCIA**”) procedural rules in force at the date that the dispute was referred to arbitration in accordance with clause 38.7(a) shall be applied and are deemed to be incorporated by reference to this Framework Agreement and the decision of the arbitrator shall be binding on the Parties in the absence of any material failure to comply with such rules;
- (c) the tribunal shall consist of a sole arbitrator to be agreed by the Parties;
- (d) if the Parties fail to agree the appointment of the arbitrator within 10 days of the Arbitration Notice being issued by the Authority under clause 38.7(a) or if the person appointed is unable or unwilling to act, the arbitrator shall be appointed by the LCIA;
- (e) the arbitration proceedings shall take place in London and in the English language; and
- (f) the arbitration proceedings shall be governed by, and interpreted in accordance with, English Law.

39. Governing Law

- 39.1 The Framework Agreement, and any Call-Off Contract(s) entered into pursuant to it, shall be governed by and interpreted in accordance with English Law and shall be subject to the jurisdiction of the Courts of England and Wales. The submission to such jurisdiction shall not (and shall not be construed so as to) limit the right of the Authority to take proceedings against the Provider in any other court of competent jurisdiction, nor shall the taking of proceedings in any other court of competent jurisdiction preclude the taking of proceedings in any other jurisdiction whether concurrently or not.

IN WITNESS WHEREOF each of the Parties to this Framework Agreement has caused this Framework Agreement to be executed each copy of which shall be deemed to be an original as of the date first above written.

Signed: _____

Name: _____

Position: _____

Date: _____

ON BEHALF OF THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS

Signed: _____

Name: _____

Position: _____

Date: _____

ON BEHALF NOISE CONSULTANTS LIMITED

FRAMEWORK ANNEX 1

PART A: THE SERVICES

1. Definitions

For the purposes of this Part A of Framework Annex 1, the following defined terms shall have the following meanings:

TERM	MEANING
“Lead Authority”	the Department for Environment, Food and Rural Affairs acting as part of the Crown.
“Bravo”	the e-Tendering system used by the Lead Authority for conducting this procurement, which can be found at http://defra.bravosolution.co.uk
“Call-off Contract”	a contract awarded by a Framework Authority under the terms of this ITT and/or the Framework Agreement.
“Call-off Procedure”	the process by which Framework Authorities will award Call-Off Contracts to Providers as set out in this ITT
“Devolved Administrations”	Means the Scottish Government; Welsh Government and the Northern Ireland Executive.
“EIR”	the Environmental Information Regulations 2004 (as amended) together with any guidance and/or codes of practice issued by the Information Commissioner or any Government Department in relation to those Regulations.
“EN Regulations”	Environmental Noise (England) Regulations 2006 (as amended),
“FOIA”	the Freedom of Information Act 2000 (as amended) and any subordinate legislation made under that Act together with any guidance and/or codes of practice issued by the Information Commissioner or any Government Department in relation to that legislation.
“Framework Contract”	the framework agreement (set out in Appendix B) to be entered into by the Lead Authority and the Tenderers who are awarded a place on the Framework.
“Framework Authorities”	Means all the bodies named in the OJEU Notice and listed in SECTION 4 FRAMEWORK AUTHORITIES of this ITT who can access the Framework (including the Lead Authority)
“the ITT”	this invitation to tender and all related documents published by the Lead Authority and made available to Tenderers.
“Pricing Schedule”	the form accessed via Bravo in which Tenderers are required to submit their pricing information as part of a Tender.
“Provider”	a Tenderer appointed to the Framework
“Regulations” or “PCR 15”	the Public Contracts Regulations 2015.
“Specification of Requirements”	the Lead Authority’s requirements set out in Section 3 of the ITT.
“Tender”	the formal offer to provide the goods and/or services under the Framework described in section 1.1 of part 1 of the ITT and comprising the responses to the questions in Bravo and the Pricing Schedule.
“Tenderer”	anyone responding to the ITT and, where the context requires, includes a potential tenderer.
“Timetable”	the procurement timetable set out in Part 2 of Section 1 of the ITT.

2. Services

The Provider shall provide to the Authority or other Contracting Body (as the case may be) Noise Modelling Design and Build Services in accordance with the technical requirements set out in paragraph 3 below and the terms of the relevant Call-Off Contract.

3. Technical Requirements

Glossary and Definition of Acronyms, Abbreviations and Terms

Acronym / Abbreviation / Term	Definition
25YEP	25 Year Environment Plan
AADF	Annual Average Daily Flow
Acoustic Model	The ground model with source location lines attributed with the relevant and necessary traffic data, sufficiently detailed for the required source apportionment calculations. The acoustic model contains all the data necessary for the acoustic calculations to take place within the noise calculation software. In this ITT, this term is not mutually exclusive from other related terms: ground model, modelling system, noise modelling and tenderers are to apply their expertise in determining whether, for the purposes of their preferred solution, any of these terms overlap and to what extent an overlap may occur.
Agglomeration	An area having a population in excess of 100,000 persons and a population density equal to or greater than 500 people per km ² and which is considered to be urbanised.
AONB	Area of Outstanding Natural Beauty
Approved User	Individuals with access to the Modelling System who have been authorised by one of the Authorised Organisations (see Error! Reference source not found. of the ITT) able to use this Framework and who have entered into an agreement with the Supplier on behalf of that Authorised Organisation. E.g. employees of the public body and their contractors.
AQMA/s	Air Quality Management Area/s
Authorised Organisation	Entities entitled to call off Services under the terms of the Framework with the Supplier as listed in Error! Reference source not found. of the ITT
A-Weighting	Standard weighting of the audible frequencies and reflects the response of the human ear to noise. The 'A' weighting filter covers the frequency range from 20Hz to 20kHz, and the shape approximates the frequency sensitivity of the human ear.
BSI	British Standards Institution
Call-Off Contract	A contract entered into between an Authorised Organisation and the Supplier under the terms of the Framework.
CRN	Calculation of Railway Noise

CRTN	Calculation of Road Traffic Noise
DA/s	Devolved Administration/Administrations
Data Standard	A term used to describe a documented agreement on the representation, format, and definition for common data.
dB	A measure of sound pressure level in decibels as indicated by a sound level meter which complies with British Standard BS EN 61672-1:2013 – Electroacoustics – Sound Level Meters – Part 1 Specifications.
dBA or dB(A)	A measure of sound pressure level (“A” weighted) in decibels as indicated by a sound level meter which complies with British Standard BS EN 61672-1:2013 – Electroacoustics – Sound Level Meters – Part 1 Specifications.
Defra	Department for Environment, Food and Rural Affairs
DF	Data Flow (associated with the EEA ENDRM)
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
DSP	Data Services Platform
EEA	European Environment Agency
END	Environmental Noise Directive 2002/49/EC
ENDRM	END Reporting Mechanism
Framework	The framework agreement that will be entered into between Defra and the Supplier.
Framework Term	The period of 4 years commencing on the start date of the Framework.
Ground Model	A 3D digital environment defining the height and profile of the terrain upon which relevant features are integrated including, but not limited to, buildings data, bridges data, noise barrier data, ground cover data and the location of the source (emission) lines. In this ITT, this term is not mutually exclusive from other related terms: Acoustic Model, Modelling System, Noise Modelling and tenderers are to apply their expertise in determining whether, for the purposes of their preferred solution, any of these terms overlap and to what extent an overlap may occur.
GDS	Government Digital Service
GIS	Geographic Information System
HE	Highways England
HGV	Heavy Goods Vehicle
IGCB(N)	Interdepartmental Group on Costs and Benefits (Noise Subject Group)

Initial Call-Off Contract	The first Call-Off Contract to be entered into between Defra and the Supplier under the Framework.
IPRs	Intellectual Property Rights
ISO	International Standards Organisation
ITT	Invitation to Tender
LA(s)	Local Authority(ies)
$L_{A10,18hr}$	The noise level exceeded for 10% of the time averaged hourly over the period 0600-2400
$L_{A10,t}$	The noise level exceeded for 10% of the time averaged hourly over the period t
$L_{Aeq,16hr}$	The L_{Aeq} over the period 0700 – 2300, local time (for strategic noise mapping this is an annual average)
$L_{Aeq,18hr}$	The L_{Aeq} over the period 0600 – 2400, local time (for strategic noise mapping this is an annual average)
$L_{Aeq,6hr}$	The L_{Aeq} over the period 0000 – 0600, local time (for strategic noise mapping this is an annual average)
$L_{Aeq,t}$	The A-weighted equivalent continuous sound pressure level which is a notional continuous level that, at a given position and over the defined time period, t, contains the same sound energy as the actual fluctuating sound that occurred at the given position over the same time period, t
L_{AMax}	The maximum value that the A-weighted sound pressure level reaches during a measurement period. $L_{AMax,f}$, or fast, is averaged over 0.125 of a second and $L_{AMax,s}$, or slow, is averaged over 1 second. Note, that the maximum is not the peak. The time period over which the maximum value has been assessed must be explicit, e.g. night-time $L_{AMax,f}$ from 2300-0700
L_{day}	The $L_{Aeq,12hr}$ over the period 0700 – 1900, local time (for strategic noise mapping this is an annual average)
L_{DEN}	The L_{Aeq} over the period 0000 – 2400, but with the evening values (1900 – 2300) weighted by the addition of 5 dB(A), and the night values (2300 – 0700) weighted by the addition of 10 dB(A) (for strategic noise mapping this is an annual average)
L_{eve}	The $L_{Aeq,4hr}$ over the period 1900 – 2300, local time (for strategic noise mapping this is an annual average)
LHA	Local Highways Authority
Linear	No weighting applied
L_{night}	The $L_{Aeq,8hr}$ over the period 2300 – 0700, local time (for strategic noise mapping this is an annual average)

Major Airports	An airport which has more than 50,000 movements per year (a movement being a take-off or a landing), excluding those purely for training purposes on light aircraft as defined in the Regulations, Regulation 3(11).
Major Railways	A railway which has more than 30,000 train passages a year as defined in the Regulations, Regulation 3(10).
Major Roads	A road which the Secretary of State regards as a trunk road, or a motorway that is not a trunk road, or a principal or classified road that has more than three million vehicle passages a year - and they consider to be regional, national or international importance as defined in the Regulations, Regulation 3(8). Any references to a major road must not be confused with the MRN.
Modelling System	The whole system consisting of database(s), functionality for development of ground and acoustic model, noise calculation software, post-processing environment, publishing (optional) capability, user management, data sharing facility, etc. In this ITT, this term is not mutually exclusive from other related terms: acoustic model, ground model, noise modelling and tenderers are to apply their expertise in determining whether, for the purposes of their preferred solution, any of these terms overlap and to what extent an overlap may occur.
MOSCOW	<u>M</u> ust Have, <u>S</u> hould Have, <u>C</u> ould Have, <u>W</u> on't Have this time
MRN	Major Road Network - a term DfT has used for creating a network of England's most important routes which complement our motorways and strategic trunk roads.
Noise Modelling	The process by which sound levels from acoustic sources (predominantly road traffic and railways) are calculated at defined receiver points. These sound levels may be considered as noise should they be unwanted or have an unwanted effect or impact on the receiver. In this ITT, this term is not mutually exclusive from other related terms: acoustic model, ground model, modelling system and tenderers are to apply their expertise in determining whether, for the purposes of their preferred solution, any of these terms overlap and to what extent an overlap may occur.
Nx,p	Number of events of x dB L_{Amax} or more during an average period, p. Commonly used for aircraft noise over an annual average or an average summer day (0700-2300) with commonly x = 60, 65 or 70.
Octave Band	Sound levels that have passed through an octave band pass filter are termed octave band sound levels. Each Octave or octave band includes a range of frequencies whose upper frequency limit is twice that of its lower frequency limit. For example, an octave filter with a centre frequency of 1kHz has a lower frequency of 707Hz and an upper frequency of 1.414kHz. Any frequencies below and above these limits are rejected or allocated to a different octave band.
PHOF	Public Health Outcomes Framework
PSGA	Public Sector Geospatial Agreement

QA	Quality Assurance
QC	Quality Control
Regulations	Environmental Noise (England) Regulations 2006 (as amended)
Specification	This document containing details of Defra's requirements in this ITT
Supplier	The successful tenderer appointed to the Framework
Third Octave Band	A one-third octave band is defined as a frequency band whose upper band-edge frequency (f2) is the lower band frequency (f1) times the cube root of two. Each octave band consists of 3 x one-third octave bands.
WHO	World Health Organisation
Z-Weighting	Flat frequency response between 10Hz and 20kHz ± 1.5 dB excluding microphone response. Data shown using Z-weighting are usually shown with dBZ or dB(Z).

Introduction

1. Defra is the UK government department responsible for safeguarding the natural environment, supporting the UK's world-leading food and farming industry, and sustaining a thriving rural economy. Its broad remit means Defra plays a major role in people's day-to-day life, from the food we eat, and the air we breathe, to the water we drink.
2. This document is for a Framework consisting of a single lot for a single supplier.
3. Defra intends to enter into an Initial Call-Off Contract from this Framework as a result of this competition, thus the ITT covers the Framework requirements and Defra's Call-Off Contract requirements. The Specification, therefore, focuses predominantly on the Initial Call-Off Contract requirements. The purpose of the Framework (and hence the key role of the successful tenderer) initiated by the Initial Call-Off Contract and hopefully enhanced by any subsequent Call-Off Contracts by any Authorised Organisation is to design and build a Modelling System to meet the requirements detailed in this Specification. The Supplier will also manage the Modelling System, including the data, on behalf of the users of this Modelling System.
4. The design of the Modelling System must include the capability to expand the geographic scope to the DAs. However, this will only be implemented should any of the DAs choose to source their noise modelling from this Framework. In this case, the DA will enter into a separate Call-Off Contract under the Framework.
5. Throughout the Framework Term, it will be possible to call off further Services through subsequent Call-Off Contracts to allow Defra and other Authorised Organisations to meet future requirements. These requirements are anticipated to relate to:
 - further development of the Modelling System, or the data held within the database; or
 - using the Modelling System itself to build and run noise models to answer questions at different spatial and temporal resolutions and for different (user-defined) geographic regions.
6. The Initial Call-Off Contract is subject to available funding. Should the winning tender prove unaffordable, then the anticipated Initial Call-Off Contract may not be let. Funding is not yet

guaranteed for the whole Framework Term. At the time of publishing this ITT, funding is allocated for financial year 20/21 only and the Initial Call-Off Contract will contain breakpoints to help manage the uncertainty. No additional contracts, beyond the anticipated Initial Call-Off Contract (subject to affordability), are guaranteed under this Framework.

7. Once the Modelling System is launched, it is currently proposed that Defra will launch the procurement of a complementary framework or dynamic purchasing system, consisting of a number of suppliers able to compete for potential contracts, to help public bodies maximise the potential of a common database which could result from the Initial Call-Off Contract. It is intended that the complementary framework or dynamic purchasing system will increase the usability of the Modelling System built under this Modelling System framework. Authorised Organisations will be able to use information from the database to build their own Acoustic Models for their preferred noise calculation software and/or facilitate further Noise Modelling using the Modelling System itself. Authorised Organisations will be required to upload their own input and output datasets to help grow the database for the common good. The timing for this complementary framework or dynamic purchasing system is thought to be around halfway through the Framework Term (2022), as by then, design decisions associated with the Modelling System and Data Standards are expected to be clearer.

Aims and Objectives

8. This Framework primarily relates to developing a database and providing the functionality to carry out strategic road and rail Noise Modelling. It also allows for post-processing the results from that Noise Modelling incorporating other relevant data as required. As more data is added to the database, Noise Modelling and/or post-processing at a more targeted level can be undertaken. The input data and the results can be shared increasing the attractiveness of the database to others and promoting the availability of common standards.

9. The aim of this Framework is to provide Defra and other bodies with a service able to deliver existing policy and legal obligations, while being agile enough to accommodate future requirements in a cost-effective manner. This means that the Modelling System design needs to take account of:

- Defra's immediate requirements – as a minimum, sufficient to meet Defra's legislative requirements and those of the 25 Year Environment Plan; and
- the long-term aim of the database – able to supplement core minimum requirements with improved and/or additional datasets, either at a national strategic level, and also at a more focussed, regional or local level.

Vision

10. The vision is for a capability which includes storing and processing multiple datasets, at different spatial and temporal resolutions and for additional locations to those covered by legislative requirements. Ultimately, this will allow for Noise Modelling, post-processing, extraction and viewing of data at a national scale as required by Defra and potentially the DAs, and also at a more local level potentially as required by LAs, Highways and Rail Authorities and other public bodies who fall under the category of Framework Authorised Organisations. Furthermore, the solution will be secure, resilient and flexible to grow to accommodate future requirements as identified. By sharing data, over time costs to the public purse of data acquisition and pre-processing should fall, providing the data is of a sufficient quality and fit for purpose.

11. The single Supplier will be contracted by Defra to provide the necessary infrastructure and associated services to provide a database and noise modelling system, which will allow future development to take place as and when required. To enable Defra to meet its statutory and policy requirements, the Supplier will additionally source all input data required for Defra's strategic noise modelling requirements and thus demonstrate the effectiveness of its solution by undertaking the strategic Noise Modelling for road and rail sources at a national scale. This includes incorporating industrial and airport noise level data (expected to be modelled elsewhere) and allowing post-processing such as population exposure counts in line with existing policy and legal obligations. The geographic scope is the whole of England.

12. However, Defra not only requires the ability to generate statutory requirements, but also an on-going capability to allow for policy development and scenario modelling, including the calculation of exposure to combined noise sources, which this Modelling System is to deliver (road and rail calculations within the system, other sources could be imported). The Supplier must manage all access to the data and add new datasets from other users, thus expanding the appeal and usefulness of the service. All design decisions must assess implications for future likely functionality which may wish to be added at a later stage and potentially beyond the scope of this contract. Defra must be informed of any adverse outcome of these assessments and the assessment must take account of the accumulation of decisions as well as the decision in isolation of all others. Suggestions for future likely functionality are explored further throughout the Specification and in particular the section relating to Acoustic Modelling, but this does not preclude the tenderer identifying additional opportunities (which will demonstrate understanding, but are not to be costed as part of the tender documentation). Any work undertaken over and above the initial call-off contract will be undertaken at the submitted hourly rates.

13. The geographic scope of all aspects of the Modelling System may be extended to incorporate the DAs.

Objectives

14. The objectives for the Modelling System are to:

- provide data suitable for strategic noise mapping for England to: - meet the legislative and policy requirements of the Regulations and subsequent development of action plans;
- provide data required for the 25 Year Environment Plan (25YEP) indicator on exposure to transport noise in England; and
- provide data required for the Public Health Outcomes Framework (PHOF), indicators 1.14ii and 1.14iii;

- allow strategic scenario modelling (forward and backward looking) to be undertaken to inform policy planning and development at the strategic national (England) level;
- produce outputs such that health assessments for user-defined population groups of interest (e.g. the population across England, and potentially in the future for certain sub-groups such as socio-economic or by ethnicity) and impacts of noise on biodiversity (expected to be through the provision of unweighted frequency band noise levels for given metrics, potentially at different heights, e.g. at ground level and typical tree height) can be generated; and
 - provide formatted outputs suitable for publication without further post-processing, including those required for legislative and policy requirements as well as for example source apportionment, combined source and impact assessment.

15. Consistency in approach and transparency across the strategic data is important, (e.g. to allow reasonable comparisons to be made across and between locations).

16. Stakeholders have been consulted and the breadth of potential future developments clearly indicates the desire of national, regional and local bodies to be able to fuse new and innovative data with traditional Noise Modelling. Further detail on the stakeholder engagement can be found [here](#)¹. This will enable them to gain new insights and to develop initiatives integrated with information beyond that associated with purely the acoustic domain. Beyond traditional Noise Modelling, typical tasks for example would include overlaying results with:

- air quality data to identify areas of synergy;
- data allowing exploration of specific topics, e.g. socio-economic, ethnic, land use data; and/or
- data containing other acoustic information, e.g. the hospitality sector, industry, soundscape to allow a holistic approach to sound management in a location or area.

17. Typical **Authorised Organisations** who will use this Framework (and the later anticipated opportunity mentioned in paragraph 7) and the database and/or Modelling System provided under the Initial Call-Off Contract are envisaged to be Highways and Railways Authorities, LAs, Other Government Departments, etc. Some of these bodies will hold existing contracts, or will wish to let new/other contracts, with suppliers other than the successful tenderer for this Framework. Access to the Defra Modelling System will be provided to those in contract to an Authorised Organisation listed in this Framework for authorised purposes through the Authorised Organisation concerned. These Authorised Organisations are expected to be, but are not restricted to:

- public bodies without existing capability looking to procure such expertise. The Supplier will use the Modelling System, to provide the output required by the body;
- public bodies with existing capability (either internal or through existing third-party contracts). The Authorised Organisation or their contractor will access just the data, or both the data and Modelling System; and
- public bodies and/or their contractors at the direction of the public body, looking to develop innovative uses over and above the traditional for such noise models, e.g. acquisition of sound quality data.

Policy Context

18. The Noise and Statutory Nuisance Team in Defra has overall lead responsibility for policy on noise management in England. At national level, noise is managed through the implementation of the Noise Policy Statement for England (NPSE). Its vision is to “promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development”. Defra works closely with other relevant government departments to promote effective implementation of the NPSE. The Noise Team also works closely with colleagues in the DAs who are responsible for noise management policy in other parts of the UK.

19. The Defra Noise Team leads on the implementation of the Regulations (as amended), which transpose the END into domestic law for England. These Regulations apply to environmental noise, mainly from transport, but also from industry, and continue to apply after EU exit until such time as any changes are introduced. The Regulations require noise mapping and action planning for major sources of road, rail and aviation noise and noise in large urban areas (agglomerations) on a five yearly cycle. They also require Defra to produce Noise Action Plans based on the maps for road and rail noise and noise in agglomerations. The Action Plans draw on the mapping data to focus attention on Important Areas (areas which are considered important due to the likely levels of exposure to environmental noise). Major airports and those which affect agglomerations are also required to produce and publish their own Noise Action Plans separately.

20. In January 2018, the UK government published its 25YEP, which sets out what Defra will do to improve the environment in England, within a generation. This includes an indicator on exposure to transport noise. The PHOF, which sets out a vision to improve and protect the nation’s health, also requires reporting of exposure to transport noise.

21. The END has been separately transposed in Wales, Scotland and Northern Ireland. Should any of the DAs use this Framework, the Supplier will need to familiarize itself with any differences in approach in transposition and implementation in each of these administrations before proceeding into a separate contract with the relevant DA and before making any design decisions under the Defra Call-Off Contract that would adversely impact on this potential expansion of the Modelling System.

22. Many other public bodies undertake road and rail Noise Modelling for example, to support planning and environmental and health impact assessments. The key differences between strategic and regional/local noise modelling are the geographic extent and resolution/detail of input data. The solution design needs to account for these in that it will be able to expand to incorporate different spatial or temporal resolutions as required.

Legislation, Standards and Guidelines

23. The Regulations, which transpose the END into domestic law, form the current legislative framework. The Regulations require strategic noise mapping in 5-yearly rounds. The results from Round 1 were reported in 2007, Round 2 in 2012, Round 3 in 2017 and Round 4 is due to be reported in 2022. Annex II to the END details the required calculation method for strategic mapping, known colloquially as CNOSSOS-EU (Directive (EU) 2015/996, as amended).

24. In implementing CNOSSOS-EU, Member States identified some irregularities within the method which may lead to implausible results. An EU working group was established to study and propose amendments to the method. Some issues relate to unclear text, some are more fundamental. The resulting report (Kok A, van Beek A. "Amendments to CNOSSOS-EU". RIVM report 2019-0023. May 2019) contains a clear, concise conclusion to most of the identified issues. Others require further research. Some of these recommendations are incorporated in the draft ISO17534-4. It is anticipated that these amendments will be reflected in the CNOSSOS-EU methodology in due course. As not all issues are resolved in this report, further amendments may follow.

25. In October 2018 the World Health Organisation (WHO) published its Environmental Noise Guidelines for the European Region. The guidelines provide revised exposure-response relationships primarily regarding the effect of transportation noise on human health and quality of life. The Interdepartmental Group on Costs and Benefits (Noise Subject Group) (IGCB(N)) is reviewing the existing government guidance on economic analysis and noise pollution to consider whether any updates are necessary. In reviewing its guidance, the Group will give careful consideration to the evidence base for the WHO Guidelines, as well as other identified, relevant, recent research carried out in the UK and abroad.

26. Notwithstanding the END, the current national method for modelling road traffic noise is the Calculation of Road Traffic Noise (CRTN) (Department of Transport, 7th June 1988, HMSO, ISBN 0115508473). This can be adapted using the report "Method for converting the UK road traffic noise index $LA_{10,18h}$ to the EU noise indices for road noise mapping" (Defra, 24th January 2006, prepared by TRL Ltd and Casella Stanger, Document Reference: st/05/91/AGG04442) for the purpose of strategic noise mapping. The current national method for modelling rail noise is the Calculation of Railway Noise (CRN) (Department of Transport, 13th July 1995, HMSO, ISBN 0115517545) and in relation to railways to which it is expressed to apply Calculation of Railway Noise 1995 Supplement No. 1 Procedure for the calculation of noise from Eurostar trains class 373 (Department of Transport, 20th October 1996, HMSO, ISBN 0115518738). These can be adapted as shown in Figure 6.5 of the report "Rail and wheel roughness – implications for noise mapping based on the Calculation of Railway Noise procedure" (Defra, March 2004, prepared by AEA technology plc, Document Reference: AEATR-PC&E-2003-002) for the purpose of strategic noise mapping.

27. In addition to the methods outlined in paragraph 26 for road assessments, the Design Manual for Road and Bridges sets out the standards for highways in England.

28. The British Standards Institution (BSI) Committee on Transport Noise (Committee EH/001/02) is considering developing a new British Standard for the Calculation of Sound Levels Outdoors. At the time of drafting this ITT, this new standard is expected to eventually replace CRTN and CRN.

29. The design of the Modelling System needs to be sufficiently flexible or modular to allow future changes to policy, legislation or guidance, including those to calculation methods, to be incorporated in a cost-effective manner.

Background Resources for Information

30. The approach and methodology undertaken in Round 1 of the statutory requirements reflected a desire to learn about strategic mapping and spread expertise throughout the industry. The decision was taken to apply those same methodologies and follow a similar (albeit with differences) approach for Rounds 2 and 3 to utilise that knowledge gained. The vision described above provides the opportunity to rethink all aspects of the design and take advantage of developments in data availability, processing and computing advances and innovations in the field. These opportunities can be harnessed in delivering not only the statutory requirements for Round 4, but also the wider aim of developing a Modelling System suitable for scenario and policy development. The following resources are therefore provided for information, but in no way set a direction for this tender. However, where still appropriate or where thought to provide a cost-effective option, there is nothing to prevent their being drawn upon to inform the solution for this new generation of strategic Modelling System. • Documenting production of Round 2 noise maps

- Round 3 noise maps and data
- Round 3 Noise Action Plans
- Appendix A - END Reporting Mechanism Guidelines for DF1_52
- Appendix B – END Reporting Mechanism Guidelines for DF4_83
- Appendix C - Example data file

Proposed Timelines

31. The Initial Call-Off Contract under the Framework will be entered into by Defra to deliver the required functionality of the Modelling System and the statutory and policy reporting outputs. This may be followed by Call-Off Contracts let by any of the DAs to deliver statutory and other requirements and the timelines for these potential Call-Off Contracts will be detailed by the DA in any specification of requirements they develop in order to let such contracts. Any further Call-Off Contracts will similarly be accompanied by specifications of requirements and will contain their own timelines from any of the bodies to which the framework applies.

32. Table 1 below outlines a proposed timeline for the Initial Call-Off Contract. Whilst the timings *in green italics* are fixed and unmovable, Defra is open to alternative suggestions for delivery for the other milestones. However, please note that the costs (and hence related activity) must be front-loaded as 50% of the budget for Sections 1-3 inclusive is available until end March 21 (approx. 5 months duration) and the remaining 50% is anticipated in the period April 21 – March 22 (12 months duration). Support costs following launch and delivery of Sections 1-3 until the end of the Framework Term are separate from this budget and remain to be secured but are hoped to follow from April 22 for the remainder of the Initial Call-Off Contract. There are various breakpoints throughout the Initial Call-Off Contract in case funding is not forthcoming, or in case the deliverables prove unsuitable for some reason.

Milestone	Task Type	Scheduled Date
Start of Framework	Milestone	
Contract Options Discussion	Meeting	
Start of Initial Call-Off Contract	Milestone	
Inception Meeting	Meeting	
Monthly Progress Meetings	Meeting	Monthly
Input Data Report	Deliverable	
Breakpoint		
Data Standards & Report	Deliverable	End Feb 2021
System Design Report	Deliverable	End Feb 2021
Breakpoint		
Progress Updates	Deliverables	Regular, as proposed by tenderer
Prototype Demonstration & Report	Deliverable	Oct 2021
Breakpoint		
Full Build Demonstration & Report	Deliverable	Feb 2022
Training & Materials	Deliverable	Feb 2022
Defra deliver shp files (see paragraph 125)	Milestone	4 weeks after start date of Section 3
<i>Statutory and Policy Requirements Results & Report</i>	<i>Deliverable</i>	<i>Jun 2022</i>
Breakpoint		
Modelling System Launch	Deliverable	Jul 2022

Detailed Brief

33. The Framework is anticipated primarily to be available for two different user types to call off from – Strategic Modeller (Defra) and Strategic Modeller (Authorised Organisation), although Focussed Modellers may also access the Framework. A full list of user types and corresponding user stories can be found at Appendix D.5 to this Specification. Strategic Modeller (Contractors) will be able to use the Modelling System through, and only at the request of, their associated Strategic Modeller (who would enter into any necessary Call-Off Contract). Other users may also require the Supplier to help develop standards for new data to be incorporated within the database.

Strategic Modeller (Defra) Requirements

34. Defra will be the sole Strategic Modeller (Defra) – for details on the user types and corresponding user stories, see Appendix D.5. The Initial Call-Off Contract is anticipated to be awarded to the Supplier as a result of the competition to which this ITT relates. The Initial Call-Off Contract will cover:

- sourcing and preparing the data for the strategic Noise Modelling to meet Defra's legislative and policy requirements;
- developing the database and Modelling System to meet the wider needs identified throughout the Specification and then supporting them throughout the Framework Term; and
- delivering the statutory and policy requirements for Defra.

35. The Initial Call-Off Contract will consist of the above three sections, with breakpoints throughout the Initial Call-Off Contract – funding is not yet guaranteed for the full Initial Call-Off Contract which is hoped to run for the Framework Term. Each section can be broken down further. Sub-sections can be completed in an order to suit the successful tenderer and some sub-sections can run concurrently with other sub-sections either within or across sections. This is to be detailed in the submission by the tenderer in the form of a project plan (see section on Project Management).

Section 1 – Identification and Preparation of Strategic Noise Modelling Input Data

36. The successful tenderer will identify and source the input data required to generate a noise model to meet Defra's requirements. As a minimum, Defra's requirements are those that will be sufficient to meet legislative requirements and those of the 25YEP (which can differ). The data will be cleansed and stored in a database (see Section 2 for additional database requirements) in a suitable format to facilitate subsequent flow of data through the Modelling System outlined in Section 2 below. The flow of data through the Modelling System is to be automated as far as possible in a cost-effective manner.

37. There are two competing requirements. The minimum data requirement outlined in paragraph 36 will meet Defra's statutory requirements. However, it may not be the most cost-effective outcome for meeting the wider vision of this tender, which is to provide common datasets which will be of use to other public bodies and to extend coverage of the mapping for policy (25YEP) purposes. This may be achieved through separate datasets of different resolution and geographic coverage or at the other extreme through single high-resolution UK-wide datasets from which appropriate data can be "stripped" or sampled within the process for the purpose intended. Therefore, tenderers are required to outline two options in their tender documentation.

38. The first option will be the optimal data selection fit for purpose for Authorised Organisations as defined in SECTION 4 FRAMEWORK AUTHORITIES of the ITT. The optimal data selection will be that which can be shown to deliver data suitable for modelling by users of the vision, i.e. suitable for more local, focused assessments fit for purpose to assess the existing noise contribution from road and rail sources in a location and for carrying out scoping for informing planning and development decisions. The optimal data selection is not necessarily the most detailed, highest resolution dataset for each input; the effect on the accuracy of the output should be considered as well as the costs associated with any licensing necessary and pre-processing. The optimal solution will be that which effectively balances

costs against gain in usefulness of the output and clearly articulates the thought process involved in developing the case for the choices made.

39. The second option will be one that meets the more basic Defra statutory requirement. It is recognised that the first option may incur additional resource compared to the second option. It is further recognised that not all data will be readily available. Some datasets may be the same for both options – it is only necessary to propose an alternative dataset if it is cost-effective. Therefore, both options are to be costed and will be assessed technically and commercially.

40. The cost of preparing (and potentially licensing) the data will depend on the extent of data required. For the purposes of ensuring fair comparison, the optimal solution is to assume the coverage is to include (along with a justification of how the infrastructure will be identified which meet the criteria):

- all roads in England which will have an effect on the calculation of the number of people exposed to $L_{DEN}>40\text{dB}$ and $L_{night}>35\text{dB}$; and
- all guided transport infrastructure (not just railways) in England which will have an effect on the calculation of the number of people exposed to $L_{DEN}>40\text{dB}$ and $L_{night}>35\text{dB}$.

41. This is because there is a desire to improve coverage of the mapping and to assess the impacts of noise on a greater proportion of the population than required by the Regulations.

42. The coverage for the basic Defra statutory requirement is to include all A-roads and motorways and in accordance with the END definition all Major Railways in England.

43. If required for the purposes of tendering, agglomeration boundaries from Round 2 should be assumed (these can be found here). It is possible that agglomerations will be redefined for Round 4 and provided to the Supplier in a shapefile in accordance with paragraph 125. However, if the source apportionment required in Table 2 and the scope described in the previous paragraphs (paragraphs 40 and 42) are provided then it is not anticipated that the actual agglomeration boundaries will have a significant impact on overall cost and any reasons for variation in cost must be outlined in the tender documentation.

44. For both options, tenderers are to identify each necessary dataset in their tender documentation and discuss the suitability of each dataset including sensitivity on output and the pros and cons in the context of both delivering compliant output for Defra's requirements and the wider aims of the Specification. Dependencies between datasets are to be noted. A discussion on the anticipated accuracy of the proposed solution and how it will be demonstrated to be fit for purpose (note: this need not be a quantified figure; however, Defra will need to be convinced of suitability) is to be included. As a minimum, fit for purpose is taken to mean suitable for focused assessments for the optimal option and sufficient to meet legislative requirements for the more basic option.

45. The pros and cons for extending the coverage beyond the basic statutory requirement, or any alternative option not listed above as identified by the tenderer and thought to be of value to this process, are to be discussed.

46. A discussion is to be provided of whether either of the above options require a different approach to data collection and preparation to each other and ensure this is addressed in the cost provided for each option.

47. Where the choice of option or dataset has a bearing on any other area in the Specification, this needs highlighting at that relevant point within the tender documentation.

48. If any data is currently unavailable or not readily available for either option, proposals for acquiring suitable data in the short and longer term need to be identified in the tender documentation. In the short term, estimations for missing data need to be made and the cost

for generating these estimations included in the fixed price for the option. Where no estimations can be generated, costs for collecting the data are to be proposed in the response to this tender and included in the fixed price for the option. The proposed methodology for the estimation or collection of missing data and any impacts on output need identifying in the tender documentation. Any remaining gaps in input data must be identified. Longer term options for improving the estimations or collecting new data can be included as costed options, but will not be assessed as part of the tender.

49. It must be clearly stated what input is required from Defra to acquire every one of these datasets for both options.

50. Once the Initial Call-Off Contract is let, any dataset subsequently selected, not specified in the tender will be subject to agreement with Defra, within the original fixed cost, and must include an assessment of the suitability of each data source for both Defra's immediate requirements and the long-term aim of the database (see paragraph 9). A justification must be provided as to why this alternative dataset is preferable and along with an evidenced assurance that quality will not be compromised as a result.

51. The input data required, and more specifically the format in which the data is stored, is naturally dependent on the design of the Modelling System and the calculation method employed. The Modelling System must retain the flexibility to operate the different calculation methods described below (see paragraphs 94, 95 and 96).

52. Consistency, completeness and integration issues may exist with many of the required input datasets. For each dataset identified in the tender, or as an option, the description must:

- justify why the proposed dataset is fit for purpose;
- outline licensing arrangements where this data is not freely available (costs to be itemised and included in the fixed price by financial year);
- identify whether the data is readily available;
- identify whether the data requires any manipulation to cleanse and pre-process it for inclusion in the ground and/or acoustic model and if so, how this manipulation is proposed to occur;
- flag whether this same dataset could be used should any of the DAs decide to extend the Modelling System to their area of interest or note whether an alternative would be necessary. Please comment on why an alternative might be used in preference if it is possible to extend geographic coverage, but not considered the most desirable option.

53. Care must be taken to ensure that conflicts between datasets do not occur (for example roads and building occupying the same space, step changes in ground height, etc.). Chosen data sources must be reliable and replicable and there should be a reasonable expectation that they should remain available for future instances of running the noise model. Furthermore, it should be relatively simple and cost-effective to incorporate updates as they are made available.

54. Once the input data has been identified and licensed (if necessary), pre-processing will need to occur to build the Ground Model and the Acoustic Model (it is assumed this will occur in a GIS environment – see paragraph 67 for further assumptions about the design, alternative methods are not precluded). This will need to be automated as far as possible to allow for future updates to each input dataset to be readily incorporated in a cost-effective manner. Where this process involves manual intervention, it must be highlighted. Quality Assurance (QA) and Quality Control (QC) processes for successful transition need to be detailed.

55. Before the data is collated, a report is to be provided, justifying the choices of datasets made with full transparency for approval by Defra before any further spend is committed. A breakpoint will occur at this time in the Initial Call-Off Contract. The report must capture:

- identification of all source/input data (including organisation generating the data) and a description of the proposed licensing arrangements for that data where not freely available;
- a discussion on the pros and cons of each identified dataset, frequency of and method for updates, any manual intervention required, any future alternatives or development to consider which would enhance the data offering. This is to be provided in the form of a quality assessment including, but not limited to, the following elements:
 - Accessibility - The ease with which data can be retrieved and manipulated by data consumers to meet their needs. This will relate to software as well as the data itself. Indicators - provision, popularity, ease and speed of access and outcome success;
 - Accuracy - The measure or degree of agreement between a data value or set of values and a source assumed to be correct. Normally this 'correct' source would be a definitive file such as say the PAF for Postal addresses, but it might be comparison with the real world;
 - Consistency - The coherence of the data set;
 - Amount of Information - The depth of information, ability to drill down into more information makes the data more useful, but also can present a simple interface for the less demanding applications. Does this vary with user?
 - Believability - This would relate to the "selling" of the dataset to user communities and beyond and assumes that some importance is attached to the data contents being believable, claims must be repeatable;
 - Clarity - Data should be clear to users; this relates to both software and data;
 - Completeness - How closely objects in a dataset match the same set of objects in the real world. Data completeness is useful for the detection of both errors of commission (extra incorrect features) and omission (missing features) of certain objects. Completeness expresses whether or not the data set is fit for purpose;
 - Concise Representation - Should duplication within records be allowed – e.g. name as well as number for roads?
 - External constraints - What, if any, are the legal or other limitations on this data?
 - Interoperability - How far will the data have to work with other systems in Defra? outside?
 - Lineage - the life history of a dataset provides the necessary information for one to reconstruct the history of a dataset and therefore analyse its potential use. Lineage provides information such as: the data source including information on the organisation providing it, coordinate systems, projection systems, associated corrections etc; methods of acquisition, derivation or compilation of the data; methods of data conversion such as stages in digitization/vectorization of raster data; transformations e.g. Coordinate transformations, reclassification etc;
 - Objectivity - Can the data be shown to represent the needs for all the purposes for which it is used?

- Relevance - The definition of the atomic level of the dataset and the subatomic levels in each case;
- Security - What are the needs of security on the data, this will include, Data Protection and IPRs;
- Timeliness - The degree to which data values or a set of values are provided at the time required or specified;
- Uniqueness - The ability to establish the uniqueness of a data record;
- Validity - The degree to which data values match acceptable values. This would include what, if any, look up tables are used;
- Value-Added - To what extent is the client benefiting from the data and what failures would damage the value added and in what ways;
- Reputational - The users “political” stance encompasses its use, and whether they expect to achieve something beyond simply adding value;
- Positional accuracy - The deviation in the values of the respective positions between the data from the real world. divided into absolute or relative accuracy. It may also be subdivided into horizontal and vertical accuracy components;
- Logical consistency - A dataset is consistent if it respects the structural characteristics of the object it represents. For instance, a contour should be closed, buildings should be closed polygons, nodes of a road network should connect etc; and
- Semantic consistency - the consistency with which geospatial objects are classified. Separating oranges and apples or combining all fruit, this should follow standard rules for taxonomies.

- a discussion on the anticipated accuracy of the proposed solution and how it will be demonstrated to be fit for purpose (note: this need not be a quantified figure; however, Defra will need to be convinced of suitability). As a minimum, fit for purpose is taken to mean suitable for focused assessments for the optimal option and sufficient to meet

- legislative requirements for the more basic option. Definitions of sufficient/fit for purpose and/or justification for your proposal must be included within the description;

- a description of the cleansing and pre-processing required for each dataset and estimation of automation/manual intervention required; and

- a description of the QA and QC processes to be adhered to during cleansing and pre-processing and development and proofing of automation routines.

56. Some of the above information will have been included in the tender documents. Where no changes have occurred Defra will expect that information to be a simple 'copy and paste' across into the standalone report, with additional detail and clarity being added where required. Defra does not expect to pay for information which has already been provided as part of the Supplier's tender.

Section 2 – Design, Development, Demonstration and Launch of the Modelling System

57. The Modelling System needs to be capable of meeting the needs of not just Defra, but of other public bodies and users and suppliers of data.

58. There are two aspects to the Modelling System to consider; one is a publicly available portal through which published data can be accessed. The other will be accessible only to Approved Users. Those Approved Users may only wish to upload and download data from the database. Alternatively, they may wish to make use of the same modelling capability as Defra.

Public Portal

59. The public portal must meet the minimum requirements associated with other Defra publishing platforms, please view the Defra Data Services Platform (DSP) to see the type of functionality available.

60. Types of data to be made available to the public include, as a minimum, the necessary outputs (data, reports, etc) for compliant reporting and (previous and updated) versions of those made public from the previous rounds of mapping (see here). Data is to contain sufficient attribution for members of the public to view key information (these attributes are to be proposed in the tender documentation but are to be agreed once the contract is let). Metadata is also to be included. The option to download datasets for use in other applications/hosting on other platforms must be included. Download formats must be specified by tenderers in their tender documentation.

61. It would be preferable that all data available from this site can be viewed as individual datasets or, by user selection, overlaid and viewed concurrently. Combined source maps should be available, with the dominant source clearly identified. Source apportionment should also be available. All public-facing data available through the user interface must be user friendly, accessible and readily interpretable. Members of the public must easily be able to navigate to their location of interest, e.g. via postcode or street/place name. They must be able to download, print and export to a common format (e.g. pdf) their location of interest. They must not need specialist skills beyond those found in the general population to achieve this.

62. Approved Users must also be able to upload to and publish data through this portal. All data needs to clearly state the organisation responsible for the data, with contact details for follow-up queries where appropriate (these may not be the same organisation). This must be in addition to that contained within the metadata so members of the public unfamiliar with metadata are readily informed. It must be clear and transparent that Defra has no responsibility for the content of any data not published by Defra, even if hosted on a site provided by Defra.

63. Defra does not wish to dictate the means of access; it is to be determined by the solution offered by the Supplier. The public portal functionality should be costed as a separate element in the commercial submission for information only. It will not be scored. As output can continue to be made available via the DSP, this option will only be taken if the cost-benefit is apparent to Defra. However, the functionality required to generate the desired outputs (e.g. combined source maps and maps identifying source apportionment in addition to those to meet the legislative and policy requirements) must be included within the Approved User portal should the public portal option not be taken and costs associated with this are to be included in the fixed price for the Approved User portal.

Approved User Portal – User Account Management

64. Not all organisations and/or potential data will be available (or even identified) before the design and launch of the Modelling System. Therefore, the design needs to ensure that likely future development is not compromised.

65. Users are to access the Modelling System through the internet, so that individual organisation security measures are not a limiting factor. Likely system and performance requirements (including those relating to hardware, storage, and runtimes, etc) must be identified and minimum requirements can be found in Appendix D (particularly D.4.2, D.4.3 and D.4.4). The Modelling System must be compliant with relevant Government Digital Service (<https://gds.blog.gov.uk/about/>) standards and guidance. This will have a bearing on the Modelling System design and implications need to be drawn out in the tender documents. This needs to take account of hosting, processing and ongoing needs and costs.

66. Defra will have the mandate to approve organisations for access at different levels (described at Appendix D). Once an organisation is approved, the successful tenderer will manage individual user accounts for the Framework Term. Subcontractors (and individual employees therein) to Authorised Organisations can be added as additional Approved Users upon verification via the originally approved organisation and subject to any required licensing being arranged through the Authorised Organisation (see the Licensing and Access section for additional detail). Individual account details cannot be shared within an organisation and passwords are to be updated regularly (tenderers to propose an appropriate interval in the

tender documentation) to maintain secure access. A proposal for managing this (and other requirements at Appendix D) is required to be included in the tender documents. Appendix D contains further requirements concerning levels of access and user support requirements.

Approved User Portal – Data Management

67. In drafting this Specification, it has been assumed that the Modelling System will consist of a GIS front end, where the Ground Model will be built. This will then be attributed and scenarios of interest can be designed and defined to form the Acoustic Model. The actual noise calculations are likely to take place within proprietary software appropriately tested to the relevant part(s) of ISO17534. Results from the calculations will be returned to the GIS environment for post-processing such as population exposure assessments and display and interrogation/query purposes and to generate any products for subsequent publishing/sharing through the public portal. Transition between the database, GIS and software environments and then, post-calculation, between the software, GIS and output database environments need to be automated to a large extent and where this involves manual intervention it must be highlighted in the tender documentation. QA processes for successful transition need to be detailed in the tender documents. Please note that use of this paired GIS/software calculation module approach is not an obligatory design requirement and Defra welcomes innovation should alternative cost-effective and user-friendly options be identified. The key desire is that data flows effectively and cost-efficiently throughout the solution, with minimum manual intervention from users or the Supplier.

68. The database is to be initially populated with the data identified for Defra's strategic mapping requirement (see Section 1, and noting that this could be an optimised dataset for additional purposes). However, other datasets from both Defra and other Authorised Organisations / Approved Users may be added during the Framework Term and the design needs to anticipate this and the storage capacity be sufficiently flexible to accommodate this. This may be achieved through separate datasets of different resolution and geographic coverage or at the other extreme through single high-resolution UK-wide datasets from which appropriate data can be "stripped" or sampled within the process for the purpose intended.

Data Standards

69. Data standards are key to manage the data flow through the Modelling System and in and out of the database. Where agreed open standards already exist, these should be identified and utilised. All data (and associated metadata) is to be compliant with the relevant government guidance, e.g. ISO19139 for non-spatial metadata and Gemini 2.3 for spatial metadata. Other ISO standards may also be relevant (including, but not limited to the ISO191xx series). Where no data standard can be identified, they are to be developed and provided as part of the Modelling System delivery so data can be managed in an efficient and cost-effective manner. The Government guidance on data standards will be adhered to – useful information can be found [here](#)⁴ and [here](#)⁵. Metadata should draw on ISO15836 and the UK government's e-GMS.

70. Furthermore, supplementary documentation will describe how data will be transformed from the format in which it is acquired to the format necessary for processing further within the Modelling System (further detail in paragraph 105 and 106). These standards and associated documentation are deliverables for the Initial Call-Off Contract for the initial data populating the database, and then provided on a case-by-case basis for each new dataset introduced.

71. From these standards and supplementary documentation, it must be easily identifiable what changes are necessary to accommodate any potential future change to the Modelling System.

72. The IPRs for the standards, supplementary documentation, routines, scripts, etc and other tools referred to in this Specification, and in particular paragraphs 69, 70 and 105 developed for this Framework will be retained or transferred (as the case may be) to Defra and delivered as part of the documentation referred to in paragraphs 69, 70 and 118. Any IPRs developed for incorporating datasets from other users (but not the data itself, where the IPRs remains with the owner of the data) will also be transferred to Defra to ensure continuity of the Modelling System as far as reasonably practicable beyond the Framework Term. Any existing IPRs relevant to this Framework is to be declared by tenderers in their tender documentation and Defra is to be granted a perpetual, irrevocable licence to ensure the Modelling System operates as proposed in the tender documentation for the Framework Term. Anything not declared in the tender documents will belong to Defra.

73. The standards (and formats) must not be so customised that they preclude the use of other proprietary software packages from that chosen (if any) to deliver this project, however they may be sufficiently tailored to facilitate the automated flow of data through the Modelling System. The supplementary documentation must also identify how pre-processing of any data will differ depending on the calculation method required and potentially the noise calculation software. A report will be required as a deliverable detailing how these standards were developed and also a summary of the proposed approach is to be included as part of the tender documentation. The format for storing each of these datasets will be made available to allow others to add to the database in the future. The proposed process for managing licensed data and (derived) IPRs is to be outlined in the tender documentation. A legal opinion will be sought by Defra on all aspects of IPR before authority to proceed will be given and the proposed approach may need to be adjusted in response to feedback. All data require associated metadata.

74. Defra intends to make the data standards it owns 'open'. It is hoped that these will be of benefit not only to this project, but to the wider acoustics community. As such, a degree of consultation with stakeholders will be required during the development process. Defra will liaise with their stakeholders throughout the Framework Term and the Supplier will be required to consider feedback from those stakeholders and document how they have addressed any comments raised. Defra will approve the standards only if they feel sufficient account of stakeholder feedback has been provided. Tenderers are to detail how they intend to develop the standards, such that they are considered to be open, and outline in their project plan the times they feel would be most appropriate to engage with Defra's stakeholders. This does not preclude Defra liaising with their stakeholders at other points throughout the Framework Term and on other aspects relating to delivery of the Modelling System. Tenderers should also propose any stakeholders they feel would be most beneficial to achieve this purpose. For the Modelling System to achieve the vision, support from the wider community will be vital.

Adding New Data

75. Additional data which is potentially foreseen, but is not limited to, includes:

- extending the geographic scope beyond England to include any of the DAs, i.e. Scotland, Wales and/or Northern Ireland;

- increasing the resolution of data to extend the usability of the data beyond national level Noise Modelling to regional or local, i.e. suitable for planning assessments, etc.;

- multiple versions of the same dataset at different time resolutions (e.g. annual averages for different years, or averages for different time periods, i.e. weekday vs weekend, hourly or diurnal averages, and so on); and
- including additional information such as that associated with soundscape assessments.

76. Users (appropriately authorised) should be able to switch seamlessly between different resolutions of data, however the Modelling System must make it apparent to the user which version of the dataset is being used to build the Ground Model and Acoustic Model and when the switch occurs. However, the choice between the two should be able to be user-selected depending on the type of analysis being undertaken, coupled with sensible calculation times and processing effort. The proposed design must discuss how this is to be achieved in the tender documentation. QA processes for successful transition need to be detailed.

77. Different datasets will be applicable for the different uses of the Modelling System. For example, for consistent traffic data across the country, Department for Transport Annual Average Daily Flow (DfT AADF) data has traditionally been used for strategic mapping. However, it may be that alternative sources available from other organisations (examples include, but not limited to, Ordnance Survey or Google) will be more suitable for national level mapping. However, when considering potential future input for other organisations this national level dataset could be supplemented by for example, HE regional traffic model data and LHA traffic model data where available. It is recognised that this approach would lead to inconsistent data coverage at a more local level and therefore, effective proposals for data management and information must be proposed to accompany the use of input data in the tender documentation. As more data becomes available, the Modelling System must be adaptable to incorporate the best available data within the governance structure designed for the Modelling System. Consistency in approach across the national level is important (e.g. to allow reasonable comparisons to be made between and across locations).

78. Methods for data control need to be developed and implemented, such that future updates will be accommodated in a cost-efficient manner. It is accepted that the preferred outcome for the incorporation of local data may generate boundary issues and methods for addressing this are to be discussed and included in the tender.

79. It should be noted that data could be added in a staged manner. Referring back to the traffic data example (see paragraph 77), it would be acceptable to incorporate the HE regional traffic model data early in the Framework Term, but to continue to use the national estimates for LHA roads for the Framework Term, or at least until a later date during the Framework Term. As LHA traffic models are likely to be in different formats, these could be added on a case by case basis at different times depending on availability, suitability and the requirements of the LHA. In this case, for strategic comparisons the user may decide to use the less detailed data which allows a like-for-like comparison between two different areas of the country (i.e. consistent), whereas if only looking at one area, the more detailed data may be preferable.

80. All publicly available data must also be available through the Approved User portal, although potentially containing additional attribution to that in the public domain, to be defined by the publishing organisation.

81. Users of data will wish to understand the provenance of that data. Therefore:

- a supplier of data retains responsibility for the accuracy of that data;

- the successful tenderer is responsible for the QC and QA of any subsequent pre-processing of data from the point of upload to the provision of that data within the database and details of this are to be made available. These processes are to be agreed with Defra and the data owner informed;

- anyone downloading data or modelling with data from the database is responsible for ensuring they have selected the most appropriate version (a method for readily identifying choices available to users must be provided); and

- all data must be accompanied by metadata.

82. These descriptions must be formalised and form part of any agreement that a user must accept before being given access to the Modelling System. Defra must not be in a position where it is held responsible for the content of other user's data in any way.

83. The Modelling System will allow data sets to be readily uploaded by Approved Users, either piecemeal or as a whole national dataset as and when new data is available / revised output is required. No existing datasets are to be overwritten. Version control is important, so it is clear when updated / new data is available, yet the previous version is to remain accessible so the user can choose whether to use the latest version, or perhaps one with a date relevant to period of interest being modelled (for retrospective or forecast noise modelling). The details relating to amendments / updates must be recorded with the metadata.

84. When new datasets are uploaded, whilst they may be valid in and of themselves, conflicts may occur when used in conjunction with other datasets already in the database (for example roads and building occupying the same space, etc.). To encourage users to embrace the vision and offer up alternative datasets, a 2-option verification approach is to be adopted. Those uploading data may choose to clearly flag their dataset as unverified. This does not mean that the data is not deemed to be of quality, merely that it hasn't been checked for conflicts against other data in the database. The data will still be available for the uploader and other users, and they will access that data at their own risk in line with the ethos in paragraph 81. The data will still need to successfully pass automated checking routines to ensure those datasets meet the published data standards and formats. The detail of the routines will be provided by the Supplier to facilitate this upload.

85. Alternatively, uploaders may call off from the Framework to carry out the verification checks and, upon successful completion, the dataset will be flagged as verified. This means that users will have confidence that no conflicts will occur during use of the data. This can occur at the point of upload by the data owner or at a later point in time by the data owner or any user of the data who wishes to confirm that the data does not conflict in any way with any other datasets already in the database.

86. If conflicts are identified during the verification process, then the Supplier is to report to the data owner (and the party contracting the verification if different) to determine if and how to resolve the conflicts. The preference would be to amend the new dataset, but if this is not possible or agreeable to all parties, then Defra must be involved (if not already) as a potential resolution would be to amend existing data in the database. In this scenario, a communication plan needs developing for all users of the previous version of that dataset identifying potential implications.

87. Any data introduced at the request of a Strategic Modeller (as defined in Section D.5.1) must be verified as part of the relevant Call-Off Contract with the Supplier.

88. The Supplier must outline its processes for validation and discuss where (to which organisation and for what part of the process) costs would fall. An example should be included in the tender documents demonstrating how issues would be resolved. No actual costs are requested at this stage but the hourly rates submitted under the tender will be used should this occur. Experience developed during the course of this Framework will be used to inform the process for future development of the database beyond the Framework Term and stakeholders will be consulted. If data cannot be validated in a cost-effective manner, the vision will not develop as hoped.

Approved User Portal – Acoustic Modelling

89. Once the appropriate data has been identified from database, the Approved User will essentially have two choices – either to download the data for use in their own Modelling Systems, or to use the additional functionality within the portal to carry out Noise Modelling.

90. For Defra and those other Approved Users who wish to manipulate the data further within the provided Modelling System, transition from database to Ground Model to complete attributed Acoustic Model within the noise calculation software environment is to be automated as far as possible in a cost-effective manner (refer also to paragraph 72). The tender is to set out how this is to occur and the QA processes necessary to identify any errors.

91. The Modelling System is to allow for strategic, regional and local modelling consisting of forward and backward looking scenarios generating replicable results. For scenario modelling, it must be possible to either make changes to the Ground Model in a GIS-type environment or to the Acoustic Model. Alternatively, apportionment data could be extracted for processing elsewhere (e.g. scaling results as a result of changes to attributes, e.g. traffic flow, speed, fleet mix, etc) or combining results to obtain broader categories (e.g. the results from Major Roads according the definitions within the Regulations and non-major roads to obtain a cumulative contribution from all roads). Accordingly, it will not be necessary to re-run the calculations for an entire noise model each time a new scenario is considered; instead analysis of existing results may be undertaken and a discussion must be provided on how this will be achieved within the proposed design (e.g. in terms of the availability and being able to access the appropriate underlying datasets). Examples of national scenario modelling or analysis are the wholesale change of a speed limit for a certain road-type or increased rail grinding across the Network Rail assets or identification of all receptors of a certain type above a specified noise level. Examples of regional or local scenario modelling are the investigation of certain mitigation measures on proposed residential developments near existing noise sources, or the introduction of new traffic flow measures/controls through a large urban area (note all these examples are supplied for illustrative purposes only and are not exhaustive). Confirmation that this functionality can be provided and recommendations for how it will be implemented, and the resulting data managed are to be provided in the tender documentation.

92. The Modelling System needs to be capable of calculating the noise level at receivers from road and rail sources based on source and geographic location. Receivers are to be user-defined, but for strategic Noise Modelling are considered to be dwellings (there may be multiple dwellings within a residential building) and noise sensitive buildings such as schools, hospitals, nursing homes. Other buildings may be identified as noise sensitive and other areas defined spatially such as national parks, green spaces, AONB, etc and the design of the Modelling System must account for this.

93. Output must be to a sufficient level of accuracy and able to identify areas and/or locations where action could be focussed. This will differ depending on the nature of the Noise Modelling being undertaken (e.g. strategic through to local) and the Supplier must justify why they feel the accuracy for the Modelling System is fit for purpose for the different users, purposes and datasets identified. Accuracy needs to be sufficient for use in local planning decisions and by either transport authorities or planning/environmental health authorities. The results are to be caveated depending on the data used.

94. Different calculation methods have been identified as a requirement of the Modelling System. The minimum required calculation method for strategic mapping is that defined in the Regulations (CNOSSOS-EU). In implementing CNOSSOS-EU, tenderers need to take account of the recommendations within the RIVM report and the draft ISO17534-4, as at the

time of publishing this ITT, it is anticipated that these amendments will be issued as a legal amendment. As not all issues are resolved in this report, further amendments may follow, which the Modelling System will need to be flexible enough to incorporate.

95. It is also necessary to be able to calculate using CRTN/CRN with the amendments set out in paragraph 26 of this Specification. For Defra, this will allow some benchmarking and comparative exercises to be carried out, as a minimum for a representative area of England

during the proof-of-concept phase (see paragraph 112), to assess the effect of changing the calculation method.

96. The BSI Committee EH/001/02 is considering developing a new British Standard for the Calculation of Sound Levels Outdoors. At the time of drafting this ITT, this new standard is expected to eventually replace CRTN and CRN as an updated national method. The Modelling System needs to be capable of incorporating this calculation method at some point in the future. To account for other future potential developments, the Modelling System should also have the capability to support ISO 9613-2 and Harmonoise methodologies.

97. For the above reasons, the Supplier must be cognisant of potential changes, and be sufficiently flexible to adapt to changes, made during the development of the Modelling System so that the outputs of the noise model meet the most recent specifications, legislation, guidelines and standards (including those to calculation methodologies).

98. Sufficient buffer zones need to be employed in the Ground Model to allow all relevant sources to be included in the calculations. Additionally, where it is anticipated that the calculation area will be sub-divided for processing efficiency, sufficient overlap between adjacent sub-areas will be required to ensure no boundary steps in output data occur. The tender must explain how these two points will be addressed.

99. Should the vision of this Modelling System be eventually realised, the scope for further development of functionality with the Modelling System is exciting and varied. Tenderers must be aware of the desired functionality of likely users in the future to ensure that the Modelling System is compatible with this potential future development and explain in the tender documentation how this is to be addressed.

100. Table 2 outlines the MoSCoW requirements from the Modelling System (including via post-processing).

Criteria	Requirement	Strategic / National	Local / Regional
Metric / Indicator	L _{day} , L _{eve} , L _{night} , ability to combine to generate L _{Aeq,16hr} and L _{den} for all methods (i.e. CNOSSOS- EU, CRTN and CRN)	Must	Must
Metric / Indicator	L _{A10,18hr} , L _{Aeq,18hr} , L _{Aeq,6hr} , (A and Z or linear-weighted) for appropriate methods and sources	Should	Should
Metric / Indicator	L _{Max} , (A and Z or linear-weighted, fast or slow) N _{x,p} (x and p definable by user) for appropriate methods and sources	Could	Could
Range	Sufficient to calculate L _{den} in the range of 40dB upwards and L _{night} in the range 35dB upwards. ⁶	Must	Must
Time	Hourly data (if and	Could	Should

	when available) to look at differences between peak and average traffic flow or diurnal patterns		
Resolution	1dB steps, ability to combine to generate 5dB contours	Must	Must
Source apportionment	Ability to interrogate receiver (or group of receivers) to identify contribution from: <ul style="list-style-type: none"> • Different roads/set of tracks • Vehicle category for road/rail, e.g. electric, HGV, freight, etc • Regulation definition, e.g. major or non-major 	Must	Must
Frequency	One-third octave data for Leq,t ₇ (as output for potential biodiversity impact assessments), Z weighted or linear	Could	Could
Frequency	Octave band data for Leq,t, Z weighted or linear	Should	Should
Green Infrastructure	Ability to include additional shielding at a later date	Could	Should
Assessment Height	Ability to assess at different heights: <ul style="list-style-type: none"> • to distribute population across building height as well as around building footprint at a set height • to consider ecosystem impacts for ground- or tree-based species 	Could	Should

101. Post-processing functionality following calculations is required to convert results to spatial (e.g. shapefile) and accessible (e.g. tabular) formats as appropriate. Minimum functionality is to allow results to be prepared for publication or to be downloaded for use elsewhere.

102. Provisions for future functionality to be considered during design of the solution must include:

- allowing for more detailed input data to be incorporated where available – for example, from HE (e.g. data from regional transport models); LHAs (e.g. transport models perhaps developed to support air quality investigations); additional building attributes (e.g. the recipients of a glazing scheme); or simply greater granularity of information available at a local level (e.g. road surface type, barrier data). Again, this must allow for forward and backward looking scenarios to be explored;

- analysis by location or source – ensuring data can be extracted by source (not just road or rail, but using source apportionment techniques to consider vehicle categories, various geographies, locations, etc);

- provision for updates to be provided by Approved Users from other organisations. This process must consider the need for: - third-party updates to be subject to controls through an agreed and transparent means, e.g. data standards;

- an approvals process which allows assessments of non-approved scenarios to be undertaken without overwriting the underlying data unless authorised; and

- a degree of consistency to be maintained, even though different locations will be treated differently depending on data availability;

- allowing for importing of other datasets to consider areas of synergy, such as multiple other pollutants and environmental health risks/policy areas, e.g. levels of air pollution (this could simply be overlaying results from other modelling systems and AQMAs). Where common datasets are identified to facilitate this, the design of the Modelling System should not preclude adaptations to allow for the highest resolution of data to be imported where this is required for alternative areas to noise. Where additional data is required, the design of the Modelling System should not preclude adaptations to allow for this. It is accepted that tenderers will not be able to foresee all potential uses of this type, however, tenders need to demonstrate that the more common and likely options have been considered and accounted for; and

- allowing for the application of improved noise calculation techniques to enable better prediction of how and where changes in noise levels occur e.g. rail wheel squeal; the effects of driving patterns.

103. Potential future **uses** of the Noise Modelling may include, but are not restricted to assessment of the:

- impact of planning decisions by assessing changes in the local noise environment;

- impact of potential mitigation options for the purposes of health and environmental impact and cost-benefit analysis at a local and national level;

- the impacts of noise on different sectors of the community (e.g. by age, ethnicity, socio-economic group); and

- assessment of noise exposure at different heights on the façade, e.g. allowing for the distribution of a population vertically within a block of flats as well as around a building rather than at a set height on the most exposed façade.

104. Other potential functions should not be precluded at the design and build stage. Tenderers are encouraged to identify other potential applications.

Approved User Portal – Licensing and Access

105. It is expected that tools (e.g. routines, scripts, workflows, etc) will be necessary for automating the processes of converting data from: • the format in which it is sourced from the data owner into the format required for storing in the database;

- the format in which it is stored in the database into the completed ground model in the GIS environment;

- the completed ground model in the GIS environment, via the acoustic model and into the noise calculation software;

- the output of the noise calculation software to that ready for post-processing in the GIS environment;

- the GIS environment into pre-determined outputs suitable for reporting and publishing; and

- any other format to that required to successfully operate the Modelling System as described throughout this Specification. Should the Modelling System operate differently to that assumed in paragraph 67, then the above list will need adapting to reflect the alternative design.

106. The IPRs for any of the above tools referred to in paragraph 105 developed for this Framework are to belong to Defra and delivered as part of the documentation referred to in paragraph 118. Any IPRs developed for incorporating datasets from other users (but not the data itself, where the IPRs remain with the owner of the data) will also belong to Defra to ensure continuity of the Modelling System as far as reasonably practicable beyond the Framework Term. Any existing IPR relevant to this framework is to be declared by tenderers in their tender documentation and Defra is to be granted a perpetual, irrevocable licence to ensure the modelling system operates as proposed in the tender documentation for the Framework Term. Anything not declared in the tender documents will belong to Defra.

107. To be able to update the Modelling System and use it to support policy development in the way Defra anticipates, it is expected that there will be future support costs. These need to be detailed and broken-down to a level sufficient to undergo scrutiny. The minimum requirement for the Modelling System is to deliver legislative (END) and related policy (25YEP and PHOF) requirements only, whilst making data available to others, but higher points will be awarded to proposals meeting the broader objective of building a Modelling System suitable to meet the vision in a cost-effective manner.

108. Anticipated costs following launch of the Modelling System for the remaining financial years of the Framework Term will include some of the following: • licensing of data – for Defra and other Authorised Organisations (to include any scaling depending on resolution and/or size of geographic coverage if appropriate). Some data will be open source and some data will be shared freely amongst users by data owners through the database - no organisation will be charged for access to open data, its own data or data which has been shared by and belongs to other users through the database. Some data (e.g. OS) may be subject to licensing on a case by case basis, which will need to be determined at point of use and may be managed through wider agreements such as the Public Sector Geospatial Agreement (PSGA);

- licensing of GIS software – for Defra and a subset of Authorised Organisations. If the proposed solution results in specific functionality (e.g. data editing, analysis) incurring costs, this must be documented;

- licensing of noise calculation software – for Defra and subset of Authorised Organisations;

- data storage – to be borne by Defra for the Framework Term and possibly to increase over time;
- processing capacity – basic provision to be borne by Defra and additional flexibility (if the Defra provision is felt to be insufficient for their needs) to be arranged as required by public bodies as part of their own contracts;
- data updates – ensuring the most recent versions of the datasets in the database are uploaded at regular intervals, to be automated as far as possible to minimise recurring costs; and
- system management costs – to be borne by Defra for the Framework Term, subject to the limits outlined in Appendix D (particularly D.4.2, D.4.3 and D.4.4).

109. The tenderer should outline a system for managing the ongoing cost with prices included as part of the commercial assessment by financial year (April – March). Also identify any areas where it can foresee potential costs might fall over the Framework Term which are not covered in the tender documents. For the Framework Term, Defra will be responsible for the costs associated with the hosting and managing the Modelling System. However, data and software licensing will need to be arranged with users on applying to access the Modelling System, depending on which datasets they require access to.

110. The aim of this initial Framework is to encourage use of the Modelling System to demonstrate viability and so costs to users will be kept to a minimum and Defra will support the Modelling System initially. Before tendering for a replacement framework (or other commercial vehicle), an assessment will be undertaken by Defra to look to share future costs in a sustainable manner. One issue that might be relevant for future frameworks but may have an implication for the design phase will be how to pass costs on in the future to other users. Considerations are:

- costs must be affordable to the organisations otherwise the vision will fail;
- equally, Defra would like to minimise the risk that many bodies request user accounts without having any desire to use the Modelling System thus increasing user management costs without any benefit;

- free time-limited trial periods are to be available to demonstrate the benefits and encourage active participation in the Modelling System;

- users must not be charged for access to open data or their own data;

- users will be charged for licensing of other data (unless managed through wider agreements such as the PSGA), or software (GIS or proprietary noise calculation software). These separate components are to be selectable by the user as part of their initial agreement to gain access; and

- any funding generated through these “licences” for access to the Modelling System will be used to offset the annual running costs to Defra.

Demonstration of Modelling System

111. Once the Modelling System design is finalised, a report is to be provided, justifying the choices of design with full transparency for approval by Defra before any further spend is committed. A breakpoint will occur at this time in the Initial Call-Off Contract. The report must capture:

- user definitions, stories and requirements (where amended from this Specification);

- system design and flow diagrams, detailing (automated and manual) interventions, licensing and IPR, pros and cons, any future alternatives and/or development to consider for enhancing the Modelling System;
- limitations and opportunities for the Modelling System;
- functionality - scenario modelling options available (e.g. within the Ground Model or the Acoustic Model or by post-processing output from noise calculations), pros and cons, any future alternatives and/or development to consider for enhancing the Modelling System;
- output – standards, format and options, pros and cons, any future alternatives and/or development to consider;
- post-processing – description and related scripts / coding, etc of routines available for common tasks;
- training – description of training to be delivered and user notes/help system which will be produced/issued;
- QA and QC procedures – within the Modelling System; and
- associated costs with justifications.

112. Subject to approval at the design stage, the prototype build stage will commence. The full functionality of the Modelling System must be available in the prototype, but the geographic scope is to be limited to a representative area in England, to be proposed in the tender document. The representative area must contain receivers exposed to a range of noise levels from both road and rail sources – some sources must be “major” in accordance with the END definition and some “non-major”. Some of the area must be “urban” and some more “rural”, with some green or open space which experiences relatively lower noise levels than the surrounding area. Please note that London is not considered to be representative of the rest of the UK. The Acoustic Model should be built and populated with data relating to the situation in 2021. Where this is not available at prototype stage, identical data sources for an earlier year are to be used and clearly documented.

113. Regular updates on build progress must be provided to Defra, with milestones and outputs clearly timetabled in the project plan, and documented testing and QA occurring at regular and appropriate intervals with results clearly reported to Defra.

114. The prototype is to be accompanied by a technical report detailing sufficient information (flow charts, coding, etc) to allow the project to be continued at a future date should funding for the remainder of the project not be available beyond the breakpoint in the contract, which will occur at this point.

115. The tenderer is to suggest appropriate points throughout the Modelling System build to demonstrate progress in their project plan.

116. QA and QC processes for every aspect must be defined as part of the design stage. This must include staged checks to verify the quality of the build and accuracy of data input and rigorous final testing ahead of post-processing.

117. A rigorous process for demonstrating accuracy must be included as part of the prototype Modelling System build (see paragraph 112). This could include comparisons of the representative area to other verified and documented noise models or real-world monitored data to demonstrate accuracy, and in the process demonstrate the flexibility of the scenario planning tool. Defra is open to other proposals for assessing compliance and accuracy in the tender documents, of an equivalent robustness.

Training and Associated Materials

118. Following successful completion of the prototype, subject to funding, authorisation to commence to full build will be given by Defra. In addition to delivering the Modelling System, the following will be provided:

- an updated, combined and expanded version of the prototype and system design reports covering the final Modelling System;
- user notes for the Modelling System (available through the Modelling System to all users – tailored if necessary);
- standards/specifications for the input format of data (available through the Modelling System for all Approved Users); and
- routines/scripts etc as per paragraph 106 for converting data from one format to another necessary for the use of the Modelling System or the generation of outputs from the Modelling System.

119. The above deliverables are required on successful delivery/installation of the Modelling System and demonstration of capabilities. A training session for anticipated Defra users is to be provided including high level capability presentations for personnel benefitting from an understanding of the functionality of the modelling, followed by more detailed interactive sessions for those anticipating using the Modelling System. Defra may invite DA representatives and potentially other Approved Users (e.g. HE representatives) to attend these sessions, if they have committed or shown clear intent to use (all or aspects of) the Modelling System. A further training session is to be provided for those in Defra administering the system and interacting with the Supplier during the remainder of the Initial Call-Off Contract.

120. Before launch, the Modelling System will be tested and demonstrated in full including by the delivery of Section 3 – Delivery of Statutory and Policy Requirements. There will be a break clause before launch.

121. Following launch, the Supplier is to provide a “helpdesk” function. This could be managed in the first instance through email to prevent costs associated with resourcing helpline telephone numbers and online chat functions. However, a chatbot or other functions could be employed if this were felt to be a cost-effective approach. The Supplier must respond to any help queries within 48hrs of receipt. This could be through digitally pointing towards the support material already provided as part of paragraph 118 or more personalised responses.

122. All requests must be logged and analysed and reported to Defra on a 6-monthly basis. Six-monthly updates to the online support materials are to follow incorporating responses to the most frequent requests with the aim to reduce the resource on the Supplier (and hence cost to Defra) over time to respond to user queries. Defra are to approve these updates in advance of publication.

123. All written material available through the Modelling System is to be approved by Defra in advance of publication.

Section 3 – Delivery of Statutory and Policy Requirements

124. Functionality of the Modelling System will, in part, be demonstrated through delivery of this section.

125. The database will contain all necessary data for strategic national Noise Modelling and population exposure assessment. Datasets not covered by this contract (population location data, airport noise data, industry noise emission data, agglomeration boundary data) will be provided by Defra no less than 4 weeks prior to the start date of this section on the project plan provided by the successful tenderer in their tender documentation. Logically, this date must

follow the anticipated date for the prototype being approved for full development. The Supplier must use dummy data for the prototype test where necessary for these datasets. The Supplier must work with Defra to ensure the data standards for these datasets are developed in consultation and are available in sufficient time (no less than 4 weeks) to allow the data to be formatted appropriately.

126. The Acoustic Model will be run, and the following outputs generated, quality assured and delivered through the Modelling System:

- sufficient data in a suitable format to allow for PHOF reporting for indicators 1.14ii and 1.14iii (e.g. spreadsheet);
- sufficient data in a suitable format (to be agreed with the Defra 25YEP indicator team) to allow for 25YEP reporting; and
- END reporting requirements⁸ – using shapefiles denoting agglomeration boundaries and attribution of major sources in the Acoustic Model, and incorporating industrial and airport modelled results, extract data suitable for meeting legislative reporting requirements. These are currently defined in DF1_5 and DF4_8 spreadsheet format (EEA ENDRM guidelines attached to this tender at Appendix A - END Reporting Mechanism Guidelines for DF1_5 and Appendix B - END Reporting Mechanism Guidelines for DF4_8 respectively), however, the EEA is currently developing a revised reporting system and the post-processing automated routines need to be sufficiently agile to adapt if necessary.

⁸ See footnote 2.

127. Data is to be accompanied by a report suitable for publication. The report is to contain as a minimum:

- a description of the input data used;
- an overview of the processing required to build the Acoustic Model;
- the name of the noise calculation software used and any settings/customisation to enable results to be repeated;
- a description of the infrastructure used for the calculation processing, along with information such as runtimes, etc;
- an overview of the post-processing undertaken to produce the required outputs;
- a description of QA and QC processes followed to ensure consistent and compliant output;
- a description of the output produced; and
- anything else thought worthwhile by the successful tenderer.

Other Defra Requirements

128. Once launched, during the Framework Term, there may be a desire to further enhance the offering of the Modelling System (including the database) or for Defra to ask the Supplier to use the Modelling System to help inform policy development for example. Examples include, but are not limited to: • further populating the database, including integration and/or verification of other data;

- enhancing the originally selected core data beyond what is initially agreed with the successful tenderer (e.g. where data sources / estimates could be improved for both strategic national and also local/regional assessments such as improved traffic speed data, introduction of electric vehicle emission data, etc.);

- projects to identify how such data could be obtained;
- the actual collection of data itself;
- scenario modelling and analysis; and/or
- policy development.

129. Defra will enter into new Call-Off Contracts from the Framework should work of this type be required. Tasks will be assessed for cost-effectiveness before any work will be called off through this facility. There will be no guarantee of any additional work.

130. Collection and integration of data, if it occurs, will likely be a phased process and the Modelling System design needs to be able to accommodate these future potential changes. Data collection will not occur as part of the Initial Call-off Contract (unless identified in paragraph 48). New data can be proposed by any Approved User. However, whenever this occurs, evidence must be provided by the proposer of the new data to show that the processes have been tested at a small scale and are scalable to the national (or appropriate) level before engaging with the Supplier for database development. The Supplier must review this evidence and seek approval from Defra before considering any changes to the database design and core datasets.

Strategic Modeller (DAs) Requirements

131. The Strategic Modeller (DAs) organisations will be the DAs (or organisations working on their behalf, as authorised by the DA). They can call off from the Framework for the following type of activities.

Strategic and Statutory Modelling

132. The DAs may wish to enter into a Call-Off Contract to extend the geographic scope of any or all of the functionality of the Defra requirements to cover their region of responsibility.

133. They may additionally request that compliant industrial modelling and airport modelling be undertaken to allow them to meet their statutory obligations as part of the above DA let contract, or as separate DA let contracts. Alternatively, the Noise Modelling results for these sources could be generated through other means (e.g. contracts with other suppliers) and imported (in a similar manner to those proposed in England) or potentially dealt with entirely separately.

Scenario Planning and Policy Development

134. Similar to England, there may be future requirements for scenario planning and policy development support.

Focussed Modeller Requirements

135. An Approved User of the Modelling System may have their own datasets to add to the database. For example, HE and LHAs may wish to include regional or local transport model output, barrier information or road surface data.

136. It is recognised that this approach would lead to inconsistent data coverage at a more local level and that this will generate boundary issues. Boundary issues are identified above at paragraph 78.

137. When a user identifies a dataset they would like adding to the database, some interaction between the Supplier and the user will be required to consider the best format for incorporating the data, if the previously identified data standards are considered insufficient for the newly identified data. The system must be designed to handle most standard formats and therefore

this scenario is expected to be an exceptional one. The Supplier will need to make the appropriate adjustments to the database and provide the new/revised data standard for any future requests for similar data to adhere to under a new Call-Off Contract from the Framework. The user can determine whether to format their data to the published standard themselves, through a completely separate contractual arrangement to be managed themselves or through the Supplier. The Supplier will then need to make any necessary amendments to the Modelling System to allow the data to “flow” through the Modelling System and into the Acoustic Model within the noise calculation software without corrupting any existing data or noise models held within the Modelling System.

Project Management

138. Monthly meetings by video-conference (VC) to be managed by the Supplier and minuted to include reviewing and updating (if necessary) the project plan and the risk register. Face-to-face meetings may occur if felt to be particularly beneficial over the VC format for some reason (assumed to be exceptional), or if all relevant parties happen to be in a conveniently similar location. The documents are to be made available in advance of each meeting by a minimum of 2 working days and minutes are to be issued in draft for review within 5 working days of the meeting. Following review by Defra, the final version is to be issued within a further 5 working days. Final versions of minutes, agendas, reports and other similar text-based documents are to be issued in pdf format, whereas drafts are to be made available in MSWord. The risk register is to be made available in either MSWord or MSeXcel (other editable formats will be considered). The project plan is to be made available in MSPProject.

139. The first meeting will occur as soon as possible and not later than 2 weeks from commencement of the contract and will agree the standing items for the agenda.

140. Emails or telephone calls from Defra are to be acknowledged and, unless otherwise agreed, responded to within 2 working days unless advance notice of leave has been given. The continuity plan, provided as part of the tender documentation, should be sufficient to cover the scenario of unexpected absences.

141. The Supplier is to provide access to all data in (e.g. database) and supporting (e.g. user and performance data) the Modelling System (current and archived) during both the Framework Term and the Initial Call-Off Contract Term (as a maximum within 10 working days of the request) along with diagrams detailing relationships between different datasets, metadata and any other relevant files/documentation (see also Appendix D, in particular D.4.2).

142. Full backup of all information (as listed in paragraph 141) to Defra servers is to be automatically provided at 6 monthly intervals from launch of the Approved User portal, within 10 working days of each 6 monthly anniversary date (not from the date of the previous delivery). This must be accompanied by a short report explaining the contents of the data transfer and a summary of “use data” information from the Modelling System.

143. The 6-monthly delivery (of all information listed in paragraph 141) due immediately before the Initial Call-Off Contract term reaches end date minus one year must also contain the Supplier’s views on future improvements to the Modelling System. Depending on timelines for launch of the system and take-up of the system by other users, this may occur at end date minus 18 months instead, with advance notice from Defra of 2 months. This will be used to inform an exercise within Defra to determine whether a replacement framework is beneficial and subsequently any tendering process that may follow.

144. A final data delivery (of all information listed in paragraph 141) will be required during the last 10 working days of both the Framework Term and the Initial Contract Call-Off term.

145. Should insufficient funding be available to support the system for the duration of the Initial Call-Off Contract, 6-monthly breakpoints will occur during the service phase of the Initial Call-Off Contract.

Appendix A - END Reporting Mechanism Guidelines for DF1_5⁹

Please see Annex DF1_5 in Visible to Suppliers Section of the ITT in Bravo

Appendix B - END Reporting Mechanism Guidelines for DF4_8¹⁰

Please see Annex DF4_8 in Visible to Suppliers Section of the ITT on Bravo

Appendix C - Example data file

File PA62 relates to one of the Project Areas described in the Background Resources for Information section (above) section of this Specification (in the second report under the Documenting production of Round 2 noise maps link).

Appendix D – Technical Requirements

D.1 Appendix Objectives

This appendix aims to present the business requirements for a service that delivers

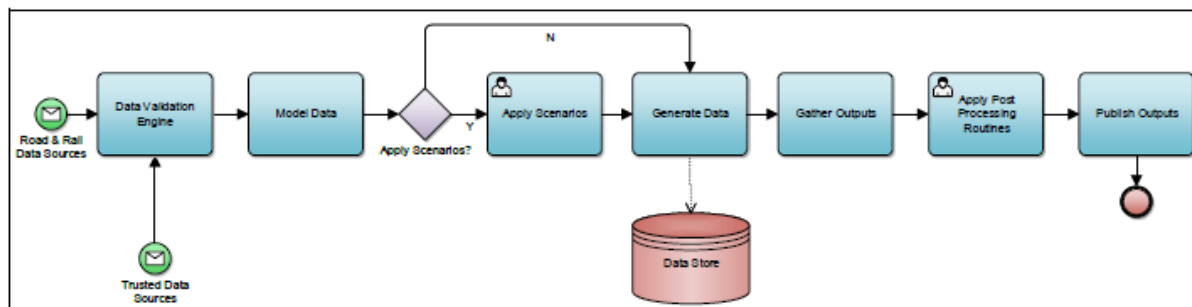
1. Data Input Management
2. Data Validation Engine
3. Data Visualisation
4. Noise Modelling solution
 - a. Public Facing User Interface.

that will enable the creation of noise maps and generate data for post processing activities and the creation of noise action plans and assessments.

The business, also the competent authority, is Defra.

It also captures the following, where possible

- System Requirements
- Non-Functional Requirements
- Business Process Model (Context Level 0)
- User Stories



1: Noise Modelling Level 0

Figure

D.3 Modelling System Requirements

The following are the specific behaviours or functionalities that is what the business expects from the Modelling System required;

ID	Requirement	MoSCoW
S1	The Modelling System must have the capability of allowing Approved Users to upload (suitably caveated) data and configure parameters as a scenario to generate data for further processing; thereby creating another version of the dataset.	Must
S2	The Modelling System must have a user access management feature where users can be created and given specific access as determined by Core Defra as Defra wants to only provide permission, but the Supplier to manage access.	Must

D.2 Business Requirements

The following business needs must be met.

#	Description	MoSCoW
BR1	The business requires the capability to estimate noise levels in England, with the capability and capacity to expand to the rest of the UK if required by the DAs (cost of additional data collation and processing to be borne by the DA)	Must
BR2	The business requires the capability to ingest data from trusted and verified sources	Must
BR3	The business requires the capability to apply post processing routines on noise levels calculated and/or imported to create outputs for business use.	Must
BR4	The business requires the capability to format and present the core outputs (key results) differently depending on end use, e.g. policy development, END requirements, 25YEP and PHOF	Must
BR5	The business requires the capability to publish key results as reports	Must
BR6	The business requires the capability to store data generated, data input from other trusted sources, reports and other related data in compliance with data retention policies and beyond to allow trend analysis etc.	Must
BR7	The business requires the capability of inputting scenario specifics to model noise levels in England with the capability and capacity to expand to the rest of the United Kingdom if required by the DAs (cost to be borne by the DA) including management of multiple projects and scenarios as described in Table 2 and elsewhere in the Specification.	Must
BR8	The business requires user management for its Noise Modelling solution	Must
BR9	The business requires the capability to maintain & store different versions of datasets	Must
BR10	The business requires the datasets as described in Section 1 to the standards agreed in paragraph 74	Must

Table 3: Business Requirements

ID	Requirement	MoSCoW
S3	The Modelling System must allow users to download noise modelling input and results data within the limits of user access for specified parameters	Must
S4	The Modelling System must have a web portal that facilitates the viewing, interrogation, analysis & printing of noise maps, in England initially then UK if extended to any DA, and use of the scenario tools.	Must
S5	The web portal must be interactive, allowing users to configure and define the views (ground and acoustic model, post-processing data and maps) based on parameters available & run their scenarios including defining geographic scope	Must
S6	The Modelling System must have United Kingdom address finder available on the web interface	Must
S7	The Modelling System must have a default System Admin User that can carry out all tasks including creating and managing users	Must
S8	The Modelling System must have the capability to support the calculation of Road Traffic Noise (CRTN) methodology including L_{A10} (with and without adaptations), Railway Noise (CRN) methodology (with and without adaptations) & the Commission Directive (EU) 2015/996 methodology (known colloquially as CNOSSOS-EU) and allowing for updates to the methods and being sufficiently flexible to adapt to changes so that the outputs of the Modelling System meet the most recent specifications, legislation, guidelines and standards. Furthermore, the Modelling System must be adaptable to incorporate any future British Standards as alternatives to CRTN and CRN.	Must
S9	The Modelling System should also allow for the application of improved noise calculation techniques as these become available to enable better prediction of how and where changes in noise levels occur e.g. rail wheel squeal; the effects of driving patterns	Should
S10	The Modelling System must provide the facility to upload & ingest noise modelling results and input data or datasets in a variety of common Vector and Raster formats (e.g. Shp, CSV, Tiff, etc.)	Must

ID	Requirement	MoSCoW
S21	The Modelling System must facilitate post processing tasks carried out by Approved Users, on Noise Modelling results data.	Must
S22	The Modelling System's database must maintain & store all the versions of the data aligned to data retention policies.	Must
S23	The Modelling System must have the capability of presenting parameters and its customization on data ingested according to the user profiles	Must
S24	The Modelling System must ensure imported datasets, even when published, do not overwrite existing data however they must be available for scenario modeling by Defra and other Approved Users.	Must
S25	The Modelling System should have the capability to support ISO 9613-2 and Harmonoise methodologies	Should
S26	The Modelling System must <u>not</u> publish or share any data or outputs without the owner's express permission	Must

Table 4 Modelling System Requirements

D.4 Non-Functional Requirements

The following defines how the Modelling System should meet its functional requirements thereby specifying criteria that can be used to judge the operations of a system

D.4.1 Availability & Resilience

ID	Requirement	MoSCoW
NM_AV_01	RTO (Recovery Time Objective) for critical infrastructure components which falls under the scope of this contract 4hrs (e.g. VPN Circuits)	Should
NM_AV_02	RPO (Recovery Point Objective) for infrastructure components - 24hrs (For data and retention of configuration information)	Should

ID	Requirement	MoSCoW
NM_AV_03	Availability for the overall service (SLA) for Infrastructure components which falls under the scope of this contract – 99.5%	Should
NM_AV_04	All components of the Modelling System must undergo annual disaster recovery testing at a time to be agreed with Defra. Supplier(s)/project teams must provide a full report of the results and correct any shortfalls. The content and format of this report must be agreed with Defra.	Must
NM_AV_05	Planned maintenance must be agreed between the Supplier and Defra at least 15 working days in advance.	Must
NM_AV_06	All component changes must be in accordance with a change management schedule agreed between the Supplier and Defra.	Must
NM_AV_07	No single change will impact the performance or availability of any other component. In particular, component upgrades must be able to be undertaken without impacting the performance or availability of any other component.	Must
NM_AV_08	The application and supporting infrastructure must be hosted within European Economic Area data centres.	Must
NM_AV_09	The Supplier must be able to migrate into UK only data centres if legislation changes during the Framework Term	Must
NM_AV_10	The Supplier must provide full application availability monitoring and report the results to Defra when requested to do so.	Must

ID	Requirement	MoSCoW
NM_AV_11	Service will implement the following fault priorities: 1 – Defra is unable to fulfil its core services & Obligations. 2 - Major impact on critical processes, or many users/devices affected. 3 - Partial loss of application functionality or non-critical business process. 4 – Minor impact on business processes and/or service to the public.	Must
NM_AV_12	Fault priorities should have the following resolution times: 1 – 1 working day 2 – 3 working days 3 – 5 working days 4 – 10 working days	Should
NM_AV_13	Fault priorities should have the following response times: 1 – 4 Hours 2 - 1 working day 3 - 2 working days 4 - 5 working days	Should

D.4.2 Performance and Capacity

ID	Requirement	MoSCoW
NM_PC_01	The platform must be licensed for a minimum of 100 named (Modeller) users on a pay-as-you use basis	Must
NM_PC_02	The platform should support a minimum of 20 concurrent named (Modeller) user sessions	Should
NM_PC_03	The platform must be able to support the simultaneous calculation of acoustic models	Must
NM_PC_04	The platform should be able to complete processing the calculations for a national model in England within 21 days.	Should
NM_PC_05	The platform must be able to complete processing the calculations for a national model in England within 35 days.	Must
NM_PC_06	The platform should have the capability to flex up/down in terms of allocated computer resource to meet the demands of the business	Should
NM_PC_07	Running system maintenance, software updates and database back-up(s) procedures should have no impact on the service during core hours.	Should
NM_PC_08	A full system and database backup should complete once a day and should be retained for a minimum period of 90 days	Should
NM_PC_09	The system should include archiving and purging functionality so there is no performance degradation as data volumes grow	Should
NM_PC_10	The database must be provisioned with an initial storage capacity of 5 Terabytes with a capability to flex to meet year on year growth requirements for the duration of the contract	Must

ID	Requirement	MoSCoW
NM_PC_11	The platform could provide data access to the general public mirroring the same solution (as a minimum) implemented by the Defra Data Sharing Platform (https://environment.data.gov.uk/)	Could
NM_PC_12	The platform must apply error checking routines to external data imports & feeds to maintain data integrity	Must
NM_PC_13	The Platform should support a minimum of 40 Read Only (Viewer Users) <i>We need to define the concurrency for Read-Only (users if we are to provide a Public Web Portal - Defra Data Services Platform Specifications will be used.</i>	Should
NM_PC_14	Full data migration (full system and database backup – current and archived) must occur to Defra servers on request and at scheduled intervals detailed in paragraphs 141-144 inclusive	Must

Table 6 Perform & Cap NFRs

D.4.3 Systems Management

ID	Requirement	MoSCoW
NM_SM_01	Where Supplier staff access the Modelling System for administrative purposes, appropriate access controls must be in place. This may include the use of a second factor authentication. A username and password alone are not enough.	Must
NM_SM_02	Approved Users must have role-based access to the Modelling System, with each user potentially having multiple roles.	Must
NM_SM_03	Must have a change journal report of all system configuration changes made by automated and manual processes by both internal and external agents, detailing, who, what, when, and before & after values	Must
NM_SM_04	Must have system generated event logs to report all system events	Must

ID	Requirement	MoSCoW
NM_SM_05	The Supplier must manage third-party user accounts.	Must

Table 7 Serv Mgmt. NFRs

D.4.4 Interoperability

ID	Requirement	MoSCoW
NM_IT_01	The Web portal should be compatible with the current versions of: <ul style="list-style-type: none"> • Chrome • MS-Edge • Firefox • Safari 	Should
NM_IT_02	Any Software Packages or additional tooling required to operate the service should be compatible with the following Operating Systems: <ul style="list-style-type: none"> • Windows 7 (64 bit) and above • Mac OS (Catalina) and above 	Should
NM_IT_03	Any Software Packages or additional tooling required to operate the service could be compatible with the following Operating Systems. <ul style="list-style-type: none"> • IOS Apple V8.0 and above • Android OS V9.0 and above 	Could
NM_IT_04	The Supplier must adhere to the Defra standards for data export.	Must
NM_IT_05	The Supplier must develop and maintain standards for import of data into the platform	Must

Table 8 Interoperability NFRs

D.4.5 Service Delivery

ID	Requirement	MoSCoW
NM_SD_01	All components of the system must undergo annual disaster recovery testing at a time to be agreed with Defra. Supplier(s)/project teams must provide a full report of the results and correct any shortfalls. The content and format of this report must be agreed with Defra.	Must
NM_SD_02	Planned maintenance should occur during core hours but must be suspended at Defra's discretion. Defra must be able to cancel planned downtime with no notice.	Must
NM_SD_03	Planned maintenance must be agreed between the Supplier and Defra at least 15 working days in advance.	Must
NM_SD_04	All component changes must be in accordance with a change management schedule agreed between the Supplier and Defra.	Must
NM_SD_05	No single change will impact the performance or availability of any other component. In particular, component upgrades must be able to be undertaken without impacting the performance or availability of any other component.	Must
NM_SD_06	The Supplier must provide full application availability monitoring and report the results to Defra when requested to do so.	Must
NM_SD_07	The Supplier must provide and adhere to a clear and consistent procedure for notifying Defra of the cost of any work requested (e.g. moves and changes) together with a date for its start and completion	Must
NM_SD_08	The Supplier must commence work on components only after the cost and scope has been agreed with Defra.	Must
NM_SD_09	The Supplier must provide comprehensive documentation on any work that is undertaken under the terms of the project.	Must
NM_SD_10	All components must support role-based access and privileges.	Must

ID	Requirement	MoSCoW
NM_SD_11	The Supplier must submit detailed business continuity and disaster recovery plans for approval by Defra.	Must
NM_SD_12	Service Delivery between the Supplier and Defra must be provided under the ITIL 3 framework	Must
NM_SD_13	The Supplier must provide for the patching of applications and operating environments at times suitable and acceptable to Defra	Must
NM_SD_14	The Supplier must provide maintenance for applications and operating environments compliant with the RPO & RTO requirements	Must
NM_SD_15	The Supplier must accept an open collaboration with all other suppliers involved in the provision of the end to end service.	Must
NM_SD_16	The Service Provider must be able to implement change freeze at Defra's request (for example during national incidents).	Must
NM_SD_17	The Supplier must comply with the service credit regime in the contract	Must

Table 9 Serv Del NFRs

D.4.6 Security Requirements

ID	Requirement	MoSCoW
NM_SC_01	The Supplier must demonstrate any security certification (e.g. ISO27001, Cyber Essentials Plus) and provide independent certificates for validation.	Must
NM_SC_02	The Supplier must provide a security management plan referencing their security policies and procedures.	Must
NM_SC_03	The Supplier must ensure that all staff with access to Defra and Authorised Organisation / Approved User information, data or systems are vetted to appropriate standards (minimum BPSS or national equivalent).	Must

ID	Requirement	MoSCoW
NM_SC_04	The Supplier must identify all third-parties involved in the Supplier's service and detail the services they provide.	Must
NM_SC_05	The Supplier must provide evidence that all third-parties involved in the Supplier's Service will meet the security standards of the Supplier which are to be approved by Defra.	Must
NM_SC_06	The Supplier must comply with the Defra Security Assurance process (process can be provided on request).	Must
NM_SC_07	The Supplier must provide details of the incident management process relating to security incidents involving Defra and Authorised Organisation / Approved User information, data or systems.	Must
NM_SC_08	The Supplier must provide details of the vulnerability management process relating to the systems processing or hosting Defra and Authorised Organisation / Approved User information as part of the Supplier's service.	Must
NM_SC_09	The Supplier must agree to, and provide support for, an IT Health Check of the service carried out by an independent 3rd party under the NCSC CHECK Scheme prior to go live. Vulnerabilities discovered as part of this activity will be remediated in line with Defra's risk appetite.	Must
NM_SC_10	The Supplier must make Defra aware of any significant changes to the service so that Defra can confirm whether it requires additional penetration testing and/or IT Health checks to be undertaken. Such changes might include re-hosting, architectural changes, or major code changes.	Must
NM_SC_11	The Supplier must provide details on how the service is segregated from other customers so that Defra can determine whether the service is adequately protected.	Must
NM_SC_12	The Supplier must provide details on how it will manage access control to ensure that access to Defra and Authorised Organisation / Approved User data is limited to that required for users to perform their roles.	Must
NM_SC_13	All access to the service by Supplier staff must be logged and stored securely in case analysis of this information is required and provided on request.	Must

ID	Requirement	MoSCoW
NM_SC_14	The Supplier should provide evidence of management of the integrity of the service data e.g. after a service outage.	Should
NM_SC_15	The Supplier must provide evidence of monitoring for unusual activity and maintenance of records of events for future analysis.	Must
NM_SC_16	The Supplier must make available access logs and audit data relating to the service if required.	Must
NM_SC_17	The Supplier must confirm that data will only be stored and processed for its intended purpose and that the storage and processing will comply with relevant legislation.	Must
NM_SC_18	The Supplier must confirm that the service will be capable of supporting data up to a maximum protective marking of OFFICIAL and an acceptable Defra Impact Assessment score	Must
NM_SC_19	The Supplier must confirm that system data will not be shared with any other party without prior approval and that only the minimum data will be shared to meet the approved needs.	Must
NM_SC_20	The Supplier should confirm that passwords and account management capabilities of the Service meet the criteria set out in Defra's Password Policy.	Should

Table 10 Security NFRs

D.5 User Matrix

#	User	Primary Functions	Best For
i)	Administrator	User Access Management	Defra
ii)	Strategic Modeller (Defra)	Upload data from trusted sources, Upload data from other noise sources, Initiate Noise Modelling, Create Scenarios, carry out Post Processing Tasks, Generate Noise Maps, configure parameters to facilitate analysis, Extract data, for example to generate Noise Action Plans	Defra

ID	Requirement	MoSCoW
NM_SD_11	The Supplier must submit detailed business continuity and disaster recovery plans for approval by Defra.	Must
NM_SD_12	Service Delivery between the Supplier and Defra must be provided under the ITIL 3 framework	Must
NM_SD_13	The Supplier must provide for the patching of applications and operating environments at times suitable and acceptable to Defra	Must
NM_SD_14	The Supplier must provide maintenance for applications and operating environments compliant with the RPO & RTO requirements	Must
NM_SD_15	The Supplier must accept an open collaboration with all other suppliers involved in the provision of the end to end service.	Must
NM_SD_16	The Service Provider must be able to implement change freeze at Defra's request (for example during national incidents).	Must
NM_SD_17	The Supplier must comply with the service credit regime in the contract	Must

Table 9 Serv Deli NFRs

D.4.6 Security Requirements

ID	Requirement	MoSCoW
NM_SC_01	The Supplier must demonstrate any security certification (e.g. ISO27001, Cyber Essentials Plus) and provide independent certificates for validation.	Must
NM_SC_02	The Supplier must provide a security management plan referencing their security policies and procedures.	Must
NM_SC_03	The Supplier must ensure that all staff with access to Defra and Authorised Organisation / Approved User information, data or systems are vetted to appropriate standards (minimum BPSS or national equivalent).	Must

#	User	Primary Functions	Best For
iii)	Strategic Modeller (DAs)	Upload data from trusted sources (geographically limited), Upload data from other noise sources, Initiate Noise Modelling (geographically limited), Create Scenarios, carry out Post Processing Tasks, Generate Noise Maps (geographically limited), configure parameters to facilitate analysis, Extract data, for example to generate Noise Action Plans	DAs
iv)	Strategic Modeller (Contractor)	Upload data from trusted sources, Upload data from other noise sources, Initiate Noise Modelling, Create Scenarios, carry out Post Processing Tasks, Generate Noise Maps, configure parameters to facilitate analysis, Extract data, for example to generate Noise Action Plans, Limitations by (Data) Licensing	Contractor hired by Defra or the DAs
v)	Focussed Modeller (Public Body)	Upload data with high resolution or update, Upload data from other noise sources, Initiate Noise Modelling, Create Scenarios, carry out Post Processing Tasks, Generate Noise Maps, configure parameters to facilitate analysis, Extract data, e.g. to inform Local Plans and EIAs, Do not overwrite core database.	Public bodies such as other Government Departments, ALBs, Agencies, LAs as named in the OJEU Notice.
vi)	Focussed Modeller (Contractor)	Upload data with high resolution or update, Upload data from other noise sources, Initiate Noise Modelling, Create Scenarios, carry out Post Processing Tasks, Generate Noise Maps, configure parameters to facilitate analysis, Extract data, e.g. to inform Local Plans and EIAs, Do not overwrite core database, Specific views, Specific Functionality, Limitations by (Data) Licensing	Contractor hired by Public bodies as named in the OJEU Notice
vii)	Viewer	View, Query & Print Noise Maps (some private, some public – different permissions)	Everyone including the Public
viii)	Publisher	Extract Templates, modify report, publish reports, Share reports	Defra, DAs

#	User	Primary Functions	Best For
ix)	Other	The tenderer may wish to propose additional groups which would enhance delivery and functionality of its proposed Modelling System or improve the governance and quality control of the proposed Modelling System in its tender documentation.	TBD

Table 11 User Matrix

Other potential users include, not exhaustive:

1. PHE: Public Health England (or DA equivalents)
2. Network Rail
3. RSSB: Rail Safety and Standards Board
4. CAA: Civil Aviation Authority
5. EA: Environment Agency (or DA equivalents)
6. NE: Natural England (or DA equivalents)

D.5.1 User Stories

i) Administrator

#	Description	MoSCoW
1	As an Administrator, I must be able to manage users access to the Noise Modelling Application so that customers can be added, removed and be given specific level of privileges, as agreed within Defra, to the Noise Modelling System Application.	Must

Table 12 Administrator User Stories

ii) Strategic Modeller (Defra)

#	Description	MoSCoW
1	As a Strategic Modeller (Defra), I must be able to upload data from trusted sources into the Noise Modelling Application so that the strategic noise maps from road & rail sources in England can be produced, meeting legislative, policy reporting and	Must

#	Description	MoSCoW
2	As a Strategic Modeller (DAs), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data enabling the Noise Modelling process.	Must
3	As a Strategic Modeller (DAs), I must be able to retrieve the output of the Noise Modelling process from the database so that I can carry out post-processing tasks in a Geographic Information System environment with other input data.	Must
4	As a Strategic Modeller (DAs), I should be able to create a Noise Action plan based on the output of the post-processing tasks, so that I can meet the legislative and publishing requirements set out in the Regulations for my DA, transposing the END and meet future policy aims	Should
5	As a Strategic Modeller (DAs), I must be able to configure parameters to execute high level scenarios for policy development.	Must
6	As a Strategic Modeller (DAs), I must be able to calculate airport and industrial sources using CNOSSOS-EU separately from every other user, so that I can determine the noise levels in my DA. This could be outside of the Modelling System and imported for population exposure and publishing purposes.	Must

Table 14 Strategic Modeller (DAs) User Stories

iv) Strategic Modeller (Contractor)

#	Description	MoSCoW
1	As a Strategic Modeller (Contractor), I must be able to upload data from trusted sources into the Noise Modelling Application so that the strategic noise maps from road & rail sources in my customer's area of responsibility can be produced, meeting legislative, policy reporting and publishing requirements.	Must
2	As a Strategic Modeller (Contractor), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data so that the initiation of the Noise Modelling process can commence.	Must

#	Description	MoSCoW
	publishing requirements, including but not limited to noise level (different metrics), combined source, level difference, population, health impacts e.g. annoyance, sleep disturbance.	
2	As a Strategic Modeller (Defra), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data enabling the Noise Modelling process.	Must
3	As a Strategic Modeller (Defra), I must be able to retrieve the output of the Noise Modelling process from the database so that I can carry out post-processing tasks in a Geographic Information System environment with other input data.	Must
4	As a Strategic Modeller (Defra), I should be able to create a Noise Action plan based on the output of the post-processing tasks, so that I can meet the legislative and publishing requirements set out in the Environmental Noise (England) Regulations, 2006 (as amended) ("Regulations") and meet future policy aims.	Should
5	As a Strategic Modeller (Defra), I must be able to configure parameters (either on new data input or result from a previous processing) to execute high level scenarios for policy development.	Must
6	As a Strategic Modeller (Defra), I must be able to calculate airport and industrial sources using CNOSSOS-EU separately from every other user, so that I can determine the noise levels in England. This could be outside of the Modelling System and imported for population exposure and publishing purposes.	Could

Table 13 Strategic Modeller (Defra) User Stories

iii) Strategic Modeller (DAs)

#	Description	MoSCoW
1	As a Strategic Modeller (DAs), I must be able to upload data (geographically limited) from trusted sources into the Noise Modelling Application so that the strategic noise maps from road & rail sources in the DA can be produced, meeting legislative, policy reporting and publishing requirements.	Must

#	Description	MoSCoW
2	As a Strategic Modeller (DAs), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data enabling the Noise Modelling process.	Must
3	As a Strategic Modeller (DAs), I must be able to retrieve the output of the Noise Modelling process from the database so that I can carry out post-processing tasks in a Geographic Information System environment with other input data.	Must
4	As a Strategic Modeller (DAs), I should be able to create a Noise Action plan based on the output of the post-processing tasks, so that I can meet the legislative and publishing requirements set out in the Regulations for my DA, transposing the END and meet future policy aims	Should
5	As a Strategic Modeller (DAs), I must be able to configure parameters to execute high level scenarios for policy development.	Must
6	As a Strategic Modeller (DAs), I must be able to calculate airport and industrial sources using CNOSSOS-EU separately from every other user, so that I can determine the noise levels in my DA. This could be outside of the Modelling System and imported for population exposure and publishing purposes.	Must

Table 14 Strategic Modeller (DAs) User Stories

iv) Strategic Modeller (Contractor)

#	Description	MoSCoW
1	As a Strategic Modeller (Contractor), I must be able to upload data from trusted sources into the Noise Modelling Application so that the strategic noise maps from road & rail sources in my customer's area of responsibility can be produced, meeting legislative, policy reporting and publishing requirements.	Must
2	As a Strategic Modeller (Contractor), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data so that the initiation of the Noise Modelling process can commence.	Must

#	Description	MoSCoW
3	As a Strategic Modeller (Contractor), I must be able to retrieve the output of the Noise Modelling process from the database so that I can carry out post-processing tasks in a Geographic Information System environment with other input data.	Must
4	As a Strategic Modeller (Contractor), I should be able to create a Noise Action plan based on the output of the post-processing tasks, so that I can meet the legislative and publishing requirements set out in the Regulations transposing the END for my customer's area of responsibility and meet their future policy aims.	Should
5	As a Strategic Modeller (Contractor), I must be able to configure parameters to execute high level scenarios for policy development to my customer's requirements.	Must
6	As a Strategic Modeller (Contractor), I must be able to export data from the Noise Modelling System application to a 3 rd party calculation software so that I can create noise maps as desired.	Must

Table 15 Strategic Modeller (Contractor) User Stories

v) Focussed Modeller (Public Body)

#	Description	MoSCoW
1	As a Focussed Modeller (Public Body), I must be able to upload data from trusted sources into the Noise Modelling Application so that the regional and local noise maps from road & rail sources in the same (or subset of the) geographical area can be produced, meeting legislative, policy reporting & publishing requirements.	Must
2	As a Focussed Modeller (Public Body), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data so that the initiation of the Noise Modelling process can commence.	Must
3	As a Focussed Modeller (Public Body), I must be able to retrieve the output of the Noise Modelling process from the database so that I can carry out post-processing tasks in a Geographic Information System environment with other input data.	Must

#	Description	MoSCoW
4	As a Focussed Modeller (Public Body), I must be able to upload Noise Modelling results and ensure they are available to other users, along with the input data uploaded by any 'Focussed Modeller Contractor'	Must
5	As a Focussed Modeller (Public Body), I must be able to configure parameters to execute high level scenarios so that I meet organisational objectives.	Must
6	As a Focussed Modeller (Public Body), I must be able to export data from the Noise Modelling System application to a 3 rd party calculation software so that I can create noise maps as desired.	Must

Table 16 Focussed Modeller (Public Body) User Stories

vi) Focussed Modeller (Contractor)

#	Description	MoSCoW
1	As a Focussed Modeller (Contractor), I must be able to upload data from trusted sources into the Noise Modelling Application so that the regional and local noise maps from road & rail sources in the same (or subset of the) geographical area in my customer's area of responsibility can be produced, meeting legislative, policy reporting & publishing requirements.	Must
2	As a Focussed Modeller (Contractor), I must be able to define parameters such as (roads, geographical scope) applicable to the data inputted & relevant data so that the initiation of the Noise Modelling process can commence.	Must
3	As a Focussed Modeller (Contractor), I must be able to retrieve the output of the Noise Modelling process from the database so that I can carry out post-processing tasks in a Geographic Information System environment with other input data.	Must
4	As a Focussed Modeller (Contractor), I must be able to upload Noise Modelling results and ensure they are available to other users.	Must

#	Description	MoSCoW
5	As a Focussed Modeller (Contractor), I must be able to configure parameters to execute high level scenarios so that I meet my customer's organisational objectives.	Must
6	As a Focussed Modeller (Contractor), I must be able to export data from the Noise Modelling System Application to a 3 rd party calculation software so that I can create noise maps as desired.	Must

Table 17 Focussed Modeller (Contractor) User Stories

vii) Viewer

#	Description	MoSCoW
1	As a viewer, I must be able to view permissible noise maps generated in the Noise Modelling System Application	Must
2.	As a viewer, I must be able to generate visuals by setting parameters in the web portal for the Noise Modelling System Application.	Must
3.	As a viewer, I must be able to interrogate / query the maps.	Must
4.	As a viewer, I must be able to navigate to my location of interest using an address finder.	Must

Table 18 Viewer User Stories

viii) Publisher

#	Description	MoSCoW
1	As a publisher, I must be able to extract Noise Modelling results data from the database as input to reporting templates, update the report as desired and publish the report.	Must

Table 19 Publisher User Stories

PART B: CALL-OFF PROCESS

- 1.1. When the Authority or Contracting Body has a requirement to procure Services through the Framework Agreement, the Authority or Contracting Body will have the discretion according to the nature, value, complexity or risk of their requirements to complete a direct award.

Direct Award

- 1.2 Subject to paragraph 1.1 (above), the Authority or Contracting Bodies may require in some situations to adopt the direct award process which will follow the procedures set out below:
 - 1.2.1 identify that the provider is capable of providing the required solution without any amendment to the solution procured for DEFRA under this Framework.
- 1.3 If the Authority or Contracting Body decides to place a Call-Off Contract with the Provider under this direct award process the Authority will submit a draft Call-Off Contract to the Provider with the appropriate modification, addition or deletion of clauses to take into account the particular requirements of that award.
- 1.4 Following receipt of a draft Call-Off Contract, the Provider shall:
 - 1.4.1 notify the Authority or Contracting Body in writing that it accepts the order for Services by signing and returning the draft Call-Off Contract to the Authority or Contracting Body within one (1) working day or such other time as the Authority or Contracting Body specifies from date of receipt of the draft Call-Off Contract; or
 - 1.4.2 notify the Authority or Contracting Body in writing that it declines to accept the order for Services and provide reasons for the decision within one (1) working day or such other time as the Authority or Contracting Body specifies from date of receipt of the draft Call-Off Contract.
- 1.5 If the Provider:
 - 1.5.1 notifies the Authority or Contracting Body that it declines to accept an order for Services; or
 - 1.5.2 the time-limit referred to in paragraph 1.11.1 has expired, then the offer from the Authority or Contracting Body to the Provider shall lapse and the relevant Authority or Contracting Body may offer that order for Services to the next applicable Framework Provider in accordance with the Direct Award Criteria as stated in paragraph 1.9.2.
- 1.6 The Provider shall provide the Authority or Contracting Body with the contact details of its nominated representative who is to receive any draft Call-off Contract for Services. It is the responsibility of the Provider to ensure that the Authority or Contracting Body is notified of any changes to its nominated representative.
- 1.7 Notwithstanding the fact that a Contracting Body has followed a procedure as set out in paragraphs 1.3 to 1.12 it shall be entitled at all times to decline to make an award for its Service requirements. Nothing in this Framework Agreement will oblige any Contracting Body to place any order for Services.

FRAMEWORK ANNEX 2

PRICING MATRIX



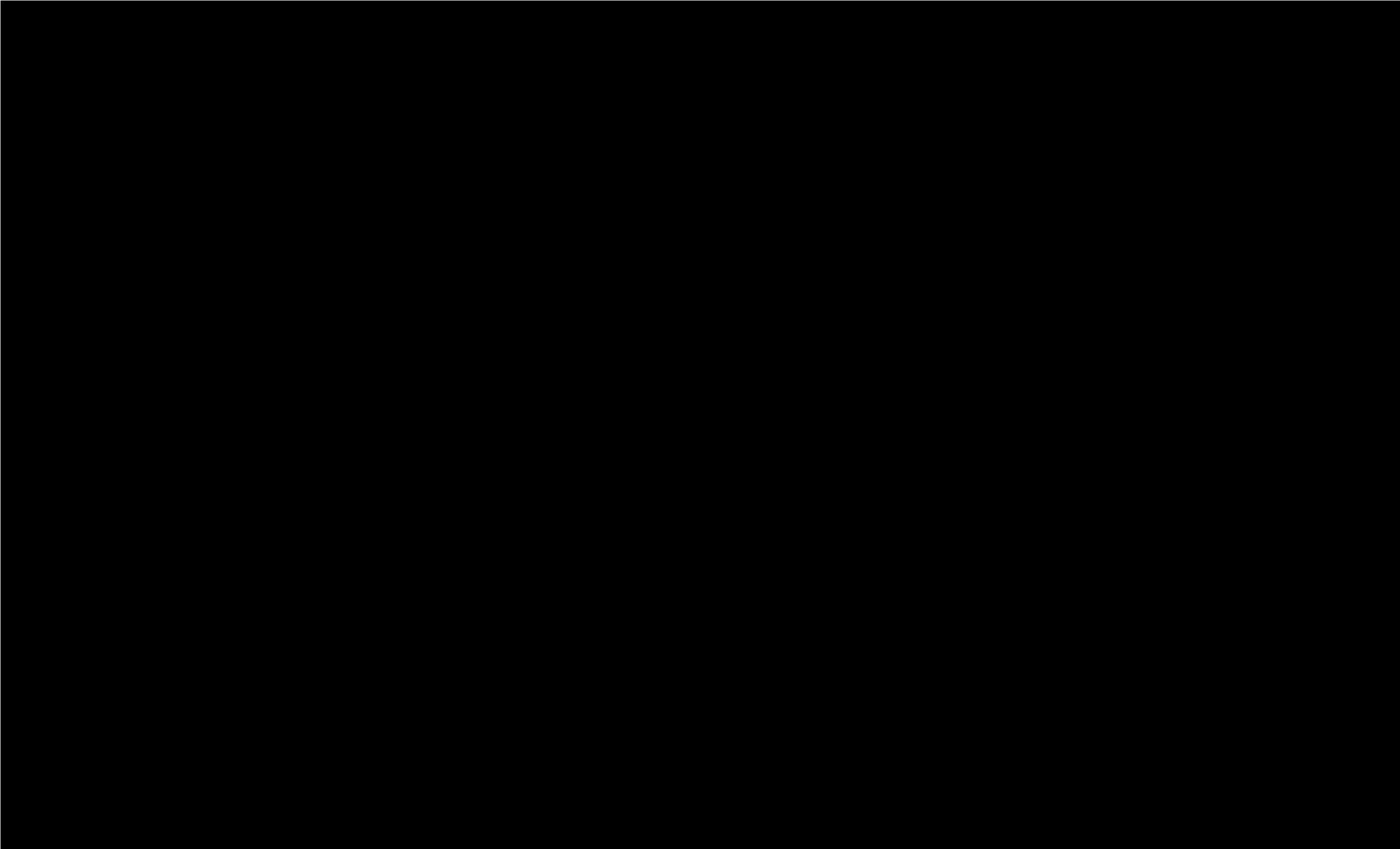
UPDATED_CLARIFICATION_Commercial_!

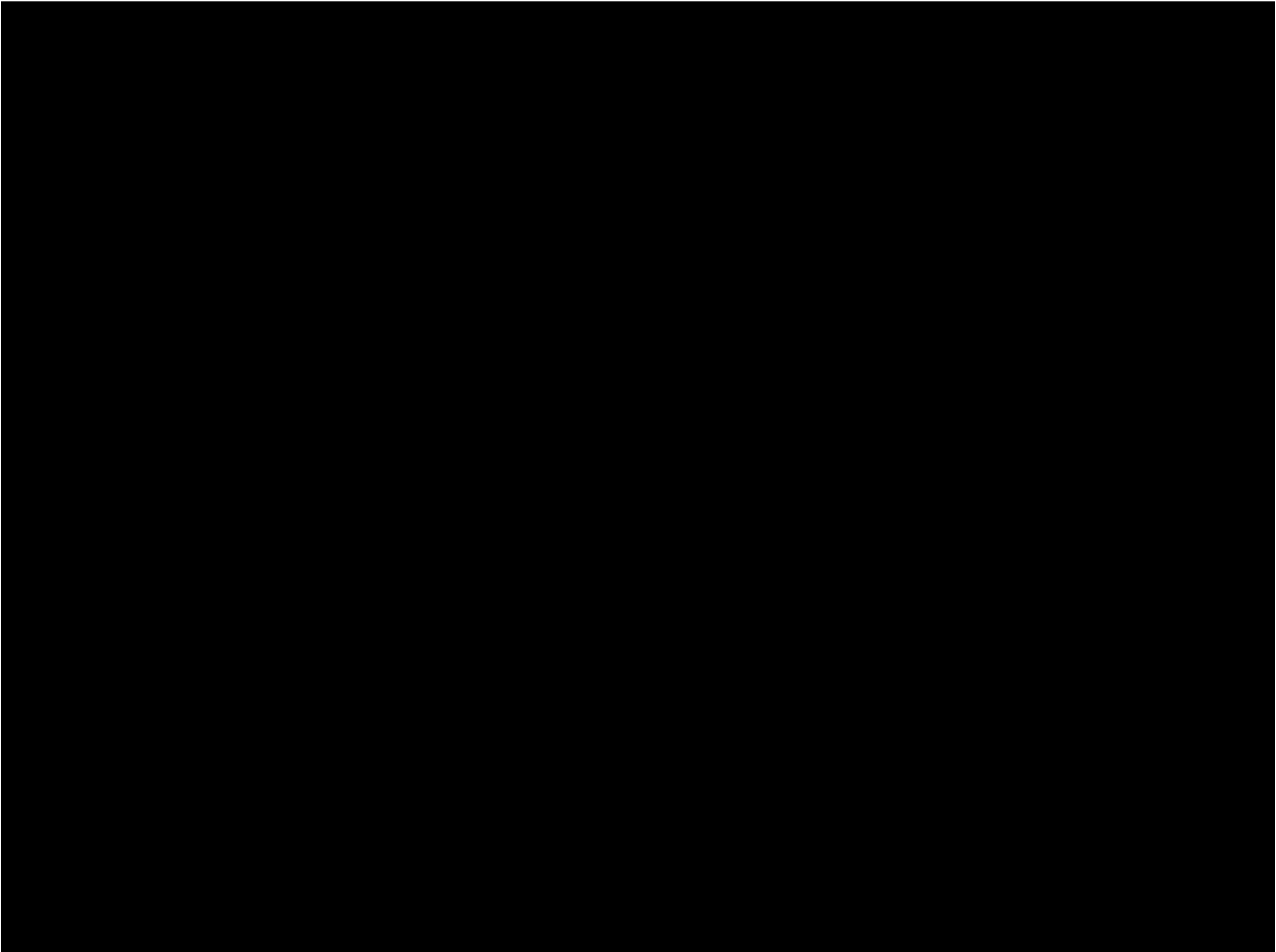
The Pricing Matrix is as per the response document titled 'Updated_Clarification Commercial_Scoring_System_NCL'. Extracted onto the following pages.

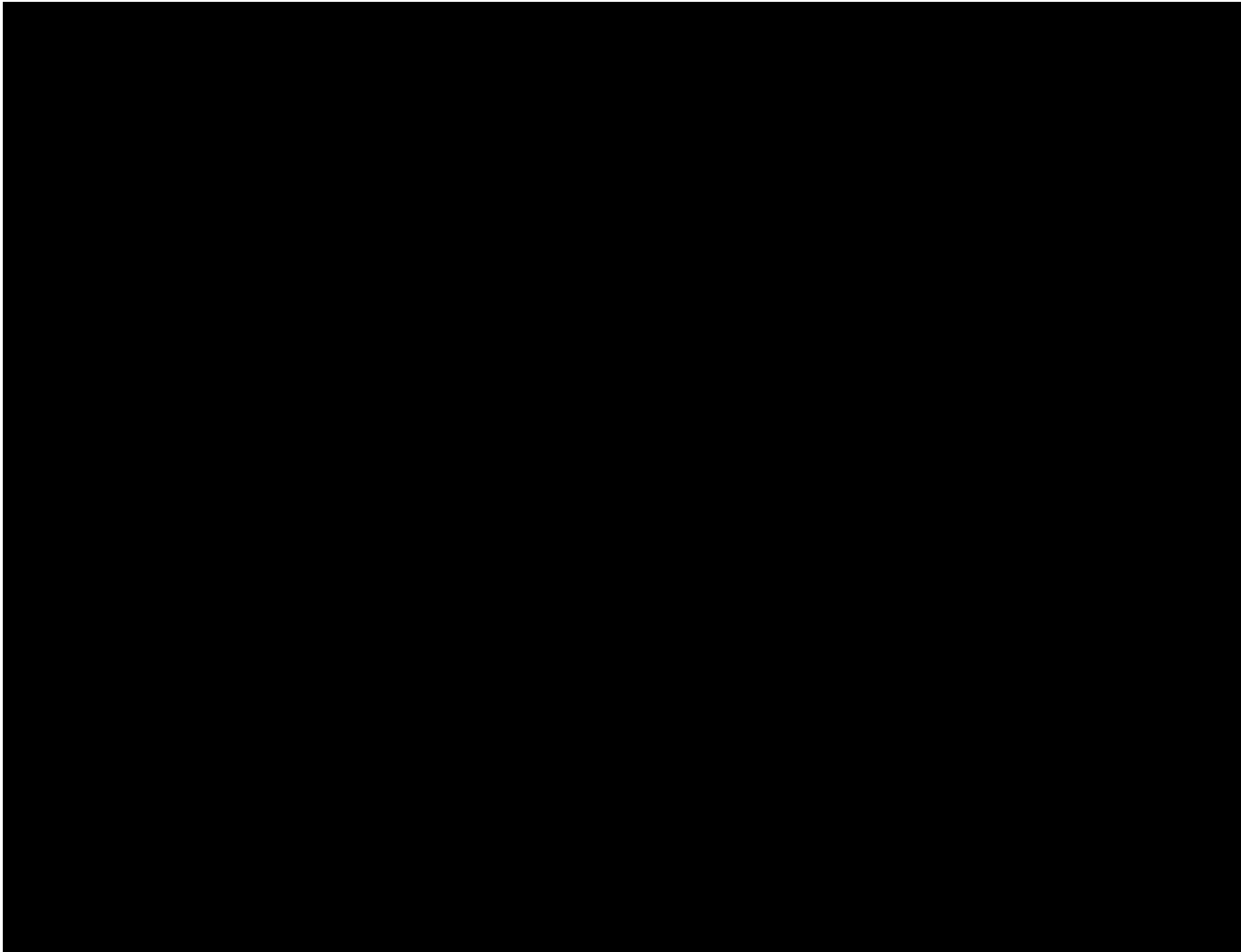
Category 1

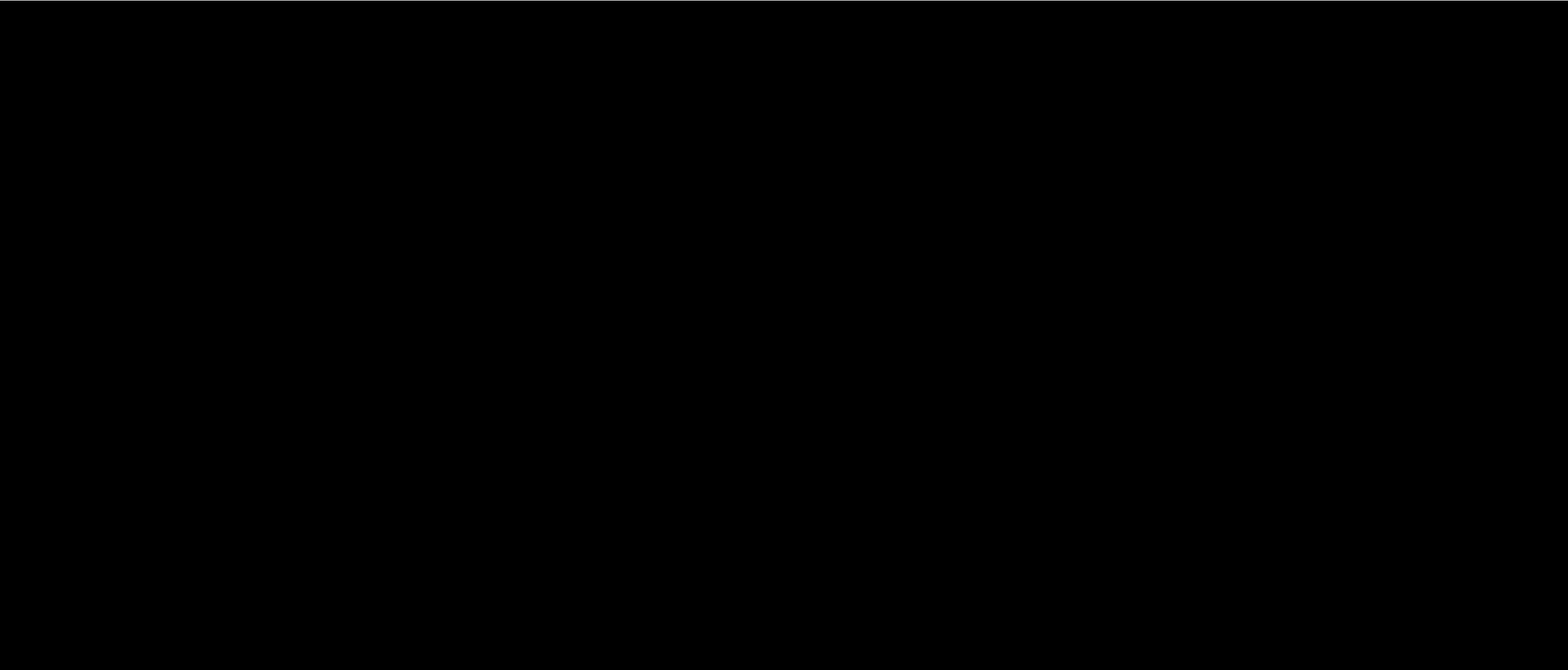
please add cost in £,000's

Optimal data selection and processing (improved datasets and identifying all those exposed LDEN>40dB and Lnight>35dB)
- Itemise each and every dataset
- Itemise licensing cost (which is likely to be similar to category 5)
- Itemise cost to develop "automation" routines (seen as one-off cost) for cleansing, pre-processing, flow of data through modelling system, etc and associated reports
- Itemise cost for input data report and any other tasks to the relevant breakpoint



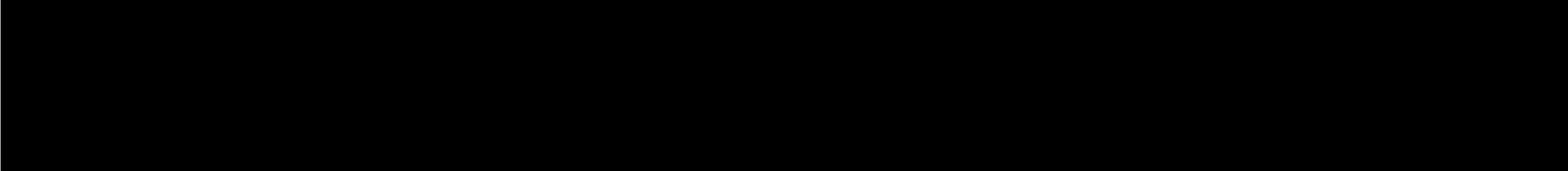


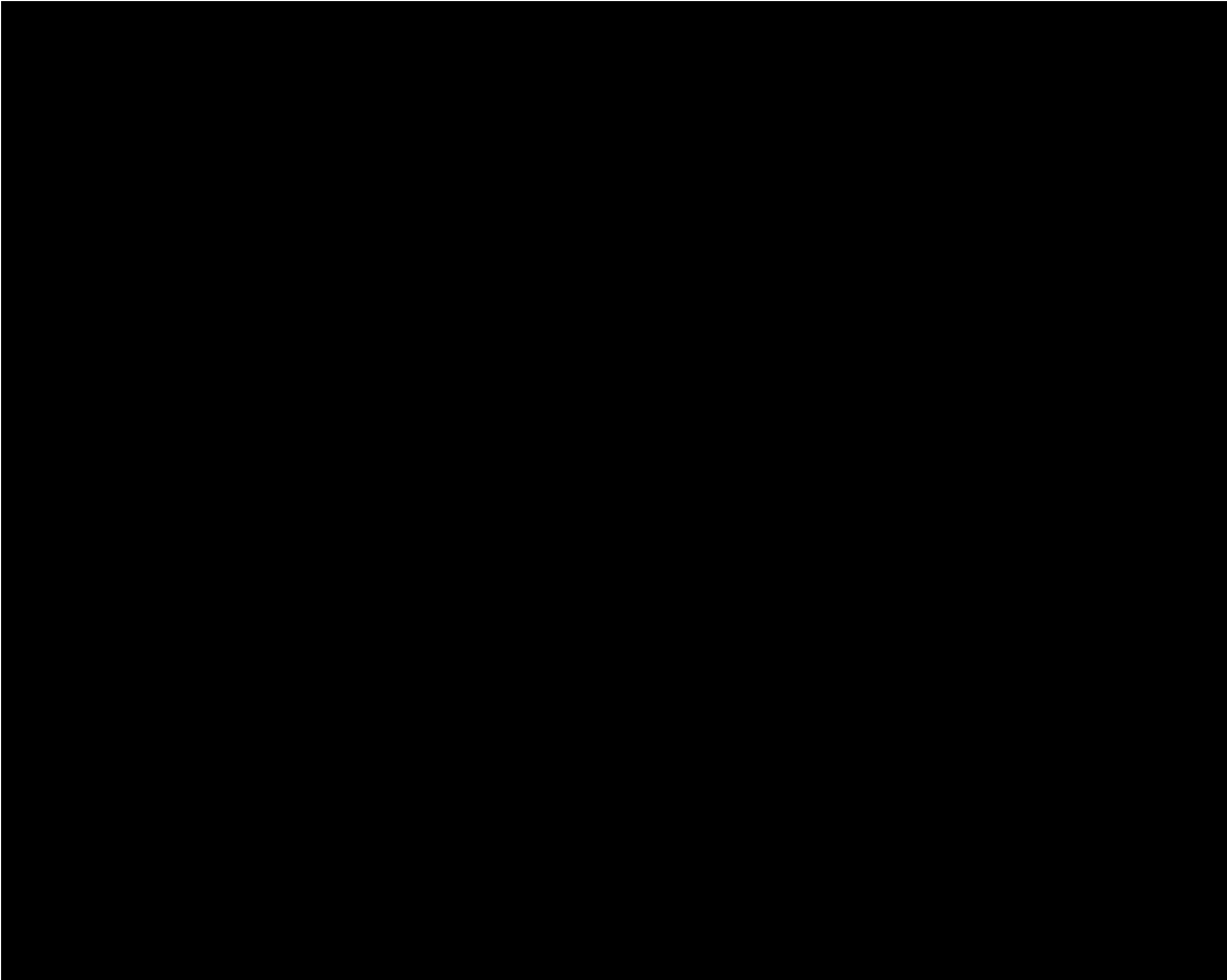


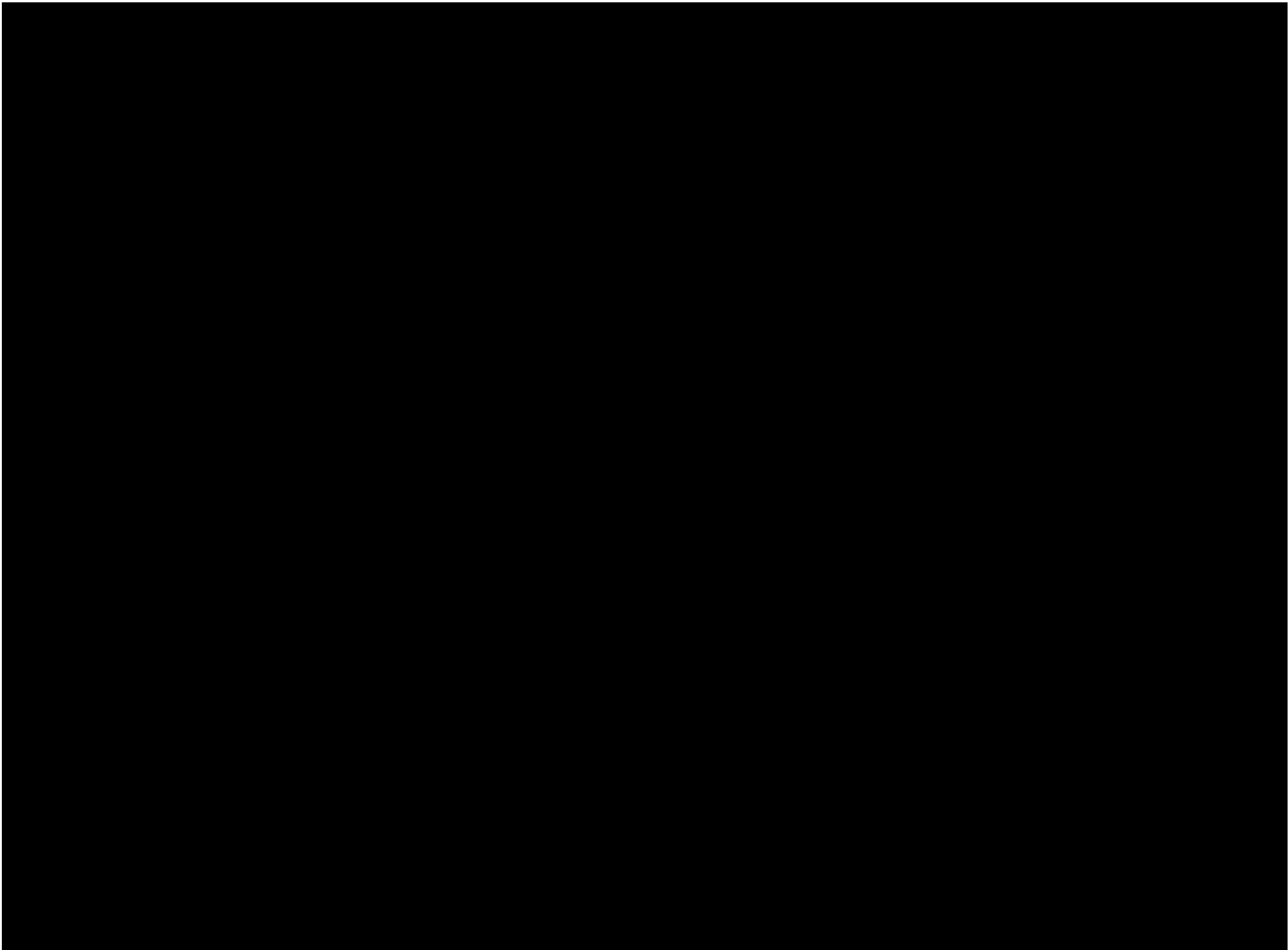


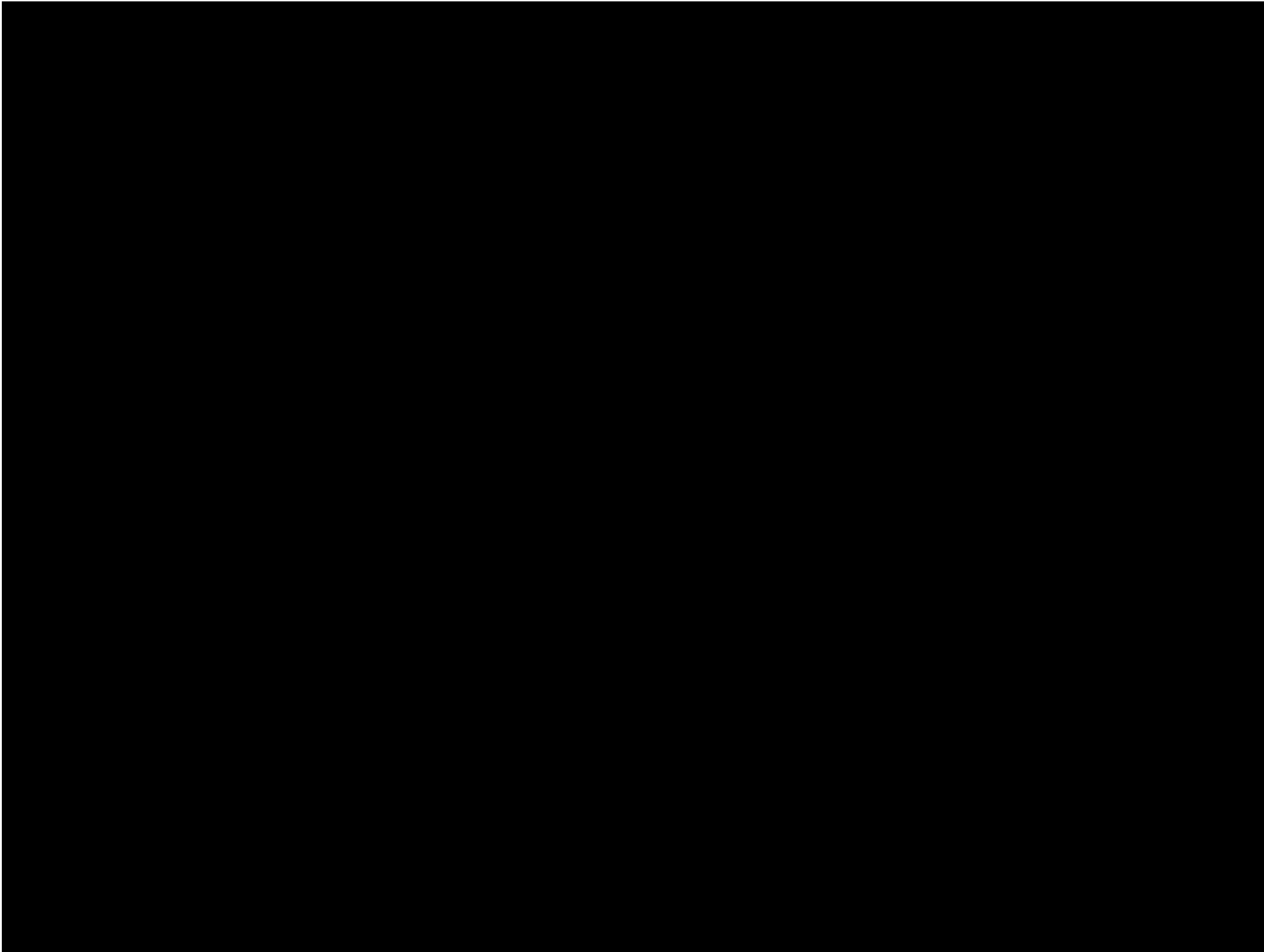
Category 2
*please add cost in
£,000's*

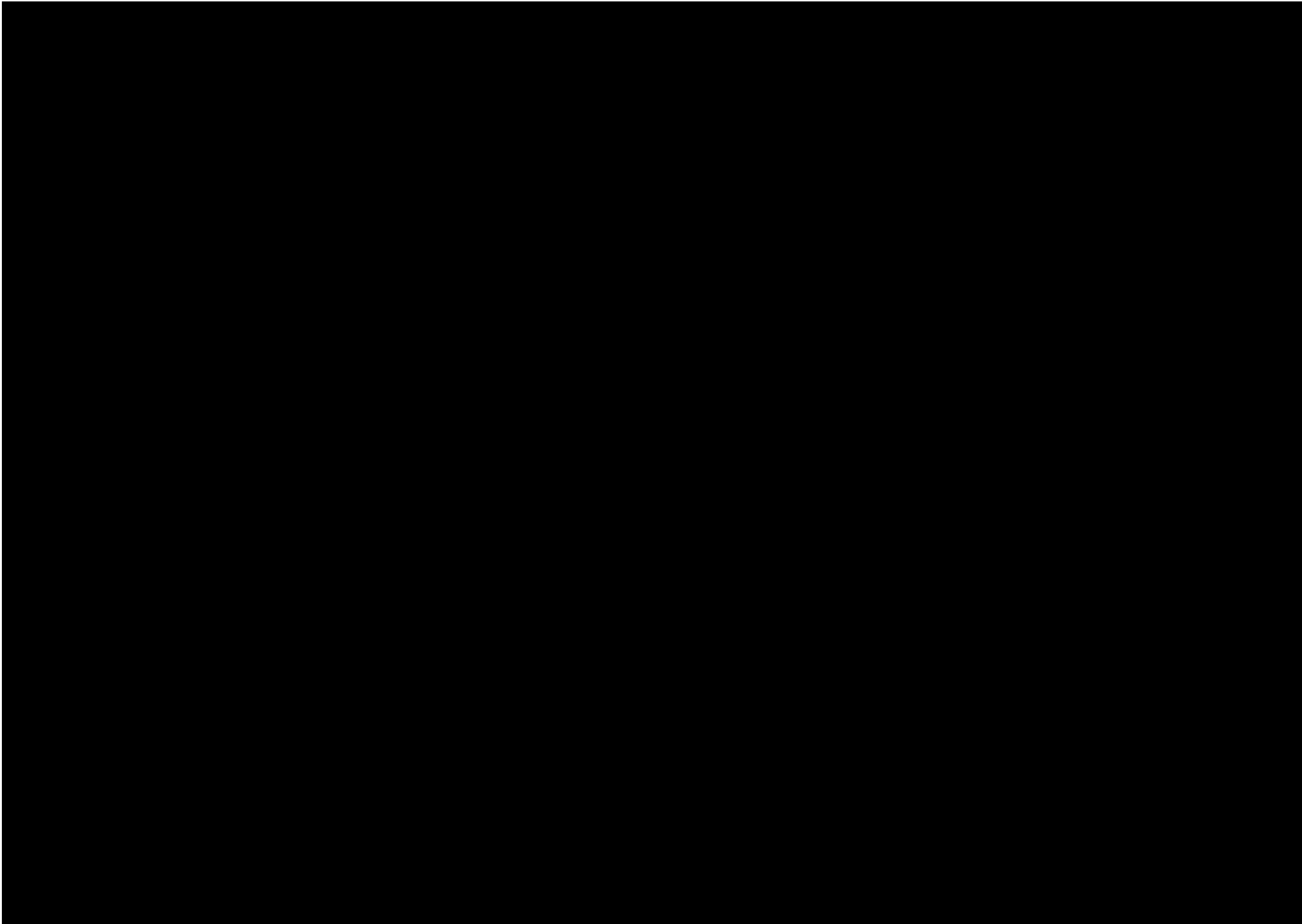
Statutory requirement data selection and processing (compliant datasets and identifying M and A roads and all major railways)
- Itemise each and every dataset
- Itemise licensing cost (which is likely to be similar to category 6)
- Itemise cost to develop "automation" routines (seen as one-off cost) for cleansing, pre-processing, flow of data through modelling system, etc and associated reports
- Itemise cost for input data report and any other tasks to the relevant breakpoint











Category 3

please add cost in £,000's

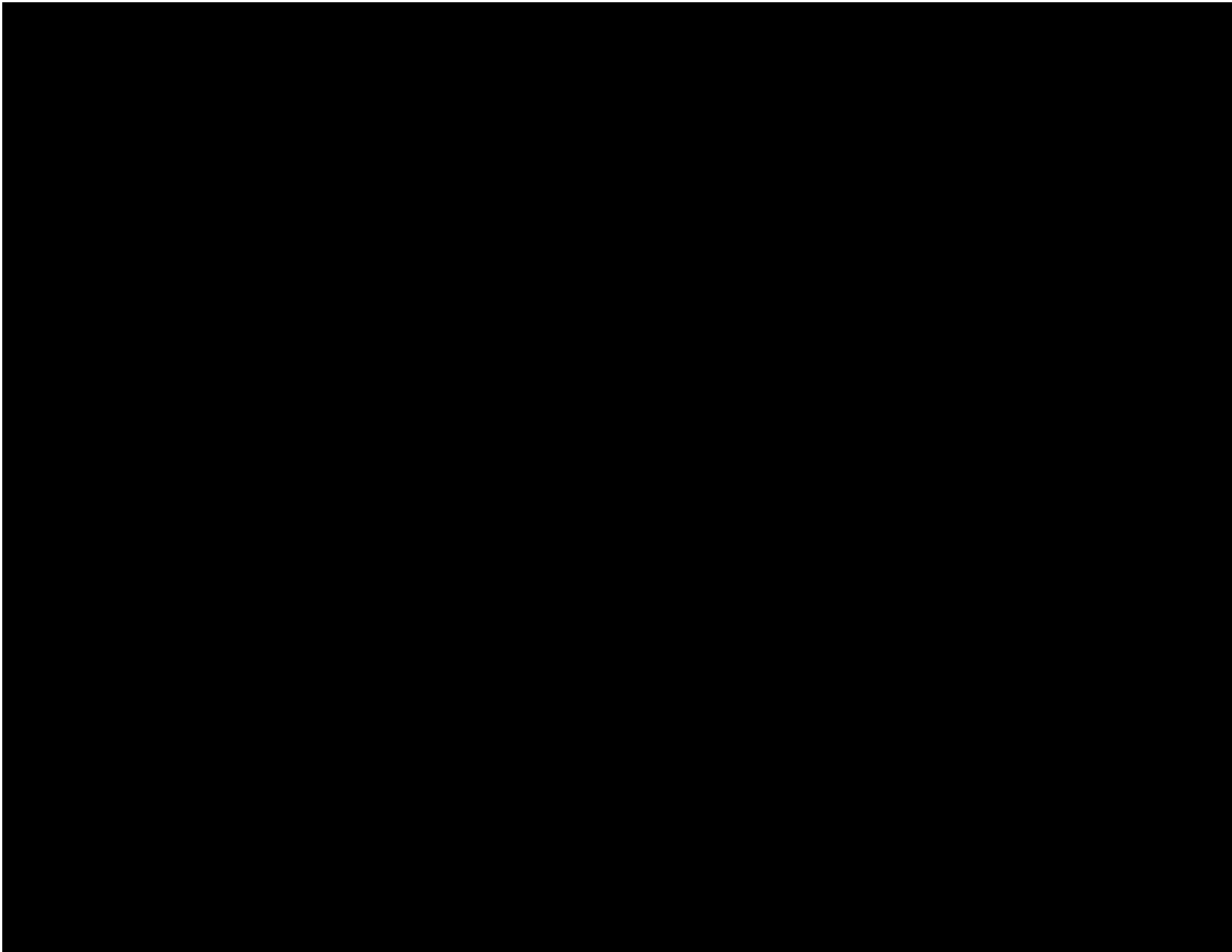
Build and demo of system
- Design, Build, Testing, Prototype and associated reports
- Demonstration (including results for END and 25YEP) and associated reports
- Licensing of each software / scripts / workflow not covered in Categories 1 and 2
- Itemise cost for data standards report, system design reports and any other tasks to the relevant breakpoints
- Itemise cost for training and materials

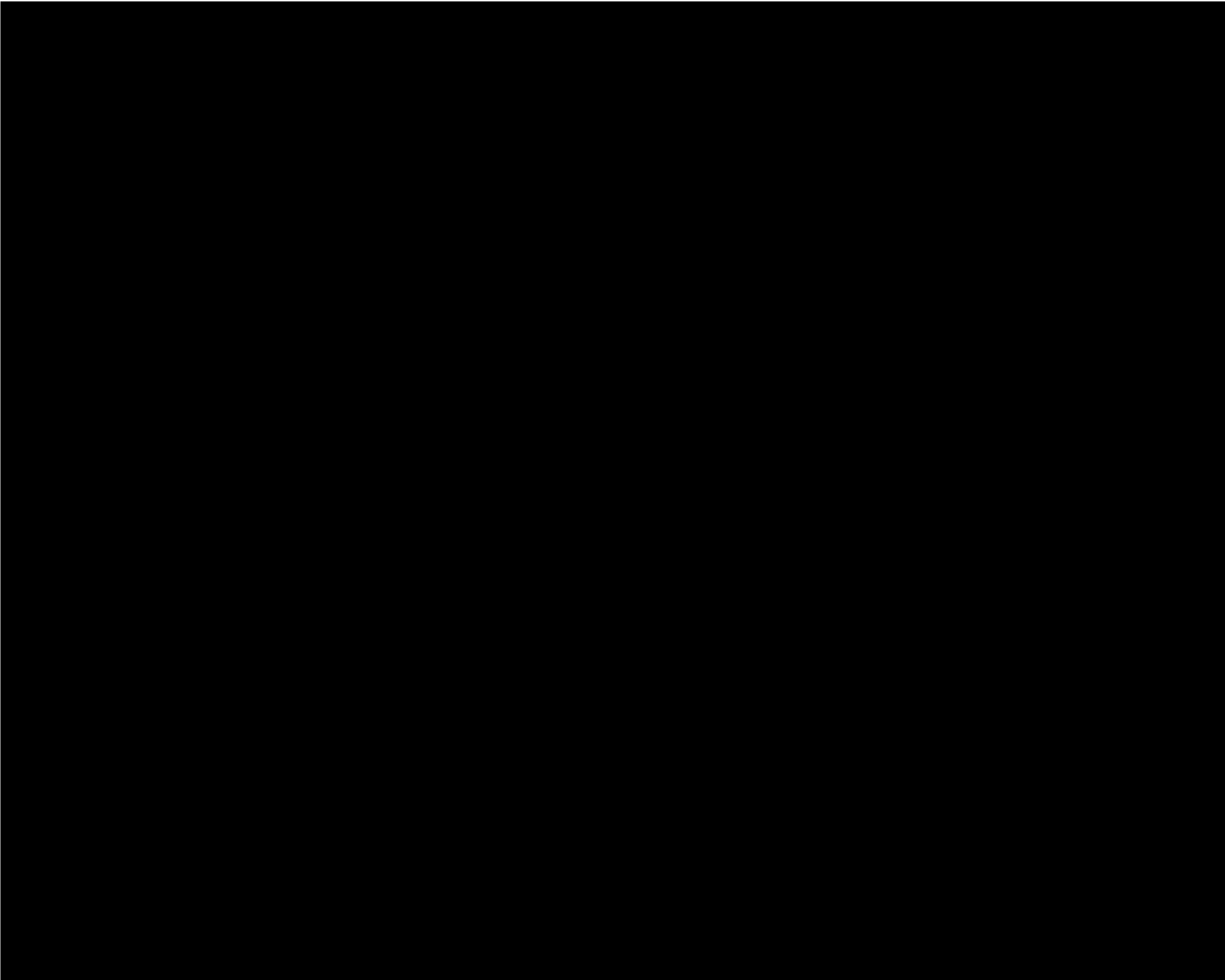
Sub-Elements

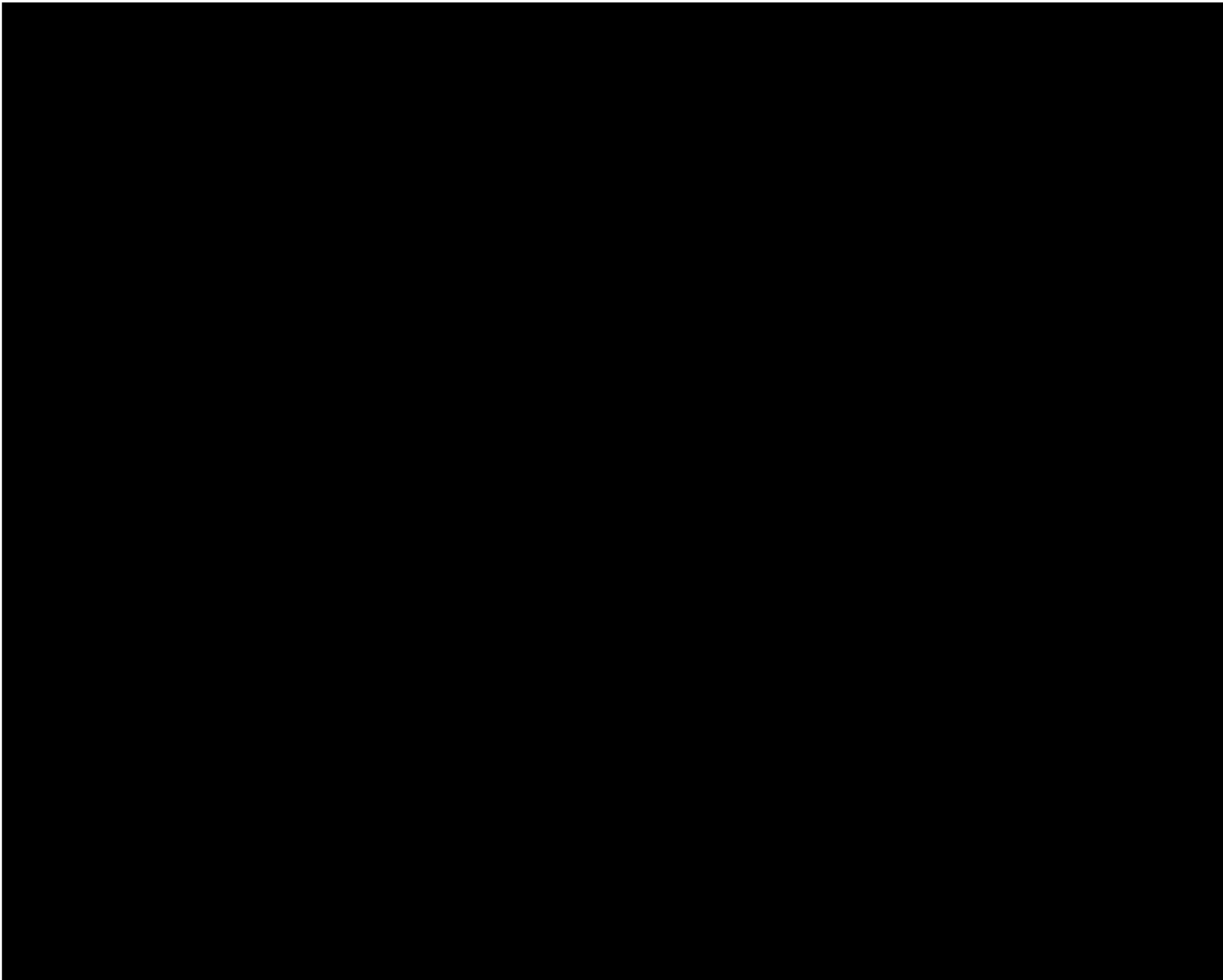
FY20/21

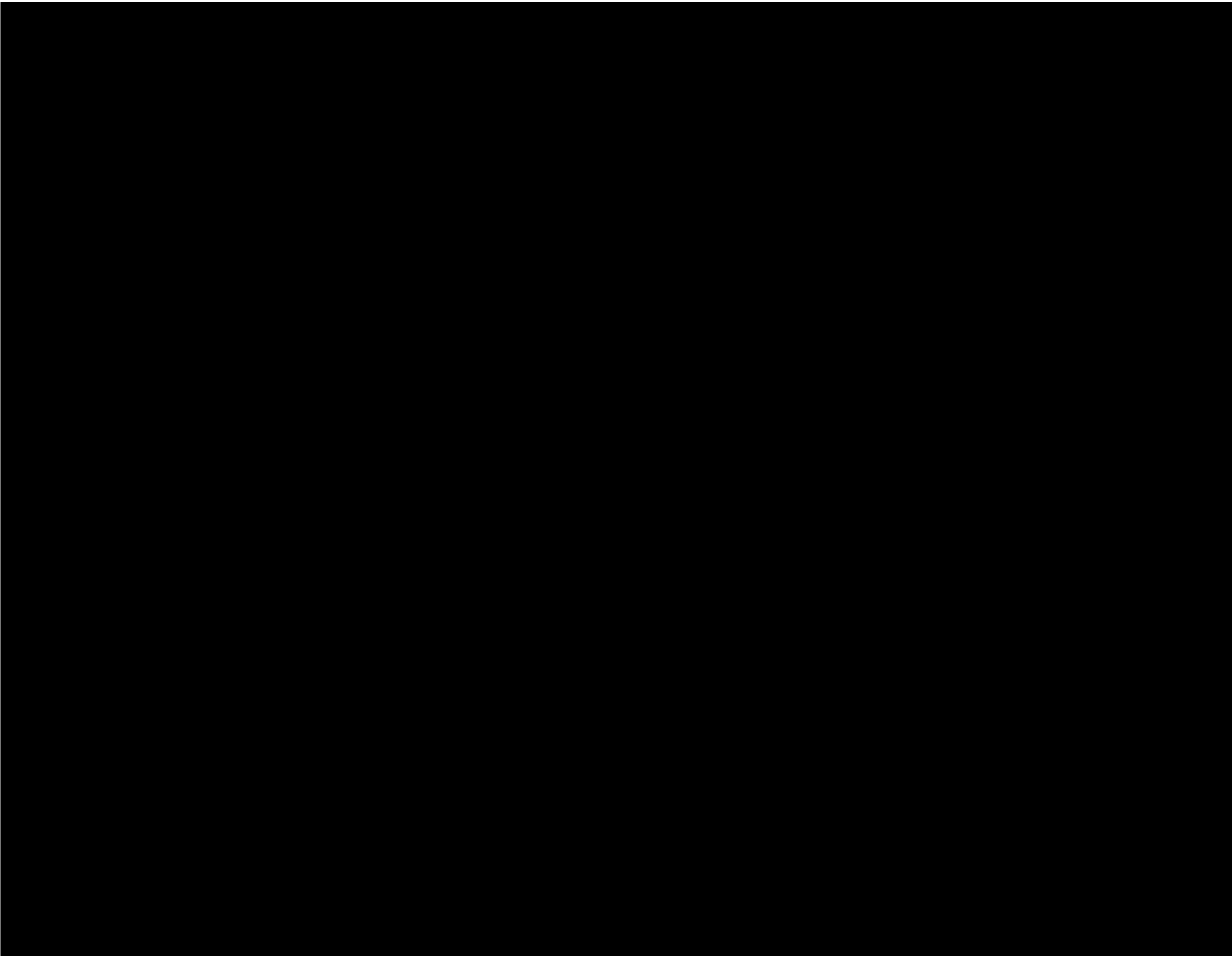
FY21/22

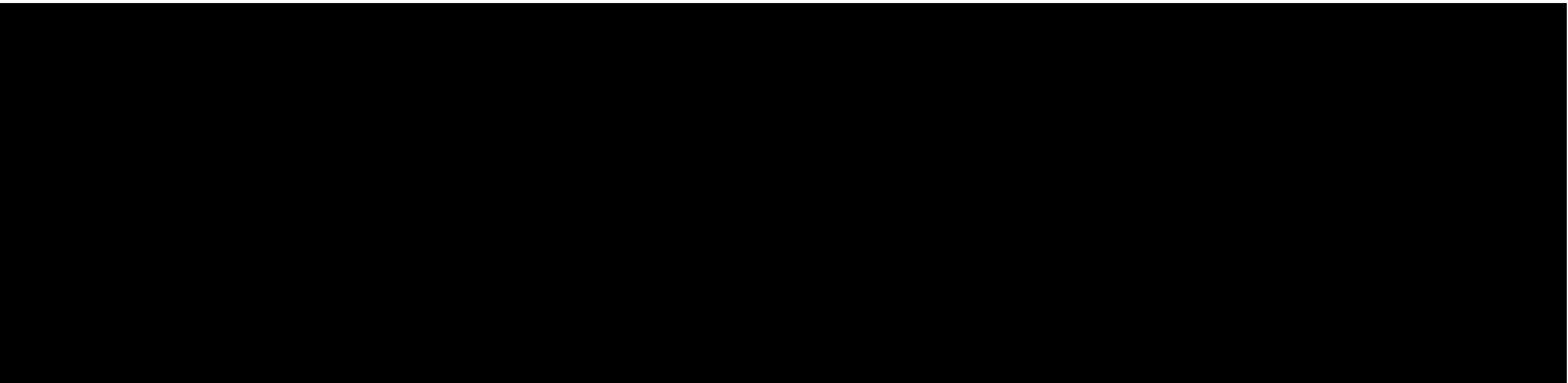
FY22/23







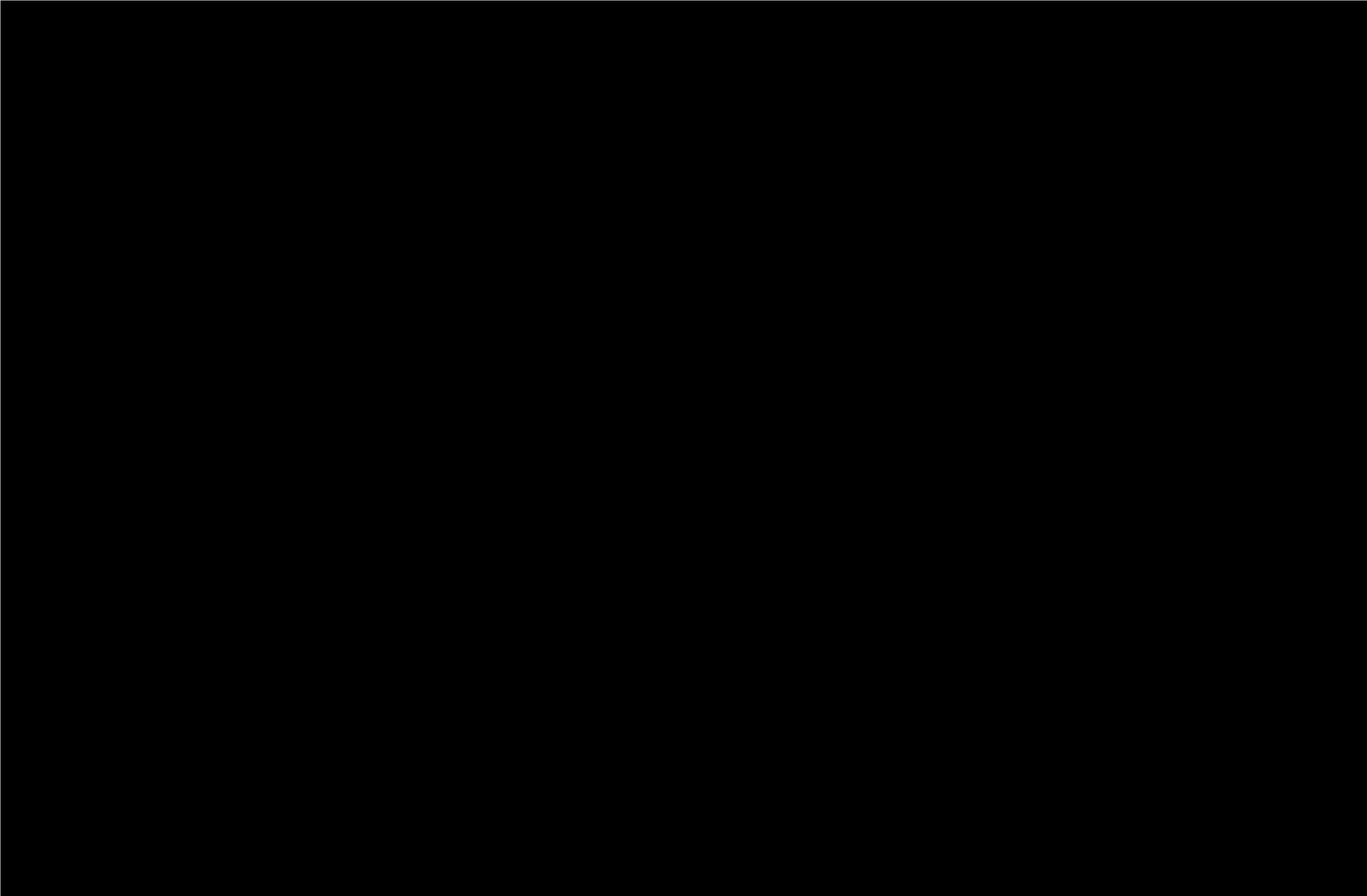


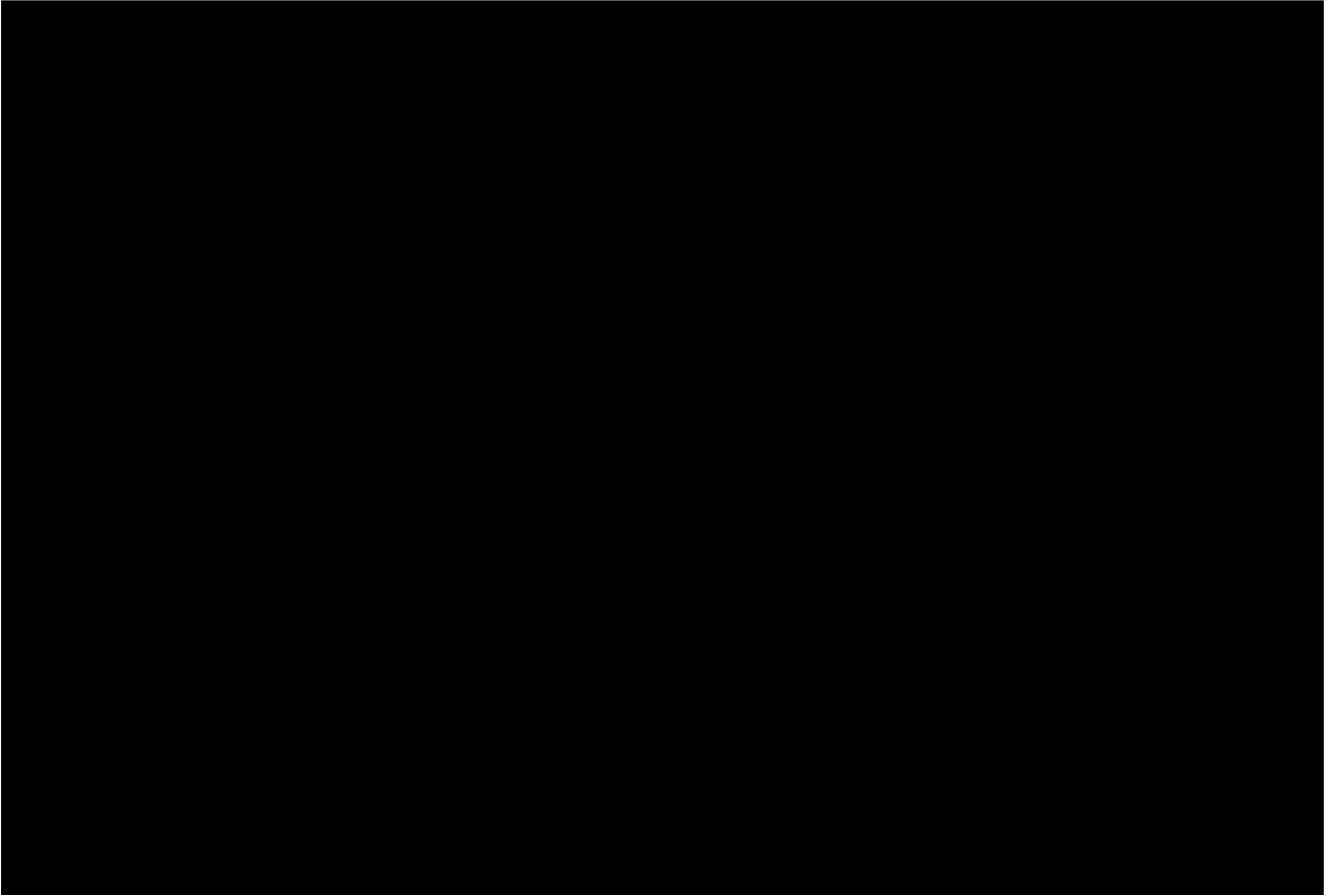


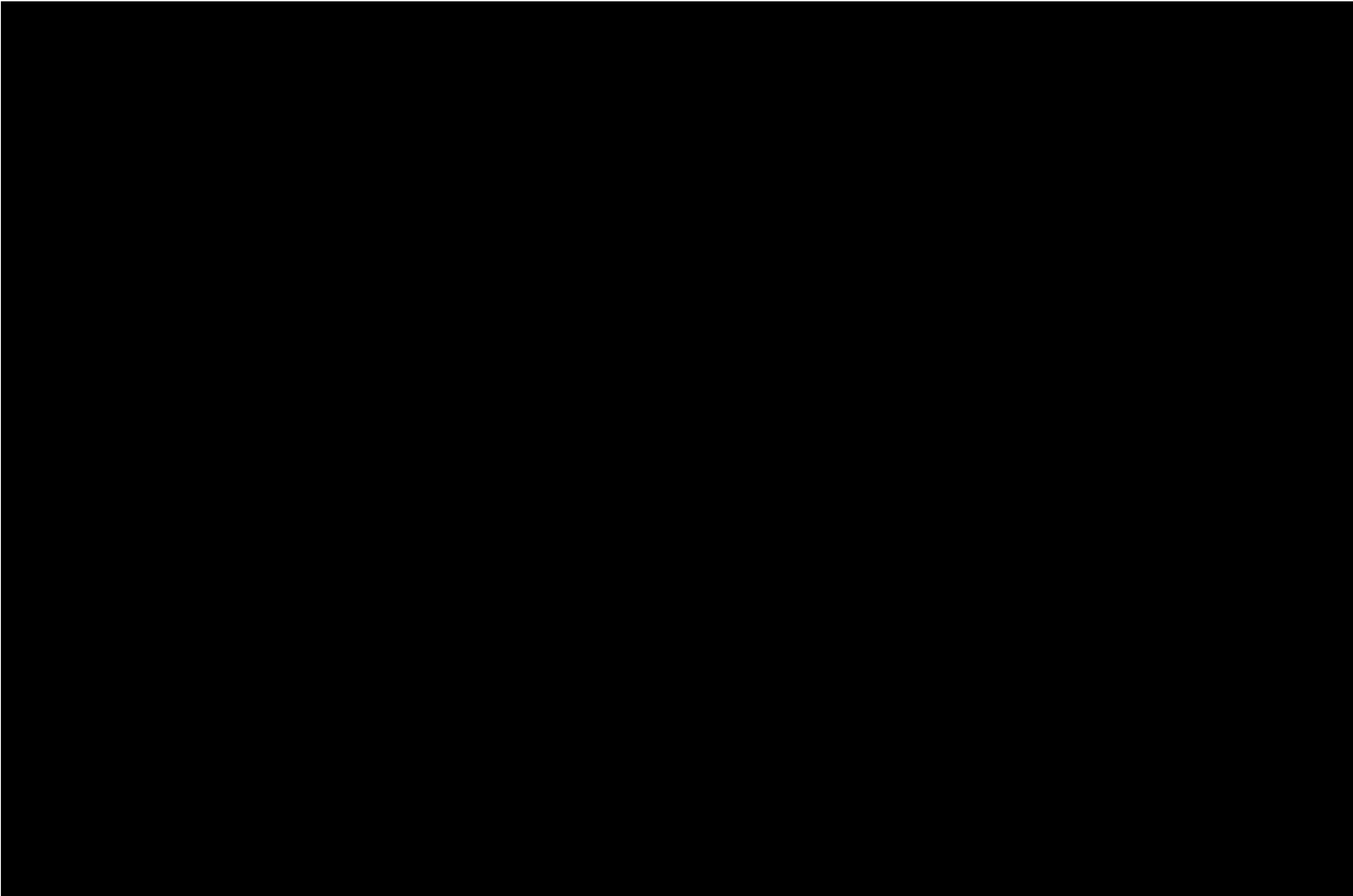
Category 4

*please add cost
in £,000's*

Annual
Runnin
g Costs
(not
data)
- Software
Licensing (incl
scripts / workflow
etc)
- Data
hostin
g
-
Suppor
t
- Itemise reports and data
transfers (incl one-off end of
contract requirements)





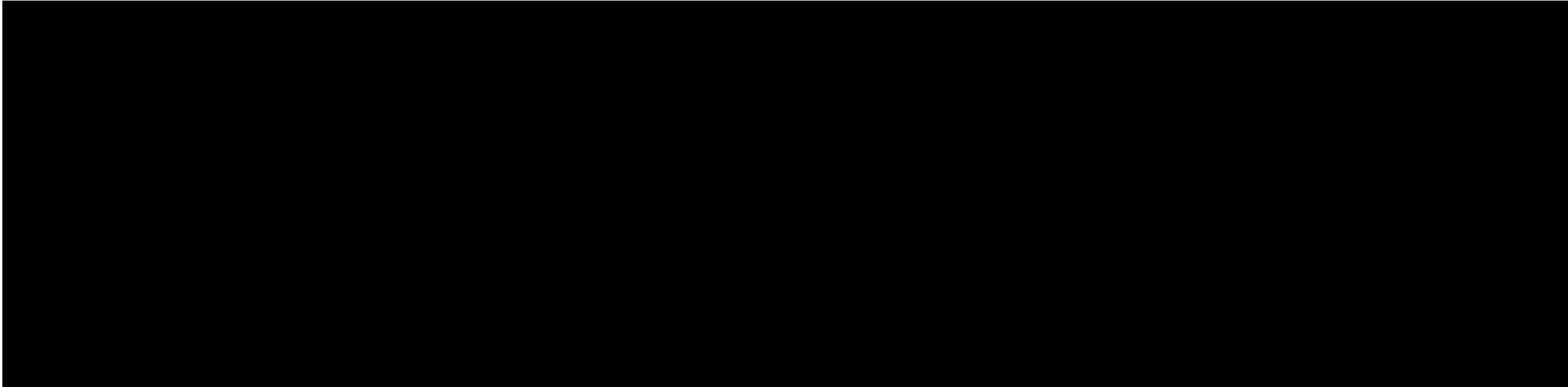




Category 5

please add cost in £,000's

- Optimal data selection and processing (improved datasets and identifying all those exposed LDEN>40dB and Lnight>35dB)
- Itemise each and every dataset
 - Itemise licensing cost (which is likely to be similar to category 1)

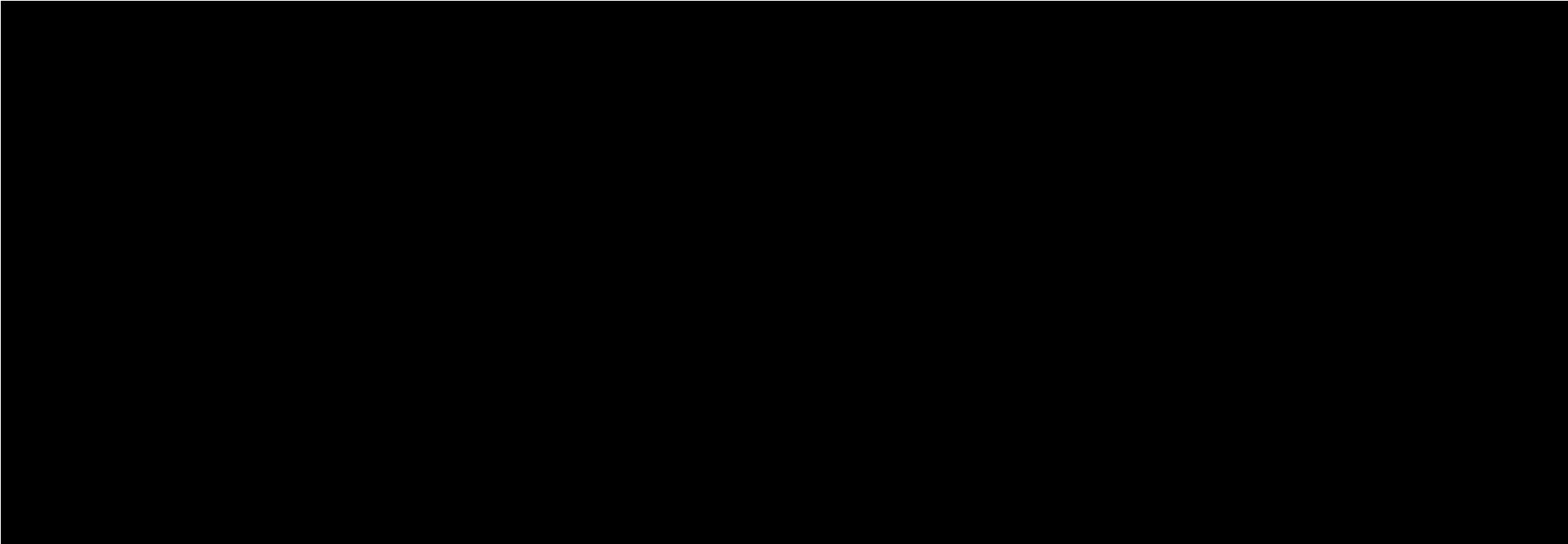




Category 6

please add cost in £,000's

- Statutory requirement data selection and processing (compliant datasets and identifying M and A roads and all major railways)
- Itemise each and every dataset
 - Itemise licensing cost (which is likely to be similar to category 2)



FRAMEWORK ANNEX 3

DRAFT CALL-OFF CONTRACT TEMPLATE

<u>FRAMEWORK AGREEMENT</u>	
Framework Agreement for the purchase of Environmental Noise Modelling Design and Build	
FRAMEWORK AGREEMENT NUMBER: To be quoted on all correspondence relating to the Order.	DATE:
BETWEEN: DEFRA Nobel House London SW1P 7JP Contact: Job Title: Telephone No: E-mail Address:	 [Contractor]
SERVICES TO BE PROVIDED AT:	INVOICE ADDRESS:
PROJECT DESCRIPTION:	
CONTRACT PERIOD:	
This Framework Agreement shall take effect on the date of execution hereof and, subject to the rights of termination contained herein, shall expire on the <i>[insert anticipated date of expiry/duration of project/[x] anniversary thereof]</i> .	
ESTIMATED CONTRACT VALUE:	
[insert estimated contract value for the duration of Framework Agreement]	
DESCRIPTION OF GOODS AND/OR SERVICES:	
The range of Goods and/or Services to be supplied under this Framework Agreement and the delivery schedule agreed between DEFRA and the Contractor are as set out in Schedule 1.	
Any variation or amendment to the Goods or Services shall not be made without prior	

agreement in writing and signed by both parties.

RATES AND CHARGES:	
---------------------------	--

The prices to be paid to the Contractor for the supply to DEFRA of specific items within the range of Goods and Services are those set out in Schedule 2 below.

Proposals to vary the prices on renewal or extension of this Framework Agreement must be made by the Contractor to DEFRA in writing [three months] before the expiry date of this Framework Agreement.

TERMS:	
---------------	--

Purpose of Framework Agreement

This Framework Agreement governs the overall relationship between DEFRA and the Contractor with respect to the supply of specific items within an agreed range of goods or services at agreed prices.

DEFRA is entitled (but not required) at any time during the duration of this Framework Agreement to order Goods or Services from the Contractor in accordance with the ordering procedures set out below, and the Contractor shall supply such Goods or Services in accordance with all applicable provisions of this Framework Agreement. No Work Package Order will be legally binding on DEFRA until both parties authorised signatories have duly signed such Work Package Order.

Scope of Framework Agreement

The specific items that may be ordered as Goods and Services by DEFRA under this Framework Agreement are listed in Schedule 1 below. DEFRA is not bound to purchase any or all of its requirements or any given value or volume of Goods or Services from the Contractor.

Method of ordering

DEFRA shall be entitled at any time during the term of this Framework Agreement to order Goods and/or Services from the Contractor by issuing a Work Package Order for the supply of such Goods or Services.

The terms and conditions relating to a Work Package Order shall comprise all of the clauses and schedules of this Framework Agreement and the provisions of the Work Package Order, including any terms included in the Work Package Order pursuant to the clause below.

Where DEFRA or the Contractor see the need for including an additional term in any Work Package Order, either party may at any time request such term by sending written notice thereof to the other party prior to the placing of a Work Package Order. The parties shall discuss any term requested by either party, but no term shall become part of the Work Package Order to which it relates unless agreed by both parties. In the event of any conflict or inconsistency between any term of a Work Package Order and any provisions of the clauses or schedules, the term in the Work Package Order shall prevail, but only in relation to the Goods or Services supplied under the relevant Work Package Order in which such terms are contained.

Termination

DEFRA may terminate this Framework Agreement at any time by giving notice to the Contractor.

In the event of termination of this Framework Agreement or any or all of the Work

Package Orders, DEFRA shall, in respect of any non-discharged Work Package Orders, be entitled, without prejudice to DEFRA's other rights and remedies, to:

- a) terminate the non-discharged Work Package Orders and to return any or all of the Goods relating to the non-discharged order (including those which have previously been accepted by DEFRA), and the Contractor shall give to DEFRA a full refund of all monies paid by DEFRA to the Contractor in connection with such returned items; and/or
- b) obtain a refund of any charges paid by DEFRA in respect of any Services which have not been performed by the Contractor in accordance with the terms of the non-discharged Work Package Order; and/or
- c) allow the Work Package Order to continue until the obligations under it are fulfilled.

Order Of Precedence

For the purposes of this Framework Agreement, Clause 2 of the General Terms will be deleted in its entirety and replaced with the following:

"In the event of and only to the extent of any conflict between this Framework Agreement, the Work Package Order, the General Terms or the Special Terms, the conflict shall be resolved in accordance with the following order of precedence:

- (a) the Special Terms;
- (b) the General Terms;
- (c) the Work Package Order;
- (d) this Framework Agreement; and
- (e) any other document referred to in the Agreement

Unless expressly agreed, a document varied pursuant to clause 8 shall not take higher precedence than specified here"

Definitions

For the purposes of this Framework Agreement, the definition of Agreement in Schedule 1 of the General Terms shall be amended to read:

"**Agreement:** means the agreement between DEFRA and the Contractor consisting of the Framework Agreement dated [*insert date of framework*], these General Terms, the Work Package Order, the Special Terms and any other documents (or parts thereof) specified by DEFRA."

For the purposes of this Framework Agreement, a new definition shall be included in Schedule 1 of the General Terms to read:

"**Work Package Order:** means the Work Package Order form from DEFRA to the Contractor setting out the particular requirements of an order under the Framework Agreement"

SIGNATURE:	
Signed on behalf of DEFRA:	Signed on behalf of the Contractor:
Authorised Signatory:	Authorised Signatory:
Print name:	Print name:
Job title:	Job title:
Date:	Date:

Schedule 1
Goods and Services available

As detailed in Part A The Services.

Schedule 2 Rates and Charges

*[include price of contract and breakdown of costs, rates and charges, excluding any applicable tax, **add details of any agreed payment dates or terms** or applicable rate table or payment profile]*



UPDATED_CLARIFIC
ATION_Commercial_!

Schedule 3
Form of Work Package Order, General Terms and Special Terms

The Defra / Government Legal Model Contract for Services will be used as the basis for all Call-offs. It is reasonable to expect that these terms will be adapted and amended with multiple minor variations to these terms to be adopted for each call-off.

MODEL SERVICES AGREEMENT

DATED

2021

(1) DEFRA and

(2) NOISE CONSULTANTS LIMITED

AGREEMENT

relating to

NOISE MODELLING DESIGN & BUILD CALL-OFF

CONTENTS

SECTION A - PRELIMINARIES	1
1 DEFINITIONS AND INTERPRETATION	1
2 DUE DILIGENCE.....	3
3 WARRANTIES.....	4
SECTION B - THE SERVICES	7
4 TERM.....	7
5 SERVICES	8
6 IMPLEMENTATION	13
7 PERFORMANCE INDICATORS	14
8 SERVICES IMPROVEMENT.....	16
9 EQUIPMENT AND MAINTENANCE	17
SECTION C - PAYMENT, TAXATION AND VALUE FOR MONEY PROVISIONS.....	19
10 FINANCIAL AND TAXATION MATTERS	19
SECTION D - CONTRACT GOVERNANCE.....	21
11 GOVERNANCE	21
12 RECORDS, REPORTS, AUDITS & OPEN BOOK DATA	21
13 CHANGE.....	21
SECTION E - SUPPLIER PERSONNEL AND SUPPLY CHAIN.....	23
14 SUPPLIER PERSONNEL	23
15 SUPPLY CHAIN RIGHTS AND PROTECTIONS.....	26
SECTION F - INTELLECTUAL PROPERTY, DATA AND CONFIDENTIALITY	33
16 INTELLECTUAL PROPERTY RIGHTS.....	33
17 LICENCES GRANTED BY THE SUPPLIER	34
18 LICENCES GRANTED BY THE AUTHORITY	34
19 IPRs INDEMNITY	39
19A OPEN SOURCE PUBLICATION.....	41
20 AUTHORITY DATA AND SECURITY REQUIREMENTS.....	41
21 CONFIDENTIALITY	42
22 TRANSPARENCY AND FREEDOM OF INFORMATION	44
23 PROTECTION OF PERSONAL DATA.....	46
24 PUBLICITY AND BRANDING	52
SECTION G - LIABILITY, INDEMNITIES AND INSURANCE	54
25 LIMITATIONS ON LIABILITY	54
26 INSURANCE	57
SECTION H - REMEDIES AND RELIEF	58
27 RECTIFICATION PLAN PROCESS.....	58
28 DELAY PAYMENTS.....	59
29 REMEDIAL ADVISER	60
30 STEP-IN RIGHTS.....	62
31 AUTHORITY CAUSE	64
32 FORCE MAJEURE	66
SECTION I - TERMINATION AND EXIT MANAGEMENT	68

33	TERMINATION RIGHTS	68
34	CONSEQUENCES OF EXPIRY OR TERMINATION	69
SECTION J - MISCELLANEOUS AND GOVERNING LAW		73
35	COMPLIANCE.....	73
36	ASSIGNMENT AND NOVATION.....	73
37	WAIVER AND CUMULATIVE REMEDIES	74
38	RELATIONSHIP OF THE PARTIES	74
39	PREVENTION OF FRAUD AND BRIBERY	75
40	SEVERANCE	76
41	FURTHER ASSURANCES	77
42	ENTIRE AGREEMENT	77
43	THIRD PARTY RIGHTS.....	77
44	NOTICES	77
45	DISPUTES.....	79
46	GOVERNING LAW AND JURISDICTION	79

SCHEDULES

1. Definitions
 2. Service Requirements
 - 2.1 Services Description
 - 2.2 Performance Levels
 - 2.3 Standards
 - 2.4 Security Management
 - 2.5 Insurance Requirements
 3. Authority Responsibilities
 4. Supplier Matters
 - 4.1 Supplier Solution
 - 4.2 Commercially Sensitive Information
 - 4.3 Notified Key Sub-contractors
 - 4.4 Third Party Contracts
 5. Software
 6. Implementation and Testing
 - 6.1 Implementation Plan
 - 6.2 Testing Procedures
 7. Financial Matters
 - 7.1 Charges and Invoicing
 - 7.2 Payments on Termination
 - 7.3 Benchmarking
 - 7.4 Financial Distress
 - 7.5 Financial Reports and Audit Rights
 - 7.6 Anticipated Savings
 8. Governance
 - 8.1 Governance
 - 8.2 Change Control Procedure
 - 8.3 Dispute Resolution Procedure
 - 8.4 Reports and Records Provisions
 - 8.5 Exit Management
 - 8.6 Service Continuity Plan and Corporate Resolution Planning
 - 8.7 Conduct of Claims
-

- 9. Employment
 - 9.1 Staff Transfer
 - 9.2 Key Personnel
 - 10. Guarantee
 - 11. Processing Personal Data
-

BETWEEN:

- (1) [NAME OF THE AUTHORITY] of [] (the “Authority”); and
- (2) [NAME OF THE SUPPLIER] a company registered in [England and Wales] under company number [] whose registered office is at [] (the “Supplier”)

(each a “Party” and together the “Parties”).

INTRODUCTION

[Set out description of background and objectives of the procurement- for example:

- (A) The Authority [insert background of relevant functions of the Authority] and wishes to [insert objectives of project].
- (B) On [insert date] the Authority advertised in the Official Journal of the European Union (reference [insert OJEU number]), inviting prospective suppliers to submit proposals for the [insert description of services].
- (C) The Supplier is a leading provider of [insert business of Supplier] and has experience in [insert services being procured].
- (D) On the basis of the Supplier's response to the advertisement and a subsequent tender process, the Authority selected the Supplier as its preferred supplier.
- (E) Following negotiations, the Parties have agreed to contract with each other in accordance with the terms and conditions set out below.]

IT IS AGREED as follows:

SECTION A - PRELIMINARIES

1 DEFINITIONS AND INTERPRETATION

1.1 In this Agreement, unless otherwise provided or the context otherwise requires, capitalised expressions shall have the meanings set out in Schedule 1 (Definitions) or the relevant Schedule in which that capitalised expression appears.

1.2 In this Agreement, unless the context otherwise requires:

- (a) the singular includes the plural and vice versa;
 - (b) reference to a gender includes the other gender and the neuter;
 - (c) references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Central Government Body;
 - (d) a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
-

- (e) any reference in this Agreement which immediately before Exit Day is a reference to (as it has effect from time to time):
 - (i) any EU regulation, EU decision, EU tertiary legislation or provision of the EEA agreement (“EU References”) which is to form part of domestic law by application of section 3 of the European Union (Withdrawal) Act 2018 and which shall be read on and after Exit Day as a reference to the EU References as they form part of domestic law by virtue of section 3 of the European Union (Withdrawal) Act 2018 as modified by domestic law from time to time; and
 - (ii) any EU institution or EU authority or other such EU body shall be read on and after Exit Day as a reference to the UK institution, authority or body to which its functions were transferred;
- (f) the words “including”, “other”, “in particular”, “for example” and similar words shall not limit the generality of the preceding words and shall be construed as if they were immediately followed by the words “without limitation”;
- (g) references to “writing” include typing, printing, lithography, photography, display on a screen, electronic and facsimile transmission and other modes of representing or reproducing words in a visible form, and expressions referring to writing shall be construed accordingly;
- (h) the headings are for ease of reference only and shall not affect the interpretation or construction of this Agreement;
- (i) unless otherwise provided and save for references in Annexes 1 to 3 of Schedule 5 (Software) and in Schedule 10 (Guarantee), references to Clauses and Schedules are references to the clauses and schedules of this Agreement and references in any Schedule to Paragraphs, Parts and Annexes are, unless otherwise provided, references to the paragraphs, parts and annexes of the Schedule or the Part of the Schedule in which the references appear; and
- (j) references to this Agreement are references to this Agreement as amended from time to time.

1.3 Where a standard, policy or document is referred to in this Agreement by reference to a hyperlink, then if the hyperlink is changed or no longer provides access to the relevant standard, policy or document, the Supplier shall notify the Authority and the Parties shall update this Agreement with a reference to the replacement hyperlink.

1.4 If there is any conflict between the Clauses and the Schedules and/or any Annexes to the Schedules, the conflict shall be resolved in accordance with the following order of precedence:

- (a) the Clauses and Schedule 1 (Definitions);
 - (b) Schedules 2.1 (Services Description) and 2.2 (Performance Levels) and their Annexes;
 - (c) any other Schedules and their Annexes (other than Schedule 4.1 (Supplier
-

Solution) and its Annexes); and

(d) Schedule 4.1 (Supplier Solution) and its Annexes (if any).

1.5 The Schedules and their Annexes form part of this Agreement.

1.6 In entering into this Agreement the Authority is acting as part of the Crown.

2 DUE DILIGENCE

2.1 The Supplier acknowledges that, subject to the Allowable Assumptions:

- (a) the Authority has delivered or made available to the Supplier all of the information and documents that the Supplier considers necessary or relevant for the performance of its obligations under this Agreement;
 - (b) it has made its own enquiries to satisfy itself as to the accuracy and adequacy of the Due Diligence Information;
 - (c) it has satisfied itself (whether by inspection or having raised all relevant due diligence questions with the Authority before the Effective Date) of all relevant details relating to:
 - (i) the Authority Requirements;
 - (ii) the suitability of the existing and (to the extent that it is defined or reasonably foreseeable at the Effective Date) future Operating Environment;
 - (iii) the operating processes and procedures and the working methods of the Authority;
 - (iv) the ownership, functionality, capacity, condition and suitability for use in the Services of the Authority Assets; and
 - (v) the existing contracts (including any licences, support, maintenance and other agreements relating to the Operating Environment) referred to in the Due Diligence Information which may be novated to, assigned to or managed by the Supplier under this Agreement and/or which the Supplier will require the benefit of for the provision of the Services; and
 - (d) it has advised the Authority in writing of:
-

- (i) each aspect, if any, of the Operating Environment that is not suitable for the provision of the Services;
- (ii) the actions needed to remedy each such unsuitable aspect; and
- (iii) a timetable for and, to the extent that such costs are to be payable to the Supplier, the costs of those actions,

and such actions, timetable and costs are fully reflected in this Agreement, including the Services Description and/or Authority Responsibilities as applicable.

2.2 The Supplier shall not be excused from the performance of any of its obligations under this Agreement on the grounds of, nor, subject to Clause 2.3, shall the Supplier be entitled to recover any additional costs or charges, arising as a result of:

- (a) any unsuitable aspects of the Operating Environment;
- (b) any misinterpretation of the Authority Requirements; and/or
- (c) any failure by the Supplier to satisfy itself as to the accuracy and/or adequacy of the Due Diligence Information.

2.3 The Parties shall comply with the provisions of Paragraph 6 of Part C of Schedule 7.1 (Charges and Invoicing) in relation to the verification of any Allowable Assumptions.

3 WARRANTIES

3.1 The Authority represents and warrants that:

- (a) it has full capacity and authority to enter into and to perform this Agreement;
- (b) this Agreement is executed by its duly authorised representative;
- (c) there are no actions, suits or proceedings or regulatory investigations before any court or administrative body or arbitration tribunal pending or, to its knowledge, threatened against it that might affect its ability to perform its obligations under this Agreement; and
- (d) its obligations under this Agreement constitute its legal, valid and binding obligations, enforceable in accordance with their respective terms subject to applicable bankruptcy, reorganisation, insolvency, moratorium or similar Laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or law).

3.2 The Supplier represents and warrants that:

- (a) it is validly incorporated, organised and subsisting in accordance with the Laws of its place of incorporation;
-

- (b) it has full capacity and authority to enter into and to perform this Agreement;
 - (c) this Agreement is executed by its duly authorised representative;
 - (d) it has all necessary consents and regulatory approvals to enter into this Agreement;
 - (e) there are no actions, suits or proceedings or regulatory investigations before any court or administrative body or arbitration tribunal pending or, to its knowledge, threatened against it or any of its Affiliates that might affect its ability to perform its obligations under this Agreement;
 - (f) its execution, delivery and performance of its obligations under this Agreement will not constitute a breach of any Law or obligation applicable to it and will not cause or result in a default under any agreement by which it is
-

bound;

- (g) its obligations under this Agreement constitute its legal, valid and binding obligations, enforceable in accordance with their respective terms subject to applicable bankruptcy, reorganisation, insolvency, moratorium or similar Laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or law);
 - (h) all written statements and representations in any written submissions made by the Supplier as part of the procurement process, including without limitation its response to the selection questionnaire and ITT (if applicable), its tender and any other documents submitted remain true and accurate except to the extent that such statements and representations have been superseded or varied by this Agreement or to the extent that the Supplier has otherwise disclosed to the Authority in writing prior to the date of this Agreement;
 - (i) it has notified the Authority in writing of any Occasions of Tax Non-Compliance and any litigation in which it is involved that is in connection with any Occasion of Tax Non-Compliance;
 - (j) it has all necessary rights in and to the Licensed Software, the Third Party IPRs, the Supplier Background IPRs and any other materials made available by the Supplier (and/or any Sub-contractor) to the Authority which are necessary for the performance of the Supplier's obligations under this Agreement and/or the receipt of the Services by the Authority;
 - (k) the Contract Inception Report is a true and accurate reflection of the Costs and Supplier Profit Margin forecast by the Supplier and the Supplier does not have any other internal financial model in relation to the Services inconsistent with the Financial Model;
 - (l) it is not subject to any contractual obligation, compliance with which is likely to have a material adverse effect on its ability to perform its obligations under this Agreement;
 - (m) no proceedings or other steps have been taken and not discharged (nor, to the best of its knowledge, are threatened) for the winding up of the Supplier or for its dissolution or for the appointment of a receiver, administrative receiver, liquidator, manager, administrator or similar officer in relation to any of the Supplier's assets or revenue;
-

- (n) within the previous 12 months, no Financial Distress Events have occurred or are subsisting (or any events that would be deemed to be Financial Distress Events under this Agreement had this Agreement been in force) and there are currently no matters that it is aware of that could cause a Financial Distress Event to occur or subsist.

3.3 The representations and warranties set out in Clause 3.2 shall be deemed to be repeated by the Supplier on the Effective Date (if later than the date of signature of this Agreement) by reference to the facts then existing.

- 3.4 Each of the representations and warranties set out in Clauses 3.1 and 3.2 shall be construed as a separate representation and warranty and shall not be limited or restricted by reference to, or inference from, the terms of any other representation, warranty or any other undertaking in this Agreement.
- 3.5 If at any time a Party becomes aware that a representation or warranty given by it under Clause 3.1 or 3.2 has been breached, is untrue or is misleading, it shall immediately notify the other Party of the relevant occurrence in sufficient detail to enable the other Party to make an accurate assessment of the situation.
- 3.6 For the avoidance of doubt, the fact that any provision within this Agreement is expressed as a warranty shall not preclude any right of termination which the Authority may have in respect of breach of that provision by the Supplier.
- 3.7 Except as expressly stated in this Agreement, all warranties and conditions whether express or implied by statute, common law or otherwise are hereby excluded to the extent permitted by Law.
-

SECTION B – THE SERVICES

4 TERM

4.1 This Agreement shall:

- (a) come into force on the Effective Date, save for Clauses 1 (Definitions and Interpretation), 3 (Warranties), 4 (Term), 21 (Confidentiality), 22 (Transparency and Freedom of Information), 24 (Publicity and Branding), 25 (Limitations on Liability), 37 (Waiver and Cumulative Remedies), 38 (Relationship of the Parties), 40 (Severance), 42 (Entire Agreement), 43 (Third Party Rights), 44 (Notices), 45 (Disputes) and 46 (Governing Law and Jurisdiction), which shall be binding and enforceable as between the Parties from the date of signature; and
- (b) unless terminated at an earlier date by operation of Law or in accordance with Clause 33 (Termination Rights), terminate:
 - (i) at the end of the Initial Term; or
 - (ii) if the Authority elects to extend the Initial Term by giving the Supplier at least [insert figure] Working Days' notice before the end of the Initial Term, at the end of the Extension Period.

Condition Precedent

- 4.2 Save for Clauses 1 (Definitions and Interpretation), 3 (Warranties), 4 (Term), 21 (Confidentiality), 22 (Transparency and Freedom of Information), 24 (Publicity and Branding), 25 (Limitations on Liability), 37 (Waiver and Cumulative Remedies), 38 (Relationship of the Parties), 40 (Severance), 42 (Entire Agreement), 43 (Third Party Rights), 44 (Notices), 45 (Disputes) and 46 (Governing Law and Jurisdiction), this Agreement is conditional upon the valid execution and delivery to the Authority of the Guarantee (the "Condition Precedent"). The Authority may in its sole discretion at any time agree to waive compliance with the Condition Precedent by giving the Supplier notice in writing.
 - 4.3 The Supplier shall satisfy, or procure the satisfaction of, the Condition Precedent as soon as possible. In the event that the Condition Precedent is not satisfied within 20 Working Days after the date of this Agreement then, unless the Condition Precedent is waived by the Authority in accordance with Clause 4.2:
 - (a) this Agreement shall automatically cease and shall not come into effect;
-

and

- (b) neither Party shall have any obligation to pay any compensation to the other Party as a result of such cessation.

- 4.4 The Supplier shall consult with the Authority in relation to the steps it takes to satisfy the condition set out in Clause 4.2 and shall keep the Authority fully informed of its progress in satisfying the condition and of any circumstances which are likely to result in the condition not being satisfied by the date set out in Clause 4.3.

5 SERVICES

Standard of Services

5.1 The Supplier shall provide:

- (a) the Implementation Services from (and including) the Implementation Services Commencement Date; and
- (b) the Operational Services in each case from (and including) the relevant Operational Service Commencement Date.

5.2 The Supplier shall ensure that:

- (a) the Services:
 - (i) comply in all respects with the Services Description; and
 - (ii) are supplied in accordance with the Supplier Solution and the provisions of this Agreement; and
- (b) where:
 - (i) the Operational Services to be provided from any Operational Service Commencement Date are similar to services that the Authority was receiving immediately prior to that Operational Service Commencement Date (such similar services being “Preceding Services”); and
 - (ii) the standard and level of service received by the Authority in respect of any of the Preceding Services in the 12 month period immediately prior to that Operational Service Commencement Date have been disclosed to the Supplier in the Due Diligence Information (such preceding services being “Relevant Preceding Services”),

the Operational Services to be provided from the relevant Operational Service Commencement Date that are similar to the Relevant Preceding Services are in each case provided to a standard and level of service which is at least as good as the standard and level of service received by the Authority in respect of the Relevant Preceding Services in the 12 month period immediately prior to the relevant Operational Service Commencement Date.

5.3 The Supplier shall:

- (a) perform its obligations under this Agreement, including in relation to the supply of the Services and any Goods in accordance with:
 - (i) all applicable Law;
 - (ii) Good Industry Practice;
 - (iii) the Standards;
 - (iv) the Baseline Security Requirements;
-

- (v) the Quality Plans;
 - (vi) the Authority IT Strategy; and
 - (vii) the Supplier's own established procedures and practices to the extent the same do not conflict with the requirements of Clauses 5.3(a)(i) to 5.3(a)(vi); and
- (b) deliver the Services using efficient business processes and ways of working having regard to the Authority's obligation to ensure value for money.

5.4 In the event that the Supplier becomes aware of any inconsistency between the requirements of Clauses 5.3(a)(i) to 5.3(a)(vi), the Supplier shall immediately notify the Authority Representative in writing of such inconsistency and the Authority Representative shall, as soon as practicable, notify the Supplier which requirement the Supplier shall comply with.

Supplier covenants

5.5 The Supplier shall:

- (a) at all times allocate sufficient resources with the appropriate technical expertise to supply the Deliverables and to provide the Services in accordance with this Agreement;
 - (b) save to the extent that obtaining and maintaining the same are Authority Responsibilities and subject to Clause 13 (Change), obtain, and maintain throughout the duration of this Agreement, all the consents, approvals, licences and permissions (statutory, regulatory contractual or otherwise) it may require and which are necessary for the provision of the Services;
 - (c) ensure that:
 - (i) it shall continue to have all necessary rights in and to the Licensed Software, the Third Party IPRs, the Supplier Background IPRs and any other materials made available by the Supplier (and/or any Sub-contractor) to the Authority which are necessary for the performance of the Supplier's obligations under this Agreement and/or the receipt of the Services by the Authority;
 - (ii) the release of any new Software or upgrade to any Software complies with the interface requirements in the Services
-

Description and (except in relation to new Software or upgrades which are released to address Malicious Software or to comply with the requirements of Schedule 2.4 (Security Management)) shall notify the Authority 3 months before the release of any new Software or Upgrade;

- (iii) all Software including Upgrades, Updates and New Releases used by or on behalf of the Supplier are currently supported versions of that Software and perform in all material respects in accordance with the relevant specification;
 - (iv) any products or services recommended or otherwise specified by the Supplier for use by the Authority in conjunction with the Deliverables and/or the Services shall enable the Deliverables and/or Services to
-

meet the Authority Requirements; and

- (v) the Supplier System and Assets used in the performance of the Services will be free of all encumbrances (except as agreed in writing with the Authority) and will be Euro Compliant;
- (d) minimise any disruption to the Services, the IT Environment and/or the Authority's operations when carrying out its obligations under this Agreement;
- (e) ensure that any Documentation and training provided by the Supplier to the Authority are comprehensive, accurate and prepared in accordance with Good Industry Practice;
- (f) co-operate with the Other Suppliers and provide reasonable information (including any Documentation), advice and assistance in connection with the Services to any Other Supplier to enable such Other Supplier to create and maintain technical or organisational interfaces with the Services and, on the expiry or termination of this Agreement for any reason, to enable the timely transition of the Services (or any of them) to the Authority and/or to any Replacement Supplier;
- (g) to the extent it is legally able to do so, hold on trust for the sole benefit of the Authority, all warranties and indemnities provided by third parties or any Sub-contractor in respect of any Deliverables and/or the Services and, where any such warranties are held on trust, at its cost enforce such warranties in accordance with any reasonable directions that the Authority may notify from time to time to the Supplier;
- (h) unless it is unable to do so, assign to the Authority on the Authority's written request and at the cost of the Supplier any such warranties and/or indemnities as are referred to in Clause 5.5(g);
- (i) provide the Authority with such assistance as the Authority may reasonably require during the Term in respect of the supply of the Services;
- (j) gather, collate and provide such information and co-operation as the Authority may reasonably request for the purposes of ascertaining the Supplier's compliance with its obligations under this Agreement;
- (k) notify the Authority in writing as soon as reasonably possible and in any event within 1 month of any change of Control taking place;
- (l) notify the Authority in writing within 10 Working Days of their

occurrence, of any actions, suits or proceedings or regulatory investigations before any court or administrative body or arbitration tribunal pending or, to its knowledge, threatened against it that might affect its ability to perform its obligations under this Agreement;

- (m) ensure that neither it, nor any of its Affiliates, embarrasses the Authority or otherwise brings the Authority into disrepute by engaging in any act or omission which is reasonably likely to diminish the trust that the public places in the Authority, regardless of whether or not such act or omission is related to the Supplier's obligations under this Agreement; and
 - (n) manage closure or termination of Services and end of life of Goods to take
-

account of the Authority's disposal requirements, including recycling and scope for re-use, and all applicable Standards.

- 5.6 An obligation on the Supplier to do, or to refrain from doing, any act or thing shall include an obligation upon the Supplier to procure that all Sub-contractors and Supplier Personnel also do, or refrain from doing, such act or thing.
- 5.7 Without prejudice to Clauses 19.2 and 19.3 (IPRs Indemnity) and any other rights and remedies of the Authority howsoever arising, the Supplier shall:
- (a) remedy any breach of its obligations in Clauses 5.5(b) to 5.5(d) inclusive within 3 Working Days of becoming aware of the breach or being notified of the breach by the Authority where practicable or within such other time period as may be agreed with the Authority (taking into account the nature of the breach that has occurred);
 - (b) remedy any breach of its obligations in Clause 5.5(a) and Clauses 5.5(e) to 5.5(j) inclusive within 20 Working Days of becoming aware of the breach or being notified of the breach by the Authority; and
 - (c) meet all the costs of, and incidental to, the performance of such remedial work,

and any failure of the Supplier to comply with its obligations under Clause 5.7(a) or Clause 5.7(b) within the specified or agreed timeframe shall constitute a Notifiable Default.

Specially Written Software warranty

- 5.8 Without prejudice to Clauses 5.5 (Supplier Covenants) and 5.7 (Services) and any other rights and remedies of the Authority howsoever arising, the Supplier warrants to the Authority that all components of the Specially Written Software shall:
- (a) be free from material design and programming errors;
 - (b) perform in all material respects in accordance with the relevant specifications contained in the Supplier Solution and Documentation; and
 - (c) not infringe any Intellectual Property Rights.

Continuing obligation to provide the Services

5.9 The Supplier shall continue to perform all of its obligations under this Agreement and shall not suspend the supply of the Services, notwithstanding:

- (a) any withholding of the Service Charges by the Authority pursuant to Clause 7.2(d)(ii) (Performance Failures);
- (b) the existence of an unresolved Dispute; and/or
- (c) any failure by the Authority to pay any Charges,

unless the Supplier is entitled to terminate this Agreement under Clause 33.3(a) (Termination by the Supplier) for failure to pay undisputed Charges.

Optional Services

- 5.10 The Authority may require the Supplier to provide any or all of the Optional Services at any time by giving notice to the Supplier in writing. The Supplier acknowledges that the Authority is not obliged to take any Optional Services from the Supplier and that nothing shall prevent the Authority from receiving services that are the same as or similar to the Optional Services from any third party.
- 5.11 If a Change Request is submitted, the Supplier shall, as part of the Impact Assessment provided by the Supplier in relation to such Change Request, provide details of the impact (if any) that the proposed Change will have on the relevant Optional Services.
- 5.12 Following receipt of the Authority's notice pursuant to Clause 5.10:
- (a) the Parties shall document the inclusion of the relevant Optional Services within the Services in accordance with the Change Control Procedure, modified to reflect the fact that the terms and conditions on which the Supplier shall provide the relevant Optional Services have already been agreed;
 - (b) the Supplier shall implement and Test the relevant Optional Services in accordance with the Optional Services Implementation Plan;
 - (c) any additional charges for the Optional Services shall be incorporated in the Charges as specified in Paragraph 3 of Part B of Schedule 7.1 (Charges and Invoicing); and
 - (d) the Supplier shall, from the date agreed in the Optional Services Implementation Plan (or, if later, the date of Achievement of any Milestones associated with the commencement of the relevant Optional Services (if any)), provide the relevant Optional Services to meet or exceed the applicable Target Performance Level in respect of all Performance Indicators applicable to the Optional Services as set out in Annex 1 of Schedule 2.2 (Performance Levels).

Power of attorney

- 5.13 By way of security for the performance of its obligations under Clauses 5.5(g) and 5.5(h) (Supplier covenants) the Supplier hereby irrevocably appoints the Authority as its agent and attorney to act with full power and authority in the Supplier's name and on its behalf to do all such acts and execute all such documents as may be necessary or desirable to enforce any such

warranties and/or effect any such assignment as are referred to in such Clauses and to delegate one or more of the powers conferred on it by this Clause 5.13 (other than the power to delegate) to officer(s) appointed for that purpose by the Authority and may vary or revoke such delegation at any time.

Authority Responsibilities

- 5.14 The Authority shall comply with its responsibilities set out in Schedule 3 (Authority Responsibilities).

6 IMPLEMENTATION

Quality Plans

- 6.1 The Supplier shall develop, within [insert number] Working Days of the Effective Date, quality plans that ensure that all aspects of the Services are the subject of quality management systems and are consistent with BS EN ISO 9001 or any equivalent standard which is generally recognised as having replaced it (“Quality Plans”).
- 6.2 The Supplier shall obtain the Authority Representative’s written approval of the Quality Plans before implementing them, which approval shall not be unreasonably withheld or delayed. The Supplier acknowledges and accepts that the Authority's approval shall not act as an endorsement of the Quality Plans and shall not relieve the Supplier of its responsibility for ensuring that the Services are provided to the standard required by this Agreement.
- 6.3 Following the approval by the Authority of the Quality Plans:
- (a) the Supplier shall design and deliver all Deliverables in accordance with the Quality Plans; and
 - (b) any Changes to the Quality Plans shall be agreed in accordance with the Change Control Procedure.

Implementation Plan and Delays

- 6.4 The Parties shall comply with the provisions of Schedule 6.1 (Implementation Plan) in relation to the agreement and maintenance of the Detailed Implementation Plan.
- 6.5 The Supplier shall:
- (a) comply with the Implementation Plan; and
 - (b) ensure that each Milestone is Achieved on or before its Milestone Date.
- 6.6 If the Supplier becomes aware that there is, or there is reasonably likely to be, a Delay:
- (a) it shall:

- (i) notify the Authority in accordance with Clause 27.1 (Rectification Plan Process); and
 - (ii) comply with the Rectification Plan Process in order to address the impact of the Delay or anticipated Delay; and
 - (iii) use all reasonable endeavours to eliminate or mitigate the consequences of any Delay or anticipated Delay; and
- (b) if the Delay or anticipated Delay relates to a Key Milestone, the provisions of Clause 28 (Delay Payments) shall apply.

Testing and Achievement of Milestones

- 6.7 The Parties shall comply with the provisions of Schedule 6.2 (Testing Procedures) in relation to the procedures to determine whether a Milestone or Test has been Achieved.

7 PERFORMANCE INDICATORS

7.1 The Supplier shall:

- (a) provide the Operational Services in such a manner so as to meet or exceed the Target Performance Level for each Performance Indicator from the Milestone Date for each relevant CPP Milestone; and
- (b) comply with the provisions of Schedule 2.2 (Performance Levels) in relation to the monitoring and reporting on its performance against the Performance Indicators.

Performance Failures

7.2 If in any Service Period:

- (a) a KPI Failure occurs, Service Credits shall be deducted from the Service Charges in accordance with Paragraph 3 of Part C of Schedule 7.1 (Charges and Invoicing);
- (b) a Material KPI Failure occurs, the Supplier shall comply with the Rectification Plan Process (in addition to Service Credits accruing in accordance with Clause 7.2(a));
- (c) a PI Failure occurs, the Supplier shall notify the Authority of the action (if any) it will take to rectify the PI Failure and/or to prevent the PI Failure from recurring; and/or
- (d) a Material PI Failure occurs:
 - (i) the Supplier shall comply with the Rectification Plan Process; and
 - (ii) the Authority may withhold a proportionate amount of the Service Charges in accordance with the process set out in Clause 10.7 (Set Off and Withholding) until the relevant Material PI

Failure is rectified to the reasonable satisfaction of the Authority,
at which point the Authority shall pay the amount withheld.

7.3 Service Credits shall be the Authority's exclusive financial remedy for a KPI Failure except where:

- (a) the Supplier has over the previous 12 month period accrued Service Credits in excess of the Service Credit Cap;
- (b) the KPI Failure:
 - (i) breaches the relevant KPI Service Threshold;
 - (ii) has arisen due to the wilful default by the Supplier or any Supplier

Personnel; or

(iii) results in:

- (A) the corruption or loss of any Authority Data (in which case the remedies under Clause 20.7 (Authority Data and Security Requirements) shall also be available); and/or
 - (B) the Authority being required to make a compensation payment to one or more third parties;
- (c) the Supplier has fraudulently misreported its performance against any Performance Indicator; and/or
- (d) the Authority is otherwise entitled to or does terminate the relevant Services or this Agreement pursuant to Clause 33.1(b) (Termination by the Authority).

Unacceptable KPI Failure

7.4 If in any Service Period an Unacceptable KPI Failure occurs:

- (a) the Authority shall (subject to the Service Credit Cap set out in Clause 25.4(b) (Financial and other limits)) be entitled to withhold and retain as compensation for the Unacceptable KPI Failure a sum equal to any Service Charges which would otherwise have been due to the Supplier in respect of that Service Period (such sum being “Compensation for Unacceptable KPI Failure”); and
- (b) if the Authority withholds and retains such Compensation for Unacceptable KPI Failure, any Service Points and Service Credits that would otherwise have accrued during the relevant Service Period shall not accrue,

provided that the operation of this Clause 7.4 shall be without prejudice to any right which the Authority may have to terminate this Agreement and/or to claim damages from the Supplier as a result of such Unacceptable KPI Failure.

7.5 The Supplier:

- (a) agrees that the application of Clause 7.4 is commercially justifiable where an Unacceptable KPI Failure occurs; and

- (b) acknowledges that it has taken legal advice on the application of Clause 7.4 and has had the opportunity to price for that risk when calculating the Service Charges.

Critical Performance Failure

- 7.6 If a Critical Performance Failure occurs, the Authority may exercise its rights to terminate this Agreement in whole or in part pursuant to Clause 33.1 or 33.2 (Termination by the Authority).

Changes to Performance Indicators and Service Credits

- 7.7 Not more than once in each Contract Year the Authority may, on giving the Supplier at least 3 months' notice:

- (a) change the weighting that applies in respect of one or more specific Key Performance Indicators; and/or
- (b) convert one or more:
 - (i) Key Performance Indicators into a Subsidiary Performance Indicator; and/or
 - (ii) Subsidiary Performance Indicators into a Key Performance Indicator (in which event the Authority shall also set out in the notice details of what will constitute a Minor KPI Failure, a Serious KPI Failure and a Severe KPI Failure for the new Key Performance Indicator).

- 7.8 The Supplier shall not be entitled to object to any changes made by the Authority under Clause 7.7, or increase the Service Charges as a result of such changes provided that:

- (a) the total number of Key Performance Indicators does not exceed 20;
- (b) the principal purpose of the change is to reflect changes in the Authority's business requirements and/or priorities or to reflect changing industry standards; and
- (c) there is no change to the Service Credit Cap.

8 SERVICES IMPROVEMENT

- 8.1 The Supplier shall have an ongoing obligation throughout the Term to identify new or potential improvements to the Services in accordance with this Clause 8.

As part of this obligation the Supplier shall identify and report to the Programme Board once every 12 months on:

- (a) the emergence of new and evolving relevant technologies which could improve the IT Environment and/or the Services, and those technological advances potentially available to the Supplier and the Authority which the Parties may wish to adopt;
- (b) new or potential improvements to the Services including the quality, responsiveness, procedures, benchmarking methods, likely performance mechanisms and customer support services in relation to the Services;
- (c) new or potential improvements to the interfaces or integration of the Services with other services provided by third parties or the Authority which might result in efficiency or productivity gains or in reduction of operational risk;

- (d) changes in business processes and ways of working that would enable the Services to be delivered at lower cost and/or with greater benefits to the Authority; and/or
 - (e) changes to the IT Environment, business processes and ways of working that would enable reductions in the total energy consumed in the delivery of Services.
- 8.2 The Supplier shall ensure that the information that it provides to the Authority shall be sufficient for the Authority to decide whether any improvement should be implemented. The Supplier shall provide any further information that the Authority requests.
- 8.3 If the Authority wishes to incorporate any improvement identified by the Supplier the Authority shall send the Supplier a Change Request in accordance with the Change Control Procedure.

9 EQUIPMENT AND MAINTENANCE

Supplier Equipment

- 9.1 The Supplier shall be solely responsible for the cost of carriage of Supplier Equipment to the Sites and to the Authority Premises, including its off-loading, removal of all packaging and all other associated costs. Likewise on termination or expiry of this Agreement the Supplier shall be responsible for the removal and safe disposal of all relevant Supplier Equipment from the Sites and the Authority Premises, including the cost of packing, carriage and making good the Sites and/or the Authority Premises following removal, and taking account of any sustainability requirements, including safe removal of data and recycling requirements.
- 9.2 All the Supplier's property, including Supplier Equipment, shall remain at the sole risk and responsibility of the Supplier, except that the Authority shall be liable for loss of or damage to any of the Supplier's property located on Authority Premises which is due to the negligent act or omission of the Authority.
- 9.3 Subject to any express provision of the Service Continuity Plan to the contrary, the loss or destruction for any reason of any Supplier Equipment shall not relieve the Supplier of its obligation to supply the Services in accordance with this Agreement, including the Target Performance Levels.

Maintenance

- 9.4 The Supplier shall create and maintain a rolling schedule of planned maintenance to the IT Environment (the “Maintenance Schedule”) which shall be agreed with the Authority. Once the Maintenance Schedule has been agreed with the Authority Representative, the Supplier shall only undertake such planned maintenance (which shall be known as “Permitted Maintenance”) in accordance with the Maintenance Schedule.
- 9.5 The Supplier shall give as much notice as is reasonably practicable to the Authority Representative prior to carrying out any Emergency Maintenance.
- 9.6 The Supplier shall carry out any necessary maintenance (whether Permitted Maintenance or Emergency Maintenance) where it reasonably suspects that the IT

Environment or the Services or any part thereof has or may have developed a fault. Any such maintenance shall be carried out in such a manner and at such times so as to avoid (or where this is not possible so as to minimise) disruption to the IT Environment and the Services.

Supply of Goods

- 9.7 Where, as part of the Services, the Supplier is to sell goods or equipment (“Goods”) to the Authority:
- (a) the relevant Goods and their prices shall be as set out in [insert description of catalogue or include list in Schedules];
 - (b) the Supplier shall supply and, where relevant, install the Goods in accordance with the relevant specification;
 - (c) the Supplier shall ensure that the Goods are free from material defects in design, materials and workmanship and remain so for 12 months after delivery;
 - (d) if following inspection or testing the Authority considers that the Goods do not conform with the relevant specification, the Authority shall inform the Supplier and the Supplier shall immediately take such remedial action as is necessary to ensure compliance; and
 - (e) without prejudice to any other rights or remedies of the Authority:
 - (i) risk in the Goods shall pass to the Authority at the time of delivery; and
 - (ii) ownership of the Goods shall pass to the Authority at the time of payment.

SECTION C – PAYMENT, TAXATION AND VALUE FOR MONEY PROVISIONS

10 FINANCIAL AND TAXATION MATTERS

Charges and Invoicing

- 10.1 In consideration of the Supplier carrying out its obligations under this Agreement, including the provision of the Services, the Authority shall pay the Charges to the Supplier in accordance with the pricing and payment profile and the invoicing procedure specified in Schedule 7.1 (Charges and Invoicing).
- 10.2 Except as otherwise provided, each Party shall each bear its own costs and expenses incurred in respect of compliance with its obligations under Clauses 6.7 (Testing and Achievement of Milestones), 12 (Records, Reports, Audits and Open Book Data), 22 (Transparency and Freedom of Information), 23 (Protection of Personal Data) and, to the extent specified therein, Clause 29 (Remedial Adviser) and Clause 30 (Step-In Rights).
- 10.3 If the Authority fails to pay any undisputed Charges properly invoiced under this Agreement, the Supplier shall have the right to charge interest on the overdue amount at the applicable rate under the Late Payment of Commercial Debts (Interest) Act 1998, accruing on a daily basis from the due date up to the date of actual payment, whether before or after judgment.

VAT

- 10.4 The Charges are stated exclusive of VAT, which shall be added at the prevailing rate as applicable and paid by the Authority following delivery of a valid VAT invoice.
- 10.5 The Supplier shall indemnify the Authority on a continuing basis against any liability, including any interest, penalties or costs incurred, that is levied, demanded or assessed on the Authority at any time in respect of the Supplier's failure to account for or to pay any VAT relating to payments made to the Supplier under this Agreement. Any amounts due under this Clause 10.5 shall be paid in cleared funds by the Supplier to the Authority not less than five Working Days before the date upon which the tax or other liability is payable by the Authority.

Set-off and Withholding

10.6 The Authority may set off any amount owed by the Supplier to the Crown or any part of the Crown (including the Authority) against any amount due to the Supplier under this Agreement or under any other agreement between the Supplier and the Authority.

10.7 If the Authority wishes to:

- (a) set off any amount owed by the Supplier to the Crown or any part of the Crown (including the Authority) against any amount due to the Supplier pursuant to Clause 10.6; or
- (b) exercise its right pursuant to Clause 7.2(d)(ii) (Performance Failures) to withhold payment of a proportion of the Service Charges,

it shall give notice to the Supplier within 30 days of receipt of the relevant invoice, setting out the Authority's reasons for withholding or retaining the relevant Charges.

Benchmarking

10.8 The Parties shall comply with the provisions of Schedule 7.3 (Benchmarking) in relation to the benchmarking of any or all of the Services.

Financial Distress

10.9 The Parties shall comply with the provisions of Schedule 7.4 (Financial Distress) in relation to the assessment of the financial standing of the Supplier and other specified entities and the consequences of a change to that financial standing.

Promoting Tax Compliance

10.10 If, at any point during the Term, an Occasion of Tax Non-Compliance occurs, the Supplier shall:

- (a) notify the Authority in writing of such fact within 5 Working Days of its occurrence; and
 - (b) promptly provide to the Authority:
 - (i) details of the steps which the Supplier is taking to address the Occasion of Tax Non-Compliance and to prevent the same from recurring, together with any mitigating factors that it considers relevant; and
 - (ii) such other information in relation to the Occasion of Tax Non-Compliance as the Authority may reasonably require.
-

SECTION D - CONTRACT GOVERNANCE

11 GOVERNANCE

- 11.1 The Parties shall comply with the provisions of Schedule 8.1 (Governance) in relation to the management and governance of this Agreement.

Representatives

- 11.2 Each Party shall have a representative for the duration of this Agreement who shall have the authority to act on behalf of their respective Party on the matters set out in, or in connection with, this Agreement.
- 11.3 The initial Supplier Representative shall be the person named as such in Schedule 9.2 (Key Personnel). Any change to the Supplier Representative shall be agreed in accordance with Clause 14 (Supplier Personnel).
- 11.4 The Authority shall notify the Supplier of the identity of the initial Authority Representative within 5 Working Days of the Effective Date. The Authority may, by written notice to the Supplier, revoke or amend the authority of the Authority Representative or appoint a new Authority Representative.

12 RECORDS, REPORTS, AUDITS & OPEN BOOK DATA

- 12.1 The Supplier shall comply with the provisions of:
- (a) Schedule 8.4 (Reports and Records Provisions) in relation to the maintenance and retention of Records; and
 - (b) Part A of Schedule 7.5 (Financial Reports and Audit Rights) in relation to the maintenance of Open Book Data.
- 12.2 The Parties shall comply with the provisions of:
- (a) Part B of Schedule 7.5 (Financial Reports and Audit Rights) in relation to the provision of the Financial Reports; and
 - (b) Part C of Schedule 7.5 (Financial Reports and Audit Rights) in relation to the exercise of the Audit Rights by the Authority or any Audit Agents.
-

13 CHANGE

Change Control Procedure

13.1 Any requirement for a Change shall be subject to the Change Control Procedure.

Change in Law

13.2 The Supplier shall neither be relieved of its obligations to supply the Services in accordance with the terms and conditions of this Agreement nor be entitled to an increase in the Charges as the result of:

- (a) a General Change in Law; or
- (b) a Specific Change in Law where the effect of that Specific Change in Law on

the Services is reasonably foreseeable at the Effective Date.

13.3 If a Specific Change in Law occurs or will occur during the Term (other than as referred to in Clause 13.2(b)), the Supplier shall:

- (a) notify the Authority as soon as reasonably practicable of the likely effects of that change, including:
 - (i) whether any Change is required to the Services, the Charges or this Agreement; and
 - (ii) whether any relief from compliance with the Supplier's obligations is required, including any obligation to Achieve a Milestone and/or to meet the Target Performance Levels; and
- (b) provide the Authority with evidence:
 - (i) that the Supplier has minimised any increase in costs or maximised any reduction in costs, including in respect of the costs of its Sub-contractors;
 - (ii) as to how the Specific Change in Law has affected the cost of providing the Services; and
 - (iii) demonstrating that any expenditure that has been avoided, for example which would have been required under the provisions of Clause 8 (Services Improvement), has been taken into account in amending the Charges.

13.4 Any variation in the Charges or relief from the Supplier's obligations resulting from a Specific Change in Law (other than as referred to in Clause 13.2(b)) shall be implemented in accordance with the Change Control Procedure.

SECTION E – SUPPLIER PERSONNEL AND SUPPLY CHAIN

14 SUPPLIER PERSONNEL

14.1 The Supplier shall:

- (a) Provide in advance of any admission to Authority Premises a list of the names of all Supplier Personnel requiring such admission, specifying the capacity in which they require admission and giving such other particulars as the Authority may reasonably require;
 - (b) ensure that all Supplier Personnel:
 - (i) are appropriately qualified, trained and experienced to provide the Services with all reasonable skill, care and diligence;
 - (ii) are vetted in accordance with Good Industry Practice and, where applicable, the security requirements set out in Schedule 2.1 (Services Description) and Schedule 2.4 (Security Management); and
 - (iii) comply with all reasonable requirements of the Authority concerning conduct at the Authority Premises, including the security requirements as set out in Schedule 2.4 (Security Management);
 - (c) subject to Schedule 9.1 (Staff Transfer), retain overall control of the Supplier Personnel at all times so that the Supplier Personnel shall not be deemed to be employees, agents or contractors of the Authority;
 - (d) be liable at all times for all acts or omissions of Supplier Personnel, so that any act or omission of a member of any Supplier Personnel which results in a Default under this Agreement shall be a Default by the Supplier;
 - (e) use all reasonable endeavours to minimise the number of changes in Supplier Personnel;
 - (f) replace (temporarily or permanently, as appropriate) any Supplier Personnel as soon as practicable if any Supplier Personnel have been removed or are unavailable for any reason whatsoever;
 - (g) bear the programme familiarisation and other costs associated with any replacement of any Supplier Personnel; and
-

- (h) procure that the Supplier Personnel shall vacate the Authority Premises immediately upon the termination or expiry of this Agreement.

14.2 If the Authority reasonably believes that any of the Supplier Personnel are unsuitable to undertake work in respect of this Agreement, it may:

- (a) refuse admission to the relevant person(s) to the Authority Premises;
and/or
 - (b) direct the Supplier to end the involvement in the provision of the Services of the relevant person(s).
-

Key Personnel

- 14.3 The Supplier shall ensure that the Key Personnel fulfil the Key Roles at all times during the Term. Schedule 9.2 (Key Personnel) lists the Key Roles and names of the persons who the Supplier shall appoint to fill those Key Roles at the Effective Date.
- 14.4 The Authority may identify any further roles as being Key Roles and, following agreement to the same by the Supplier, the relevant person selected to fill those Key Roles shall be included on the list of Key Personnel.
- 14.5 The Supplier shall not remove or replace any Key Personnel (including when carrying out Exit Management) unless:
- (a) requested to do so by the Authority;
 - (b) the person concerned resigns, retires or dies or is on maternity or long-term sick leave;
 - (c) the person's employment or contractual arrangement with the Supplier or a Sub-contractor is terminated for material breach of contract by the employee; or
 - (d) the Supplier obtains the Authority's prior written consent (such consent not to be unreasonably withheld or delayed).
- 14.6 The Supplier shall:
- (a) notify the Authority promptly of the absence of any Key Personnel (other than for short-term sickness or holidays of 2 weeks or less, in which case the Supplier shall ensure appropriate temporary cover for that Key Role);
 - (b) ensure that any Key Role is not vacant for any longer than 10 Working Days;
 - (c) give as much notice as is reasonably practicable of its intention to remove or replace any member of Key Personnel and, except in the cases of death, unexpected ill health or a material breach of the Key Personnel's employment contract, this will mean at least 60 Working Days' notice;
 - (d) ensure that all arrangements for planned changes in Key Personnel provide adequate periods during which incoming and outgoing personnel work together to transfer responsibilities and ensure that
-

such change does not have an adverse impact on the performance of the Services; and

- (e) ensure that any replacement for a Key Role:
 - (i) has a level of qualifications and experience appropriate to the relevant Key Role; and
 - (ii) is fully competent to carry out the tasks assigned to the Key Personnel whom he or she has replaced.

Employment Indemnity

14.7 The Parties agree that:

- (a) the Supplier shall both during and after the Term indemnify the Authority against all Employee Liabilities that may arise as a result of any claims brought against the Authority by any person where such claim arises from any act or omission of the Supplier or any Supplier Personnel; and
- (b) the Authority shall both during and after the Term indemnify the Supplier against all Employee Liabilities that may arise as a result of any claims brought against the Supplier by any person where such claim arises from any act or omission of the Authority or any of the Authority's employees, agents, consultants and contractors.

Income Tax and National Insurance Contributions

14.8 Where the Supplier or any Supplier Personnel are liable to be taxed in the UK or to pay national insurance contributions in respect of consideration received under this Agreement, the Supplier shall:

- (a) at all times comply with the Income Tax (Earnings and Pensions) Act 2003 and all other statutes and regulations relating to income tax, and the Social Security Contributions and Benefits Act 1992 and all other statutes and regulations relating to national insurance contributions, in respect of that consideration; and
- (b) indemnify the Authority against any income tax, national insurance and social security contributions and any other liability, deduction, contribution, assessment or claim arising from or made in connection with the provision of the Services by the Supplier or any Supplier Personnel.

Staff Transfer

14.9 The Parties agree that:

- (a) where the commencement of the provision of the Services or any part of the Services results in one or more Relevant Transfers, Schedule 9.1 (Staff Transfer) shall apply as follows:
 - (i) where the Relevant Transfer involves the transfer of Transferring Authority Employees, Part A and Part D of Schedule 9.1 (Staff Transfer) shall apply;
 - (ii) where the Relevant Transfer involves the transfer of
-

Transferring Former Supplier Employees, Part B and Part D of Schedule 9.1 (Staff Transfer) shall apply;

- (iii) where the Relevant Transfer involves the transfer of Transferring Authority Employees and Transferring Former Supplier Employees,
Parts A, B and D of Schedule 9.1 (Staff Transfer) shall apply; and
 - (iv) Part C of Schedule 9.1 (Staff Transfer) shall not apply;
- (b) where commencement of the provision of the Services or a part of the Services does not result in a Relevant Transfer, Part C of Schedule 9.1 (Staff Transfer) shall apply, Part D of Schedule 9.1 may apply and Parts A and B of Schedule 9.1 (Staff Transfer) shall not apply; and

- (c) Part E of Schedule 9.1 (Staff Transfer) shall apply on the expiry or termination of the Services or any part of the Services.

15 SUPPLY CHAIN RIGHTS AND PROTECTIONS

Advertising Sub-contract Opportunities

15.1 The Supplier shall:

- (a) subject to Clause 15.3 and 15.4, advertise on Contracts Finder all Sub- contract opportunities arising from or in connection with the provision of the Goods and/or Services and/or Works above a minimum threshold of £25,000 that arise during the Term;
- (b) within 90 days of awarding a Sub-contract to a Sub-contractor, update the notice on Contracts Finder with details of the successful Sub-contractor;
- (c) monitor the number, type and value of the Sub-contract opportunities placed on Contracts Finder advertised and awarded in its supply chain during the Term;
- (d) provide reports on the information at Clause 15.1(c) to the Authority in the format and frequency as reasonably specified by the Authority; and
- (e) promote Contracts Finder to its suppliers and encourage those organisations to register on Contracts Finder.

15.2 Each advert referred to in Clause 15.1 above shall provide a full and detailed description of the Sub-contract opportunity with each of the mandatory fields being completed on Contracts Finder by the Supplier.

15.3 The obligation at Clause 15.1 shall only apply in respect of Sub-contract opportunities arising after the Effective Date.

15.4 Notwithstanding Clause 15.1 the Authority may, by giving its prior written approval, agree that a Sub-contract opportunity is not required to be advertised on Contracts Finder.

Appointment of Sub-contractors

15.5 The Supplier shall exercise due skill and care in the selection and appointment of any Sub-contractors to ensure that the Supplier is able to:

- (a) manage any Sub-contractors in accordance with Good Industry Practice;
 - (b) comply with its obligations under this Agreement in the delivery of the Services; and
 - (c) assign, novate or otherwise transfer to the Authority or any Replacement Supplier any of its rights and/or obligations under each Sub-contract that relates exclusively to this Agreement.
-

15.6 Prior to sub-contracting any of its obligations under this Agreement, the Supplier shall notify the Authority in writing of:

- (a) the proposed Sub-contractor's name, registered office and company registration number;
- (b) the scope of any Services to be provided by the proposed Sub-contractor; and
- (c) where the proposed Sub-contractor is an Affiliate of the Supplier, evidence that demonstrates to the reasonable satisfaction of the Authority that the proposed Sub-contract has been agreed on "arm's-length" terms.

15.7 If requested by the Authority within 10 Working Days of receipt of the Supplier's notice issued pursuant to Clause 15.6, the Supplier shall also provide:

- (a) a copy of the proposed Sub-contract; and
- (b) any further information reasonably requested by the Authority.

15.8 The Authority may, within 10 Working Days of receipt of the Supplier's notice issued pursuant to Clause 15.6 (or, if later, receipt of any further information requested pursuant to Clause 15.7), object to the appointment of the relevant Sub-contractor if it considers that:

- (a) the appointment of a proposed Sub-contractor may prejudice the provision of the Services and/or may be contrary to the interests of the Authority;
- (b) the proposed Sub-contractor is unreliable and/or has not provided reasonable services to its other customers;
- (c) the proposed Sub-contractor employs unfit persons; and/or
- (d) the proposed Sub-contractor should be excluded in accordance with Clause 15.22;

in which case, the Supplier shall not proceed with the proposed appointment.

15.9 If:

- (a) the Authority has not notified the Supplier that it objects to the proposed Sub-contractor's appointment by the later of 10 Working Days of receipt of:
-

- (i) the Supplier's notice issued pursuant to Clause 15.6; and
 - (ii) any further information requested by the Authority pursuant to Clause 15.7; and
- (b) the proposed Sub-contract is not a Key Sub-contract (which shall require the written consent of the Authority in accordance with Clause 10.10 (Appointment of Key Sub-contractors),

the Supplier may proceed with the proposed appointment and, where the Sub-contract is entered into exclusively for the purpose of delivery of the Services, may notify the Authority that the relevant Sub-contract shall constitute a Third Party Contract for the purposes of Schedule 4.4 (Third Party Contracts).

Appointment of Key Sub-contractors

15.10 Where the Supplier wishes to enter into a Key Sub-contract or replace a Key Sub-contractor, it must obtain the prior written consent of the Authority, such consent not to be unreasonably withheld or delayed. For these purposes, the Authority may withhold its consent to the appointment of a Key Sub-contractor if it reasonably considers that:

- (a) the appointment of a proposed Key Sub-contractor may prejudice the provision of the Services or may be contrary to the interests of the Authority;
- (b) the proposed Key Sub-contractor is unreliable and/or has not provided reasonable services to its other customers; and/or
- (c) the proposed Key Sub-contractor employs unfit persons; and/or
- (d) the proposed Key Sub-contractor should be excluded in accordance with Clause 15.22.

15.11 The Authority consents to the appointment of the Key Sub-contractors listed in Schedule 4.3 (Notified Key Sub-contractors).

15.12 Except where the Authority has given its prior written consent, the Supplier shall ensure that each Key Sub-contract shall include:

- (a) provisions which will enable the Supplier to discharge its obligations under this Agreement;
 - (b) a right under CRTPA for the Authority to enforce any provisions under the Key Sub-contract which are capable of conferring a benefit upon the Authority;
 - (c) a provision enabling the Authority to enforce the Key Sub-contract as if it were the Supplier;
 - (d) a provision enabling the Supplier to assign, novate or otherwise transfer any of its rights and/or obligations under the Key Sub-contract to the Authority or any Replacement Supplier without restriction (including any need to obtain any consent or approval) or payment by the Authority;
 - (e) obligations no less onerous on the Key Sub-contractor than those imposed on the Supplier under this Agreement in respect of:
-

- (i) data protection requirements set out in Clauses 20 (Authority Data and Security Requirements) and 23 (Protection of Personal Data);
 - (ii) FOIA requirements set out in Clause 22 (Transparency and Freedom of Information);
 - (iii) the obligation not to embarrass the Authority or otherwise bring the Authority into disrepute set out in Clause 5.5(m) (Services);
 - (iv) the keeping of records in respect of the services being provided under the Key Sub-contract, including the maintenance of Open Book Data; and
 - (v) the conduct of Audits set out in Part C of Schedule 7.5 (Financial Reports)
-

and Audit Rights);

(f) provisions enabling the Supplier to terminate the Key Sub-contract on notice on terms no more onerous on the Supplier than those imposed on the Authority under Clauses 33.1(a) (Termination by the Authority) and 34.4 (Payments by the Authority) and Schedule 7.2 (Payments on Termination) of this Agreement;

(g) a provision restricting the ability of the Key Sub-contractor to sub-contract all or any part of the services provided to the Supplier under the Key Sub-contract without first seeking the written consent of the Authority;

(h) a provision enabling the Supplier or the Authority to appoint a Remedial Adviser on substantially the same terms as are set out in Clause 29 (Remedial Adviser);

(i) a provision enabling the Supplier, the Authority or any other person on behalf of the Authority to step-in on substantially the same terms as are set out in Clause 30 (Step-in Rights);

(j) a provision requiring the Key Sub-contractor to participate in, and if required by the Authority in the relevant Multi-Party Procedure Initiation Notice to procure the participation of all or any of its Sub-contractors in, the Multi-Party Dispute Resolution Procedure; and

(k) a provision requiring the Key Sub-contractor to:

(i) promptly notify the Supplier and the Authority in writing of any of the following of which it is, or ought to be, aware:

(A) the occurrence of a Financial Distress Event in relation to the Key Sub-contractor; or

(B) any fact, circumstance or matter of which it is aware which could cause the occurrence of a Financial Distress Event in relation to the Key Sub-contractor,

and in any event, provide such notification within 10 Working Days of the date on which the Key Sub-contractor first becomes aware of such); and

(ii) co-operate with the Supplier and the Authority in order to give full effect to the provisions of Schedule 7.4 (Financial Distress),

including meeting with the Supplier and the Authority to discuss and review the effect of the Financial Distress Event on the continued performance and delivery of the Services, contributing to and complying with the Financial Distress Remediation Plan, and providing the information specified at paragraph 4.3(b)(ii) of Schedule 7.4 (Financial Distress).

- 15.13 The Supplier shall not terminate or materially amend the terms of any Key Sub-contract without the Authority's prior written consent, which shall not be unreasonably withheld or delayed.

Supply chain protection

15.14 The Supplier shall ensure that all Sub-contracts (which in this sub-clause includes any contract in the Supplier's supply chain made wholly or substantially for the purpose of performing or contributing to the performance of the whole or any part of this Agreement) contain provisions:

- (a) giving the Supplier a right to terminate the Sub-contract if the Sub-contractor fails to comply in the performance of the Sub-contract with legal obligations in the fields of environmental, social or labour law;
- (b) requiring the Supplier or other party receiving goods or services under the contract to consider and verify invoices under that contract in a timely fashion;
- (c) that if the Supplier or other party fails to consider and verify an invoice in accordance with sub-paragraph (b), the invoice shall be regarded as valid and undisputed for the purpose of sub-paragraph (d) after a reasonable time has passed;
- (d) requiring the Supplier or other party to pay any undisputed sums which are due from it to the Sub-contractor within a specified period not exceeding 30 days of verifying that the invoice is valid and undisputed; and
- (e) giving the Authority a right to publish the Supplier's compliance with its obligation to pay undisputed invoices within the specified payment period; and
- (f) requiring the Sub-contractor to include a clause to the same effect as this clause
15.14 in any contracts it enters into wholly or substantially for the purpose of performing or contributing to the performance of the whole or any part of this Agreement.

15.15 The Supplier shall:

- (a) pay any undisputed sums which are due from it to a Sub-contractor within 30 days of verifying that the invoice is valid and undisputed;
- (b) include within the Balanced Scorecard Report produced by it pursuant to Schedule 2.2 (Performance Levels) a summary of its compliance with Clause 15.15(a), such data to be certified each Quarter by a director of the Supplier as being accurate and not misleading.

15.16 Notwithstanding any provision of Clauses 21 (Confidentiality) and 24 (Publicity)

and Branding), if the Supplier notifies the Authority (whether in a Balanced Scorecard Report or otherwise) that the Supplier has failed to pay a Sub-contractor's undisputed invoice within 30 days of receipt, or the Authority otherwise discovers the same, the Authority shall be entitled to publish the details of the late or non-payment (including on government websites and in the press).

Termination of Sub-contracts

15.17 The Authority may require the Supplier to terminate:

- (a) a Sub-contract where:
 - (i) the acts or omissions of the relevant Sub-contractor have caused
or

materially contributed to the Authority's right of termination pursuant to Clause 33.1(b) (Termination by the Authority);

- (ii) the relevant Sub-contractor or any of its Affiliates have embarrassed the Authority or otherwise brought the Authority into disrepute by engaging in any act or omission which is reasonably likely to diminish the trust that the public places in the Authority, regardless of whether or not such act or omission is related to the Sub-contractor's obligations in relation to the Services or otherwise;
 - (iii) the relevant Sub-contractor has failed to comply in the performance of its Sub-contract with legal obligations in the fields of environmental, social or labour law; and/or
 - (iv) the Authority has found grounds for exclusion of the Sub-contractor in accordance with clause 15.18; and
- (b) a Key Sub-contract where there is a Change of Control of the relevant Key Sub-contractor, unless:
 - (i) the Authority has given its prior written consent to the particular Change of Control, which subsequently takes place as proposed; or
 - (ii) the Authority has not served its notice of objection within 6 months of the later of the date the Change of Control took place or the date on which the Authority was given notice of the Change of Control.

Competitive Terms

15.18 If the Authority is able to obtain from any Sub-contractor or any other third party (on a like-for-like basis) more favourable commercial terms with respect to the supply of any goods, software or services used by the Supplier or the Supplier Personnel in the supply of the Services, then the Authority may:

- (a) require the Supplier to replace its existing commercial terms with that person with the more favourable commercial terms obtained by the Authority in respect of the relevant item; or
 - (b) subject to Clause 15.13, enter into a direct agreement with that Sub-contractor or third party in respect of the relevant item.
-

- 15.19 If the Authority exercises either of its options pursuant to Clause 15.14, then the Charges shall be reduced by an amount that is agreed in accordance with the Change Control Procedure.
- 15.20 The Authority's right to enter into a direct agreement for the supply of the relevant items is subject to:
- (a) the Authority making the relevant item available to the Supplier where this is necessary for the Supplier to provide the Services; and
 - (b) any reduction in the Charges taking into account any unavoidable costs payable by the Supplier in respect of the substituted item, including in respect of any licence fees or early termination charges.
-

Retention of Legal Obligations

- 15.21 Notwithstanding the Supplier's right to sub-contract pursuant to this Clause 15, the Supplier shall remain responsible for all acts and omissions of its Sub-contractors and the acts and omissions of those employed or engaged by the Sub-contractors as if they were its own. In respect of any element of the Services delivered by Supplier Personnel and/or which are Sub-contracted by the Supplier, an obligation on the Supplier to do or to refrain from doing any act or thing under this Contract, shall include an obligation on the Supplier to procure that the Supplier Personnel and the Sub-contractor also do or refrain from doing such act or thing in their delivery of those elements of the Services.

Exclusion of Sub-contractors

- 15.22 Where the Authority considers whether there are grounds for the exclusion of a Sub- contractor under Regulation 57 of the Public Contracts Regulations 2015, then:
- (a) if the Authority finds there are compulsory grounds for exclusion, the Supplier shall replace or shall not appoint the Sub-contractor;
 - (b) if the Authority finds there are non-compulsory grounds for exclusion, the Authority may require the Supplier to replace or not to appoint the Sub- contractor and the Supplier shall comply with such a requirement.

Reporting SME/VCSE Sub-contracts

- 15.23 In addition to any other Management Information requirements set out in this Agreement, the Supplier agrees that it shall, at no charge, provide timely, full, accurate and complete Supply Chain Transparency Information Reports to the Authority thirty days prior to the of the end of each financial year by providing all of the information described in the Supply Chain Transparency Information Template in the format set out in the Schedule 8.4 (Reports and Records Provisions) Annex 4 and in accordance with any guidance issued by the Authority from time to time.
- 15.24 The Authority may update the Supply Chain Transparency Information Template from time to time (including the data required and/or format) by issuing a replacement version with at least thirty (30) days' notice and specifying the date from which it must be used.

SECTION F - INTELLECTUAL PROPERTY, DATA AND CONFIDENTIALITY

16 INTELLECTUAL PROPERTY RIGHTS

16.1 Except as expressly set out in this Agreement:

- (a) the Authority shall not acquire any right, title or interest in or to the Intellectual Property Rights of the Supplier or its licensors, namely:
 - (i) the Supplier Software;
 - (ii) the Third Party Software;
 - (iii) the Third Party IPRs; and
 - (iv) the Supplier Background IPRs;
- (b) the Supplier shall not acquire any right, title or interest in or to the Intellectual Property Rights of the Authority or its licensors, including:
 - (i) the Authority Software;
 - (ii) the Authority Data; and
 - (iii) the Authority Background IPRs;
- (c) Specially Written Software and Project Specific IPRs (except for any Know-How, trade secrets or Confidential Information contained therein) shall be the property of the Authority.

16.2 Where either Party acquires, by operation of law, title to Intellectual Property Rights that is inconsistent with the allocation of title set out in Clause 16.1, it shall assign in writing such Intellectual Property Rights as it has acquired to the other Party on the request of the other Party (whenever made).

16.3 Neither Party shall have any right to use any of the other Party's names, logos or trade marks on any of its products or services without the other Party's prior written consent.

16.4 Unless the Authority otherwise agrees in advance in writing:

- (a) all Specially Written Software and any software element of Project Specific IPRs shall be created in a format, or able to be converted into a
-

format, which is suitable for publication by the Authority as open source software; and

- (b) where the Specially Written Software and any software element of Project Specific IPRs are written in a format that requires conversion before publication as open source software, the Supplier shall also provide the converted format to the Authority.

16.5 Where the Authority agrees that any Specially Written Software and/or any software element of Project Specific IPRs should be excluded from Open Source publication, the Supplier shall as soon as reasonably practicable provide written details of the impact that such exclusion will have on the Authority's ability to publish other Open Source software under clause 19A (Open Source Publication).

Specially Written Software and Project Specific IPRs

17.1 Subject to Clause 17.17 (Patents) the Supplier hereby agrees to transfer to the Authority, or shall procure the transfer to the Authority of, all rights (subject to Clause 16.1(a)) in the Specially Written Software and the Project Specific IPRs including (without limitation):

- (a) the Documentation, Source Code and the Object Code of the Specially Written Software; and
- (b) all build instructions, test instructions, test scripts, test data, operating instructions and other documents and tools necessary for maintaining and supporting the Specially Written Software (together the “Software Supporting Materials”);

but not including any Know-How, trade secrets or Confidential Information.

17.2 The Supplier:

- (a) shall:
 - (i) inform the Authority of all Specially Written Software and any element of Project Specific IPRs that constitutes a modification or enhancement to Supplier Software or Third Party Software; and
 - (ii) deliver to the Authority the Specially Written Software and the software element of Project Specific IPRs in both Source Code and Object Code forms together with relevant Documentation and all related Software Supporting Materials within seven days of the issue of a Milestone Achievement Certificate in respect of the relevant Deliverable and shall provide updates of the Source Code and of the Software Supporting Materials promptly following each new release of the Specially Written Software, in each case on media that is reasonably acceptable to the Authority; and
 - (iii) without prejudice to Clause 17.11 (Third Party Software and Third Party IPRs), provide full details to the Authority of any Supplier Background IPRs or Third Party IPRs which are embedded in or which are an integral part of the Specially Written Software or any element of Project Specific IPRs;
-

- (b) acknowledges and agrees that the ownership of the media referred to in Clause 17.2(a)(ii) shall vest in the Authority upon their receipt by the Authority; and
- (c) shall execute all such assignments as are required to ensure that any rights in the Specially Written Software and Project Specific IPRs are properly transferred to the Authority.

Supplier Software and Supplier Background IPRs

17.3 The Supplier shall not use any Supplier Non-COTS Software or Supplier Non-COTS Background IPR in the provision of the Services unless it is detailed in Schedule 5 (Software) or sent to the Technical Board for review and approval granted by the Authority.

17.4 The Supplier hereby grants to the Authority:

- (a) subject to the provisions of Clause 17.17 (Patents) and Clause 34.11(b) (Consequences of expiry or termination), perpetual, royalty-free and non-exclusive licences to use (including but not limited to the right to load, execute, store, transmit, display and copy (for the purposes of archiving, backing-up, loading, execution, storage, transmission or display)):
 - (i) the Supplier Non-COTS Software for which the Supplier delivers a copy to the Authority for any purpose relating to the Services (or substantially equivalent services) or for any purpose relating to the exercise of the Authority's (or any other Central Government Body's) business or function; and
 - (ii) the Supplier Non-COTS Background IPRs for any purpose relating to the Services (or substantially equivalent services) or for any purpose relating to the exercise of the Authority's (or any other Central Government Body's) business or function;
- (b) a licence to use the Supplier COTS Software for which the Supplier delivers a copy to the Authority and Supplier COTS Background IPRs on the licence terms identified in a letter in or substantially in the form set out in Annex 1 to Schedule 5 (Software) and signed by or on behalf of the Parties on or before the Effective Date provided always that the Authority shall remain entitled to sub-license and to assign and novate the Supplier COTS Software and Supplier COTS Background IPRs on equivalent terms to those set out in Clauses 17.7 and 17.8(b) in relation to the Supplier Non-COTS Software and Supplier Non-COTS Background IPRs; and
- (c) a perpetual royalty-free non-exclusive licence to use without limitation any Know-How, trade secrets or Confidential Information contained within the Specially Written Software or the Project Specific IPRs.

17.5 At any time during the Term or following termination or expiry of this Agreement, the Supplier may terminate the licence granted in respect of the

Supplier Non-COTS Software under Clause 17.4(a)(i) or in respect of the Supplier Non-COTS Background IPRs under Clause 17.4(a)(ii) by giving 30 days' notice in writing (or such other period as agreed by the Parties) if the Authority or any person to whom the Authority grants a sub-licence pursuant to Clause 17.7 (Authority's right to sub-license) commits any material breach of the terms of Clause 17.4(a)(i) or 17.4(a)(ii) or 17.4(a)(ii) (as the case may be) which, if the breach is capable of remedy, is not remedied within 20 Working Days after the Supplier gives the Authority written notice specifying the breach and requiring its remedy.

17.6 In the event the licence of the Supplier Non-COTS Software or the Supplier Non-COTS Background IPRs is terminated pursuant to Clause 17.5, the Authority shall:

- (a) immediately cease all use of the Supplier Non-COTS Software or the Supplier Non-COTS Background IPRs (as the case may be);
- (b) at the discretion of the Supplier, return or destroy documents and other tangible materials to the extent that they contain any of the Supplier Non-COTS Software and/or the Supplier Non-COTS Background IPRs, provided that if the Supplier has not made an election within 6 months of the termination of the licence, the Authority may destroy the documents and other tangible materials that contain any of the Supplier Non-COTS Software and/or the Supplier Non-COTS Background IPRs (as the case may be); and
- (c) ensure, so far as reasonably practicable, that any Supplier Non-COTS Software and/or Supplier Non-COTS Background IPRs that are held in electronic, digital or other machine-readable form ceases to be readily accessible (other than by the information technology staff of the Authority) from any computer, word processor, voicemail system or any other device containing such Supplier Non-COTS Software and/or Supplier Non-COTS Background IPRs.

Authority's right to sub-license

17.7 Subject to Clause 17.17 (Patents) the Authority may sub-license:

- (a) the rights granted under Clause 17.4(a) (Supplier Software and Supplier Background IPRs) to a third party (including for the avoidance of doubt, any Replacement Supplier) provided that:
 - (i) the sub-licence is on terms no broader than those granted to the Authority;
 - (ii) the sub-licence authorises the third party to use the rights licensed in Clause 17.4(a) (Supplier Software and Supplier Background IPRs) only for purposes relating to the Services (or substantially equivalent services) or for any purpose relating to the exercise of the Authority's (or any other Central Government Body's) business or function; and
 - (iii) the sub-licensee shall have executed a confidentiality undertaking in favour of the Supplier in or substantially in the form set out in
-

Annex 2 to Schedule 5 (Software); and

- (b) the rights granted under Clause 17.4(a) (Supplier Software and Supplier Background IPRs) to any Approved Sub-Licensee to the extent necessary to use and/or obtain the benefit of the Specially Written Software and/or the Project Specific IPRs provided that:
 - (i) the sub-licence is on terms no broader than those granted to the Authority; and
 - (ii) the Supplier has received a confidentiality undertaking in its favour in or substantially in the form set out in Annex 2 to Schedule 5 (Software) duly executed by the Approved Sub-Licensee.
-

Authority's right to assign/novate licences

- 17.8 The Authority may assign, novate or otherwise transfer its rights and obligations under the licences granted pursuant to Clause 17.4(a) (Supplier Software and Supplier Background IPRs) to:
- (a) A Central Government Body
 - (b) to any body (including any private sector body) which performs or carries on any of the functions and/or activities that previously had been performed and/or carried on by the Authority.
- 17.9 Any change in the legal status of the Authority which means that it ceases to be a Central Government Body shall not affect the validity of any licence granted in Clause 17.4 (Supplier Software and Supplier Background IPRs). If the Authority ceases to be a Central Government Body, the successor body to the Authority shall still be entitled to the benefit of the licence granted in Clause 17.4 (Supplier Software and Supplier Background IPRs).
- 17.10 If a licence granted in Clause 17.4 (Supplier Software and Supplier Background IPRs) is novated under Clause 17.8 (Authority's right to assign/novate licences) or there is a change of the Authority's status pursuant to Clause 17.9, the rights acquired on that novation or change of status shall not extend beyond those previously enjoyed by the Authority.

Third Party Software and Third Party IPRs

- 17.11 The Supplier shall not use in the provision of the Services (including in any Specially Written Software or in the software element of Project Specific IPRs) any Third Party Non-COTS Software or Third Party Non-COTS IPRs unless detailed in Schedule 5 (Software) or approval is granted by the Authority following a review by the Technical Board and has in each case either:
- (a) first procured that the owner or an authorised licensor of the relevant Third Party Non-COTS IPRs or Third Party Non-COTS Software (as the case may be) has granted a direct licence to the Authority on a royalty-free basis to the Authority and on terms no less favourable to the Authority than those set out in Clauses 17.4(a) and 17.5 (Supplier Software and Supplier Background IPRs) and Clause 17.8 (Authority's right to assign/novate licences); or
 - (b) complied with the provisions of Clause 17.12.

- 17.12 If the Supplier cannot obtain for the Authority a licence in respect of any Third
-

Party Non-COTS Software and/or Third Party Non-COTS IPRs in accordance with the licence terms set out in Clause 17.11(a), the Supplier shall:

- (a) notify the Authority in writing giving details of what licence terms can be obtained from the relevant third party and whether there are alternative software providers which the Supplier could seek to use; and
 - (b) use the relevant Third Party Non-COTS Software and/or Third Party Non-COTS IPRs only if the Authority has first approved in writing the terms of the licence from the relevant third party.
-

17.13 The Supplier shall:

- (a) notify the Authority in writing of all Third Party COTS Software and Third Party COTS IPRs that it uses and the terms on which it uses them; and
- (b) unless instructed otherwise in writing by the Authority in any case within 20 Working Days of notification pursuant to Clause 17.12(a), use all reasonable endeavours to procure in each case that the owner or an authorised licensor of the relevant Third Party COTS Software and Third Party COTS IPRs grants a direct licence to the Authority on terms no less favourable (including as to indemnification against IPRs Claims) than those on which such software is usually made commercially available by the relevant third party.

17.14 Should the Supplier become aware at any time, including after termination, that the Specially Written Software and/or the Project Specific IPRs contain any Intellectual Property Rights for which the Authority does not have a suitable licence, then the Supplier must notify the Authority within 10 days of what those rights are and which parts of the Specially Written Software and the Project Specific IPRs they are found in.

Termination and Replacement Suppliers

17.15 For the avoidance of doubt, the termination or expiry of this Agreement shall not of itself result in any termination of any of the licences granted by the Supplier or relevant third party pursuant to or as contemplated by this Clause 17.

17.16 The Supplier shall, if requested by the Authority in accordance with Schedule 8.5 (Exit Management) and at the Supplier's cost:

- (a) grant (or procure the grant) to any Replacement Supplier of:
 - (i) a licence to use any Supplier Non-COTS Software, Supplier Non-COTS Background IPRs, Third Party Non-COTS IPRs and/or Third Party Non-COTS Software on a royalty-free basis to the Replacement Supplier and on terms no less favourable than those granted to the Authority in respect of the relevant Software and/or IPRs pursuant to or as contemplated by this Clause 17 subject to receipt by the Supplier of a confidentiality undertaking in its favour in or substantially in the form set out in Annex 2 to Schedule 5 (Software) duly executed by the Replacement Supplier;
-

- (ii) a licence to use any Supplier COTS Software and/or Supplier COTS Background IPRs, on terms no less favourable (including as to indemnification against IPRs Claims) than those on which such software is usually made commercially available by the Supplier; and/or
- (b) use all reasonable endeavours to procure the grant to any Replacement Supplier of a licence to use any Third Party COTS Software and/or Third Party COTS IPRs on terms no less favourable (including as to indemnification against IPRs Claims) than those on which such software is usually made commercially available by the relevant third party.

Patents

- 17.17 Where a patent owned by the Supplier is necessarily infringed by the use of the Specially Written Software or Project Specific IPRs by the Authority or any Replacement Supplier, the Supplier hereby grants to the Authority and the Replacement Supplier a non-exclusive, irrevocable, royalty-free, worldwide patent licence to use the infringing methods, materials or software solely for the purpose for which they were delivered under this Agreement.

18 LICENCES GRANTED BY THE AUTHORITY

- 18.1. The Authority hereby grants to the Supplier a royalty-free, non-exclusive, non-transferable licence during the Term to use the Authority Software, the Authority Background IPRs, the Specially Written Software, the Project Specific IPRs and the Authority Data solely to the extent necessary for performing the Services in accordance with this Agreement, including (but not limited to) the right to grant sub-licences to Sub-contractors provided that:
- (a) any relevant Sub-contractor has entered into a confidentiality undertaking with the Supplier on the same terms as set out in Clause 21 (Confidentiality); and
 - (b) the Supplier shall not, without the Authority's prior written consent, use the licensed materials for any other purpose or for the benefit of any person other than the Authority.
- 18.2. In the event of the termination or expiry of this Agreement, the licence granted pursuant to Clause 18.1 and any sub-licence granted by the Supplier in accordance with Clause 18.1 shall terminate automatically on the date of such termination or expiry and the Supplier shall:
- (c) immediately cease all use of the Authority Software, the Authority Background IPRs and the Authority Data (as the case may be);
 - (d) at the discretion of the Authority, return or destroy documents and other tangible materials that contain any of the Authority Software, the Authority Background IPRs and the Authority Data, provided that if the Authority has not made an election within 6 months of the termination of the licence, the Supplier may destroy the documents and other tangible materials that contain any of the Authority Software, the Authority Background IPRs and the Authority Data (as the case may be); and
 - (e) ensure, so far as reasonably practicable, that any Authority Software, Authority Background IPRs and Authority Data that are held in electronic, digital or other machine-readable form ceases to be readily accessible from any Supplier computer, word processor, voicemail
-

system or any other Supplier device containing such Authority Software, Authority Background IPRs and/or Authority Data.

19 IPRs INDEMNITY

- 19.1 The Supplier shall at all times, during and after the Term, on written demand indemnify the Authority and each other Indemnified Person, and keep the Authority and each other Indemnified Person indemnified, against all Losses incurred by, awarded against or agreed to be paid by an Indemnified Person arising from an IPRs Claim.

19.2 If an IPRs Claim is made, or the Supplier anticipates that an IPRs Claim might be made, the Supplier may, at its own expense and sole option, either:

- (a) procure for the Authority or other relevant Indemnified Person the right to continue using the relevant item which is subject to the IPRs Claim; or
- (b) replace or modify the relevant item with non-infringing substitutes provided that:
 - (i) the performance and functionality of the replaced or modified item is at least equivalent to the performance and functionality of the original item;
 - (ii) the replaced or modified item does not have an adverse effect on any other services or the IT Environment;
 - (iii) there is no additional cost to the Authority or relevant Indemnified Person (as the case may be); and
 - (iv) the terms and conditions of this Agreement shall apply to the replaced or modified Services.

19.3 If the Supplier elects to procure a licence in accordance with Clause 19.2(a) or to modify or replace an item pursuant to Clause 19.2(b), but this has not avoided or resolved the IPRs Claim, then:

- (a) the Authority may terminate this Agreement (if subsisting) with immediate effect by written notice to the Supplier; and
- (b) without prejudice to the indemnity set out in Clause 19.1, the Supplier shall be liable for all reasonable and unavoidable costs of the substitute items and/or services including the additional costs of procuring, implementing and maintaining the substitute items.

19A OPEN SOURCE PUBLICATION

19A.1 The Supplier agrees that the Authority may at its sole discretion publish as Open Source Software all or part of the Specially Written Software and any software element of the Project Specific IPRs after the Operational Service Commencement Date.

19A.2 The Supplier hereby warrants that the Specially Written Software and any software element of the Project Specific IPRs:

- (a) are suitable for release as Open Source and that any release will not allow a third party to use the Open Source software to in any way compromise the operation, running or security of the Specially Written Software, the Project Specific IPRs or the Authority System;
- (b) shall not cause any harm or damage to any party using anything published as Open Source and that the Specially Written Software and the Project Specific IPRs do not contain any Malicious Software;
- (c) do not contain any material which would bring the Authority into disrepute upon publication as Open Source;

- (d) do not contain any IPR owned or claimed to be owned by any third party which is found, or alleged to be found, in the Specially Written Software and the Project Specific IPRs (“Non-Party IPRs”); and
- (e) will be supplied in a format suitable for publication as Open Source (“the Open Source Publication Material”) no later than the Operational Service Commencement Date.

19A.3 The Supplier shall ensure that the Open Source Publication Material provided to the Authority does not include any Supplier Software or Supplier Background IPRs save that which the Supplier is willing to allow to be included in any Open Source publication. In such a case, the Supplier hereby acknowledges that any such Supplier Software or Supplier Background IPRs will become Open Source and will be licensed and treated as such following publication by the Authority and any third party that uses the Open Source Publication Materials on the terms of the Open Source licence used by the Authority when publishing as Open Source.

19A.4 The Supplier hereby indemnifies the Authority against all claims in which the Authority is, or is threatened to be, a party for any alleged infringement of any Non- Party IPRs arising from publication of the Specially Written Software and any software element of the Project Specific IPRs as Open Source under sub-clause 19A.1.

20 AUTHORITY DATA AND SECURITY REQUIREMENTS

- 20.1 The Supplier shall not delete or remove any proprietary notices contained within or relating to the Authority Data.
 - 20.2 The Supplier shall not store, copy, disclose, or use the Authority Data except as necessary for the performance by the Supplier of its obligations under this Agreement or as otherwise expressly authorised in writing by the Authority.
 - 20.3 To the extent that Authority Data is held and/or processed by the Supplier, the Supplier shall supply that Authority Data to the Authority as requested by the Authority in the format specified in Schedule 2.1 (Services Description).
 - 20.4 The Supplier shall preserve the integrity of Authority Data and prevent the corruption or loss of Authority Data at all times that the relevant Authority Data is under its control or the control of any Sub-contractor.
-

- 20.5 The Supplier shall perform secure back-ups of all Authority Data and shall ensure that up-to-date back-ups are stored off-site in accordance with the Service Continuity Plan. The Supplier shall ensure that such back-ups are available to the Authority (or to such other person as the Authority may direct) at all times upon request and are delivered to the Authority at no less than 6 monthly intervals (or such other intervals as may be agreed in writing between the Parties).
- 20.6 The Supplier shall ensure that any system on which the Supplier holds any Authority Data, including back-up data, is a secure system that complies with the Security Requirements.
-

- 20.7 If the Authority Data is corrupted, lost or sufficiently degraded as a result of the Supplier's Default so as to be unusable, the Authority may:
- (a) require the Supplier (at the Supplier's expense) to restore or procure the restoration of Authority Data to the extent and in accordance with the requirements specified in Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning) and the Supplier shall do so as soon as practicable but not later than 5 Working Days from the date of receipt of the Authority's notice; and/or
 - (b) itself restore or procure the restoration of Authority Data, and shall be repaid by the Supplier any reasonable expenses incurred in doing so to the extent and in accordance with the requirements specified in Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning).
- 20.8 If at any time the Supplier suspects or has reason to believe that Authority Data has or may become corrupted, lost or sufficiently degraded in any way for any reason, then the Supplier shall notify the Authority immediately and inform the Authority of the remedial action the Supplier proposes to take.
- 20.9 The Supplier shall comply with the requirements of Schedule 2.4 (Security Management).
- 20.10 The Authority shall notify the Supplier of any changes or proposed changes to the Baseline Security Requirements.
- 20.11 If the Supplier believes that a change or proposed change to the Baseline Security Requirements will have a material and unavoidable cost implication to the Services it may submit a Change Request. In doing so, the Supplier must support its request by providing evidence of the cause of any increased costs and the steps that it has taken to mitigate those costs. Any change to the Charges shall then be agreed in accordance with the Change Control Procedure.
- 20.12 Until and/or unless a change to the Charges is agreed by the Authority pursuant to Clause 20.11 the Supplier shall continue to perform the Services in accordance with its existing obligations.

21 CONFIDENTIALITY

- 21.1 For the purposes of this Clause 21, the term "Disclosing Party" shall mean a Party which discloses or makes available directly or indirectly its Confidential Information and "Recipient" shall mean the Party which receives or obtains
-

directly or indirectly Confidential Information.

21.2 Except to the extent set out in this Clause 21 or where disclosure is expressly permitted elsewhere in this Agreement, the Recipient shall:

- (a) treat the Disclosing Party's Confidential Information as confidential and keep it in secure custody (which is appropriate depending upon the form in which such materials are stored and the nature of the Confidential Information contained in those materials);
 - (b) not disclose the Disclosing Party's Confidential Information to any other person except as expressly set out in this Agreement or without obtaining the
-

owner's prior written consent;

- (c) not use or exploit the Disclosing Party's Confidential Information in any way except for the purposes anticipated under this Agreement; and
- (d) immediately notify the Disclosing Party if it suspects or becomes aware of any unauthorised access, copying, use or disclosure in any form of any of the Disclosing Party's Confidential Information.

21.3 The Recipient shall be entitled to disclose the Confidential Information of the Disclosing Party where:

- (a) the Recipient is required to disclose the Confidential Information by Law, provided that Clause 22 (Transparency and Freedom of Information) shall apply to disclosures required under the FOIA or the EIRs;
- (b) the need for such disclosure arises out of or in connection with:
 - (i) any legal challenge or potential legal challenge against the Authority arising out of or in connection with this Agreement;
 - (ii) the examination and certification of the Authority's accounts (provided that the disclosure is made on a confidential basis) or for any examination pursuant to section 6(1) of the National Audit Act 1983 of the economy, efficiency and effectiveness with which the Authority is making use of any Services provided under this Agreement; or
 - (iii) the conduct of a Central Government Body review in respect of this Agreement; or
- (c) the Recipient has reasonable grounds to believe that the Disclosing Party is involved in activity that may constitute a criminal offence under the Bribery Act 2010 and the disclosure is being made to the Serious Fraud Office.

21.4 If the Recipient is required by Law to make a disclosure of Confidential Information, the Recipient shall as soon as reasonably practicable and to the extent permitted by Law notify the Disclosing Party of the full circumstances of the required disclosure including the relevant Law and/or regulatory body requiring such disclosure and the Confidential Information to which such disclosure would apply.

21.5 The Supplier may disclose the Confidential Information of the Authority on a

confidential basis only to:

- (a) Supplier Personnel who are directly involved in the provision of the Services and need to know the Confidential Information to enable performance of the Supplier's obligations under this Agreement;
- (b) its auditors; and
- (c) its professional advisers for the purposes of obtaining advice in relation to this Agreement.

Where the Supplier discloses Confidential Information of the Authority pursuant to this Clause 21.5, it shall remain responsible at all times for compliance with the

confidentiality obligations set out in this Agreement by the persons to whom disclosure has been made.

21.6 The Authority may disclose the Confidential Information of the Supplier:

- (a) on a confidential basis to any Central Government Body for any proper purpose of the Authority or of the relevant Central Government Body;
- (b) to Parliament and Parliamentary Committees or if required by any Parliamentary reporting requirement;
- (c) to the extent that the Authority (acting reasonably) deems disclosure necessary or appropriate in the course of carrying out its public functions;
- (d) on a confidential basis to a professional adviser, consultant, supplier or other person engaged by any of the entities described in Clause 21.6(a) (including any benchmarking organisation) for any purpose relating to or connected with this Agreement;
- (e) on a confidential basis for the purpose of the exercise of its rights under this Agreement, including the Audit Rights, its step-in rights pursuant to Clause 30 (Step-In Rights), its rights to appoint a Remedial Adviser pursuant to Clause 29 (Remedial Adviser) and Exit Management rights; or
- (f) on a confidential basis to a proposed Successor Body in connection with any assignment, novation or disposal of any of its rights, obligations or liabilities under this Agreement,

and for the purposes of the foregoing, references to disclosure on a confidential basis shall mean disclosure subject to a confidentiality agreement or arrangement containing terms no less stringent than those placed on the Authority under this Clause 21.

21.7 Nothing in this Clause 21 shall prevent a Recipient from using any techniques, ideas or know-how gained during the performance of this Agreement in the course of its normal business to the extent that this use does not result in a disclosure of the Disclosing Party's Confidential Information or an infringement of Intellectual Property Rights.

22 TRANSPARENCY AND FREEDOM OF INFORMATION

22.1 The Parties acknowledge that

- (a) the Transparency Reports; and
 - (b) the content of this Agreement, including any changes to this Agreement agreed from time to time, except for –
 - (i) any information which is exempt from disclosure in accordance with the provisions of the FOIA, which shall be determined by the Authority; and
 - (ii) Commercially Sensitive Information;
-

(together the “Transparency Information”) are not Confidential Information.

- 22.2 Notwithstanding any other provision of this Agreement, the Supplier hereby gives its consent for the Authority to publish to the general public the Transparency Information in its entirety (but with any information which is exempt from disclosure in accordance with the provisions of the FOIA redacted). The Authority shall, prior to publication, consult with the Supplier on the manner and format of publication and to inform its decision regarding any redactions but shall have the final decision in its absolute discretion.
- 22.3 The Supplier shall assist and co-operate with the Authority to enable the Authority to publish the Transparency Information, including the preparation of the Transparency Reports in accordance with Paragraph 1 of Schedule 8.4 (Reports and Records Provisions).
- 22.4 If the Authority believes that publication of any element of the Transparency Information would be contrary to the public interest, the Authority shall be entitled to exclude such information from publication. The Authority acknowledges that it would expect the public interest by default to be best served by publication of the Transparency Information in its entirety. Accordingly, the Authority acknowledges that it will only exclude Transparency Information from publication in exceptional circumstances and agrees that where it decides to exclude information from publication it will provide a clear explanation to the Supplier.
- 22.5 The Authority shall publish the Transparency Information in a format that assists the general public in understanding the relevance and completeness of the information being published to ensure the public obtain a fair view on how the Agreement is being performed, having regard to the context of the wider commercial relationship with the Supplier.
- 22.6 The Supplier agrees that any Information it holds that is not included in the Transparency Reports but is reasonably relevant to or that arises from the provision of the Services shall be provided to the Authority on request unless the cost of doing so would exceed the appropriate limit prescribed under section 12 of the FOIA. The Authority may disclose such information under the FOIA and the EIRs and may (except for Commercially Sensitive Information, Confidential Information (subject to clause 21.6(c)) and Open Book Data) publish such Information. The Supplier shall provide to the Authority within 5 working days (or such other period as the Authority may reasonably specify) any such Information requested by the Authority.
- 22.7 The Supplier acknowledges that the Authority is subject to the requirements of the FOIA and the EIRs. The Supplier shall:
- (a) provide all necessary assistance and cooperation as reasonably requested
-

by the Authority to enable the Authority to comply with its obligations under the FOIA and EIRs;

- (b) transfer to the Authority all Requests for Information relating to this Agreement that it receives as soon as practicable and in any event within 2 Working Days of receipt;
 - (c) provide the Authority with a copy of all Information held on behalf of the Authority which is requested in a Request For Information and which is in its possession or control in the form that the Authority requires within 5 Working
-

Days (or such other period as the Authority may reasonably specify) of the Authority's request for such Information; and

- (d) not respond directly to a Request For Information addressed to the Authority unless authorised in writing to do so by the Authority.

22.8 The Supplier acknowledges that the Authority may be required under the FOIA and EIRs to disclose Information (including Commercially Sensitive Information) without consulting or obtaining consent from the Supplier. The Authority shall take reasonable steps to notify the Supplier of a Request For Information (in accordance with the Secretary of State's section 45 Code of Practice on the Discharge of the Functions of Public Authorities under Part 1 of the FOIA) to the extent that it is permissible and reasonably practical for it to do so but (notwithstanding any other provision in this Agreement) the Authority shall be responsible for determining in its absolute discretion whether any Commercially Sensitive Information and/or any other information is exempt from disclosure in accordance with the FOIA and EIRs.

23 PROTECTION OF PERSONAL DATA

Status of the Controller

23.1 The Parties acknowledge that for the purposes of the Data Protection Legislation, the nature of the activity carried out by each of them in relation to their respective obligations under this Agreement will determine the status of each Party under the Data Protection Legislation. A Party may act as:

- (a) "Controller" (where the other Party acts as the "Processor");
- (b) "Processor" (where the other Party acts as the "Controller");
- (c) "Joint Controller" (where both Parties are considered to jointly control the same Personal Data);
- (d) "Independent Controller" of the Personal Data where the other Party is also "Controller" of the same Personal Data in its own right (but there is no element of joint control);

and the Parties shall set out in Schedule 11 (Processing Personal Data) which scenario or scenarios are intended to apply under this Agreement.

Where one Party is Controller and the other Party its Processor

- 23.2 Where a Party is a Processor, the only processing that it is authorised to do is listed in Schedule 11 (Processing Personal Data) by the Controller.**
- 23.3 The Processor shall notify the Controller immediately if it considers that any of the Controller's instructions infringe the Data Protection Legislation.
- 23.4 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.

23.5 The Processor shall, in relation to any Personal Data processed in connection with its obligations under this Agreement:

- (a) process that Personal Data only in accordance with Schedule 11 (Processing Personal Data), unless the Processor is required to do otherwise by Law. If it is so required the Processor shall promptly notify the Authority before processing the Personal Data unless prohibited by Law;
 - (b) ensure that it has in place Protective Measures, including in the case of the Controller the measures set out in Clause 20 (Authority Data and Security Requirements), 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 Agreement (and in particular Schedule 11 (Processing Personal Data));
 - (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, Clauses 21 (Confidentiality) and 20 (Authority Data and Security Requirements);;
 - (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 Agreement; and
 - (D) have undergone adequate training in the use, care, protection and handling of Personal Data;
- (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 DPA 2018 Section 75) 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; and
- (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 Agreement unless the Processor is required by Law to retain the Personal Data.

23.6 Subject to Clause 23.7, the Processor shall notify the Controller immediately if it:

- (a) receives a Data Subject Request (or purported Data Subject Request);
 - (b) receives a request to rectify, block or erase any Personal Data;
 - (c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
 - (d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Agreement;
 - (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.
-

- 23.7 The Processor's obligation to notify under Clause 23.6 shall include the provision of further information to the Controller in phases, as details become available.
- 23.8 Taking into account the nature of the processing, the Processor shall provide the Controller with reasonable assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under Clause 23.6 (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 it to comply with a Data Subject 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; and/or
 - (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.
- 23.9 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; or
 - (c) the Controller determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- 23.10 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.
- 23.11 The Parties shall designate a Data Protection Officer if required by the Data Protection Legislation.
- 23.12 Before allowing any Sub-processor to process any Personal Data related to this Agreement, 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 23 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.

23.13 The Processor shall remain fully liable for all acts or omissions of any of its Sub-processors.

23.14 The Authority 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 Agreement).

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

Where the Parties are Joint Controllers of Personal Data

23.16 In the event that the Parties are Joint Controllers in respect of Personal Data under this Agreement, the Parties shall implement Clauses that are necessary to comply with GDPR Article 26 based on the terms set out in Annex 1 to Schedule 11 (Processing Personal Data).

Where the Parties are Independent Controllers of Personal Data

23.17 With respect to Personal Data provided by one Party to another Party for which each Party acts as Controller but which is not under the Joint Control of the Parties, each Party undertakes to comply with the applicable Data Protection Legislation in respect of their processing of such Personal Data as Controller.

23.18 Each Party shall process the Personal Data in compliance with its obligations under the Data Protection Legislation and not do anything to cause the other Party to be in breach of it.

23.19 Where a Party has provided Personal Data to the other Party in accordance with Clause 23.17, the recipient of the Personal Data will provide all such relevant documents and information relating to its data protection policies and procedures as the other Party may reasonably require.

23.20 The Parties shall be responsible for their own compliance with Articles 13 and 14 GDPR in respect of the processing of Personal Data for the purposes of this

Agreement.

23.21 The Parties shall only provide Personal Data to each other:

- (a) to the extent necessary to perform the respective obligations under this Agreement;
- (b) in compliance with the Data Protection Legislation (including by ensuring all required fair processing information has been given to affected Data Subjects); and
- (c) where it has recorded it in Schedule 11 (Processing Personal Data).

23.22 Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, each Party shall, with respect to its processing of Personal Data as independent Controller, implement and maintain appropriate technical and organisational measures to ensure a level of security appropriate to that risk, including, as appropriate, the measures referred to in Article 32(1)(a), (b), (c) and (d) of the GDPR, and the measures shall, at a minimum, comply with the requirements of the Data Protection Legislation, including Article 32 of the GDPR.

23.23 A Party processing Personal Data for the purposes of this Agreement shall maintain a record of its processing activities in accordance with Article 30 GDPR and shall make the record available to the other Party upon reasonable request.

23.24 Where a Party receives a request by any Data Subject to exercise any of their rights under the Data Protection Legislation in relation to the Personal Data provided to it by the other Party pursuant to this Agreement (“the Request Recipient”):

- (a) the other Party shall provide any information and/or assistance as reasonably requested by the Request Recipient to help it respond to the request or correspondence, at the cost of the Request Recipient; or
 - (b) where the request or correspondence is directed to the other party and/or relates to the other party's Processing of the Personal Data, the Request Recipient will:
 - (i) promptly, and in any event within five (5) Working Days of receipt of the request or correspondence, inform the other party that it has received the same and shall forward such request or
-

correspondence to the other party; and

- (ii) provide any information and/or assistance as reasonably requested by the other party to help it respond to the request

or correspondence in the timeframes specified by Data Protection Legislation.

23.25 Each party shall promptly notify the other Party upon it becoming aware of any Personal Data Breach relating to Personal Data provided by the other party pursuant to this Agreement and shall:

- (a) do all such things as reasonably necessary to assist the other Party in mitigating the effects of the Data Breach;
- (b) implement any measures necessary to restore the security of any compromised Personal Data;
- (c) work with the other Party to make any required notifications to the Information Commissioner's Office and affected Data Subjects in accordance with the Data Protection Legislation (including the timeframes set out therein); and
- (d) not do anything which may damage the reputation of the other Party or that Party's relationship with the relevant Data Subjects, save as required by Law.

23.26 Personal Data provided by one Party to the other Party may be used exclusively to exercise rights and obligations under this Agreement as specified in Schedule 11 (Processing Personal Data).

23.27 Personal Data shall not be retained or processed for longer than is necessary to perform each Party's obligations under this Agreement which is specified in Schedule 11 (Processing Personal Data).

23.28 Notwithstanding the general application of Clauses 23.2 to 23.15 to Personal Data, where the Supplier is required to exercise its regulatory and/or legal obligations in respect of Personal Data, it shall act as an Independent Controller of Personal Data in accordance with Clause 23.16 to 23.27.

24 PUBLICITY AND BRANDING

24.1 The Supplier shall not:

- (a) make any press announcements or publicise this Agreement or its contents in any way; or
-

- (b) use the Authority's name or brand in any promotion or marketing or announcement of orders;

without the prior written consent of the Authority, which shall not be unreasonably withheld or delayed.

24.2 Each Party acknowledges to the other that nothing in this Agreement either expressly

or by implication constitutes an endorsement of any products or services of the other Party (including the Services, the Supplier System and the Authority System) and each Party agrees not to conduct itself in such a way as to imply or express any such approval or endorsement.

SECTION G - LIABILITY, INDEMNITIES AND INSURANCE

25 LIMITATIONS ON LIABILITY

Unlimited liability

25.1 Neither Party limits its liability for:

- (a) death or personal injury caused by its negligence, or that of its employees, agents or Sub-contractors (as applicable);
- (b) fraud or fraudulent misrepresentation by it or its employees;
- (c) breach of any obligation as to title implied by section 12 of the Sale of Goods Act 1979 or section 2 of the Supply of Goods and Services Act 1982; or
- (d) any liability to the extent it cannot be limited or excluded by Law.

25.2 The Supplier's liability in respect of the indemnities in Clause 10.5 (VAT), Clause 14.7 (Employment Indemnity), Clause 14.8 (Income Tax and National Insurance Contributions), Clause 19 (IPRs Indemnity), Schedule 9.1 (Staff Transfer) and the Annexes to Schedule 9.1 (Staff Transfer) shall be unlimited.

25.3 The Authority's liability in respect of the indemnities in Clause 14.7 (Employment Indemnity), Schedule 9.1 (Staff Transfer) and the Annexes to Schedule 9.1 (Staff Transfer) shall be unlimited.

Financial and other limits

25.4 Subject to Clauses 25.1 and 25.2 (Unlimited Liability) and Clauses 25.7 and 25.8 (Consequential losses):

- (a) the Supplier's aggregate liability in respect of loss of or damage to the Authority Premises or other property or assets of the Authority (including technical infrastructure, assets or equipment but excluding any loss or damage to the Authority's Data or any other data) that is caused by Defaults of the Supplier occurring in each and any Contract Year shall in no event exceed [£10 million];
-

(b) the Supplier's aggregate liability in respect of loss of or damage to Authority Data or breach of the Data Protection Legislation that is caused by Default of the Supplier occurring in each and any Contract Year shall in no event exceed [£10 million];

(c) the Supplier's aggregate liability in respect of all:

(i) Service Credits; and

(ii) Compensation for Unacceptable KPI Failure;

incurred in any rolling period of 12 months shall be subject to the Service Credit Cap; and

- (d) the Supplier's aggregate liability in respect of all other Losses incurred by the Authority under or in connection with this Agreement as a result of Defaults by the Supplier shall in no event exceed:
 - (i) in relation to Defaults occurring in the first Contract Year, an amount equal to [150%] of the Estimated Year 1 Charges;
 - (ii) in relation to Defaults occurring during any subsequent Contract Year, an amount equal to [150%] of the Charges paid and/or due to be paid to the Supplier under this Agreement in the Contract Year immediately preceding the occurrence of the Default; and
 - (iii) in relation to Defaults occurring after the end of the Term, an amount equal to [150%] of the Charges paid and/or due to be paid to the Supplier in the 12 month period immediately prior to the last day of the Term,

provided that where any Losses referred to in this Clause 25.4(d) have been incurred by the Authority as a result of the Supplier's abandonment of this Agreement or the Supplier's wilful default, wilful breach of a fundamental term of this Agreement or wilful repudiatory breach of this Agreement, the references in such Clause to [150%] shall be deemed to be references to [200%].

25.5 Deductions from Charges shall not be taken into consideration when calculating the Supplier's liability under Clause 25.4(c).

25.6 Subject to Clauses 25.1 and 25.3 (Unlimited Liability) and Clause 25.7(Consequential Losses) and without prejudice to the Authority's obligation to pay the Charges as and when they fall due for payment:

- (a) the Authority's total aggregate liability in respect of all Losses incurred by the Supplier under or in connection with this Agreement as a result of early termination of this Agreement by the Authority pursuant to Clause 33.1(a) (Termination by the Authority) or by the Supplier pursuant to Clause 33.3(a) (Termination by the Supplier) shall in no event exceed the following amounts:
 - (i) in relation to the Unrecovered Payment, the amount set out in Paragraph 4 of Schedule 7.2 (Payments on Termination);
 - (ii) in relation to the Breakage Costs Payment, the amount set out in Paragraph 3.2 of Schedule 7.2 (Payments on Termination); and
-

- (iii) in relation to the Compensation Payment, the amount set out in Paragraph 6 of Schedule 7.2 (Payments on Termination); and
 - (b) the Authority's aggregate liability in respect of all Losses incurred by the Supplier under or in connection with this Agreement as a result of Defaults of the Authority shall in no event exceed:
 - (i) in relation to Defaults occurring in the first Contract Year, an amount equal to the Estimated Year 1 Charges;
 - (ii) in relation to Defaults occurring during any subsequent Contract Year,
-

an amount equal to the total Charges paid and/or due to be paid under this Agreement in the Contract Year immediately preceding the occurrence of the Default; and

- (iii) in relation to Defaults occurring after the end of the Term, an amount equal to the total Charges paid and/or due to be paid to the Supplier in the 12 month period immediately prior to the last day of the Term.

Consequential Losses

25.7 Subject to Clauses 25.1, 25.2 and 25.3 (Unlimited Liability) and Clause 25.8, neither Party shall be liable to the other Party for:

- (a) any indirect, special or consequential Loss; or
- (b) any loss of profits, turnover, business opportunities or damage to goodwill (in each case whether direct or indirect).

25.8 Notwithstanding Clause 25.7 but subject to Clause 25.4, the Supplier acknowledges that the Authority may, amongst other things, recover from the Supplier the following Losses incurred by the Authority to the extent that they arise as a result of a Default by the Supplier:

- (a) any additional operational and/or administrative costs and expenses incurred by the Authority, including costs relating to time spent by or on behalf of the Authority in dealing with the consequences of the Default;
 - (b) any wasted expenditure or charges;
 - (c) the additional cost of procuring Replacement Services for the remainder of the Term and/or replacement Deliverables, which shall include any incremental costs associated with such Replacement Services and/or replacement Deliverables above those which would have been payable under this Agreement;
 - (d) any compensation or interest paid to a third party by the Authority;
 - (e) any fine or penalty incurred by the Authority pursuant to Law and any costs incurred by the Authority in defending any proceedings which result in such fine or penalty; and
 - (f) any anticipated savings identified in Schedule 7.6 (Anticipated Savings).
-

Conduct of indemnity claims

- 25.9 Where under this Agreement one Party indemnifies the other Party, the Parties shall comply with the provisions of Schedule 8.7 (Conduct of Claims) in relation to the conduct of claims made by a third person against the Party having (or claiming to have) the benefit of the indemnity.

Mitigation

- 25.10 Each Party shall use all reasonable endeavours to mitigate any loss or damage suffered arising out of or in connection with this Agreement, including any Losses for

which the relevant Party is entitled to bring a claim against the other Party pursuant to the indemnities in this Agreement.

26 INSURANCE

The Supplier shall comply with the provisions of Schedule 2.5 (Insurance Requirements) in relation to obtaining and maintaining insurance.

SECTION H – REMEDIES AND RELIEF

27 RECTIFICATION PLAN PROCESS

27.1 In the event that:

- (a) there is, or is reasonably likely to be, a Delay;
- (b) in any Service Period there has been:
 - (i) a Material KPI Failure; and/or
 - (ii) a Material PI Failure; and/or
- (c) the Supplier commits a material Default that is capable of remedy (and for these purposes a material Default may be a single material Default or a number of Defaults or repeated Defaults (whether of the same or different obligations and regardless of whether such Defaults are remedied) which taken together constitute a material Default),

(each a “Notifiable Default”), the Supplier shall notify the Authority of the Notifiable Default as soon as practicable but in any event within 3 Working Days of becoming aware of the Notifiable Default, detailing the actual or anticipated effect of the Notifiable Default and, unless the Notifiable Default also constitutes a Rectification Plan Failure or other Supplier Termination Event, the Authority may not terminate this Agreement in whole or in part on the grounds of the Notifiable Default without first following the Rectification Plan Process.

Notification

27.2 If:

- (a) the Supplier notifies the Authority pursuant to Clause 27.1 that a Notifiable Default has occurred; or
 - (b) the Authority notifies the Supplier that it considers that a Notifiable Default has occurred (setting out sufficient detail so that it is reasonably clear what the Supplier has to rectify),
-

then, unless the Notifiable Default also constitutes a Supplier Termination Event and the Authority serves a Termination Notice, the Supplier shall comply with the Rectification Plan Process.

- 27.3 The “Rectification Plan Process” shall be as set out in Clauses 27.4 (Submission of the draft Rectification Plan) to 27.9 (Agreement of the Rectification Plan).

Submission of the draft Rectification Plan

- 27.4 The Supplier shall submit a draft Rectification Plan to the Authority for it to review as soon as possible and in any event within 10 Working Days (or such other period as may be agreed between the Parties) after the original notification pursuant to Clause 27.2 (Notification). The Supplier shall submit a draft Rectification Plan even if the Supplier disputes that it is responsible for the Notifiable Default.

27.5 The draft Rectification Plan shall set out:

- (a) full details of the Notifiable Default that has occurred, including a root cause analysis;
- (b) the actual or anticipated effect of the Notifiable Default; and
- (c) the steps which the Supplier proposes to take to rectify the Notifiable Default (if applicable) and to prevent such Notifiable Default from recurring, including timescales for such steps and for the rectification of the Notifiable Default (where applicable).

27.6 The Supplier shall promptly provide to the Authority any further documentation that the Authority reasonably requires to assess the Supplier's root cause analysis. If the Parties do not agree on the root cause set out in the draft Rectification Plan, either Party may refer the matter to be determined by an expert in accordance with Paragraph 6 of Schedule 8.3 (Dispute Resolution Procedure).

Agreement of the Rectification Plan

27.7 The Authority may reject the draft Rectification Plan by notice to the Supplier if, acting reasonably, it considers that the draft Rectification Plan is inadequate, for example because the draft Rectification Plan:

- (a) is insufficiently detailed to be capable of proper evaluation;
- (b) will take too long to complete;
- (c) will not prevent reoccurrence of the Notifiable Default; and/or
- (d) will rectify the Notifiable Default but in a manner which is unacceptable to the Authority.

27.8 The Authority shall notify the Supplier whether it consents to the draft Rectification Plan as soon as reasonably practicable. If the Authority rejects the draft Rectification Plan, the Authority shall give reasons for its decision and the Supplier shall take the reasons into account in the preparation of a revised Rectification Plan. The Supplier shall submit the revised draft of the Rectification Plan to the Authority for review within 5 Working Days (or such other period as agreed between the Parties) of the Authority's notice rejecting the first draft.

27.9 If the Authority consents to the Rectification Plan:

- (a) the Supplier shall immediately start work on the actions set out in the Rectification Plan; and
- (b) the Authority may no longer terminate this Agreement in whole or in part on the grounds of the relevant Notifiable Event.

28 DELAY PAYMENTS

28.1 If a Key Milestone has not been Achieved by its relevant Milestone Date, the provisions of Paragraph 1 of Part C of Schedule 7.1 (Charges and Invoicing) shall apply in relation to the payment of Delay Payments.

28.2 Delay Payments shall be the Authority's exclusive financial remedy for the Supplier's failure to Achieve a Key Milestone by its Milestone Date except where:

- (a) the Authority is entitled to or does terminate this Agreement pursuant to Clause 33.1(b) (Termination by the Authority); or
- (b) the Delay exceeds the Delay Deduction Period.

29 REMEDIAL ADVISER

29.1 If:

- (a) any of the Intervention Trigger Events occur; or
- (b) the Authority reasonably believes that any of the Intervention Trigger Events are likely to occur,

(each an "Intervention Cause"), the Authority may give notice to the Supplier (an "Intervention Notice") giving reasonable details of the Intervention Cause and requiring:

- (i) a meeting between the Authority Representative and the Supplier Representative to discuss the Intervention Cause; and/or
- (ii) the appointment as soon as practicable by the Supplier of a Remedial Adviser, as further described in this Clause 29.

For the avoidance of doubt, if the Intervention Cause is also a Supplier Termination Event, the Authority has no obligation to exercise its rights under this Clause 29.1 prior to or instead of exercising its right to terminate this Agreement.

29.2 If the Authority gives notice that it requires the appointment of a Remedial Adviser:

- (a) the Remedial Adviser shall be:
 - (i) a person selected by the Supplier and approved by the Authority; or
 - (ii) if none of the persons selected by the Supplier have been approved by the Authority (or no person has been selected by the Supplier)
-

within 10 Working Days following the date on which the Intervention Notice is given, a person identified by the Authority;

- (b) the terms of engagement and start date agreed with the Remedial Adviser must be approved by the Authority; and
- (c) any right of the Authority to terminate this Agreement pursuant to Clause 33.1(b) (Termination by the Authority) for the occurrence of that Intervention Cause shall be suspended for 60 Working Days from (and including) the date of the Intervention Notice (or such other period as may be agreed between the Parties)(the “Intervention Period”).

29.3 The Remedial Adviser’s overall objective shall be to mitigate the effects of, and (to the extent capable of being remedied) to remedy, the Intervention Cause and to avoid the occurrence of similar circumstances in the future. In furtherance of this objective (but without diminishing the Supplier’s responsibilities under this

Agreement), the Parties agree that the Remedial Adviser may undertake any one or more of the following actions:

- (a) observe the conduct of and work alongside the Supplier Personnel to the extent that the Remedial Adviser considers reasonable and proportionate having regard to the Intervention Cause;
- (b) gather any information the Remedial Adviser considers relevant in the furtherance of its objective;
- (c) write reports and provide information to the Authority in connection with the steps being taken by the Supplier to remedy the Intervention Cause;
- (d) make recommendations to the Authority and/or the Supplier as to how the Intervention Cause might be mitigated or avoided in the future; and/or
- (e) take any other steps that the Authority and/or the Remedial Adviser reasonably considers necessary or expedient in order to mitigate or rectify the Intervention Cause.

29.4 The Supplier shall:

- (a) work alongside, provide information to, co-operate in good faith with and adopt any reasonable methodology in providing the Services recommended by the Remedial Adviser;
- (b) ensure that the Remedial Adviser has all the access it may require in order to carry out its objective, including access to the Assets;
- (c) submit to such monitoring as the Authority and/or the Remedial Adviser considers reasonable and proportionate in respect of the Intervention Cause;
- (d) implement any reasonable recommendations made by the Remedial Adviser that have been approved by the Authority within the timescales given by the Remedial Adviser; and
- (e) not terminate the appointment of the Remedial Adviser prior to the end of the Intervention Period without the prior consent of the Authority (such consent not to be unreasonably withheld).

29.5 The Supplier shall be responsible for:

- (a) the costs of appointing, and the fees charged by, the Remedial Adviser;
and
- (b) its own costs in connection with any action required by the Authority
and/or the Remedial Adviser pursuant to this Clause 29.

29.6 If:

- (a) the Supplier:
 - (i) fails to perform any of the steps required by the Authority in
an Intervention Notice; and/or
 - (ii) is in Default of any of its obligations under Clause 29.4; and/or

- (b) the relevant Intervention Trigger Event is not rectified by the end of the Intervention Period,

(each a “Remedial Adviser Failure”), the Authority shall be entitled to terminate this Agreement pursuant to Clause 33.1(b) (Termination by the Authority).

30 STEP-IN RIGHTS

30.1 On the occurrence of a Step-In Trigger Event, the Authority may serve notice on the Supplier (a “Step-In Notice”) that it will be taking action under this Clause 30 (Step- in Rights), either itself or with the assistance of a third party (provided that the Supplier may require any third parties to comply with a confidentiality undertaking equivalent to Clause 21 (Confidentiality)). The Step-In Notice shall set out the following:

- (a) the action the Authority wishes to take and in particular the Services that it wishes to control (the “Required Action”);
- (b) the Step-In Trigger Event that has occurred and whether the Authority believes that the Required Action is due to the Supplier's Default;
- (c) the date on which it wishes to commence the Required Action;
- (d) the time period which it believes will be necessary for the Required Action;
- (e) whether the Authority will require access to the Supplier's premises and/or the Sites; and
- (f) to the extent practicable, the impact that the Authority anticipates the Required Action will have on the Supplier's obligations to provide the Services during the period that the Required Action is being taken.

30.2 Following service of a Step-In Notice, the Authority shall:

- (a) take the Required Action set out in the Step-In Notice and any consequential additional action as it reasonably believes is necessary to achieve the Required Action;
 - (b) keep records of the Required Action taken and provide information about the Required Action to the Supplier;
-

- (c) co-operate wherever reasonable with the Supplier in order to enable the Supplier to continue to provide the Services in relation to which the Authority is not assuming control; and
- (d) act reasonably in mitigating the cost that the Supplier will incur as a result of the exercise of the Authority's rights under this Clause 30.

30.3 For so long as and to the extent that the Required Action is continuing, then:

- (a) the Supplier shall not be obliged to provide the Services to the extent that they are the subject of the Required Action;

- (b) no Deductions shall be applicable in relation to Charges in respect of Services that are the subject of the Required Action and the provisions of Clause 30.4 shall apply to Deductions from Charges in respect of other Services; and
- (c) the Authority shall pay to the Supplier the Charges after subtracting any applicable Deductions and the Authority's costs of taking the Required Action.

30.4 If the Supplier demonstrates to the reasonable satisfaction of the Authority that the Required Action has resulted in:

- (a) the degradation of any Services not subject to the Required Action; or
- (b) the non-Achievement of a Milestone,

beyond that which would have been the case had the Authority not taken the Required Action, then the Supplier shall be entitled to an agreed adjustment of the Charges.

30.5 Before ceasing to exercise its step in rights under this Clause 30 the Authority shall deliver a written notice to the Supplier (a “Step-Out Notice”), specifying:

- (a) the Required Action it has actually taken; and
- (b) the date on which the Authority plans to end the Required Action (the “Step- Out Date”) subject to the Authority being satisfied with the Supplier's ability to resume the provision of the Services and the Supplier's plan developed in accordance with Clause 30.6.

30.6 The Supplier shall, following receipt of a Step-Out Notice and not less than 20 Working Days prior to the Step-Out Date, develop for the Authority's approval a draft plan (a “Step-Out Plan”) relating to the resumption by the Supplier of the Services, including any action the Supplier proposes to take to ensure that the affected Services satisfy the requirements of this Agreement.

30.7 If the Authority does not approve the draft Step-Out Plan, the Authority shall inform the Supplier of its reasons for not approving it. The Supplier shall then revise the draft Step-Out Plan taking those reasons into account and shall re-submit the revised plan to the Authority for the Authority’s approval. The Authority shall not withhold or delay its approval of the draft Step-Out Plan unnecessarily.

30.8 The Supplier shall bear its own costs in connection with any step-in by the Authority under this Clause 30, provided that the Authority shall reimburse the Supplier's reasonable additional expenses incurred directly as a result of any step-in action taken by the Authority under:

- (a) limbs (c) or (d) of the definition of a Step-In Trigger Event; or
 - (b) limbs (e), (f) and (g) of the definition of a Step-in Trigger Event (insofar as the primary cause of the Authority serving the Step-In Notice is identified as not being the result of the Supplier's Default).
-

31 AUTHORITY CAUSE

31.1 Notwithstanding any other provision of this Agreement, if the Supplier has failed to:

- (a) Achieve a Milestone by its Milestone Date;
- (b) provide the Operational Services in accordance with the Target Performance Levels; and/or
- (c) comply with its obligations under this

Agreement, (each a “Supplier Non-Performance”),

and can demonstrate that the Supplier Non-Performance would not have occurred but for an Authority Cause, then (subject to the Supplier fulfilling its obligations in this Clause 31):

- (i) the Supplier shall not be treated as being in breach of this Agreement to the extent the Supplier can demonstrate that the Supplier Non- Performance was caused by the Authority Cause;
 - (ii) the Authority shall not be entitled to exercise any rights that may arise as a result of that Supplier Non-Performance:
 - (A) to terminate this Agreement pursuant to Clause 33.1(b) (Termination by the Authority); or
 - (B) to take action pursuant Clauses 29 (Remedial Adviser) or 30 (Step-In);
 - (iii) where the Supplier Non-Performance constitutes the failure to Achieve a Milestone by its Milestone Date:
 - (A) the Milestone Date shall be postponed by a period equal to the period of Delay that the Supplier can demonstrate was caused by the Authority Cause;
 - (B) if the Authority, acting reasonably, considers it appropriate, the Implementation Plan shall be amended to reflect any consequential revisions required to subsequent Milestone Dates resulting from the Authority Cause;
 - (C) if the Milestone is a Key Milestone, the Supplier shall
-

have no liability to pay any Delay Payments associated with the Key Milestone to the extent that the Supplier can demonstrate that such failure was caused by the Authority Cause; and

(D) the Supplier shall be entitled to claim compensation subject to and in accordance with the principles set out in Paragraph 2 of Part C of Schedule 7.1 (Charges and Invoicing); and/or

(iv) where the Supplier Non-Performance constitutes a Performance Failure:

(A) the Supplier shall not be liable to accrue Service Credits;

- (B) the Authority shall not be entitled to withhold any of the Service Charges pursuant to Clause 7.2(d)(ii) (Performance Failures);
- (C) the Authority shall not be entitled to withhold and retain any Compensation for Unacceptable KPI Failure pursuant to Clause 7.4(a) (Unacceptable KPI Failure); and
- (D) the Supplier shall be entitled to invoice for the Service Charges for the relevant Operational Services affected by the Authority Cause,

in each case, to the extent that the Supplier can demonstrate that the Performance Failure was caused by the Authority Cause.

31.2 In order to claim any of the rights and/or relief referred to in Clause 31.1, the Supplier shall as soon as reasonably practicable (and in any event within 10 Working Days) after becoming aware that an Authority Cause has caused, or is reasonably likely to cause, a Supplier Non-Performance, give the Authority notice (a “Relief Notice”) setting out details of:

- (a) the Supplier Non-Performance;
- (b) the Authority Cause and its effect, or likely effect, on the Supplier’s ability to meet its obligations under this Agreement;
- (c) any steps which the Authority can take to eliminate or mitigate the consequences and impact of such Authority Cause; and
- (d) the relief and/or compensation claimed by the Supplier.

31.3 Following the receipt of a Relief Notice, the Authority shall as soon as reasonably practicable consider the nature of the Supplier Non-Performance and the alleged Authority Cause and whether it agrees with the Supplier’s assessment set out in the Relief Notice as to the effect of the relevant Authority Cause and its entitlement to relief and/or compensation, consulting with the Supplier where necessary.

31.4 The Supplier shall use all reasonable endeavours to eliminate or mitigate the consequences and impact of an Authority Cause, including any Losses that the Supplier may incur and the duration and consequences of any Delay or anticipated Delay.

31.5 Without prejudice to Clause 5.9 (Continuing obligation to provide the

Services), if a Dispute arises as to:

- (a) whether a Supplier Non-Performance would not have occurred but for an Authority Cause; and/or
- (b) the nature and/or extent of the relief and/or compensation claimed by the Supplier,

either Party may refer the Dispute to the Dispute Resolution Procedure. Pending the resolution of the Dispute, both Parties shall continue to resolve the causes of, and mitigate the effects of, the Supplier Non-Performance.

31.6 Any Change that is required to the Implementation Plan or to the Charges pursuant to this Clause 31 shall be implemented in accordance with the Change Control Procedure.

32 FORCE MAJEURE

32.1 Subject to the remaining provisions of this Clause 32 (and, in relation to the Supplier, subject to its compliance with its obligations in Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning)), a Party may claim relief under this Clause 32 from liability for failure to meet its obligations under this Agreement for as long as and only to the extent that the performance of those obligations is directly affected by a Force Majeure Event. Any failure or delay by the Supplier in performing its obligations under this Agreement which results from a failure or delay by an agent, Sub-contractor or supplier shall be regarded as due to a Force Majeure Event only if that agent, Sub-contractor or supplier is itself impeded by a Force Majeure Event from complying with an obligation to the Supplier.

32.2 The Affected Party shall as soon as reasonably practicable issue a Force Majeure Notice, which shall include details of the Force Majeure Event, its effect on the obligations of the Affected Party and any action the Affected Party proposes to take to mitigate its effect.

32.3 If the Supplier is the Affected Party, it shall not be entitled to claim relief under this Clause 32 to the extent that consequences of the relevant Force Majeure Event:

- (a) are capable of being mitigated by any of the Services including the Service Continuity Services, but the Supplier has failed to do so; and/or
- (b) should have been foreseen and prevented or avoided by a prudent provider of services similar to the Services, operating to the standards required by this Agreement.

32.4 Subject to Clause 32.5, as soon as practicable after the Affected Party issues the Force Majeure Notice, and at regular intervals thereafter, the Parties shall consult in good faith and use reasonable endeavours to agree any steps to be taken and an appropriate timetable in which those steps should be taken, to enable continued provision of the Services affected by the Force Majeure Event.

32.5 The Parties shall at all times following the occurrence of a Force Majeure Event and during its subsistence use their respective reasonable endeavours to prevent and mitigate the effects of the Force Majeure Event. Where the

Supplier is the Affected Party, it shall take all steps in accordance with Good Industry Practice to overcome or minimise the consequences of the Force Majeure Event.

32.6 Where, as a result of a Force Majeure Event:

- (a) an Affected Party fails to perform its obligations in accordance with this Agreement, then during the continuance of the Force Majeure Event:
 - (i) the other Party shall not be entitled to exercise any rights to terminate this Agreement in whole or in part as a result of such failure other than pursuant to Clause 33.1(c) (Termination by the Authority) or Clause 33.3(b) (Termination by the Supplier); and

- (ii) neither Party shall be liable for any Default arising as a result of such failure;
 - (b) the Supplier fails to perform its obligations in accordance with this Agreement:
 - (i) the Authority shall not be entitled:
 - (A) during the continuance of the Force Majeure Event to exercise its rights under Clause 29 (Remedial Adviser) and/or Clause 30 (Step-in Rights) as a result of such failure;
 - (B) to receive Delay Payments pursuant to Clause 28 (Delay Payments) to the extent that the Achievement of any Milestone is affected by the Force Majeure Event; and
 - (C) to receive Service Credits, to withhold any of the Service Charges pursuant to Clause 7.2(d)(ii) (Performance Failures) or withhold and retain any of the Service Charges as compensation pursuant to Clause 7.4(a) (Unacceptable KPI Failure) to the extent that a Performance Failure has been caused by the Force Majeure Event; and
 - (ii) the Supplier shall be entitled to receive payment of the Charges (or a proportional payment of them) only to the extent that the Services (or part of the Services) continue to be performed in accordance with the terms of this Agreement during the occurrence of the Force Majeure Event.
- 32.7 The Affected Party shall notify the other Party as soon as practicable after the Force Majeure Event ceases or no longer causes the Affected Party to be unable to comply with its obligations under this Agreement.
- 32.8 Relief from liability for the Affected Party under this Clause 32 shall end as soon as the Force Majeure Event no longer causes the Affected Party to be unable to comply with its obligations under this Agreement and shall not be dependent on the serving of notice under Clause 32.7.
-

SECTION I – TERMINATION AND EXIT MANAGEMENT

33 TERMINATION RIGHTS

Termination by the Authority

33.1 The Authority may terminate this Agreement by issuing a Termination Notice to the Supplier:

- (a) for convenience at any time, including where the Agreement should not have been entered into in view of a serious infringement of obligations under European Law declared by the Court of Justice of the European Union under Article 258 of the Treaty on the Functioning of the EU;
- (b) if a Supplier Termination Event occurs;
- (c) if a Force Majeure Event endures for a continuous period of more than 90 days; or
- (d) if the Agreement has been substantially amended to the extent that the Public Contracts Regulations 2015 require a new procurement procedure,

and this Agreement shall terminate on the date specified in the Termination Notice.

33.2 Where the Authority:

- (a) is terminating this Agreement under Clause 33.1(b) due to the occurrence of either limb (b) and/or (g) of the definition of Supplier Termination Event, it may rely on a single material Default or on a number of Defaults or repeated Defaults (whether of the same or different obligations and regardless of whether such Defaults are cured) which taken together constitute a material Default; and/or
 - (b) has the right to terminate this Agreement under Clause 33.1(b) or Clause 33.1(c), it may, prior to or instead of terminating the whole of this Agreement, serve a Termination Notice requiring the partial termination of this Agreement to the extent that it relates to any part of the Services which are materially affected by the relevant circumstances.
-

Termination by the Supplier

33.3 The Supplier may, by issuing a Termination Notice to the Authority, terminate:

- (a) this Agreement if the Authority fails to pay an undisputed sum due to the Supplier under this Agreement which in aggregate exceeds £[insert amount equivalent to 1 month's average Charges] and such amount remains outstanding 40 Working Days after the receipt by the Authority of a notice of non-payment from the Supplier; or
- (b) any Services that are materially impacted by a Force Majeure Event that endures for a continuous period of more than 90 days,

and this Agreement or the relevant Services (as the case may be) shall then terminate on the date specified in the Termination Notice (which shall not be less than 20 Working Days from the date of the issue of the Termination Notice). If the

operation of Clause 33.3(b) would result in a Partial Termination, the provisions of Clause 33.4 (Partial Termination) shall apply.

Partial Termination

- 33.4 If the Supplier notifies the Authority pursuant to Clause 33.3(b) (Termination by the Supplier) that it intends to terminate this Agreement in part and the Authority, acting reasonably, believes that the effect of such Partial Termination is to render the remaining Services incapable of meeting a significant part of the Authority Requirements, then the Authority shall be entitled to terminate the remaining part of this Agreement by serving a Termination Notice to the Supplier within 1 month of receiving the Supplier's Termination Notice. For the purpose of this Clause 33.4, in assessing the significance of any part of the Authority Requirements, regard shall be had not only to the proportion of that part to the Authority Requirements as a whole, but also to the importance of the relevant part to the Authority.
- 33.5 The Parties shall agree the effect of any Change necessitated by a Partial Termination in accordance with the Change Control Procedure, including the effect the Partial Termination may have on any other Services and the Charges, provided that:
- (a) the Supplier shall not be entitled to an increase in the Charges in respect of the Services that have not been terminated if the Partial Termination arises due to the occurrence of a Supplier Termination Event;
 - (b) any adjustment to the Charges (if any) shall be calculated in accordance with the Financial Model and must be reasonable; and
 - (c) the Supplier shall not be entitled to reject the Change.

34 CONSEQUENCES OF EXPIRY OR TERMINATION

General Provisions on Expiry or Termination

- 34.1 The provisions of Clauses 5.8 (Specially Written Software warranty), 10.4 and 10.5 (VAT), 10.6 and 10.7 (Set-off and Withholding), 12 (Records, Reports, Audits and Open Book Data), 14.7 (Employment Indemnity), 14.8 (Income Tax and National Insurance Contributions), 16 (Intellectual Property Rights), 17 (Licences Granted by the Supplier), 19.1 (IPRs Indemnity), 21 (Confidentiality), 22 (Transparency and Freedom of Information), 23 (Protection of Personal Data), 25 (Limitations on Liability), 34 (Consequences of Expiry or Termination), 40 (Severance),
-

42 (Entire Agreement), 43 (Third Party Rights), 45 (Disputes) and 46 (Governing Law and Jurisdiction), and the provisions of Schedules 1 (Definitions), 7.1 (Charges and Invoicing), 7.2 (Payments on Termination), 7.5 (Financial Reports and Audit Rights), 8.3 (Dispute Resolution Procedure), 8.4 (Reports and Records Provisions), 8.5 (Exit Management), and 9.1 (Staff Transfer), shall survive the termination or expiry of this Agreement.

Exit Management

- 34.2 The Parties shall comply with the provisions of Schedule 8.5 (Exit Management) and any current Exit Plan in relation to orderly transition of the Services to the Authority or a Replacement Supplier.

Payments by the Authority

34.3 If this Agreement is terminated by the Authority pursuant to Clause 33.1(a) (Termination by the Authority) or by the Supplier pursuant to Clause 33.3(a) (Termination by the Supplier), the Authority shall pay the Supplier the following payments (which shall be the Supplier's sole remedy for the termination of this Agreement):

- (a) the Termination Payment; and
- (b) the Compensation Payment, if either of the following periods is less than 365 days:
 - (i) the period from (but excluding) the date that the Termination Notice is given (or, where Paragraph 2.1(a) of Part D of Schedule 7.1 (Charges and Invoicing) applies, deemed given) by the Authority pursuant to Clause 33.1(a) (Termination by the Authority)) to (and including) the Termination Date; or
 - (ii) the period from (and including) the date of the non-payment by the Authority referred to in Clause 33.3(a) (Termination by the Supplier) to (and including) the Termination Date.

34.4 If this Agreement is terminated (in part or in whole) by the Authority pursuant to Clauses 33.1(b), 33.1(c) and/or 33.2 (Termination by the Authority), or the Term expires, the only payments that the Authority shall be required to make as a result of such termination (whether by way of compensation or otherwise) are:

- (a) payments in respect of any Assets or apportionments in accordance with Schedule 8.5 (Exit Management); and
- (b) payments in respect of unpaid Charges for Services received up until the Termination Date.

34.5 The costs of termination incurred by the Parties shall lie where they fall if:

- (a) either Party terminates or partially terminates this Agreement for a continuing Force Majeure Event pursuant to Clauses 33.1(c) or 33.2(b) (Termination by the Authority) or 33.3(b) (Termination by the Supplier); or
 - (b) the Authority terminates this Agreement under Clause 33.1(d).
-

Payments by the Supplier

- 34.6 In the event of termination or expiry of this Agreement, the Supplier shall repay to the Authority all Charges it has been paid in advance in respect of Services not provided by the Supplier as at the date of expiry or termination.
- 34.7 If this Agreement is terminated (in whole or in part) by the Authority pursuant to Clause 33.1(b) (Termination by the Authority) prior to Achievement of one or more CPP Milestones, the Authority may at any time on or within 12 months of the issue of the relevant Termination Notice by issue to the Supplier of written notice (a “Milestone Adjustment Payment Notice”) require the Supplier to repay to the Authority an amount equal to the aggregate Milestone Adjustment Payment Amounts
-

in respect of each CPP Milestone to which the Milestone Adjustment Payment Notice relates.

34.8 A Milestone Adjustment Payment Notice shall specify:

- (a) each CPP Milestone to which it relates;
- (b) in relation to each such CPP Milestone, each Deliverable relating to that CPP Milestone that the Authority wishes to retain, if any (each such Deliverable being a “Retained Deliverable”); and
- (c) those Retained Deliverables, if any, the Allowable Price for which the Authority considers should be subject to deduction of an adjusting payment on the grounds that they do not or will not perform in all material respects in accordance with their specification (such adjusting payment being an “Allowable Price Adjustment”),

and may form part of a Termination Notice.

34.9 The Supplier shall within 10 Working Days of receipt of a Milestone Adjustment Payment Notice, in each case as applicable:

- (a) notify the Authority whether it agrees that the Retained Deliverables which the Authority considers should be subject to an Allowable Price Adjustment as specified in the relevant Milestone Adjustment Payment Notice should be so subject; and
 - (b) in relation to each such Retained Deliverable that the Supplier agrees should be subject to an Allowable Price Adjustment, notify the Authority of the Supplier’s proposed amount of the Allowable Price Adjustment and the basis for its approval;
 - (c) provide the Authority with its calculation of the Milestone Adjustment Payment Amount in respect of each CPP Milestone the subject of the relevant Milestone Adjustment Payment Notice using its proposed Allowable Price Adjustment, including details of:
 - (i) all relevant Milestone Payments; and
 - (ii) the Allowable Price of each Retained Deliverable; and
 - (d) provide the Authority with such supporting information as the Authority may require.
-

34.10 If the Parties do not agree the calculation of a Milestone Adjustment Payment Amount within 20 Working Days of the Supplier's receipt of the relevant Milestone Adjustment Payment Notice, either Party may refer the Dispute to the Dispute Resolution Procedure.

34.11 If the Authority issues a Milestone Adjustment Payment Notice pursuant to Clause 34.7:

(a) the Authority shall:

(i) securely destroy or return to the Supplier all Non-retained Deliverables

that are in tangible form; and

- (ii) ensure that all Non-retained Deliverables that are held in electronic, digital or other machine-readable form cease to be readily accessible (other than by the information technology staff of the Authority) from any computer, word processor, voicemail system or any other device containing such all Non-retained Deliverables,

in each case as soon as reasonably practicable after repayment of the aggregate Milestone Adjustment Payment Amounts repayable pursuant to that Milestone Adjustment Payment Notice; and

- (b) all licences granted pursuant to Clause 17 (Licences granted by the Supplier) in respect of Specially Written Software and Project Specific IPRs and any Supplier Non-COTS Software and/or Supplier Background IPRs shall terminate upon such repayment to the extent that they relate to the Non-retained Deliverables.

SECTION J - MISCELLANEOUS AND GOVERNING LAW

35 COMPLIANCE

Health and Safety

35.1 The Supplier shall perform its obligations under this Agreement (including those in relation to the Services) in accordance with:

- (a) all applicable Law regarding health and safety; and
- (b) the Health and Safety Policy whilst at the Authority Premises.

35.2 Each Party shall notify the other as soon as practicable of any health and safety incidents or material health and safety hazards at the Authority Premises of which it becomes aware and which relate to or arise in connection with the performance of this Agreement. The Supplier shall instruct the Supplier Personnel to adopt any necessary associated safety measures in order to manage any such material health and safety hazards.

Equality and Diversity

35.3 The Supplier shall:

- (a) perform its obligations under this Agreement (including those in relation to the Services) in accordance with:
 - (i) all applicable equality Law (whether in relation to race, sex, gender reassignment, age, disability, sexual orientation, religion or belief, pregnancy, maternity or otherwise);
 - (ii) the Authority's equality and diversity policy as provided to the Supplier from time to time; and
 - (iii) any other requirements and instructions which the Authority reasonably imposes in connection with any equality obligations imposed on the Authority at any time under applicable equality Law; and
 - (b) take all necessary steps, and inform the Authority of the steps taken, to prevent unlawful discrimination designated as such by any court or tribunal, or the Equality and Human Rights Commission or (any
-

successor organisation).

Official Secrets Act and Finance Act

35.4 The Supplier shall comply with the provisions of:

- (a) the Official Secrets Acts 1911 to 1989; and
- (b) section 182 of the Finance Act 1989.

36 ASSIGNMENT AND NOVATION

36.1 The Supplier shall not assign, novate or otherwise dispose of or create any trust in relation to any or all of its rights, obligations or liabilities under this Agreement

without the prior written consent of the Authority.

36.2 The Authority may at its discretion assign, novate or otherwise dispose of any or all of its rights, obligations and liabilities under this Agreement and/or any associated licences to:

- (a) any Central Government Body; or
- (b) to a body other than a Central Government Body (including any private sector body) which performs any of the functions that previously had been performed by the Authority,

and the Supplier shall, at the Authority's request, enter into a novation agreement in such form as the Authority shall reasonably specify in order to enable the Authority to exercise its rights pursuant to this Clause 36.2.

36.3 A change in the legal status of the Authority such that it ceases to be a Central Government Body shall not (subject to Clause 36.4) affect the validity of this Agreement and this Agreement shall be binding on any successor body to the Authority.

36.4 If the Authority assigns, novates or otherwise disposes of any of its rights, obligations or liabilities under this Agreement to a body which is not a Central Government Body or if a body which is not a Central Government Body succeeds the Authority (any such body a "Successor Body"), the Supplier shall have the right to terminate for an Insolvency Event affecting the Successor Body identical to the right of termination of the Authority under limb (k) of the definition of Supplier Termination Event (as if references in that limb (k) to the Supplier and the Guarantor were references to the Successor Body).

37 WAIVER AND CUMULATIVE REMEDIES

37.1 The rights and remedies under this Agreement may be waived only by notice and in a manner that expressly states that a waiver is intended. A failure or delay by a Party in ascertaining or exercising a right or remedy provided under this Agreement or by law shall not constitute a waiver of that right or remedy, nor shall it prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of any right or remedy shall prevent or restrict the further exercise of that or any other right or remedy.

37.2 Unless otherwise provided in this Agreement, rights and remedies under this Agreement are cumulative and do not exclude any rights or remedies provided

by law, in equity or otherwise.

38 RELATIONSHIP OF THE PARTIES

Except as expressly provided otherwise in this Agreement, nothing in this Agreement, nor any actions taken by the Parties pursuant to this Agreement, shall create a partnership, joint venture or relationship of employer and employee or principal and agent between the Parties, or authorise either Party to make representations or enter into any commitments for or on behalf of any other Party.

39 PREVENTION OF FRAUD AND BRIBERY

39.1 The Supplier represents and warrants that neither it, nor to the best of its knowledge any Supplier Personnel, have at any time prior to the Effective Date:

- (a) committed a Prohibited Act or been formally notified that it is subject to an investigation or prosecution which relates to an alleged Prohibited Act; and/or
- (b) been listed by any government department or agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programmes or contracts on the grounds of a Prohibited Act.

39.2 The Supplier shall not during the term of this Agreement:

- (a) commit a Prohibited Act; and/or
- (b) do or suffer anything to be done which would cause the Authority or any of the Authority's employees, consultants, contractors, sub-contractors or agents to contravene any of the Relevant Requirements or otherwise incur any liability in relation to the Relevant Requirements.

39.3 The Supplier shall during the term of this Agreement:

- (a) establish, maintain and enforce, and require that its Sub-contractors establish, maintain and enforce, policies and procedures which are adequate to ensure compliance with the Relevant Requirements and prevent the occurrence of a Prohibited Act;
- (b) have in place reasonable prevention measures (as defined in sections 45(3) and 46(4) of the Criminal Finance Act 2017) to ensure that Associated Persons of the Supplier do not commit tax evasion facilitation offences as defined under that Act;
- (c) keep appropriate records of its compliance with its obligations under Clause 39.3(a) and make such records available to the Authority on request; and
- (d) take account of any guidance about preventing facilitation of tax evasion offences which may be published and updated in accordance with Section 47 of the Criminal Finances Act 2017.

39.4 The Supplier shall immediately notify the Authority in writing if it becomes

aware of any breach of Clause 39.1 and/or 39.2, or has reason to believe that it has or any of the Supplier Personnel have:

- (a) been subject to an investigation or prosecution which relates to an alleged Prohibited Act;
 - (b) been listed by any government department or agency as being debarred, suspended, proposed for suspension or debarment, or otherwise ineligible for participation in government procurement programmes or contracts on the grounds of a Prohibited Act; and/or
-

- (c) received a request or demand for any undue financial or other advantage of any kind in connection with the performance of this Agreement or otherwise suspects that any person or Party directly or indirectly connected with this Agreement has committed or attempted to commit a Prohibited Act.
- 39.5 If the Supplier makes a notification to the Authority pursuant to Clause 39.4, the Supplier shall respond promptly to the Authority's enquiries, co-operate with any investigation, and allow the Authority to Audit any books, Records and/or any other relevant documentation in accordance with Clause 12 (Records, Reports, Audits and Open Book Data).
- 39.6 If the Supplier is in Default under Clauses 39.1 and/or 39.2, the Authority may by notice:
 - (a) require the Supplier to remove from performance of this Agreement any Supplier Personnel whose acts or omissions have caused the Default; or
 - (b) immediately terminate this Agreement.
- 39.7 Any notice served by the Authority under Clause 39.6 shall specify the nature of the Prohibited Act, the identity of the Party who the Authority believes has committed the Prohibited Act and the action that the Authority has elected to take (including, where relevant, the date on which this Agreement shall terminate).

40 SEVERANCE

- 40.1 If any provision of this Agreement (or part of any provision) is held to be void or otherwise unenforceable by any court of competent jurisdiction, such provision (or part) shall to the extent necessary to ensure that the remaining provisions of this Agreement are not void or unenforceable be deemed to be deleted and the validity and/or enforceability of the remaining provisions of this Agreement shall not be affected.
 - 40.2 In the event that any deemed deletion under Clause 40.1 is so fundamental as to prevent the accomplishment of the purpose of this Agreement or materially alters the balance of risks and rewards in this Agreement, either Party may give notice to the other Party requiring the Parties to commence good faith negotiations to amend this Agreement so that, as amended, it is valid and enforceable, preserves the balance of risks and rewards in this Agreement and, to the extent that is reasonably possible, achieves the Parties' original commercial intention.
-

40.3 If the Parties are unable to agree on the revisions to this Agreement within 5 Working Days of the date of the notice given pursuant to Clause 40.2, the matter shall be dealt with in accordance with Paragraph 4 (Commercial Negotiation) of Schedule

8.3 (Dispute Resolution Procedure) except that if the representatives are unable to resolve the dispute within 30 Working Days of the matter being referred to them, this Agreement shall automatically terminate with immediate effect. The costs of termination incurred by the Parties shall lie where they fall if this Agreement is terminated pursuant to this Clause 40.3.

41 FURTHER ASSURANCES

Each Party undertakes at the request of the other, and at the cost of the requesting Party to do all acts and execute all documents which may be reasonably necessary to give effect to the meaning of this Agreement.

42 ENTIRE AGREEMENT

42.1 This Agreement constitutes the entire agreement between the Parties in respect of its subject matter and supersedes and extinguishes all prior negotiations, arrangements, understanding, course of dealings or agreements made between the Parties in relation to its subject matter, whether written or oral.

42.2 Neither Party has been given, nor entered into this Agreement in reliance on, any warranty, statement, promise or representation other than those expressly set out in this Agreement.

42.3 Nothing in this Clause 42 shall exclude any liability in respect of misrepresentations made fraudulently.

43 THIRD PARTY RIGHTS

43.1 The provisions of Clause 19.1 (IPRs Indemnity), Paragraphs 2.1 and 2.6 of Part A, Paragraphs 2.1, 2.6, 3.1 and 3.3 of Part B, Paragraphs 2.1 and 2.3 of Part C, Part D and Paragraphs 1.4, 2.3 and 2.8 of Part E of Schedule 9.1 (Staff Transfer) and the provisions of Paragraph 6.9 of Schedule 8.5 (Exit Management) (together “Third Party Provisions”) confer benefits on persons named in such provisions other than the Parties (each such person a “Third Party Beneficiary”) and are intended to be enforceable by Third Parties Beneficiaries by virtue of the CRTPA.

43.2 Subject to Clause 43.1, a person who is not a Party to this Agreement has no right under the CRTPA to enforce any term of this Agreement but this does not affect any right or remedy of any person which exists or is available otherwise than pursuant to that Act.

43.3 No Third Party Beneficiary may enforce, or take any step to enforce, any Third Party Provision without the prior written consent of the Authority, which may, if given, be given on and subject to such terms as the Authority may determine.

43.4 Any amendments or modifications to this Agreement may be made, and any rights created under Clause 43.1 may be altered or extinguished, by the Parties without the consent of any Third Party Beneficiary.

44 NOTICES

44.1 Any notices sent under this Agreement must be in writing.

44.2 Subject to Clause 44.4, the following table sets out the method by which notices may be served under this Agreement and the respective deemed time and proof of service:

Manne of Delivery r	Deeme time of d service	Proo of service f
------------------------	-----------------------------------------	----------------------

Email	9.00am on the first Working Day after sending	Dispatched as a pdf attachment to an e-mail to the correct e-mail address without any error message
Personal delivery	On delivery, provided delivery is between 9.00am and 5.00pm on a Working Day. Otherwise, delivery will occur at 9.00am on the next	Properly addressed and delivered as evidenced by signature of a delivery receipt
Prepaid, Royal Mail Signed For™ 1 st Class or other prepaid, next working day service providing proof of delivery.	At the time recorded by the delivery service, provided that delivery is between 9.00am and 5.00pm on a Working Day. Otherwise, delivery will occur at 9.00am on the same Working Day (if delivery is before	Properly addressed prepaid and delivered as evidenced by signature of a delivery receipt

- 44.3 Notices shall be sent to the addresses set out below or at such other address as the relevant Party may give notice to the other Party for the purpose of service of notices under this Agreement:

	Supplier	Authority
Contact		
Address		
Email		

- 44.4 The following notices may only be served as an attachment to an email if the original notice is then sent to the recipient by personal delivery or recorded delivery in the manner set out in the table in Clause 44.2:

- (a) Step-In Notices;
 - (b) Force Majeure Notices;
 - (c) notices issued by the Supplier pursuant to Clause 33.3 (Termination by the Supplier);
-

(d) Termination Notices; and

(e) Dispute Notices.

44.5 Failure to send any original notice by personal delivery or recorded delivery in accordance with Clause 44.4 shall invalidate the service of the related e-mail transmission. The deemed time of delivery of such notice shall be the deemed time of delivery of the original notice sent by personal delivery or Royal Mail Signed For™ 1st Class delivery (as set out in the table in Clause 44.2) or, if earlier, the time of response or acknowledgement by the other Party to the email attaching the notice.

44.6 This Clause 44 does not apply to the service of any proceedings or other documents in any legal action or, where applicable, any arbitration or other method of dispute resolution (other than the service of a Dispute Notice under Schedule 8.3 (Dispute Resolution Procedure)).

45 DISPUTES

45.1 The Parties shall resolve Disputes arising out of or in connection with this Agreement in accordance with the Dispute Resolution Procedure.

45.2 The Supplier shall continue to provide the Services in accordance with the terms of this Agreement until a Dispute has been resolved.

46 GOVERNING LAW AND JURISDICTION

46.1 This Agreement and any issues, disputes or claims (whether contractual or non- contractual) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the laws of England and Wales.

46.2 Subject to Clause 45 (Disputes) and Schedule 8.3 (Dispute Resolution Procedure) (including the Authority's right to refer the dispute to arbitration), the Parties agree that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim (whether contractual or non-contractual) that arises out of or in connection with this Agreement or its subject matter or formation.

IN WITNESS of which this Agreement has been duly executed by the Parties on the date which appears at the head of its page 1.

EXECUTED AS A DEED, but not)
delivered until the date specified on)
this deed, by [name of the Supplier])
by a director in the presence of a) Signature:
witness:

Name
(block
capitals):

Director

Witness
signature:

Witness name
(block capitals):

Witness address:

SIGNED for and on behalf of [name of the
Authority]

Signature:

Name (block capitals):

Position:

Date:

SCHEDULE

1

Definitions

Unless otherwise provided or the context otherwise requires the following expressions shall have the meanings set out below.

“Accounting Reference Date” its	means the dates to which the Supplier prepares audited financial statements;
“Achieve”	(a) in respect of a Test, to successfully pass a Test without any Test Issues; and (b) in respect of a Milestone, the issue of a Milestone Achievement Certificate in respect of that Milestone in accordance with the provisions of Schedule 6.2 (Testing Procedures), and “Achieved” and “Achievement” shall be construed accordingly;
“Acquired Rights Directive” the	the European Council Directive 77/187/EEC on approximation of laws of European member states relating to the safeguarding of employees’ rights in the event of transfers of undertakings, businesses or parts of undertakings or businesses, as amended or re-enacted from time to time;
“Affected Party”	the Party seeking to claim relief in respect of a Force Majeure Event;
“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;

“Allowable Assumptions”

the assumptions set out in Annex 5 of Schedule 7.1 (Charges and Invoicing);

“Allowable Price”

in relation to the Retained Deliverables relating to a CPP Milestone, if any, an amount determined in accordance with the formula:

$$A - B$$

where:

- (a) A is an amount equal to the Costs incurred by the Supplier in providing or developing the relevant Retained Deliverables as reflected in the Financial Model together with an amount

equal to the Anticipated Contract Life Profit Margin thereon; and

- (b) B is an amount equal to the Allowable Price Adjustment relating to the relevant Retained Deliverables, if any, or if there is no such Allowable Price Adjustment, zero,

provided that the Allowable Price for any Retained Deliverables shall in no circumstances exceed the aggregate amount of the Milestone Payments paid to the Supplier in respect of the Milestones (or in the case of Partial Termination, the Milestones for the parts of the Services terminated) relating to that CPP Milestone;

“Allowable Price Adjustment” (Payments

has the meaning given in Clause 34.8(c)

by the Supplier);

“Annual Contract Report” (Financial

has the meaning given in Schedule 7.5

Reports and Audit Rights);

“Annual Revenue”

means, for the purposes of determining whether an entity is a Public Sector Dependent Supplier, the audited consolidated aggregate revenue (including share of revenue of joint ventures and Associates) reported by the Supplier or, as appropriate, the Supplier Group in its most recent published accounts, subject to the following methodology:

(a) figures for accounting periods of other than 12 months should be scaled pro rata to produce a proforma figure for a 12 month period; and

(b) where the Supplier, the Supplier Group and/or their joint ventures and Associates report in a foreign currency, revenue should be converted to British Pound Sterling at the closing exchange rate on the Accounting Reference Date;

“Anticipated Contract Life Profit Margin”

has the meaning given in Schedule 7.1 (Charges and Invoicing);

“Approved Sub-Licensee”

any of the following:

- (a) a Central Government Body;
- (b) any third party providing services to a Central Government Body; and/or
- (c) any body (including any private sector body) which performs or carries on any of the functions and/or activities that previously had

been performed and/or carried on by the Authority;

“Assets”	all assets and rights used by the Supplier to provide the Services in accordance with this Agreement but excluding the Authority Assets;
“Associated Person”	has the meaning given to it in Section 44(4) of the Criminal Finances Act 2017;
“Associates”	means, in relation to an entity, an undertaking in which the entity owns, directly or indirectly, between 20% and 50% of the voting rights and exercises a degree of control sufficient for the undertaking to be treated as an associate under generally accepted accounting principles;
“Assurance”	means written confirmation from a Relevant Authority to the Supplier that the CRP Information is approved by the Relevant Authority;
“ATP Milestone”	the Milestone linked to Authority to Proceed for the relevant Operational Services set out in the Implementation Plan;
“Audit”	any exercise by the Authority of its Audit Rights pursuant to Clause 12 (Records, Reports, Audit and Open Book Data) and Schedule 7.5 (Financial Reports and Audit Rights);
“Audit Agents”	(a) the Authority’s internal and external auditors; (b) the Authority’s statutory or regulatory auditors;

- (c) the Comptroller and Auditor General, their staff and/or any appointed representatives of the National Audit Office;
- (d) HM Treasury or the Cabinet Office;
- (e) any party formally appointed by the Authority to carry out audit or similar review functions; and
- (f) successors or assigns of any of the above;

“Audit Rights”	the audit and access rights referred to in Schedule 7.5 (Financial Reports and Audit Rights);
“Authority Assets”	the Authority Materials, the Authority infrastructure and any other data, software, assets, equipment or other property owned by and/or licensed or leased to the Authority and which is or may be used in connection with the provision or receipt of the Services;
“Authority Background IPRs” the	(a) IPRs owned by the Authority before Effective Date, including IPRs contained in any of the Authority's Know-How, documentation, processes and procedures; (b) IPRs created by the Authority independently of this Agreement; and/or (c) Crown Copyright which is not available to the Supplier otherwise than under this Agreement; but excluding IPRs owned by the Authority subsisting in the Authority Software;
“Authority Cause”	any material breach by the Authority of any of the Authority Responsibilities, except to the extent that such breach is: (a) the result of any act or omission by the Authority to which the Supplier has given its prior consent; or (b) caused by the Supplier, any Sub-contractor or any Supplier Personnel;
“Authority Data”	(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 Supplier by or on behalf of the Authority; and/or
 - (ii) which the Supplier is required to generate, process, store or transmit pursuant to this Agreement; or
- (b) any Personal Data for which the Authority is the Data Controller;
-

“Authority IT Strategy” Effective	the Authority's IT policy in force as at the
	Date (a copy of which has been supplied to the Supplier), as updated from time to time in accordance with the Change Control Procedure;
“Authority Materials”	<p>the Authority Data together with any materials, documentation, information, programs and codes supplied by the Authority to the Supplier, the IPRs in which:</p> <p>(a) are owned or used by or on behalf of the Authority; and</p> <p>(b) are or may be used in connection with the provision or receipt of the Services,</p> <p>but excluding any Project Specific IPRs, Specially Written Software, Supplier Software, Third Party Software and Documentation relating to Supplier Software or Third Party Software;</p>
“Authority Premises”	premises owned, controlled or occupied by the Authority and/or any Central Government Body which are made available for use by the Supplier or its Sub-contractors for provision of the Services (or any of them);
“Authority Representative”	the representative appointed by the Authority pursuant to Clause 11.4 (Representatives);
“Authority Requirements”	<p>the requirements of the Authority set out in Schedules 2.1 (Services Description),</p> <p>, 2.2 (Performance Indicators), 2.3 (Standards),</p> <p>2.4 (Security Management), 2.5 (Insurance Requirements), 6.1 (Implementation Plan),</p>

8.4 (Reports and Records Provisions), 8.5 (Exit Management) and 8.6 (Service Continuity Plan and Corporate Resolution Planning);

“Authority Responsibilities”
in

the responsibilities of the Authority specified

Schedule 3 (Authority Responsibilities);

“Authority Software”

software which is owned by or licensed to the Authority (other than under or pursuant to this Agreement) and which is or will be used by the Supplier for the purposes of providing the Services;

“Authority System”

the Authority's computing environment (consisting of hardware, software and/or telecommunications networks or equipment) used by the Authority or the Supplier in connection with this Agreement which is owned by the Authority or licensed to it by a third

party and which interfaces with the Supplier System or which is necessary for the Authority to receive the Services;

“Authority to Proceed” or “ATP” the authorisation to the Supplier to commence the provision of the relevant Operational Services to the Authority, provided by the Authority in the form of a Milestone Achievement Certificate in respect of the ATP Milestone;

“Balanced Scorecard Report” has the meaning given in Paragraph 1.1(b) of Part B of Schedule 2.2 (Performance Levels);

“Baseline Security Requirements” the Authority's baseline security requirements, the current copy of which is contained in Annex 1 of Schedule 2.4 (Security Management), as updated from time to time by the Authority and notified to the Supplier;

“Board” means the Supplier’s board of directors;

“Board Confirmation” means the written confirmation from the Board in accordance with paragraph 8 of Schedule 7.4 (Financial Distress);

“Breakage Costs Payment” (Payments has the meaning given in Schedule 7.2 on Termination);

“Cabinet Office Markets and Suppliers Team” means the UK government’s team responsible for managing the relationship between government and its Strategic Suppliers, or any replacement or successor body carrying out the same function;

“Central Government Body”
categories

a body listed in one of the following sub-

of the Central Government classification of the
Public Sector Classification Guide, as published
and amended from time to time by the Office
for National Statistics:

- (a) Government Department;
 - (b) Non-Departmental Public Body or
Assembly Sponsored Public Body
(advisory, executive, or tribunal);
 - (c) Non-Ministerial Department; or
 - (d) Executive Agency;
-

“Certificate of Costs”	has the meaning given in Schedule 7.1 (Charges and Invoicing);
“Change”	any change to this Agreement;
“Change Authorisation Note” which	a form setting out an agreed Contract Change shall be substantially in the form of Annex 2 of Schedule 8.2 (Change Control Procedure);
“Change Control Procedure” in	the procedure for changing this Agreement set out in Schedule 8.2 (Change Control Procedure);
“Change in Law”	any change in Law which impacts on the performance of the Services which comes into force after the Effective Date;
“Change Request”	a written request for a Contract Change substantially in the form of Annex 1 of Schedule 8.2 (Change Control Procedure);
“Charges”	the charges for the provision of the Services set out in or otherwise calculated in accordance with Schedule 7.1 (Charges and Invoicing), including any Milestone Payment or Service Charge;
“Class 1 Transaction” by	has the meaning set out in the listing rules issued the UK Listing Authority;
“CNI”	means Critical National Infrastructure;
“Commercially Sensitive Information” (Commercially	the information listed in Schedule 4.2 Sensitive Information) comprising the information of a commercially sensitive nature relating to –

(a) the pricing of the Services;

(b) details of the Supplier's IPRs; and

(c) the Supplier's business and investment plans;

which the Supplier has indicated to the Authority that, if disclosed by the Authority, would cause the Supplier significant commercial disadvantage or material financial loss;

“Comparable Supply”

the supply of services to another customer of the Supplier that are the same or similar to any of the Services;

“Compensation for Unacceptable KPI Failure”	has the meaning given in Clause 7.4(a) (Unacceptable KPI Failure);
“Compensation Payment” on	has the meaning given in Schedule 7.2 (Payments Termination);
“Condition Precedent”	has the meaning given in Clause 4.2 (Condition Precedent);
“Confidential Information”	<p>(a) Information, including all Personal Data, which (however it is conveyed) is provided by the Disclosing Party pursuant to or in anticipation of this Agreement that relates to:</p> <p>(i) the Disclosing Party Group; or</p> <p>(ii) the operations, business, affairs, developments, intellectual property rights, trade secrets, know-how and/or personnel of the Disclosing Party Group;</p> <p>(b) other Information provided by the Disclosing Party pursuant to or in anticipation of this Agreement that is clearly designated as being confidential or equivalent or that ought reasonably to be considered to be confidential (whether or not it is so marked) which comes (or has come) to the Recipient’s attention or into the Recipient’s possession in connection with this Agreement;</p> <p>(c) discussions, negotiations, and correspondence between the Disclosing Party or any of its directors, officers, employees, consultants or professional advisers and the Recipient or any of its directors, officers, employees, consultants and professional</p>

advisers in connection with this Agreement and all matters arising therefrom; and

(d) Information derived from any of the

above, but not including any Information

which:

- (i) was in the possession of the Recipient without obligation of confidentiality prior to its disclosure by the Disclosing Party;
- (ii) the Recipient obtained on a non-confidential basis from a third party who is not, to the Recipient's knowledge or belief, bound by a confidentiality agreement with the Disclosing

Party or otherwise prohibited from disclosing the information to the Recipient;

(iii) was already generally available and in the public domain at the time of disclosure otherwise than by a breach of this Agreement or breach of a duty of confidentiality;

(iv) was independently developed without access to the Confidential Information; or

(v) relates to the Supplier's:

1. performance under this Agreement; or

2. failure to pay any Sub-contractor as required pursuant to Clause 15.15(a) (Supply Chain Protection);

“Contract Change”

any change to this Agreement other than an Operational Change;

“Contract Inception Report”

the initial financial model in a form agreed by the Supplier and the Authority in writing on or before the Effective Date;

“Contract Finder”

the online government portal which allows suppliers to search for information about contracts worth over £10,000 (excluding VAT) as prescribed by Part 4 of the Public Contract Regulations 2015;

“Contract Year”

(a) a period of 12 months commencing on the Effective Date; or

(b) thereafter a period of 12 months commencing on each anniversary of the Effective Date;

provided that the final Contract Year shall end on the expiry or termination of the Term;

“Control”

the possession by person, directly or indirectly, of 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 “Controls” and “Controlled” shall be interpreted accordingly;

“Controller”

has the meaning given in the GDPR;

“Corporate Change Event”

means:

- (a) any change of Control of the Supplier or a Parent Undertaking of the Supplier;
 - (b) any change of Control of any member of the Supplier Group which, in the reasonable opinion of the Authority, could have a material adverse effect on the Services;
 - (c) any change to the business of the Supplier or any member of the Supplier Group which, in the reasonable opinion of the Authority, could have a material adverse effect on the Services;
 - (d) a Class 1 Transaction taking place in relation to the shares of the Supplier or any Parent Undertaking of the Supplier whose shares are listed on the main market of the London Stock Exchange plc;
 - (e) an event that could reasonably be regarded as being equivalent to a Class 1 Transaction taking place in respect of the Supplier or any Parent Undertaking of the Supplier;
 - (f) payment of dividends by the Supplier or the ultimate Parent Undertaking of the Supplier Group exceeding 25% of the Net Asset Value of the Supplier or the ultimate Parent Undertaking of the Supplier Group respectively in any 12 month period;
 - (g) an order is made or an effective resolution is passed for the winding up of any member of the Supplier Group;
 - (h) any member of the Supplier Group stopping payment of its debts generally or becoming unable to pay its debts within the meaning of section 123(1) of the Insolvency Act 1986 or any member of the Supplier Group ceasing to carry on all or substantially all its business, or any compromise, composition, arrangement or agreement being made with creditors of any member of the Supplier Group;
-

(i) the appointment of a receiver, administrative receiver or administrator in respect of or over all or a material part of the undertaking or assets of any member of the Supplier Group; and/or

(j) any process or events with an effect analogous to those in paragraphs (e) to (g) inclusive above occurring to a member of the Supplier Group

in a jurisdiction outside England and Wales;

“Corporate Resolution Planning Information”

means, together, the:

a) Group Structure Information and Resolution Commentary; and

b) UK Public Sector and CNI Contract Information;

“Costs”

has the meaning given in Schedule 7.1 (Charges and Invoicing);

“CPP Milestone”

a contract performance point as set out in the Implementation Plan, being the Milestone at which the Supplier has demonstrated that the Supplier Solution or relevant Service is working satisfactorily in its operating environment in accordance with Schedule 6.2 (Testing Procedures);

“Critical National Infrastructure” means those critical elements of UK national

infrastructure (namely assets, facilities, systems, networks or processes and the essential workers that operate and facilitate them), the loss or compromise of which could result in:

a) major detrimental impact on the availability, integrity or delivery of essential services – including those services whose integrity, if compromised, could result in significant loss of life or casualties – taking into account significant economic or social impacts; and/or

b) significant impact on national security, national defence, or the functioning of the UK;

“Critical Performance Failure” (a) the Supplier accruing in aggregate
[insert

number] or more Service Points (in terms of the number of points allocated) in any period of [insert number] months; or

- (b) the Supplier accruing Service Credits or Compensation for Unacceptable KPI Failure which meet or exceed the Service Credit Cap;

“Critical Service Contract”
as

means the overall status of this Agreement

determined by the Authority and specified in paragraph 10.1 of Part 2 to Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning)

“CRP Information”	means the Corporate Resolution Planning Information;
“CRTPA”	the Contracts (Rights of Third Parties) Act 1999;
“Data Loss Event”	any event that results, or may result, in unauthorised access to Personal Data held by the Supplier under this Agreement, and/or actual or potential loss and/or destruction of Personal Data in breach of this Agreement, 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” applicable	<p>a) the GDPR, the LED and any national implementing Laws as amended from time to time</p> <p>b) the DPA 2018 to the extent that it relates to processing of personal data and privacy;</p> <p>c) all applicable Law about the processing of personal data and privacy;</p>
“Data Subject”	has the meaning given in the DPA;
“Data Subject Request” Subject	<p>a request made by, or on behalf of, a Data</p> <p>in accordance with rights granted pursuant to the Data Protection Legislation to their Personal Data;</p>
“Deductions”	all Service Credits, Compensation for Unacceptable KPI Failure, Delay Payments or

any other deduction which is paid or payable to the Authority under this Agreement;

“Default”

any breach of the obligations of the relevant Party (including abandonment of this Agreement in breach of its terms, repudiatory breach or breach of a fundamental term) or any other default, act, omission, negligence or statement:

- (a) in the case of the Authority, of its employees, servants, agents; or
- (b) in the case of the Supplier, of its Sub- contractors or any Supplier Personnel,

in connection with or in relation to the subject- matter of this Agreement and in respect of which

such Party is liable to the other;

“Defect”

- (a) any error, damage or defect in the manufacturing of a Deliverable;
- (b) any error or failure of code within the Software which causes a malfunction or to produce unintelligible or incorrect results; or
- (c) any failure of any Deliverable to provide performance, features and functionality specified in the Authority Requirements or the Documentation (including any adverse effect on response times) regardless of whether or not it prevents the relevant Deliverable from meeting its associated Test Success Criteria; or
- (d) any failure of any Deliverable to operate in conjunction with or interface with any other Deliverable in order to provide the performance, features and functionality specified in the Authority Requirements or the Documentation (including any adverse effect on response times) regardless of whether or not it prevents the relevant Deliverable from meeting its associated Test Success Criteria;

“Delay”

- (a) a delay in the Achievement of a Milestone by its Milestone Date; or
- (b) a delay in the design, development, testing or implementation of a Deliverable by the relevant date set out in the Implementation Plan;

“Delay Deduction Period”
relevant

the period of 100 days commencing on the
Milestone Date;

“Delay Payments”

the amounts payable by the Supplier to the Authority in respect of a Delay in Achieving a

Key Milestone as specified in Schedule 7.1
(Charges and Invoicing);

“Deliverable”

an item or feature delivered or to be delivered
by the Supplier at or before a Milestone Date or
at any other stage during the performance of
this Agreement;

“Detailed Implementation Plan” the plan developed and revised from time to time
in accordance with Paragraphs 3 and 4
of Schedule 6.1 (Implementation Plan);

“Dependent Parent Undertaking” means any Parent Undertaking which provides any

of its Subsidiary Undertakings and/or Associates, whether directly or indirectly, with any financial, trading, managerial or other assistance of whatever nature, without which the Supplier would be unable to continue the day to day conduct and operation of its business in the same manner as carried on at the time of entering into this Agreement, including for the avoidance of doubt the provision of the Services in accordance with the terms of this Agreement;

“Disclosing Party” has the meaning given in Clause 21.1 (Confidentiality);

“Disclosing Party Group”
the (a) where the Disclosing Party is the Supplier,

Supplier and any Affiliates of the Supplier;
and

(b) where the Disclosing Party is the Authority, the Authority and any Central Government Body with which the Authority or the Supplier interacts in connection with this Agreement;

“Dispute” any dispute, difference or question of interpretation arising out of or in connection with this Agreement, including any dispute, difference or question of interpretation relating to the Services, failure to agree in accordance with the Change Control Procedure or any matter where this Agreement directs the Parties to resolve an issue by reference to the Dispute Resolution Procedure;

“Dispute Notice” a written notice served by one Party on the other stating that the Party serving the notice believes that there is a Dispute;

“Dispute Resolution Procedure” the dispute resolution procedure set out in Schedule 8.3 (Dispute Resolution Procedure);

“Documentation”

descriptions of the Services and Performance Indicators, details of the Supplier System (including

(i) vendors and versions for off-the-shelf components and (ii) source code and build information for proprietary components), relevant design and development information, technical specifications of all functionality including those not included in standard manuals (such as those that modify system performance and access levels), configuration details, test scripts, user manuals,

operating manuals, process definitions and procedures, and all such other documentation as:

- (a) is required to be supplied by the Supplier to the Authority under this Agreement;
- (b) would reasonably be required by a competent third party capable of Good Industry Practice contracted by the Authority to develop, configure, build, deploy, run, maintain, upgrade and test the individual systems that provide Services;
- (c) is required by the Supplier in order to provide the Services; and/or
- (d) has been or shall be generated for the purpose of providing the Services;

“DOTAS”

the Disclosure of Tax Avoidance Schemes rules which require a promoter of tax schemes to tell HMRC of any specified notifiable arrangements or proposals and to provide prescribed information on those arrangements or proposals within set time limits as contained in Part 7 of the Finance Act 2004 and in secondary legislation made under vires contained in Part 7 of the Finance Act 2004 and as extended to national insurance contributions by the National Insurance Contributions (Application of Part 7 of the Finance Act 2004) Regulations 2012, SI 2012/1868) made under section 132A of the Social Security Administration Act 1992;

“DPA”

the Data Protection Act 2018 ;

“Due Diligence Information”
on

any information supplied to the Supplier by or
behalf of the Authority prior to the Effective Date;

“Effective Date”

the later of:

- (a) the date on which this Agreement is signed by both Parties; and
- (b) the date on which the Condition Precedent has been satisfied or waived in accordance with Clause 4.2 (Condition Precedent);

“EIRs”

the Environmental Information Regulations 2004, together with any guidance and/or codes of practice issued by the Information Commissioner or any

Central Government Body in relation to such Regulations;

“Emergency Maintenance”
the

ad hoc and unplanned maintenance provided by

Supplier where:

- (a) the Authority reasonably suspects that the IT Environment or the Services, or any part of the IT Environment or the Services, has or may have developed a fault, and notifies the Supplier of the same; or
- (b) the Supplier reasonably suspects that the IT Environment or the Services, or any part the IT Environment or the Services, has or may have developed a fault;

“Employee Liabilities”
demands,

all claims, actions, proceedings, orders,

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

- (a) redundancy payments including contractual or enhanced redundancy costs, termination costs and notice payments;
 - (b) unfair, wrongful or constructive dismissal compensation;
 - (c) compensation for discrimination on grounds of sex, race, disability, age, religion or belief, gender reassignment, marriage or civil partnership, pregnancy and maternity or sexual orientation or claims for equal pay;
-

- (d) compensation for less favourable treatment of part-time workers or fixed term employees;
 - (e) outstanding employment debts and unlawful deduction of wages including any PAYE and national insurance contributions;
 - (f) employment claims whether in tort, contract or statute or otherwise;
 - (g) any investigation relating to employment matters by the Equality and Human Rights Commission or other enforcement, regulatory or
-

supervisory body and of implementing any requirements which may arise from such investigation;

“Employment Regulations”	the Transfer of Undertakings (Protection of Employment) Regulations 2006 (SI 2006/246) as amended or replaced or any other Regulations implementing the Acquired Rights Directive;
“Estimated Year 1 Charges” Authority	<p>the estimated Charges payable by the</p> <p>during the first Contract Year, as set out in the Financial Model;</p>
“Estimated Initial Service Charges” by the	<p>the estimated Service Charges payable</p> <p>Authority during the period of 12 months from the</p> <p>first Operational Service Commencement Date, as set out in the Financial Model;</p>
“Euro Compliant”	<p>means that: (i) the introduction of the euro within any part(s) of the UK shall not affect the performance or functionality of any relevant items nor cause such items to malfunction, end abruptly, provide invalid results or adversely affect the Authority’s business; (ii) all currency-reliant and currency-related functions (including all calculations concerning financial data) of any relevant items enable the introduction and operation of the euro; and (iii) in particular each and every relevant item shall, to the extent it performs or relies upon currency-related functions (including all calculations concerning financial data):</p> <ul style="list-style-type: none">(a) be able to perform all such functions in any number of currencies and/or in euros;(b) during any transition phase applicable to the relevant part(s) of the UK, be able to deal with multiple currencies and, in relation to the euro and the national currency of the relevant part(s) of the UK,

dual denominations;

- (c) recognise accept, display and print all the euro currency symbols and alphanumeric codes which may be adopted by any government and other European Union body in relation to the euro;
 - (d) incorporate protocols for dealing with rounding and currency conversion;
 - (e) recognise data irrespective of the currency in which it is expressed (which includes the euro) and express any output data in the national
-

currency of the relevant part(s) of the UK and/or the euro; and

- (f) permit the input of data in euro and display an outcome in euro where such data, supporting the Authority's normal business practices, operates in euro and/or the national currency of the relevant part(s) of the UK;

“Exit Day” shall have the meaning in the European Union (Withdrawal) Act 2018;

“Exit Management” services, activities, processes and procedures to ensure a smooth and orderly transition of all or part of the Services from the Supplier to the Authority and/or a Replacement Supplier, as set out or referred to in Schedule 8.5 (Exit Management);

“Exit Plan” the plan produced and updated by the Supplier during the Term in accordance with Paragraph 4 of Schedule 8.5 (Exit Management);

“Expedited Dispute Timetable” the reduced timetable for the resolution of Disputes set out in Paragraph 3 of Schedule 8.3 (Dispute Resolution Procedure);

“Expert” has the meaning given in Schedule 8.3 (Dispute Resolution Procedure);

“Expert Determination” the process described in Paragraph 6 of Schedule 8.3 (Dispute Resolution Procedure);

“Extension Period” a period of [x] years from the end of the Initial Term;

“Financial Distress Event” the occurrence of one or more of the events listed in

Distress);

Paragraph 3.1 of Schedule 7.4 (Financial

“Financial Distress Remediation Plan” a plan setting out how the Supplier will ensure the

continued performance and delivery of the Services in accordance with this Agreement in the event that a Financial Distress Event occurs;

“Financial Model”

has the meaning given in Schedule 7.5 (Financial Reports and Audit Rights);

“Financial Reports”

has the meaning given in Schedule 7.5 (Financial Reports and Audit Rights);

“Financial
Transparency
Objectives”

has the meaning given in Schedule 7.5 (Financial Reports and Audit Rights);

“FOIA”

the Freedom of Information Act 2000 and any subordinate legislation made under that Act from

time to time, together with any guidance and/or codes of practice issued by the Information Commissioner or any relevant Central Government Body in relation to such Act;

“Force Majeure Event”

any event outside the reasonable control of either Party affecting its performance of its obligations under this Agreement arising from acts, events, omissions, happenings or non-happenings beyond its reasonable control and which are not attributable to any wilful act, neglect or failure to take reasonable preventative action by that Party, including acts of God, riots, war or armed conflict, acts of terrorism, acts of government, local government or regulatory bodies, fire, flood, storm or earthquake, or disaster but excluding any industrial dispute relating to the Supplier or the Supplier Personnel or any other failure in the Supplier’s or a Sub-contractor’s supply chain;

“Force Majeure Notice”

a written notice served by the Affected Party on the other Party stating that the Affected Party believes that there is a Force Majeure Event;

“Former Supplier”

has the meaning given in Schedule 9.1 (Staff Transfer);

“GDPR”

The General Data Protection Regulation (EU) 2016/679

“General Anti-Abuse Rule”

(a) the legislation in Part 5 of the Finance Act 2013; and

(b) any future legislation introduced into parliament to counteract tax advantages arising from abusive arrangements to avoid national insurance contributions;

“General Change in Law”
general

a Change in Law where the change is of a

legislative nature (including taxation or duties of any sort affecting the Supplier) or which affects or relates to a Comparable Supply;

“Good Industry Practice”

at any time the exercise of that degree of care, skill, diligence, prudence, efficiency, foresight and timeliness which would be reasonably expected at such time from a leading and expert supplier of services similar to the Services to a customer like the Authority, such supplier seeking to comply with its contractual obligations in full and complying with applicable Laws;

“Goods”	has the meaning given in Clause 9.7 (Supply of Goods);
“Group Structure Information and Resolution Commentary”	means the information relating to the Supplier Group to be provided by the Supplier in accordance with Paragraphs 11 to 13 and Appendix 1 of Part 2 of Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning);
“Guarantee”	the deed of guarantee in favour of the Authority entered into by the Guarantor on or about the date of this Agreement (which is in the form set out in Schedule 10 (Guarantee)), or any guarantee acceptable to the Authority that replaces it from time to time;
“Guarantor”	[insert name], a company registered in [insert country] with company number [insert company number] and whose registered office is at [insert registered address];
“Halifax Abuse Principle” 255/02	the principle explained in the CJEU Case C-Halifax and others;
“Health and Safety Policy” and/or	the health and safety policy of the Authority other relevant Central Government Body as provided to the Supplier on or before the Effective Date and as subsequently provided to the Supplier from time to time except any provision of any such subsequently provided policy that cannot be reasonably reconciled to ensuring compliance with applicable Law regarding health and safety;
“HMRC”	HM Revenue & Customs;

“Impact Assessment”

has the meaning given in Schedule 8.2
(Change Control Procedure);

“Implementation Plan”

the Outline Implementation Plan or (if and when
approved by the Authority pursuant to
Paragraph 3 of Schedule 6.1 (Implementation
Plan)) the Detailed Implementation Plan as
updated in accordance with
Paragraph 4
of Schedule 6.1
(Implementation Plan) from time to time;

“Implementation Services”

the implementation services described as such in
the Services Description;

“Implementation Services Commencement Date”	the date on which the Supplier is to commence provision of the first of the Services, being [insert date];
“Indemnified Person” whom	the Authority and each and every person to the Authority (or any direct or indirect sub-licensee of the Authority) sub-licenses, assigns or novates any Relevant IPRs or rights in Relevant IPRs in accordance with this Agreement;
“Independent Control” to	where a Controller has provided Personal Data another Party which is neither a Processor or Joint Controller because the recipient itself determines the purposes and means of processing but does so separately from the Controller providing it with Personal Data;
“Information”	all information of whatever nature, however conveyed and in whatever form, including in writing, orally, by demonstration, electronically and in a tangible, visual or machine-readable medium (including CD-ROM, magnetic and digital form);
“Initial Term”	the period of [x years] from and including the Effective Date;
“Initial Upload Date”	means the occurrence of an event detailed in Schedule 8.4 (Reports and RecordsProvisions) Annex 3 (Virtual Library) which requires the Supplier to provide its initial upload of the relevant information to the Virtual Library;
“Insolvency Event”	with respect to any person, means: (a) that person suspends, or threatens to

suspend, payment of its debts, or is unable to pay its debts as they fall due or admits inability to pay its debts, or:

- (i) (being a company or a LLP) is deemed unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986, or
 - (ii) (being a partnership) is deemed unable to pay its debts within the meaning of section 222 of the Insolvency Act 1986;
- (b) that person commences negotiations with one or more of its creditors (using a voluntary arrangement, scheme of arrangement or

otherwise) with a view to rescheduling any of its debts, or makes a proposal for or enters into any compromise or arrangement with one or more of its creditors or takes any step to obtain a moratorium pursuant to Section 1A and Schedule A1 of the Insolvency Act 1986 other than (in the case of a company, a LLP or a partnership) for the sole purpose of a scheme for a solvent amalgamation of that that person with one or more other companies or the solvent reconstruction of that person;

- (c) another person becomes entitled to appoint a receiver over the assets of that person or a receiver is appointed over the assets of that person;
- (d) a creditor or encumbrancer of that person attaches or takes possession of, or a distress, execution or other such process is levied or enforced on or sued against, the whole or any part of that person's assets and such attachment or process is not discharged within 14 days;
- (e) that person suspends or ceases, or threatens to suspend or cease, carrying on all or a substantial part of its business;
- (f) where that person is a company, a LLP or a partnership:
 - (i) a petition is presented (which is not dismissed within 14 days of its service), a notice is given, a resolution is passed, or an order is made, for or in connection with the winding up of that person other than for the sole purpose of a scheme for a solvent amalgamation of that person with one or more other companies or the solvent reconstruction of that person;
 - (ii) an application is made to court, or

an order is made, for the appointment of an administrator, or if a notice of intention to appoint an administrator is filed at Court or given or if an administrator is appointed, over that person;

- (iii) (being a company or a LLP) the holder of a qualifying floating charge over the assets of that person has become

entitled to appoint or has appointed an administrative receiver; or

(iv) (being a partnership) the holder of an agricultural floating charge over the assets of that person has become entitled to appoint or has appointed an agricultural receiver; or

(g) any event occurs, or proceeding is taken, with respect to that person in any jurisdiction to which it is subject that has an effect equivalent or similar to any of the events mentioned above;

“Intellectual Property Rights” or
“IPRs”

(a) copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in Internet domain names and website addresses and other rights in trade names, designs, Know-How, trade secrets and other rights in Confidential Information;

(b) applications for registration, and the right to apply for registration, for any of the rights listed at (a) that are capable of being registered in any country or jurisdiction; and

(c) all other rights having equivalent or similar effect in any country or jurisdiction;

“Intervention Cause”

has the meaning given in Clause 29.1 (Remedial Adviser);

“Intervention Notice”

has the meaning given in Clause 29.1 (Remedial Adviser);

“Intervention Period”
(Remedial

has the meaning given in Clause 29.2(c) Adviser);

“Intervention Trigger Event”
(f)

(a) any event falling within limb (a), (b), (c), (e),

or (g) of the definition of a Supplier
Termination Event;

(b) a Default by the Supplier that is materially preventing or materially delaying the performance of the Services or any material part of the Services;

(c) the Supplier accruing in aggregate
[insert number of points which is 75%
of the points

that would constitute a “Critical Performance Failure”] or more Service Points (in terms of the number of points allocated) in any period of [insert number of months taken from definition of “Critical Performance Failure”] months;

- (d) the Supplier accruing Service Credits which meet or exceed 75% of the Service Credit Cap; and/or
- (e) the Supplier not Achieving a Key Milestone within 75 days of its relevant Milestone Date;

“IPRs Claim”

any claim against any Indemnified Person of infringement or alleged infringement (including the defence of such infringement or alleged infringement) of any Relevant IPRs save for any such claim to the extent that it is caused by any use by or on behalf of that Indemnified Person of any Relevant IPRs, or the use of the Authority Software by or on behalf of the Supplier, in either case in combination with any item not supplied or recommended by the Supplier pursuant to this Agreement or for a purpose not reasonably to be inferred from the Services Description or the provisions of this Agreement;

“IT”

information and communications technology;

“IT Environment”

the Authority System and the Supplier System;

“Joint Controllers”

where two or more Controllers jointly determine the purposes and means of processing

“Key Milestone”

the Milestones identified in the Implementation Plan as key milestones and in respect of which Delay Payments may be payable in

accordance with Paragraph 1 of Part C of Schedule 7.1 (Charges and Invoicing) if the Supplier fails to Achieve the Milestone Date in respect of such Milestone;

“Key Performance Indicator” the key performance indicators set out in Table 1 of Part I of Annex 1 of Schedule 2.2 (Performance Levels);

“Key Personnel” those persons appointed by the Supplier to fulfil the Key Roles, being the persons listed in Schedule 9.2 (Key Personnel) against each Key Role as at the Effective Date or as amended from time

to time in accordance with Clauses 14.5 and 14.6 (Key Personnel);

“Key Roles” a role described as a Key Role in Schedule 9.2 (Key Personnel) and any additional roles added from time to time in accordance with Clause 14.4 (Key Personnel);

“Key Sub-contract” each Sub-contract with a Key Sub-contractor;

“Key Sub-contractor” any Sub-contractor:

- (a) which, in the opinion of the Authority, performs (or would perform if appointed) a critical role in the provision of all or any part of the Services; and/or
- (b) with a Sub-contract with a contract value which at the time of appointment exceeds (or would exceed if appointed) 10% of the aggregate Charges forecast to be payable under this Agreement (as set out in the Financial Model);

“Know-How” all ideas, concepts, schemes, information, knowledge, techniques, methodology, and anything else in the nature of know how relating to the Services but excluding know how already in the other Party’s possession before this Agreement;

“KPI Failure” a failure to meet the Target Performance Level in respect of a Key Performance Indicator;

“KPI Service Threshold” shall be as set out against the relevant Key Performance Indicator in Table 1 of Part I of Annex 1 of Schedule 2.2 (Performance Levels);

“Law”

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

“Licensed Software”

all and any Software licensed by or through the Supplier, its Sub-contractors or any third party to the Authority for the purposes of or pursuant to this Agreement, including any Supplier Software, Third

Party Software and/or any Specially Written Software;

“Losses”

losses, liabilities, damages, costs and expenses (including legal fees on a solicitor/client basis) and disbursements and costs of investigation, litigation, settlement, judgment interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty or otherwise;

“Maintenance Schedule”

shall have the meaning set out in Clause 9.4 (Maintenance);

“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;

“Management Information”

the management information specified in Schedule 2.2 (Performance Levels), Schedule 7.1 (Charges and Invoicing) and Schedule 8.1 (Governance) to be provided by the Supplier to the Authority;

“Material KPI Failure”

- (a) a Serious KPI Failure;
- (b) a Severe KPI Failure; or
- (c) a failure by the Supplier to meet a KPI Threshold;

“Material PI Failure”

- (a) a failure by the Supplier to meet the PI Service Threshold in respect of 25% or Subsidiary Performance Indicators that are measured in that Service Period;
- (b) a failure by the Supplier to meet the

Performance Level in respect of 50% or more of the Subsidiary Performance Indicators that are measured in that

“Measurement Period”

in relation to a Key Performance Indicator or Subsidiary Performance Indicator, the period over which the Supplier’s performance is measured (for example, a Service Period if measured monthly or a 12 month period if measured annually);

“Milestone”	an event or task described in the Implementation Plan which, if applicable, shall be completed by the relevant Milestone Date;
“Milestone Achievement Certificate”	the certificate to be granted by the Authority when the Supplier has Achieved a Milestone, which shall be in substantially the same form as that set out in Annex 3 of Schedule 6.2 (Testing Procedures);
“Milestone Adjustment Payment Amount”	<p>in respect of each CPP Milestone the subject of a Milestone Adjustment Payment Notice, an amount determined in accordance with the formula:</p> $A - B$ <p>where:</p> <p>(a) A is an amount equal to the aggregate sum of all Milestone Payments paid to the Supplier in respect of the Milestones (or in the case of Partial Termination, the Milestones for the parts of the Services terminated) relating to that CPP Milestone; and</p> <p>(b) B is an amount equal to the aggregate Allowable Price for the Retained Deliverables relating to that CPP Milestone or, if there are no such Retained Deliverables, zero;</p>
“Milestone Adjustment Payment Notice”	has the meaning given in Clause 34.7 (Payments by the Supplier);
“Milestone Date”	the target date set out against the relevant Milestone in the Implementation Plan by which the Milestone must be Achieved;

“Milestone Payment”	a payment identified in Schedule 7.1 (Charges and Invoicing) to be made following the issue of a Milestone Achievement Certificate;
“Milestone Retention”	has the meaning given in Schedule 7.1 (Charges and Invoicing);
“Minor KPI Failure”	shall be as set out against the relevant Key Performance Indicator in Table 1 of Part I of Annex 1 of Schedule 2.2 (Performance Levels);
“month”	a calendar month and “monthly” shall be interpreted accordingly;

“Multi-Party Dispute Resolution Procedure”	has the meaning given in Paragraph 9.1 of Schedule 8.3 (Dispute Resolution Procedure);
“Multi-Party Procedure Initiation Notice”	has the meaning given in Paragraph 9.2 of Schedule 8.3 (Dispute Resolution Procedure);
“New Releases”	an item produced primarily to extend, alter or improve the Software and/or any Deliverable by providing additional functionality or performance enhancement (whether or not defects in the Software and/or Deliverable are also corrected) while still retaining the original designated purpose of that item;
“Non-trivial Customer Base”	a significant customer base with respect to the date of first release and the relevant market but excluding Affiliates and other entities related to the licensor;
“Non-retained Deliverables” and	in relation to a CPP Milestone Payment Notice each CPP Milestone the subject of that CPP Milestone Payment Notice, Deliverables provided to the Authority which relate to the relevant CPP Milestone(s) and which are not Retained Deliverables;
“Notifiable Default”	shall have the meaning given in Clause 27.1 (Rectification Plan Process);
“Object Code”	software and/or data in machine-readable, compiled object code form;
“Occasion of Tax Non-Compliance” submitted to a	(a) any tax return of the Supplier Relevant Tax Authority on or after 1 October 2012 is found on or after 1 April 2013 to be incorrect as a result of:

- (i) a Relevant Tax Authority successfully challenging the Supplier under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle;
- (ii) the failure of an avoidance scheme which the Supplier was involved in, and which was, or should have been, notified to a Relevant Tax Authority under the DOTAS or any equivalent or

similar regime; and/or

(b) any tax return of the Supplier submitted to a Relevant Tax Authority on or after 1 October 2012 gives rise on or after 1 April 2013 to a criminal conviction in any jurisdiction for tax related offences which is not spent at the Effective Date or to a civil penalty for fraud or evasion;

(c)

“Open Book Data”

has the meaning given in Schedule 7.5 (Financial Reports and Audit Rights)

“Open Source”

computer Software that is released on the internet for use by any person, such release usually being

made under a recognised open source licence and stating that it is released as open source;

“Operating Environment”

the Authority System and the Sites;

“Operational Change”
procedures

any change in the Supplier's operational

which in all respects, when implemented:

(a) will not affect the Charges and will not result in any other costs to the Authority;

(b) may change the way in which the Services are delivered but will not adversely affect the output of the Services or increase the risks in performing or receiving the Services;

(c) will not adversely affect the interfaces or interoperability of the Services with any of the Authority's IT infrastructure; and

(d) will not require a change to this Agreement;

“Operational
Service

Commencement Date”

in relation to an
Operational Service,
the later of:

- (a) the date
identified in the
Operational
Services
Implementation
Plan upon
which the

“Operational Services”
the

Operational Service is to commence; and

- (b) where the Implementation Plan states that the Supplier must have Achieved the relevant ATP Milestone before it can commence the provision of that Operational Service, the date upon which the Supplier Achieves the relevant ATP Milestone;

the operational services described as such in

Services Description;

“Optional Services”	the services described as such in Schedule 2.1 (Services Description) which are to be provided by the Supplier if required by the Authority in accordance with Clause 5.10 (Optional Services);
“Optional Services Implementation Plan”	the implementation plan to effect the Optional Services agreed between the Parties prior to the Effective Date and, if not agreed prior to the Effective Date, to be developed by the Supplier and approved by the Authority;
“Other Supplier”	any supplier to the Authority (other than the Supplier) which is notified to the Supplier from time to time and/or of which the Supplier should have been aware;
“Outline Implementation Plan”	the outline plan set out at Annex 1 of Schedule 6.1 (Implementation Plan);
“Parent Undertaking” the	has the meaning set out in section 1162 of Companies Act 2006;
“Partial Termination”	the partial termination of this Agreement to the extent that it relates to the provision of any part of the Services as further provided for in Clause 33.2(b) (Termination by the Authority) or 33.3(b) (Termination by the Supplier) or otherwise by mutual agreement by the Parties;
“Parties” and “Party” of	have the meanings respectively given on page 1 this Agreement;
“Performance Failure”	a KPI Failure or a PI Failure;

“Performance Indicators” Subsidiary	the Key Performance Indicators and the Performance Indicators;
“Permitted Maintenance” (Maintenance);	has the meaning given in Clause 9.4
“Performance Monitoring Report” (Performance	has the meaning given in Schedule 2.2 Levels);
“Personal Data”	has the meaning given in the GDPR
“Personal Data Breach”	has the meaning given in the GDPR
“PI Failure” in	a failure to meet the Target Performance Level

	respect of a Subsidiary Performance Indicator;
“PI Service Threshold” Subsidiary	shall be as set out against the relevant Performance Indicator in Table 2 in Part I of Annex 1 of Schedule 2.2 (Performance Levels);
“Preceding Services”	has the meaning given in Clause 5.2(b) (Standard of Services);
“Processor”	has the meaning given to it under the GDPR;
“Processor Personnel”	means all directors, officers, employees, agents, consultants and suppliers of the Processor and/or of any Sub-Processor engaged in the performance of its obligations under this Agreement;
“Programme Board”	the body described in Paragraph 5 of Schedule 8.1 (Governance);
“Prohibited Act”	<p>(a) to directly or indirectly offer, promise or give any person working for or engaged by the Authority a financial or other advantage to:</p> <p>(i) induce that person to perform improperly a relevant function or activity; or</p> <p>(ii) reward that person for improper performance of a relevant function or activity;</p> <p>(b) to directly or indirectly request, agree to receive or accept any financial or other advantage as an inducement or a reward for improper performance of a relevant function or activity in connection with this</p>

Agreement;

(c) an offence:

(i) under the Bribery Act 2010 (or any legislation repealed or revoked by such Act);

(ii) under legislation or common law concerning fraudulent acts (including offences by the Supplier under Part 3 of the Criminal Finances Act 2017) ; or

(iii)defrauding, attempting to defraud or conspiring to defraud the Authority; or

(d) any activity, practice or conduct which would constitute one of the offences listed under (c)

above if such activity, practice or conduct had been carried out in the UK;

“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;

“Project Specific IPRs”
created

(a) Intellectual Property Rights in items

by the Supplier (or by a third party on behalf of the Supplier) specifically for the purposes of this Agreement and updates and amendments of these items including (but not limited to) database schema; and/or

(b) Intellectual Property Rights arising as a result of the performance of the Supplier's obligations under this Agreement;

but shall not include the Supplier Background IPRs or the Specially Written Software;

“Public Sector Dependent Supplier” means a supplier where that Supplier, or that

Supplier's Group has Annual Revenue of £50 million or more of which over 50% is generated from UK Public Sector Business;

“Public Sector and CNI
Contract Information”

means the information requirements set out in accordance with Paragraphs 11 to 13 and Appendix II of Part 2 of Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning);

“Quality Plans”

has the meaning given in Clause 6.1 (Quality Plans);

“Quarter”

the first three Service Periods and each subsequent three Service Periods (save that the final Quarter shall end on the date of termination or expiry of this Agreement);

“Recipient”

has the meaning given
in Clause 21.1 (Confidentiality);

“Records”
and

has the meaning given in Schedule 8.4 (Reports
Records Provisions);

“Rectification Plan”

a plan to address the impact of, and prevent
the reoccurrence of, a Notifiable Default;

“Rectification Plan Failure”
a

- (a) the Supplier failing to submit or resubmit

draft Rectification Plan to the Authority
within the timescales specified in
Clauses 27.4 (Submission of the draft
Rectification Plan) or 27.8 (Agreement
of the Rectification Plan);
 - (b) the Authority, acting reasonably, rejecting
a revised draft of the Rectification Plan
submitted by the Supplier pursuant to
Clause 27.7 (Agreement of the
Rectification Plan);
 - (c) the Supplier failing to rectify a material
Default within the later of:
 - (i) 30 Working Days of a notification
made pursuant to Clause 27.2
(Notification); and
 - (ii) where the Parties have agreed a
Rectification Plan in respect of that
material Default and the Supplier can
demonstrate that it is implementing
the Rectification Plan in good faith,
the date specified in the Rectification
Plan by which the Supplier must
rectify the material Default;
 - (d) a Material KPI Failure re-occurring in
respect of the same Key Performance
Indicator for the same (or substantially the
same) root cause in any of the 3
Measurement Periods subsequent to the
Measurement Period in which the initial
-

Material KPI Failure occurred;

- (e) the Supplier not Achieving a Key Milestone by the expiry of the Delay Deduction Period; and/or
 - (f) following the successful implementation of a Rectification Plan, the same Notifiable Default recurring within a period of 6 months for the same (or substantially the same) root cause as that of the original Notifiable Default;
-

“Rectification Plan Process” of	the process set out in Clauses 27.4 (Submission of the draft Rectification Plan) to 27.9 (Agreement of the Rectification Plan);
“Registers”	has the meaning given in Schedule 8.5 (Exit Management);
“Reimbursable Expenses”	has the meaning given in Schedule 7.1 (Charges and Invoicing);
“Relevant Authority”	means the Authority or, where the Supplier is a Strategic Supplier, the Cabinet Office Markets and Suppliers Team;
“Relevant IPRs”	IPRs used to provide the Services or as otherwise provided and/or licensed by the Supplier (or to which the Supplier has provided access) to the Authority or a third party in the fulfilment of the Supplier’s obligations under this Agreement including IPRs in the Specially Written Software, the Supplier Non-COTS Software, the Supplier Non-COTS Background IPRs, the Third Party Non-COTS Software and the Third Party Non-COTS IPRs but excluding any IPRs in the Authority Software, the Authority Background IPRs, the Supplier COTS Software, the Supplier COTS Background IPRs, the Third Party COTS Software and/or the Third Party COTS IPRs;
“Relevant Preceding Services”	has the meaning given in Clause 5.2(b) (Standard of Services);
“Relevant Requirements” corruption	all applicable Law relating to bribery, and fraud, including the Bribery Act 2010 and any guidance issued by the Secretary of State for Justice pursuant to section 9 of the Bribery Act 2010;

“Relevant Tax Authority”
the

HMRC, or, if applicable, a tax authority in
jurisdiction in which the Supplier is established;

“Relevant Transfer”

a transfer of employment to which the
Employment Regulations applies;

“Relief Notice”

has the meaning given in Clause 31.2
(Authority Cause);

“Remedial Adviser”

the person appointed pursuant to
Clause 29.2 (Remedial Adviser);

“Remedial Adviser Failure”

has the meaning given in Clause 29.6
(Remedial Adviser);

“Replacement Services”
substantially

any services which are the same as or

similar to any of the Services and which the Authority receives in substitution for any of the Services following the expiry or termination or Partial Termination of this Agreement, whether those services are provided by the Authority internally and/or by any third party;

“Replacement Supplier”
Replacement

any third party service provider of

Services appointed by the Authority from time to time (or where the Authority is providing replacement Services for its own account, the Authority);

“Request For Information”
the

a Request for Information under the FOIA or

EIRs;

“Required Action”

has the meaning given in Clause 30.1(a) (Step-In Rights);

“Retained Deliverables”
(Payments

has the meaning given in Clause 34.8(b)

by the Supplier);

“Risk Register”

the register of risks and contingencies that have been factored into any Costs due under this Agreement, a copy of which is set out in Annex 4 of Schedule 7.1 (Charges and Invoicing);

“Security Management Plan”
2

the Supplier's security plan as attached as Annex

of Schedule 2.4 (Security Management) and as subsequently developed and revised pursuant to Paragraphs 3 and 4 of Schedule 2.4 (Security Management);

“Serious KPI Failure”

shall be as set out against the relevant Key Performance Indicator in Table 1 of Part I of Annex 1 of (Schedule 2.2 (Performance Levels);

“Service Charges”

the periodic payments made in accordance with Schedule 7.1 (Charges and Invoicing) in respect of the supply of the Operational Services;

“Service Continuity Plan”

any plan prepared pursuant to Paragraph 2 of Schedule 8.6 (Service Continuity Plan and

Corporate Resolution Planning) as may be amended from time to time;

“Service Continuity Services” the business continuity, disaster recovery and insolvency continuity services set out in Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning);

“Service Credit Cap”

- (a) in the period of 12 months from the first Operational Service Commencement occur after the Effective Date, [x]% of the Estimated Initial Service Charges; and
- (b) during the remainder of the Term, [x]% of Service Charges paid and/or due to be paid to the Supplier under this Agreement of 12 months immediately preceding the Service Period in respect of which Service accrued;

“Service Credits” credits payable by the Supplier due to the occurrence of 1 or more KPI Failures, calculated in accordance with Paragraph 3 of Part C of Schedule 7.1 (Charges and Invoicing);

“Service Period” a calendar month, save that:

- (a) the first service period shall begin on the first Operational Service Commencement Date and shall expire at the end of the calendar month in which the first Operational Service Commencement Date falls; and
 - (b) the final service period shall commence on the first day of the calendar month in which the Term expires or terminates and shall end on the expiry or termination of the Term;
-

“Service Points”	in relation to a KPI Failure, the points that are set out against the relevant Key Performance Indicator in the fifth column of the table in Annex 1 of Schedule 2.2 (Performance Levels);
“Services”	any and all of the services to be provided by the Supplier under this Agreement, including those set out in Schedule 2.1 (Services Description);
“Service Transfer Date”	has the meaning given in Schedule 9.1 (Staff

Transfer);

“Services Description”

the services description set out in Schedule 2.1 (Services Description);

“Severe KPI Failure”

shall be as set out against the relevant Key Performance Indicator in Table 1 of Part I of Annex 1 of Schedule 2.2 (Performance Levels);

“Sites”

any premises (including the Authority Premises, the Supplier’s premises or third party premises):

(a) from, to or at which:

- (i) the Services are (or are to be) provided; or
- (ii) the Supplier manages, organises or otherwise directs the provision or the use of the Services; or

(b) where:

- (i) any part of the Supplier System is situated; or
- (ii) any physical interface with the Authority System takes place;

“SME”

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

“Software”

Specially Written Software, Supplier Software and Third Party Software;

“Software Supporting Materials” has the meaning given in Clause 17.1(b)
(Specially

Written Software and Project Specific IPRs);

“Source Code”

computer programs and/or data in eye-readable form and in such form that it can be compiled or interpreted into equivalent binary code together with all related design comments, flow charts, technical information and documentation necessary for the use, reproduction, maintenance, modification and enhancement of such software;

“Specially Written Software”
linking

any software (including database software,

instructions, test scripts, compilation instructions

and test instructions) created by the Supplier (or by a Sub-contractor or other third party on behalf of the Supplier) specifically for the purposes of this Agreement, including any modifications or enhancements to Supplier Software or Third Party Software created specifically for the purposes of this Agreement.

“Specific Change in Law”
the

a Change in Law that relates specifically to

business of the Authority and which would not affect a Comparable Supply;

“Staffing Information”

has the meaning given in Schedule 9.1 (Staff Transfer);

“Standards”

the standards, policies and/or procedures identified in Schedule 2.3 (Standards);

“Step-In Notice”

has the meaning given in Clause 30.1 (Step-In Rights);

“Step-In Trigger Event”
a

(a) any event falling within the definition of
Supplier Termination Event;

(b) a Default by the Supplier that is materially preventing or materially delaying the performance of the Services or any material part of the Services;

(c) the Authority considers that the circumstances constitute an emergency despite the Supplier not being in breach of its obligations under this Agreement;

(d) the Authority being advised by a

regulatory body that the exercise by the Authority of its rights under Clause 30 (Step-In Rights) is necessary;

- (e) the existence of a serious risk to the health or safety of persons, property or the environment in connection with the Services; and/or
- (f) a need by the Authority to take action to discharge a statutory duty;

“Step-Out Date”

has the meaning given in Clause 30.5(b) (Step-In Rights);

“Step-Out Notice”	has the meaning given in Clause 30.5 (Step-In Rights);
“Step-Out Plan”	has the meaning given in Clause 30.6 (Step-In Rights);
“Strategic Supplier”	means those suppliers to government listed at https://www.gov.uk/government/publications/strategic-suppliers ;
“Sub-contract”	any contract or agreement (or proposed contract or agreement) between the Supplier (or a Sub- contractor) and any third party whereby that third party agrees to provide to the Supplier (or the Sub- contractor) all or any part of the Services or facilities or services which are material for the provision of the Services or any part thereof or necessary for the management, direction or control of the Services or any part thereof;
“Sub-contractor”	<p>any third party with whom:</p> <p>(a) the Supplier enters into a Sub-contract; or</p> <p>(b) a third party under (a) above enters into a Sub- contract,</p> <p>or the servants or agents of that third party;</p>
“Sub-processor”	any third party appointed to process Personal Data on behalf of the Supplier related to this Agreement;
“Subsidiary Undertaking”	has the meaning set out in section 1162 of the

Companies Act
2006;

“Subsidiary Performance Indicator” the performance indicators set out in
Table 2 of

Part I of Annex 1 of Schedule 2.2
(Performance Levels);

“Successor Body”

has the meaning given in Clause 36.4
(Assignment and Novation);

“Supplier Background IPRs”
the

(a) Intellectual Property Rights owned by

Supplier before the Effective Date, for
example those subsisting in the Supplier's
standard development tools, program
components or standard code used in
computer programming or in physical or
electronic media containing

the Supplier's Know-How or generic business methodologies; and/or

- (b) Intellectual Property Rights created by the Supplier independently of this Agreement,

which in each case is or will be used before or during the Term for designing, testing implementing or providing the Services but excluding Intellectual Property Rights owned by the Supplier subsisting in the Supplier Software;

“Supplier COTS Background IPRs” Any embodiments of Supplier Background IPRs that:

- (a) the Supplier makes generally available commercially prior to the date of this Agreement (whether by way of sale, lease or licence) on standard terms which are not typically negotiated by the Supplier save as to price; and
- (b) has a Non-trivial Customer Base;

“Supplier COTS Software” software)

Supplier Software (including open source that:

- (a) the Supplier makes generally available commercially prior to the date of this Agreement (whether by way of sale, lease or licence) on standard terms which are not typically negotiated by the Supplier save as to price; and
- (b) has a Non-trivial Customer Base;

“Supplier Equipment”

the hardware, computer and telecoms devices and equipment used by the Supplier or its Sub-contractors (but not hired, leased or loaned from the Authority) for the provision of the Services;

“Supplier Group”	means the Supplier, its Dependent Parent Undertakings and all Subsidiary Undertakings and Associates of such Dependent Parent Undertakings;
“Supplier Non-COTS Background IPRs”	Any embodiments of Supplier Background IPRs that have been delivered by the Supplier to the Authority and that are not Supplier COTS Background IPRs;
“Supplier Non-COTS Software”	Supplier Software that is not Supplier COTS Software;

“Supplier (Authority) Non-Performance”	has the meaning given in Clause 31.1 Cause);
“Supplier Personnel”	all directors, officers, employees, agents, consultants and contractors of the Supplier and/or of any Sub-contractor engaged in the performance of the Supplier’s obligations under this Agreement;
“Supplier Profit”	has the meaning given in Schedule 7.1 (Charges and Invoicing);
“Supplier Profit Margin”	has the meaning given in Schedule 7.1 (Charges and Invoicing);
“Supplier Representative”	the representative appointed by the Supplier pursuant to Clause 11.3 (Representatives);
“Supplier Software”	software which is proprietary to the Supplier (or an Affiliate of the Supplier) and which is or will be used by the Supplier for the purposes of providing the Services, including the software specified as such in Schedule 5 (Software);
“Supplier Solution”	the Supplier's solution for the Services set out in Schedule 4.1 (Supplier Solution) including any Annexes of that Schedule;
“Supplier System”	the information and communications technology system used by the Supplier in implementing and performing the Services including the Software, the Supplier Equipment, configuration and management utilities, calibration and testing tools and related cabling (but excluding the Authority System);

“Supplier Termination Event”

- (a) the Supplier’s level of performance constituting a Critical
 - (b) the Supplier committing a material which is irremediable;
 - (c) as a result of the Supplier's Default, the Authority incurring Losses in any which exceed 80% of the value of the aggregate annual liability cap for that out in Clause 25.6(a) (Financial Limits);
 - (d) a Remedial Adviser Failure;
 - (e) a Rectification Plan Failure;
-

- (f) where a right of termination is expressly reserved in this Agreement, including pursuant to:
 - (i) Clause 19 (IPRs Indemnity);
 - (ii) Clause 39.6(b) (Prevention of Fraud and Bribery); and/or
 - (iii) Paragraph 6 of Schedule 7.4 (Financial Distress);
 - (iv) Paragraph 12 of Part 2 to Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning);
 - (g) the representation and warranty given by the Supplier pursuant to Clause 3.2(i) (Warranties) being materially untrue or misleading;
 - (h) the Supplier committing a material Default under Clause 10.10 and 10.11 (Promoting Tax Compliance) or failing to provide details of steps being taken and mitigating factors pursuant to Clause 10.10 (Promoting Tax Compliance) which in the reasonable opinion of the Authority are acceptable;
 - (i) the Supplier committing a material Default under any of the following Clauses:
 - (i) Clause 5.5(j) (Services);
 - (ii) Clause 23 (Protection of Personal Data);
 - (iii) Clause 22 (Transparency and Freedom of Information);
 - (iv) Clause 21 (Confidentiality); and
 - (v) Clause 35 (Compliance); and/or
-

in respect of any security requirements set out in Schedule 2.1 (Services Description), Schedule 2.4 (Security Management) or the Baseline Security Requirements; and/or

in respect of any requirements set out in Schedule 9.1 (Staff Transfer);

- (j) any failure by the Supplier to implement the changes set out in a Benchmark Report as referred to in Paragraph 5.9 of Schedule 7.3 (Benchmarking);

- (k) an Insolvency Event occurring in respect of the Supplier or the Guarantor;
 - (l) the Guarantee ceasing to be valid or enforceable for any reason (without the Guarantee being replaced with a comparable guarantee to the satisfaction of the Authority with the Guarantor or with another guarantor which is acceptable to the Authority);
 - (m) a change of Control of the Supplier or a Guarantor unless:
 - (i) the Authority has given its prior written consent to the particular Change of Control, which subsequently takes place as proposed; or
 - (ii) the Authority has not served its notice of objection within 6 months of the later of the date on which the Change of Control took place or the date on which the Authority was given notice of the Change of Control;
 - (n) a change of Control of a Key Sub-contractor unless, within 6 months of being notified by the Authority that it objects to such change of Control, the Supplier terminates the relevant Key Sub-contract and replaces it with a comparable Key Sub-contract which is approved by the Authority pursuant to Clause 15.0 (Appointment of Key Sub- contractors);
 - (o) any failure by the Supplier to enter into or to comply with an Admission Agreement under the Annex to either Part A or Part B of Schedule 9.1 (Staff Transfer);
 - (p) the Authority has become aware that the Supplier should have been excluded under Regulation 57(1) or (2) of the Public Contracts Regulations 2015 from the procurement procedure leading to the award
-

of this Agreement; or

- (q) a failure by the Supplier to comply in the performance of the Services with legal obligations in the fields of environmental, social or labour law.

“Supply Chain Transparency Report” means the report provided by the Supplier to the

Authority in the form set out in Annex 4 of Schedule

8.4 (Reports and Records Provisions)

“Target Performance Level” the minimum level of performance for a Performance Indicator which is required by the Authority, as set out against the relevant Performance Indicator in the tables in Annex 1 of Schedule 2.2 (Performance Levels);

“Term” the period commencing on the Effective Date and ending on the expiry of the Initial Term or any Extension Period or on earlier termination of this Agreement;

“Termination Assistance Notice” has the meaning given in Paragraph 5.1 of Schedule 8.5 (Exit Management);

“Termination Assistance Period” in relation to a Termination Assistance Notice, the period specified in the Termination Assistance Notice for which the Supplier is required to provide the Termination Services as such period may be extended pursuant to Paragraph 5.2 of Schedule 8.5 (Exit Management);

“Termination Date” the date set out in a Termination Notice on which this Agreement (or a part of it as the case may be) is to terminate;

“Termination Notice” a written notice of termination given by one Party to the other, notifying the Party receiving the notice of the intention of the Party giving the notice to terminate this Agreement (or any part thereof) on a specified date and setting out the grounds for termination;

“Termination Payment” the payment determined in accordance with

Schedule 7.2 (Payments on Termination);

“Termination Services”

the services and activities to be performed by the Supplier pursuant to the Exit Plan, including those activities listed in Annex 1 of Schedule 8.5 (Exit Management), and any other services required pursuant to the Termination Assistance Notice;

“Test Issues”

has the meaning given in Schedule 6.2 (Testing Procedures);

“Tests” and “Testing”	any tests required to be carried out under this Agreement, as further described in Schedule 6.2 (Testing Procedure) and “Tested” shall be construed accordingly;
“Test Success Criteria”	has the meaning given in Schedule 6.2 (Testing Procedures);
“Third Party Auditor” by	an independent third party auditor as appointed the Authority from time to time to confirm the completeness and accuracy of information uploaded to the Virtual Library in accordance with the requirements outlined in Schedule 8.4 (Reports and Records Provisions);
“Third Party Beneficiary” Party	has the meaning given in Clause 43.1 (Third Rights);
“Third Party COTS IPRs”	Third Party IPRs that: <ul style="list-style-type: none"> (a) the supplier makes generally available commercially prior to the date of this Agreement (whether by way of sale, lease or licence) on standard terms which are not typically negotiated by the supplier save as to price; and (b) has a Non-trivial Customer Base;
“Third Party COTS Software”	Third Party Software (including open source software) that: <ul style="list-style-type: none"> (a) the supplier makes generally available commercially prior to the date of this Agreement (whether by way of sale, lease or licence) on standard terms which are not typically negotiated by the supplier save

as to price; and

(b) has a Non-trivial Customer base;

“Third Party IPRs”

Intellectual Property Rights owned by a third party but excluding Intellectual Property Rights owned by the third party subsisting in any Third Party Software;

“Third Party Non-COTS IPRs”
IPRs;

Third Party IPRs that are not Third Party COTS

“Third Party Non-COTS Software”
Third Party Software that is not Third Party COTS Software;

“Third Party Provisions” Party	has the meaning given in Clause 43.1 (Third Rights) ;
“Third Party Software” (other	software which is proprietary to any third party than an Affiliate of the Supplier) or any Open Source Software which in any case is, will be or is proposed to be used by the Supplier for the purposes of providing the Services, including the software specified as such in Schedule 5 (Software);
“Transferring Assets” of	has the meaning given in Paragraph 6.2(a) Schedule 8.5 (Exit Management);
“Transferring Authority Employees”	has the meaning given in Schedule 9.1 (Staff Transfer);
“Transferring Former Supplier Employees”	has the meaning given in Schedule 9.1 (Staff Transfer);
“Transferring Supplier Employees”	has the meaning given in Schedule 9.1 (Staff Transfer);
“Transparency Information” (Transparency	has the meaning given in Clause 22.1 and Freedom of Information);
“Transparency Reports” and	has the meaning given in Schedule 8.4 (Reports Records Provisions);
“UK”	the United Kingdom;

“UK Public Sector Business”
UK

means any goods, service or works provision to

public sector bodies, including Central Government Departments and their arm's length bodies and agencies, non-departmental public bodies, NHS bodies, local authorities, health bodies, police, fire and rescue, education bodies and devolved administrations;

“UK Public Sector / CNI
Contract Information”

means the information relating to the Supplier Group to be provided by the Supplier in accordance with Paragraphs 11 to 13 and Appendix II of Part 2 of Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning);

“Unacceptable KPI Failure”	the Supplier failing to achieve the KPI Service Threshold in respect of more than 50% of the Key Performance Indicators that are measured in that Service Period;
“Unrecovered Payment”	has the meaning given in Schedule 7.2 (Payments on Termination);
“Updates”	in relation to any Software and/or any Deliverable means a version of such item which has been produced primarily to overcome Defects in, or to improve the operation of, that item;
“Update Requirement”	means the occurrence of an event detailed in Schedule 8.4 (Reports and Records Provisions) Annex 3 (Virtual Library) which requires the Supplier to update the relevant information hosted on the Virtual Library;
“Valid”	in respect of an Assurance, has the meaning given to it in Paragraph 11.7 of Part 2 to Schedule 8.6 (Service Continuity Plan and Corporate Resolution Planning);
“Upgrades”	any patch, New Release or upgrade of Software and/or a Deliverable, including standard upgrades, product enhancements, and any modifications, but excluding any Update which the Supplier or a third party software supplier (or any Affiliate of the Supplier or any third party) releases during the Term;
“VAT”	value added tax as provided for in the Value Added Tax Act 1994;
“VCSE”	means a non-governmental organisation that is value-driven and which principally reinvests its

surpluses to further social, environmental or cultural objectives;

“Virtual Library”

means the data repository hosted by the Supplier containing the information about this Agreement and the Services provided under it in accordance with Schedule 8.4 (Reports and Records Provisions);

“Working Day”

any day other than a Saturday, Sunday or public holiday in England and Wales.

FRAMEWORK ANNEX 4 - CONTRACT MONITORING REQUIREMENTS

Roles and Responsibilities / Key Contacts

Supplier

Details of main supplier and any relevant subsidiaries and key sub-contractors					
Supplier name	Name	Job title	Main responsibilities/ inc. authorisations	Email	Tel. No.
NCL	James [REDACTED]	Director	Project Manager	[REDACTED]	[REDACTED]

Business Area/Customer

Name	Job title	Main responsibilities/ inc. authorisations	Email	Tel. No.
Hilary Notley	<i>Principal Acoustic Analyst</i>	. Provides technical advice and evidence to the Noise and Statutory Nuisance teams, primarily on acoustics.	Hilary.Notley@defra.gov.uk	0208 02 63248

Meeting structure

Meeting title	Main purpose and standing agenda items	Frequency	Regular attendees - client	Regular attendees - supplier
Noise Modelling Design	General update on progress	Monthly and as detailed in Framework	Hilary Notley	Project Manager

Meeting title	Main purpose and standing agenda items	Frequency	Regular attendees - client	Regular attendees - supplier
		Annex 1, paragraph 3		
Ad hoc	Resolve emerging and/or urgent issues	As required and as detailed in Framework Annex 1, paragraph 3	Hilary Notley	Project Manager
Project specific	To discuss task requirements	As required and as detailed in Framework Annex 1, paragraph 3	Hilary Notley	Project Manager, task manager and staff as required

Annual Contract Review Process

- Defra may review the performance of each call-off from the framework.
- Defra may consider the financial stability of the lead authority and its supply chain and may seek further information in the instance of uncertainty.
- Defra may seek the feedback from other framework users.
- Defra may seek the review of project risks with the supply and seek mitigations.
- Defra will be open to communication from the Supplier openly and in the interest of mutually improving contract performance.

Annual Review Activity	Main purpose	Responsible Owner
Annual Meeting with MI.	Improve Contract Performance and identify /mitigate risks/	Hilary Notley

Complaints / Feedback procedure

Taking into account the nature of the processing, the Contractor shall provide the Authority with full assistance in relation to either Party's obligations under Data Protection

Legislation and any complaint, communication or request made under Clause E2.5 (and insofar as possible within the timescales reasonably required by the Authority) including by promptly providing:

- (a) the Authority with full details and copies of the complaint, communication or request;*
- (b) such assistance as is reasonably requested by the Authority to enable the Authority to comply with a Data Subject Access Request within the relevant timescales set out in the Data Protection Legislation;*
- (c) the Authority, at its request, with any Personal Data it holds in relation to a Data Subject;*
- (d) assistance as requested by the Authority following any Data Loss Event;*
- (e) assistance as requested by the Authority with respect to any request from the Information Commissioner's Office, or any consultation by the Authority with the Information Commissioner's Office.*

Escalation and Dispute Resolution

Both Parties shall seek to communicate openly to identify mutual risks. All risks are to be managed in accordance with the process set out in the tender response and in line with Defra expectations.

FOI management

Freedom of Information

E5.1 The Contractor acknowledges that the Authority is subject to the requirements of the FOIA and the EIR.

E5.2 The Contractor shall transfer to the Authority all Requests for Information that it receives as soon as practicable and in any event within 2 Working Days of receipt:

- (a) give the Authority a copy of all Information in connection with the Contract in its possession or control in the form that the Authority requires within 5 Working Days (or such other period as the Authority may specify) of the Authority's request;*
- (b) provide all necessary assistance as reasonably requested by the Authority to enable the Authority to comply with its obligations under the FOIA and EIR;*
- (c) not respond to directly to a Request for Information unless authorised to do so in writing by the Authority.*

E5.3 The Authority shall determine in its absolute discretion and notwithstanding any other provision in the Contract or any other agreement whether the Commercially Sensitive Information and any other Information is exempt from disclosure in accordance with the provisions of the FOIA and/or the EIR.

Performance Management

Key Milestones

Milestone	Date
As set out in Part A The Services	
To be updated as per each Call off – Project Specific	
Annual Review December of each year.	

Management Information/ Reporting

Document Title	Document Purpose	Internal/External	When Provided	Provided to	Frequency
Report on other Framework Users	Supplier to detail other framework Users	External	Jan & July	Defra	6 monthly
Project Specific Reports set out in each call-off	Set out in each call-off	Set out in each call-off	Set out in each call-off	Set out in each call-off	Set out in each call-off

Measures available in case of consistent under-performance

IN the instance of consistent under performance Defra may elect to stop using the framework and explore the use of other public contracts to deliver the requirement.

FRAMEWORK ANNEX 5 – KEY PERFORMANCE INDICATORS

Metric	KPI	What is required to make this measurable	KPI Measurement	KPI Rating		
Delivery	KPI 1 – Project Deadlines	Deliverables will be presented by the Contractor(s) to the Authority at the agreed date and quality as outlined in the deliverables.	Quality deliverables are presented to the Authority on the day that has been agreed by both parties. The Authority's project officer deems the deliverable to be of sufficient quality.	Deliverables sent to the Authority greater than 15 (fifteen) working days after the agreed deadline.	Deliverables sent to the Authority greater than 5 (five) working day after the agreed deadline.	Meets expectations - All deliverables sent to the Authority on time
Contract Management	KPI 2 – Invoices	<p>Invoices to be received within five (5) working days of the end of each month.</p> <p>Invoices and associated deliverables should be clearly linked.</p> <p>Note partial payment for milestones is not permissible: only completed milestones and deliverables are chargeable.</p>	<p>Invoices quote the correct PO, Contract number, the Authority Contact, and qualitative description of the work being done.</p> <p>Invoices must be clearly itemised: specific milestones and deliverables should be explicitly listed.</p> <p>Associated reports should be clearly and explicitly linked to invoices to help financial tracking.</p>	Invoices received by the Authority which contains inaccuracies and/or greater than 10 (ten) working days after the agreed deadline.	Invoices received by the Authority greater than 5 (five) working days after the end of the month, and/or contains some inaccuracies.	Meets expectations - All invoices received by the Authority on time and accurately reflect agreed work

Metric	KPI	What is required to make this measurable	KPI Measurement	KPI Rating		
Quality of Service	KPI 3 – Quality of Deliverable: Error Free and Complete	Deliverables are accurate and free of errors. Incomplete is considered an error for the purposes of this KPI	Deliverables reviewed by the Authority for accuracy.	A significant error is identified that results in published documents or National Statistics being amended by Defra. Or an error is identified that results in Government incurring financial damages or significant reputational harm.	An error is identified that does not result in published documents or National Statistics being amended	Meets Expectations – No errors within deliverables
Contract Management	KPI 4 – Annual risk Assessment	High quality, detailed and up to date project risk assessments in place.	Initial submission 1 month from commencement and kept to date throughout the project. Evidence should be provided that risks are proactively managed.	Risk Assessment is not kept up to date and known risks are not communicated on the Risk Assessment	Risk Assessment is kept up to date but communication on the Risk Assessment is incomplete	Risk assessment is kept up to date and remains appropriate for use
Price	KPI 5 – Right Price	Deliverables will be presented by the Contractor(s) to the Authority at or less than the agreed price as outlined in the call off contract.	Invoices reviewed by the Authority and progress (including costs incurred to date) discussed at regular project meetings	Costs exceed the agreed price and amendments are not communicated and agreed with the Authority	Costs change for justifiable reasons which communicated well in advance and agreed with the Authority	Meets expectations – projects costs are pre-agreed and not exceeded



Department
for Environment
Food & Rural Affairs

FRAMEWORK AGREEMENT CHANGE NOTE

Contract Change Note Number	
Contract Reference Number and Title	
Variation Title	
Number of Pages	

Whereas the Provider and the Authority entered into a Framework Agreement for the provision of xxxxxxxxxx operations dated [dd/mm/yyyy] (the “Original Framework Agreement”) and now wish to amend the Original Framework Agreement.

It is agreed as follows:

1. With effect from [dd/mm/yyyy] the Original Framework Agreement shall be amended as set out in this CCN:

Change Requestor / Originator	
Summary of Change	
Reason for Change	
Revised Contract Price	Original Contract Value £
	Previous Contract Changes £
	Contract Change Note [x] £
	New Contract Value £
Revised Payment Schedule	
Revised Specification (see Annex A)	
Revised Contract Period	
Change in Contract Manager(s)	
Other Changes	

2. Save as herein amended all other terms and conditions of the Original Framework Agreement shall remain in full force and effect.

Execution of the Contract Change Note is carried out in accordance with EU Directive 99/93 (Community framework for electronic signatures) and the Electronic Communications Act 2000. The revised Framework Agreement is formed on the date on which both Parties communicate acceptance of its terms on the Authority’s electronic contract management system (“Bravo”).

FRAMEWORK ANNEX 7 – PROCESSING, PERSONAL DATA AND DATA SUBJECTS

1. This Framework Annex shall be completed by the Authority, who may take account of the view of the Provider, however the final decision as to the content of this Framework Annex shall be with the Authority at its absolute discretion.
2. The contact details of the Authority Data Protection Officer are:
3. The contact details of the Provider Data Protection Officer are:

data.protection@defra.gov.uk
4. The Provider shall comply with any further written instructions with respect to processing by the Authority.
5. Any such further instructions shall be incorporated into this Framework Annex.

Data Processing descriptor	Narrative
Identity of the Controller and Processor	The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Controller and the Provider is the Processor in accordance with Clause 18.1.
Subject matter of the processing	
Duration of the processing	
Nature and purposes of the processing	Strictly as required for the performance of the relevant Call-Off Contract.
Type of Personal Data	Name, [date of birth], business contact details, gender, relevant medical conditions (including allergies).
Categories of Data Subject	Authority staff (which may include agents and temporary workers).
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	In accordance with the terms of the Framework Agreement.

FRAMEWORK ANNEX 8 – NON DISCLOSURE AGREEMENT

THIS NON DISCLOSURE AGREEMENT is made the [insert day] day of [insert date] (the “Commencement Date”

BETWEEN:

[Insert full name of contractor] of [insert full address but if registered company please insert the following - (registered in England and Wales under number [insert company number]) whose registered office is situated at [] (the “Contractor”);

and

[Insert name and address of the Staff member, professional advisor or consultant of the Contractor] (the "Disclosee").

(each a “Party” and together the “Parties”).

WHEREAS:

- (a) The Contractor has contracted with the Secretary of State for Environment, Food and Rural Affairs (the “Authority”) to provide services to the Authority in an agreement dated [insert date] (the “Contract”).
- (b) The Contract places an obligation of confidentiality on the Contractor. The Disclosee is an [insert employee, professional advisor or consultant] of the Contractor engaged in the provision of services to the Authority in support of or in connection with the services to be provided by the Contractor under the Contract.
- (c) The Disclosee may therefore, have communicated to it, certain Confidential Information belonging to the Authority which is proprietary and must be held in confidence. Accordingly, the Contract requires the Contractor to ensure that the Disclosee enters into a non-disclosure agreement with the Contractor on the terms set out herein.
- (d) Any Confidential Information disclosed by the Authority or the Contractor to the Disclosee, whether contained in original or copy documents, will at all times remain the property of the Authority together with all notes, memoranda and drawings that have been made as a result of access to such Confidential Information.

NOW IT IS AGREED as follows:

Definition and Interpretation

1. In this Agreement:

- a) “Confidential Information” means: any information which has been designated as confidential by the Authority in writing or that ought to be considered as confidential (however it is conveyed or on whatever media it is stored) whether commercial, financial, technical or otherwise including (without limitation) information belonging to or in respect of the Authority which relates to research, development, trade secrets, formulae, processes, designs, specifications, the Authority data, internal management, information technology and infrastructure and requirements, price lists and lists of, and information about, customers and employees, all materials and information belonging to third parties in respect of which the Disclosee owes obligations of confidence; information the disclosure of which would, or would be likely to, prejudice the commercial interests of any person, intellectual property rights or know-how of the Authority and all personal data within the meaning of the General Data Protection Regulation (Regulation (EU) 2016/679), whether or not

that information is marked or designated as confidential or proprietary; whether arising prior to, on or after the Commencement Date;

- b) "Law" means any applicable Act of Parliament, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, exercise of the royal prerogative, enforceable community right within the meaning of Section 2 of the European Communities Act 1972, regulatory policy, guidance or industry code, judgment of a relevant court of law, or directives or requirements of any regulatory body of which the Contractor is bound to comply.
- 2. In construing this Agreement the general words introduced or followed by the word include(s) or including or in particular shall not be given a restrictive meaning because they are followed or preceded (as the case may be) by particular examples intended to fall within the meaning of the general words.
- 3. Unless the context requires otherwise, the singular shall include the plural and vice versa, and the masculine shall include the feminine and vice versa.
- 4. Reference to any legislative and statutory requirement or similar instrument shall be deemed to include reference to any subsequent amendment to them.
- 5. References to any person shall, as the context may require, be construed as a reference to any individual, firm, company, corporation, government department, agency, or any association or partnership (whether or not having a separate legal personality).

CONFIDENTIALITY

- 6. The Disclosee undertakes to: keep confidential all Confidential Information and safeguard it accordingly; and that any Confidential Information supplied will not be used by it for any purpose other than in connection with the Contractor's delivery of the services under the Contract without the prior written permission of the Authority.
- 7. The Disclosee will take all necessary precautions to ensure that the Confidential Information is held in confidence and will provide proper and secure storage for all information and any papers, drawings or other materials which relate to or are compiled from such information.
- 8. The Disclosee shall, with respect to any Confidential Information it receives directly from or on behalf of the Authority or from the Contractor, comply, with all instructions and/or guidelines produced and supplied by or on behalf of the Authority from time to time for the handling and storage of Confidential Information, generally or for specific items.
- 9. The Disclosee will not disclose any Confidential Information or any part thereof to any third party.
- 10. Where the Disclosee is an employee, breach of the obligations set out herein in this Agreement shall be a cause of disciplinary proceedings, and the Contractor shall institute and enforce such disciplinary proceedings as against the Disclosee in relation to such breach.
- 11. Where the Disclosee is a professional advisor or consultant, breach of the obligation set out herein shall entitle the Contractor to terminate the contract of engagement with the Disclosee immediately, and the Contractor shall enforce such right of termination as against the Disclosee in relation to such breach.

12. All Confidential Information in tangible form received hereunder together with all copies thereof shall be destroyed or returned immediately to the Contractor or where so required by the Authority and notified to the Disclosee, to the Authority, upon request or upon completion of the task for the purposes of which such Confidential Information was released.
13. The Confidential Information will not be used by the Disclosee for any purpose or in any way other than under this Agreement.
14. The following circumstances shall not constitute a breach of the obligations of confidentiality contained in this Agreement:
 - 14.1 Disclosure of Confidential Information by the Disclosee when required to do so by Law or pursuant to the rules or any order having the force of Law of any court, of competent jurisdiction;
 - 14.2 Disclosure of Confidential Information by the Disclosee where and to the extent that the Confidential Information has, except as a result of breach of confidentiality, become publicly available or generally known to the public at the time of such disclosure;
 - 14.3 Disclosure of Confidential Information by the Disclosee where and to the extent that the Confidential Information is already lawfully in the possession of a recipient or lawfully known to it prior to such disclosure;
 - 14.4 Possession of Confidential Information by the Disclosee where it has been acquired from a third party who is not in breach of any obligation of confidence in providing that Confidential Information;

provided that, in no event shall information relating to the affairs of any identifiable person be disclosed or released from the obligations herein without the prior written consent of the Authority.
15. The Disclosee shall: notify the Contractor and the Authority promptly of the date and circumstances of the loss or unauthorised disclosure, if any, of the Confidential Information or any part of the Confidential Information and in addition, the action being taken to rectify that loss or unauthorised disclosure.
16. The obligations contained in this Agreement shall continue until notified in writing by the Authority or the Confidential Information becomes public knowledge (other than by breach of the terms of this Agreement).
17. No licence of any intellectual property rights (including but not limited to patent rights, copyrights, trademarks and rights in proprietary information and/or know-how and whether registrable or unregistrable) is granted hereby, beyond that necessary to enable use of the Confidential Information for the purpose for which the Confidential Information was released.
18. Nothing in this Agreement shall be construed as compelling any of the Parties to disclose any Confidential Information or to enter into any further contractual relationship with any other party.
19. No representation or warranties are given regarding the accuracy, completeness or freedom from defects of the Confidential Information or with respect to infringement of any rights including intellectual property rights of others.

20. Without affecting any other rights or remedies that the other Parties may have, the Disclosee acknowledges and agrees that damages alone would not be an adequate remedy for any breach of any of the provisions of this Agreement.

GENERAL

21. No failure or delay by any Party to this Agreement in exercising any of its rights hereunder shall operate as a waiver of such rights, nor shall any single or partial exercise preclude any further exercise of such rights. Any waiver by a Party of any breach or non-compliance with any term of this Agreement shall not constitute a waiver of any subsequent breach of non-compliance with the same or any other term of this Agreement.
22. No Party may assign this Agreement or any of its rights and obligations hereunder without the prior written consent of the Authority.
23. Any notice under this Agreement shall be in writing and shall be delivered by post, fax or e-mail to the address of the Party in question set out at the beginning of this Agreement or such other address (or e-mail address or fax number) as the Parties may notify one another from time to time.
24. No term of this Agreement shall be enforceable, by virtue of the Contracts (Rights of Third Parties) Act 1999, by any person who is not a party to this Agreement other than the Authority. The Parties shall only with the prior written consent of the Authority be entitled to vary any of the provisions of this Agreement without notifying or seeking the consent of any third party and the rights conferred by section 2 of the Contracts (Rights of Third Parties) Act 1999 are excluded.
25. This Agreement shall be governed by and shall be interpreted in accordance with the laws of England.
26. The courts of England have exclusive jurisdiction to settle any disputes which may arise out of or in connection with this Agreement and accordingly that any proceedings, suit or action arising out of or in connection therewith shall be brought in such courts.

This Agreement has been entered into on the date first written above.

SIGNED by the authorised signatory for and on behalf of the Contractor:

SIGNED by the Disclosee:

FRAMEWORK ANNEX 9 – COMMERCIALLY SENSITIVE INFORMATION

- 1 Without prejudice to the Authority's general obligation of confidentiality, the Parties acknowledge that the Authority may have to disclose Information in or relating to the Framework Agreement following a Request for Information pursuant to clause 21 (Freedom of Information).
- 2 In this Framework Annex the Parties have sought to identify the Provider's Confidential Information that is genuinely commercially sensitive and the disclosure of which would be contrary to the public interest.
- 3 Where possible the Parties have sought to identify when any relevant Information will cease to fall into the category of Information to which this Framework Annex applies.
- 4 Without prejudice to the Authority's obligation to disclose Information in accordance with the FOIA and the EIR, the Authority will, acting reasonably but in its sole discretion, seek to apply the commercial interests exemption set out in s.43 of the FOIA to the Information listed below.

PROVIDER'S COMMERCIALLY SENSITIVE INFORMATION		DATE	DURATION OF CONFIDENTIALITY
Framework Annex 2 (Pricing Matrix)		Commencement Date	Term of the Framework Agreement

FRAMEWORK ANNEX 10 – PROVIDER SOLUTION

It should be noted that these responses are focussed towards the delivery of specific tasks which are expected to be required under this framework agreement. They also set out background to the proposed approach which will be taken for any other call-off items under this contract. Any subsequent call-off items would be expected to be within the scope of the specification of requirements, and the approach set out in these responses.

ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data
Page 1 of 10

The selection of datasets and their preparation for statutory and optimal noise mapping and analysis falls into two areas: 3D Ground Model; and Emission Datasets. Our response presents our proposals in relation to identification and preparation of datasets along with providing a series of general principles underpinning our proposed approach.

General Principles

The Consultants' proposed solution will apply the following general principles to the obtaining of all datasets described in this response, and their associated processing and quality control.

Accuracy – the Consultants' ambition is that the accuracy of the calculated noise levels should be within $\pm 2\text{dB}$ at the point of emission in line with Directive 2015/996 (CNOSSOS-EU). Through the development of spatially accurate ground models, this accuracy is likely to result in a corresponding level of uncertainty in the calculated noise levels.

Addressing Calculation Methods – the core system requirements are for calculations to be available according to the CRTN, CRN and CNOSSOS-EU calculation methods. The CNOSSOS method requires a 'step change' in data inputs for the calculation of source emissions compared to the current national methods. However, the data requirements captured in order to meet CNOSSOS requirements will allow for the derivation of inputs for current national methods. As such, our approach to data gathering will be based around a CNOSSOS capture exercise with processing to make the data fit for purpose for all calculation methods.

Toolkits and Addressing Gaps – in previous rounds assumptions have been used to address data gaps. These assumptions have been informed by discrete studies as part of mapping projects or using the WG-AEN publication 'Good Practice Guide for Strategic Noise Mapping'. CNOSSOS will require a re-evaluation of how potential assumptions affect accuracy and uncertainties. The team propose that studies will be carried out to test the potential uncertainties of any gap-filling assumptions which are proposed. These studies will be analytical in nature, considering reports and papers such as those produced for DG ENV and EC JRC on the implementation of CNOSSOS. These toolkits are mentioned throughout our response and would in all instances be carried out so to ensure that Defra is informed and can make decisions. This will involve the development of clear and defined data hierarchies. However, toolkit development could require very specific academic investigations. These have been identified, such as the reference measurements of railhead roughness, track transfer functions and bridge constants and UK road surfaces and are provided as cost options using recognised experts from ISVR available as associates through Acustica Limited.

Stakeholder Engagement and Participation – a core theme to our approach in identifying and capturing data is stakeholder participation. The Consultants will contact all stakeholders. This is identified in our project plan with routine planned engagement supported by a comprehensive data requirements specification. This will (a) confirm the dataset availability as described in this report; and (b) will provide the necessary tools and data standards to allow stakeholders to provide data for inclusion within the acoustic models. This is particularly relevant for meeting optimal requirements and sets an ethos of stakeholders participating by providing data rather than a centralised data capture approach as adopted for previous rounds.

Strategic and Optimal Requirements – the conceptual approach is that the same resolution datasets will be used to deliver both strategic and optimal geographic coverage requirements with respect to the ground model. Applying this approach will avoid any discontinuities in the statutory

reporting to the optimal report. For calculating noise emissions, very low road traffic (c.35/hour) and rail (c.2/hour) movements could result in exposure above the 40 dB L_{den} and 35 dB L_{night} optimal requirement. Our approach to optimal source data capture will therefore be to obtain data that is available at a national level before populating this data with stakeholder inputs provided in accordance with developed data standards. This is so to reduce the risk of low stakeholder participation.

Automation – we have identified in our response the degree to which various processes can be automated. In developing our proposed approach this has identified situations where automation cannot be achieved at first, however techniques are proposed so to allow the automation and updating of the mapping more readily as part of future mapping exercises. This is a fundamental principle of our approach and aims to reduce the cost and effort of future rounds of mapping. The ambition is that for future updates of the noise calculations these can be automated as far as possible in a cost-effective manner. ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data

Page 2 of 10

Interoperability – the selection and processing of data for the acoustic model is influenced by the software specification of the noise calculation software. So not to process in a manner which locks Defra to our selected calculation engine, LimA, we will develop our processing taking into account the principles of ISO 17534 and the Quality Assurance Interface (QSI) data format. This will better allow for a change in software provider in the future.

Updates and Linkage to Policy – the 25-year environment plan ('25YEP') has a clear influence on the approach taken to the system and particularly the delivery of optimal coverage. Transportation noise is a clear environmental pressure and as such tracking exposure in the context of comprehensive and reliable data within the robust delivery framework as per the principles of the 25YEP must also apply to function of the system. This means that the system needs to be built on solid foundations whereby noise exposure data can be updated and reviewed to monitor performance against the principles of the 25YEP. This means that the selection of datasets, the processes and the way in which noise is calculated is robust and reproducible so that methodological decisions and data availability do not detract from making meaningful comparisons as part backward-looking exercises. As a general principle, we have selected data choices and processes for use for both statutory purposes and optimal purposes.

Considering Other Devolved Administrations (DAs) – the approaches outlined in this response are directly compatible to England, Wales and Scotland. For Northern Ireland and Gibraltar, whilst the processes presented will apply, these DAs will rely on different data sources to those listed. Furthermore, these DAs will require modelling to be undertaken on different Spatial Reference Systems (SRS). We have experience of working with OSNI datasets and Government generated data in Gibraltar. Any specific changes to the processing that arises from these datasets would be addressed as part of future call-off contracts.

QA/QC Procedures – QA/QC procedures for data will be developed during Stage 1. These will build on the team's collective experience and published papers (five in total) relating to QA/QC procedures in noise modelling projects. These will be formalised in a manner where they can be automated through tools such as FME. As such the processing activities indicated in this response will include built-in QC routines and reports. We will formalise the QA/QC procedures having reference to the HM Treasury Aqua Book. This specially address QA/QC and uncertainty as part of Government modelling to enable 'fit for purpose' analysis. We will also take inspiration from air quality by reviewing the Defra report 'Review of Quality Assurance Framework for Models' to identify any relevant synergies which can improve or enhance procedures.

3D Ground Model Datasets

3D Ground Model datasets are used by the acoustic modelling to generate the 3D environment within which sound propagation calculations can occur. The 3D ground model must therefore be developed where the spatial accuracy of the ground model is representative of the corresponding accuracy of the emission sources, and whilst having regard for the demographic and population data which may be used in the analysis of the mapping.

With the above in mind, our proposal is to base much of the ground model on Ordnance Survey (OS) datasets, particularly the MasterMap product line and publicly available open government data. The OS products are accessible to Defra via Public Sector Geospatial Agreement (PSGA) and, in future, can be made available to the system through the OS Data Hub API. Access to the OS datasets and to the OS Data Hub API will require Defra to work with the Consultants and OS to ensure all licencing arrangements are in place. However, the use of these datasets through the PSGA will be at no cost to Defra and therefore the Consultant. Not all OS products are available through PSGA and whilst requests can be made to OS for their inclusion, the Consultants have indicated where the use of OS or any other commercial data will incur licencing cost. The update frequency of OS datasets is every 6 weeks which makes these compatible with the 25YEP objectives.

We also propose to use open government data, for example, Environmental Agency terrain datasets. In cases where free PSGA OS or open data is unavailable or more suitable dataset exists, we propose to use commercially available datasets, for example, Land Cover Map as detailed below. All of these datasets share the same OS Grid SRS and as such reduce the burden on processing by providing a consistent geospatial reference.

Terrain – terrain performs three functions in the 3D model and as part of the noise calculations. The first is to inform the calculations of the relative height of acoustic sources to defined receiver points; the second to enable the calculation of the relative heights of any obstacles, including the terrain itself, to the sound propagation for the ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data

Page 3 of 10

purposes calculating acoustic barrier screening and side diffractions; and the third to allow the height of propagation paths to the ground to be calculated to enable the calculation of ground absorption. The acoustic model requires terrain to be defined as either spot heights; equal height contour lines; or 3-dimensional breaklines. In the Consultants' experience the most computationally efficient and acoustically accurate approach is to model breaklines with supporting spot heights in the vicinity of rail and road sources. This is because nearfield screening effects are key to the accuracy of propagation calculations. Beyond this the terrain can be supported by either a grid of spot heights or equal height contours as terrain screening become less influential.

In previous rounds bespoke datasets from IBM/Infoterra Central Data Service (CDS) and HS1 'as built' CAD models were used for the purposes of creating 'near source' breaklines. However, with improvements in quality and coverage of terrain datasets, acoustic breaklines equivalent of those used in previous rounds can be generated directly by integrating datasets such as the Environment Agency (EA) LiDAR Composite DTM with surface geometries (from road, rail and general surface layers) will be extracted from the OSMM Topography datasets. We propose to use the EA LIDAR Composite DTM 2019 - 1m dataset produced by EA in 2019 that covers around 80% of England at 1m resolution and derived from LiDAR with a vertical accuracy of $\pm 15\text{cm}$ RMSE. However, through the EA's National LIDAR Programme, it is anticipated that full England coverage will be available by 2021. However, until full coverage is available, other DTM datasets will be required to patch gaps in coverage. The most accurate of these, both in terms of horizontal and vertical resolution with optimal coverage is the OS Terrain 5 data product of 5m resolution with a typical accuracy level greater than 2m RMSE. This data product cannot be obtained through PGSA and therefore has a cost attached to it as well as commercial license. Whilst other terrain datasets are available, the lack of horizontal resolution to depict slopes presents potential technical issues within the acoustic modelling. These two datasets will be used as the basis of generating the acoustic terrain model for both optimal and strategic requirements. The processing requirements for terrain to ensure they are fit for purpose are presented in the table below:

Step	Processing Activity	
1	The EA LIDAR Composite DTM 2019 -1m coverage will be determined as a series of polygon objects along with an associated buffer area 200m	Fully Automated
2	Combined DTM - A complete England coverage DTM will be created by combining the EA LIDAR Composite DTM 2019 -1m and OS Terrain 5 datasets. To address 'edge effects' from elevation discontinuities between the two DTM datasets, the fusion of low and high resolution and accuracy DTMs will be completed. We propose to use a blending approach where elevation values of the overlapping area will be interpolated to obtain a smooth transition.	Fully Automated
3	Breakline Creation - OS MM feature codes such as 10056, 10183 will be extracted within 200m of road and rail sources and draped on the derived complete England coverage DTM created in Step 2. At each vertex of the extracted MM geometries, 3D heights will be assigned at vertices thus generating breakline objects.	Fully Automated
4	Contour Generation – for all areas beyond the relevant sources, 2m equal height contours will be generated	Fully Automated
5	Spot Height Generation – spot heights will be generated on a 25m grid obtained directly from the combined DTM as described in Step 2.	Fully Automated
6	Acoustic Modelling Data Scheme is applied and the data	Fully Automated

	is then transferred and ingested into the acoustic model	
--	----------------------------------------------------------	--

Step	Processing Activity	Automation
1	The EA LIDAR Composite DTM 2019 -1m coverage will be determined as a series of polygon objects along with an associated buffer area 200m	Fully Automated
2	Combined DTM - A complete England coverage DTM will be created by combining the EA LIDAR Composite DTM 2019 -1m and OS Terrain 5 datasets. To address 'edge effects' from elevation discontinuities between the two DTM datasets, the fusion of low and high resolution and accuracy DTMs will be completed. We propose to use a blending approach where elevation values of the overlapping area will be interpolated to obtain a smooth transition.	Fully Automated
3	Breakline Creation - OS MM feature codes such as 10056, 10183 will be extracted within 200m of road and rail sources and draped on the derived complete England coverage DTM created in Step 2. At each vertex of the extracted MM geometries, 3D heights will be assigned at vertices thus generating breakline objects.	Fully Automated
4	Contour Generation – for all areas beyond the relevant sources, 2m equal height contours will be generated	Fully Automated
5	Spot Height Generation – spot heights will be generated on a 25m grid obtained directly from the combined DTM as described in Step 2.	Fully Automated
6	Acoustic Modelling Data Scheme is applied and the data is then transferred and ingested into the acoustic model	Fully Automated

Building and Structure Polygons – statutory and optimal extents will be based on extracting building and structure features from the OS MM Topography layer. The pros of this data layer are that its features are already stored in geospatial format and associated geometry rules which are directly compatible with the LimA noise calculation engine that we propose to use. This has been achieved through over 15 years of this calculation engine delivering solutions for Defra based on the OS MM dataset. The calculation engine therefore includes a dedicated OS MM object definitions and data structures which can be ingested from our data solution. The most recent OS MM Building Height Attribute product, an enhancement to the OS MM Topography Layer includes 2.5D building height information which significantly reduces the need for processing. The benefits of this dataset also extends to the analysis of the noise calculations, as the data includes key links to other OS datasets, namely the OS AddressBase Plus product which allows the number of residential dwellings represented by the building polygon to be calculated and/or whether the polygon represents an alternative noise-sensitive use (i.e. schools, hospitals, places of worship etc). The OS AddressBase Plus product also includes objects without postal addresses, such as subdivided properties, places of worship and community centres and cross-references the information with other OS MM products such as OS MM Topography Layer and Integrated Transport Network (ITN) Layer via Topographic Identifiers (TOIDs). The Consultant's experience is that through OS MM Topography Layer building polygons combined with building height attribute product, OS AddressBase Plus and Census data it is possible to compute an estimated population per building. This approach is considered optimal for the delivery of noise exposure calculations and provides a greater level of exposure estimation when

calculating noise levels at facades, as is described by the Case 1 and Case 2 procedures in CNOSSOS-EU.

Whilst other datasets such as the OpenStreetMap, OS OpenData VectorMap and Zoomstack products could be used for strategic purposes, it is highly likely that these will result in additional processes in terms of: calculating building heights; creating intrinsic links to population and noise-sensitive receptors; and rectifying non-standard attribution and/or wider crowd sourcing geospatial digitisation issues (in the case of OpenStreetMap). In some instances, the size of building footprints as digitised within these products could comprise the acoustic integrity of the models. For these reasons the use of these datasets is considered a high risk with respect to the accuracy and quality of both the strategic and optimal requirements.

The acoustic model will require buildings to be attributed with a height. Whilst these are available within the OS MM Building Height Attribute product, there are some small geographic areas where this data is unavailable. The calculation of building heights in these areas will therefore be undertaken using the EA LIDAR DTM and DSM where this data is available. Where this data is not available a default building height will be assigned. The processing requirements for buildings objects to ensure fit for purpose are shown in the table below:

Step	Processing Activity	Automation
1	Building objects extracted from the OS MasterMap Topography layer	Fully Automated
2	Data schema is applied to the objects	Fully Automated
3	Building heights are mapped directly from the OS MasterMap dataset into the data scheme where they are available. Where not, buildings are flagged.	Fully Automated
4	For building objects without heights, a subtraction of the EA LIDAR Composite DTM and DSM products occurs and the building height is determined as being the average difference within the building polygon	Fully Automated
5	Where EA LIDAR Composite DTM and DSM products coverage is unavailable, a default height of 8m will be assigned.	Fully Automated

Ground Cover – ground cover objects allow the acoustic absorbency (or otherwise) of the ground surface to be represented in the calculation of the sound propagation. This requires datasets which can be used to describe acoustic absorbency by providing an indication of ground surface conditions, such as grasslands and areas of water. There are several datasets which cover England and the wider UK which allow for this. In England, previous rounds of the Regulations have used the CORINE Land Use Mapping. The latest version of this data, CORINE Land Cover 2018 is freely available. However, this is a generalised dataset and can often miss discrete features such as urban parks and gardens and areas of inland water. It also tends to be updated every 6 years. As the dataset is affiliated with the European Commission and European Environment Agency (EEA) it is also uncertain as to whether the dataset will be updated for the UK in the future. For these reasons, and to ensure consistency in approach for future rounds of mapping, the Consultants will utilise UK Centre of Ecology and Hydrology (UKCEH), Land Cover Map 2019 (LCM) - land parcels product. This dataset was first produced in 2017 and is updated every year at a national level therefore making it suitable for strategic and optimal purposes. It is also available for the other DAs. It includes 21 land cover classifications and is derived from the OS MM Topography dataset, meaning that ground cover is compatible with the wider OS MM layers selected. This dataset has been used on major infrastructure projects and was utilised for noise mapping in Northern Ireland. The latest version of LCM is for 2019 and whilst this dataset is commercial, it is considered to provide a cost-effective means of ensuring future rounds of modelling can track changes to ground cover reducing

risk that other datasets such as CORINE become unavailable. The processing requirements for the ground cover to make it fit for purpose are:

ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data

Step	Processing Activity	Automation
1	LCM data product is ingested with a look-up configured to allocated ground absorption coefficients based on the ground surface classifications available	Fully Automated
2	Processing will be undertaken to dissolve adjacent areas of identical ground absorption coefficients to make efficient the acoustic modelling.	Fully Automated
3	Acoustic Modelling Data Scheme is applied and the data is then transferred and ingested into the acoustic model	Fully Automated

Noise Barriers – noise barrier datasets have been captured and used on previous rounds of Defra's strategic mapping. These have been generated from detailed data capture exercises using information from other asset datasets and central data sources from stakeholders such as Highways England (HE) and Transport for London (TfL). We are aware of more recent asset databases held by Network Rail (NR) such as NR 'Offering Rail Better Information Services' (ORBIS) which can be used to identify the location, height and material of railway side barriers along strategic sources. However, access to and the format of this data does not necessarily make it fit for purpose or allow for automation into the acoustic modelling environment. Therefore, any approach proposed must plan for a degree of manual processing. It is not proposed to repeat any existing data capture exercise for generating noise barrier noise model datasets. Instead we propose to carry out and facilitate engagement with stakeholders providing relevant data standards and tools to enable noise barrier locations to be gathered and ingested into the modelling system from the stakeholders themselves.

The ambition is to provide through a front-end User Portal a system for stakeholders to provide and insert noise barrier data. This feature already exists within the ODEN system that we propose to use. A list of stakeholders will be developed with Defra and engagement activities will be established to facilitate access to barrier datasets and to train stakeholders on how that information can be inserted into the portal. To reduce manual work by stakeholders, a data standard will be developed for noise barriers allowing stakeholders to convert their datasets into a format directly compatible with the system. This approach is likely to provide an opportunity for Defra to engage with local authorities as part of gathering data to satisfy an optimal solution and would set the basis for allowing automation of noise barrier datasets as part of future rounds. In the event that stakeholder participation is low or partial, the Consultants will use a 'fallback' option where the noise barrier datasets utilised as part of the previous rounds will be reused and revised to reflect any stakeholder inputs. This data is considered fit purpose for statutory requirements. The processing requirements for noise barriers to make them fit for purpose are:

Step	Processing Activity	Automation
1	Noise barrier datasets are captured from stakeholders through data provided according to developed data	Fully Automated

	standards and through the portal, which will be validated.	
2	Where a barrier is not within 50m of a barrier used in the previous round of mapping, the barrier from the previous round will be brought into the dataset	Fully Automated
3	The Acoustic Modelling Data Schema is applied and the data is then transferred and ingested into the acoustic model	Fully Automated

Bridges – bridge objects are an important aspect of the acoustic model as they ensure that elevated sources are positioned correctly and that the acoustic screening from bridges is available. There are no ‘off the shelf’ datasets that provide bridge objects in a manner which are directly compatible with commercial noise calculation systems. In the previous round of the regulations, bridges were manually digitised using a series of ‘target datasets’. This approach will be required as part of future rounds, particularly for the optimal solution. Engagements with NR and HE will be carried out to help establish additional target datasets such as ORBIS. For statutory requirements, it is proposed that bridge objects created for the previous rounds are reused as much as this is possible. They are considered fit for purpose as they are already available in a format which is compatible with our proposed system and will integrate with the processed terrain as described above. However, automated checks can be used as part of a process to determine: (a) the potential location of all relevant bridges; (b) identify whether an existing bridge from the previous round can be reused; and (c) to allow for the generation of new bridge objects to be automated as far as is practicable. For optimal requirements, a front-end User Portal allowing stakeholders to either draw or upload bridge location information according to a data standard will be made available. However, even with this in place, some manual digitisation work for bridges will be required. This is addressed in the following proposed processing requirements:

Step	Processing Activity	Automation
------	---------------------	------------

1	All road and rail centre polylines (irrespective of statutory or optional requirements) will be intersected with each other and with features available within the OS MM topology dataset describing features which may normally be traversed by bridge e.g. rivers. This will generate a target points dataset.	Fully Automated
2	The road and rail centre polylines will then be draped on to the derived combined DTM and split into 10m sections. For each section, the line gradient will be identified. Should the line gradient exceed 15% indicating a steep slope, the polyline segment is flagged	Fully Automated
3	The location of flagged segments and the target points are identified and a spatial query using buffering is performed with respect to the location of the bridges available in the previous round. The results of this query will identify locations where bridges are available and can be reused and where additional bridges may be required. This query will also take into account bridge objects provided by stakeholders through the engagement exercise.	Fully Automated
4	Where additional bridges are required, these will be automatically generated in the first instance taking into account the road segments indicating the need for a bridge. These automatic generations may need to be manually reviewed.	Semi Automated
5	A full QA process will then be carried out to ensure that the bridges which have been generated according to appropriate digitisation rules and with respect to the underlying terrain model and location of the road centreline. This will be fully automated using existing QC check existing within LimA as described in E03.	Fully Automated

Road Traffic Source Emissions

Road Centreline Geometries – road centreline geometries are required to locate sources of road traffic noise emissions. A variety of datasets make these available including OS VectorMap, OpenStreetMap, and the OS MasterMap Highways Network. All of these datasets are free to use for Defra however the OS MasterMap Highways Network (OSMMHN) dataset provides a level of accuracy and information such as road classifications which can be used to help fill data gaps. It is also updated every 6 weeks by OS and has been used successfully in previous rounds and on major EIA. In previous rounds the OSMMHN objects have been used so that separate carriageways are modelled and road traffic flows and statistics proportioned accordingly. This approach complements guidance in LA111 and as such it is proposed that carriageways as defined in OSMMHN are reused.

Road Surfacing – road traffic noise emissions are highly sensitive to road surface types. During previous rounds of the mapping, stakeholders have informed the location and nature of road surfaces with HE and local authorities providing information. In the same manner as proposed for noise barriers, the User Portal will be enabled to allow stakeholders to provide road surface data. A pre-population of this information will be made by spatially joining the road emission objects used for previous rounds of mapping to the latest OSMMHN dataset. However, this pre-population will only provide road surface categories as defined under the CRTN method, and not CNOSSOS. Furthermore, HE recently updated guidance relating to road surfaces in the Annex of its LA111 publication, which introduces alternative descriptions of road surfaces. As such, along with stakeholder data gathering, a discrete study is proposed to deliver a toolkit that can be used to establish appropriate default road surface corrections based on common UK surface types. This study will be carried out in the form of ‘sprint study’ and will be centred around identifying ‘acoustically equivalent’ road surface corrections within the CNOSSOS method utilising acoustics and road surfacing knowledge available within the team. It is intended that this toolkit can be used to support the selection of road surface corrections based on stakeholder inputs. As such, through the User Portal, it is proposed that stakeholders can allocate surfaces to certain road centreline objects.

Traffic Flows – CNOSSOS-EU requires that road traffic flows are available in the form of annual averages for day, evening and night-time periods. These flows must further be broken down into the six vehicle types/classifications recognised by CNOSSOS-EU. Some online platforms such as Google can provide traffic flow estimates however access to this service was shut down in 2019, and when available could only provide high level volumes rather than vehicle type information. For HE roads, traffic counts are available via an API to their webTRIS system. This system provides publicly accessible MIDAS data which can be used to gather traffic flows for a 24-hour period ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data which can further be broken into day, evening and night, or to hourly flows in some instances. The data also allows all proxies to vehicle categories covered by the CNOSSOS and CRTN calculation methods. This data can be obtained through an API and returned in the form of an annual, daily or monthly report allowing end users the potential to understand daily and seasonal variations in road traffic noise from these roads. Although this data is considered suitable for mapping, the availability of the counter data is not complete with counters sometimes reporting outages. Despite this, the webTRIS data is considered fit for purpose for both statutory and optimal requirements with availability issues, a matter which can be addressed through processing. However, in order to obtain greater and optimal coverage, additional data sources are required. The Department for Transport Road Traffic Statistics website provides traffic count data at a series of counter sites across England. This data can also largely be mapped to CNOSSOS vehicle categories, however the traffic flows available are for 12-hour periods therefore whilst spatial coverage is broadly optimal, flow conversion to day, evening and night-time flows will be required. A study is proposed to help deliver a series of toolkits and is part of the main costing as this exercise will be required. This is because unlike the delivery of calculations under CRTN Method III, CNOSSOS does not interpolate a daytime road traffic noise emission into separate day, evening and night-time values. This must be achieved through corresponding road traffic statistics. These toolkits will take inputs from our team's highways experts and data scientists to develop models for converting 12-hour AADT traffic flows to day, evening and night-time periods for all required vehicle classes. This analysis will develop tools considering road classifications and regions, and whether roads are known to be highlight utilised by HGVs at night, such as those servicing ports. The output of this study and the toolkits themselves would be submitted to Defra for approval and will be embedded into the dataflow. Further optimal coverage can be obtained through engagement with local authorities and their highways teams. This is likely to result in data being received in a range of qualities. It is therefore proposed that to allow such data to be used, the User Portal along with data standards will be provided to LAs to allow attributions to take place.

Traffic Speeds – As per the requirement for traffic flows, average traffic speeds are required for day, evening, and night-time periods. These should also be available for each vehicle classification. During previous round of the Regulations, traffic speeds were assumed based on guidance available from CRTN with a toolkit developed to allocate traffic speeds based on road classification and whether the road was inside or outside an agglomeration. Additional data sources are now available to allow more accurate speed representations. For strategic purposes, and for HE roads, webTRIS can provide average traffic speed estimations based on MIDAS data. This data can potentially be processed to indicate average traffic speeds for different vehicle categories during day, evening and night periods. This data will therefore be utilised where it is available. However, for other forms of road traffic data as outlined above, speed data is unavailable. The OSMMHN includes fields for reporting the average and maximum speeds on road centrelines. This is a commercial dataset and is not covered under PSGA however its use is considered cost effective as it is updated routinely in line with other OS products thus standardising data input for future rounds and removing capture requirements. This dataset will be used for both strategic and optimal purposes. It is proposed that average speeds are used in the absence of other data. The speeds will be appropriately applied to vehicle classes so that, for example, HGVs on motorways cannot be modelled at speeds above their 56mph limit. This will be addressed through a simple toolkit to be agreed by Defra which will be embedded within a workflow.

Distance to and Types of Junctions – the points dataset version of the OSMMHN allows roundabouts and signalled junctions to be identified. These points can be buffered to identified various distances

to such junctions. For different road types and their associated speeds, a distance to junction assumption will be identified taking into account processes currently being implemented in the German RLS20 standard. This assumption will be the subject to testing by the test team. It should be noted that whilst the LimA calculation core can work out such distances and apply such correction automatically as part of the acoustic calculations, reliance upon this feature goes against the principle of interoperability as outlined above.

Traffic Flow Direction – both CNOSSOS and CRTN require the direction of traffic to be known. This is required so that gradient corrections can be applied within the acoustic model. The OSMMHN road centreline geometries are generally digitised in the direction of traffic flows. However, in some instances they require reversal. This will be addressed manually in the first instance but will be addressed to allow automation at a later date as described. ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data

Page 8 of 10

Studded Tyre Use – CNOSSOS-EU requires the months of the year and the percentage of vehicles which are likely to use studded tyres. Whilst this is a requirement of the calculation method, studded tyres are illegal in the UK and therefore a simple assumption will be applied to remove their consideration.

Processing Activities for Road Emission Sources – FME Workflows

Step	Processing Activity	Automation
0	Apply Data Scheme to Centreline Geometries – data standard is applied to the OSMMHN with relevant attributes from the geometries stored	Fully Automated
1	Attribute Counter Sites and Flow Directions - Counter sites are overlaid against the OSMMHN derived road centreline network and allocated to carriageways. Traffic counter datasets are linked to road centrelines using an ID system. This ID system will reference the counter ID and its source. A data hierarchy will be established so that data from webTRIS is mapped as precedence to DfT data. For optimal data available from local authorities this will be undertaken by them through data standards and/or the User Portal. Road centreline digitisation directions will be checked with respect to flows.	Semi Automated (to allow automated updates)
2	Allocated Road Surface Type - Road surface type data will be extracted from the User Portal and mapped over to relevant CNOSSOS and CRTN types. Toolkits will be applied where this is required.	Fully Automated
3	Populate Road Traffic Flows – Road traffic flow data from counter sites will be processed into a usable form as part of workflows. Where traffic data is available from LAs through the portal and/or data standards this will be applied in preference to DfT counters. Developed toolkits will then be applied to allow traffic flows to be mapped over to CNOSSOS and CRTN data fields where this is not readily available including time-averaging conversions.	Fully Automated
4	Populate Speeds - Traffic speeds will be applied. Speeds obtained from webTRIS will be used as primacy, with average speed and maximum speed data taken from OSMMHN as a secondary input. Where this data is unavailable, default values will applied from the developed toolkit based on road classification and vehicle category.	Fully Automated

5	Distances to Junctions – distances to junction will be calculated using a toolkit and series of queries based on the OSMMHN points dataset.	Fully Automated
6	Allocated Road Surface Type – road surface types will be assigned based on data obtained from stakeholders using the portal and/or data standards. Where these are not available, defaults will be applied based on a toolkit.	Fully Automated
Final	Calculate Emissions – noise emissions levels are calculated in accordance with CNOSSOS and CRTN with emission levels populated.	Fully Automated

Rail Source Emissions

Rail Geometries – the calculation of railway noise requires a pair of railheads to be presented as a single rail centreline feature. In previous rounds of the regulations, Network Rail's Geographic Measure Line dataset has been used which rather than presenting railway data at 'line level', presents the rail network at 'route level'. This data is only available for NR managed lines and therefore does not capture sources such as city trams and the London Underground (LU). Alternatively, the NR ORBIS dataset can provide access to such information however it is anticipated that additional processing will be required.

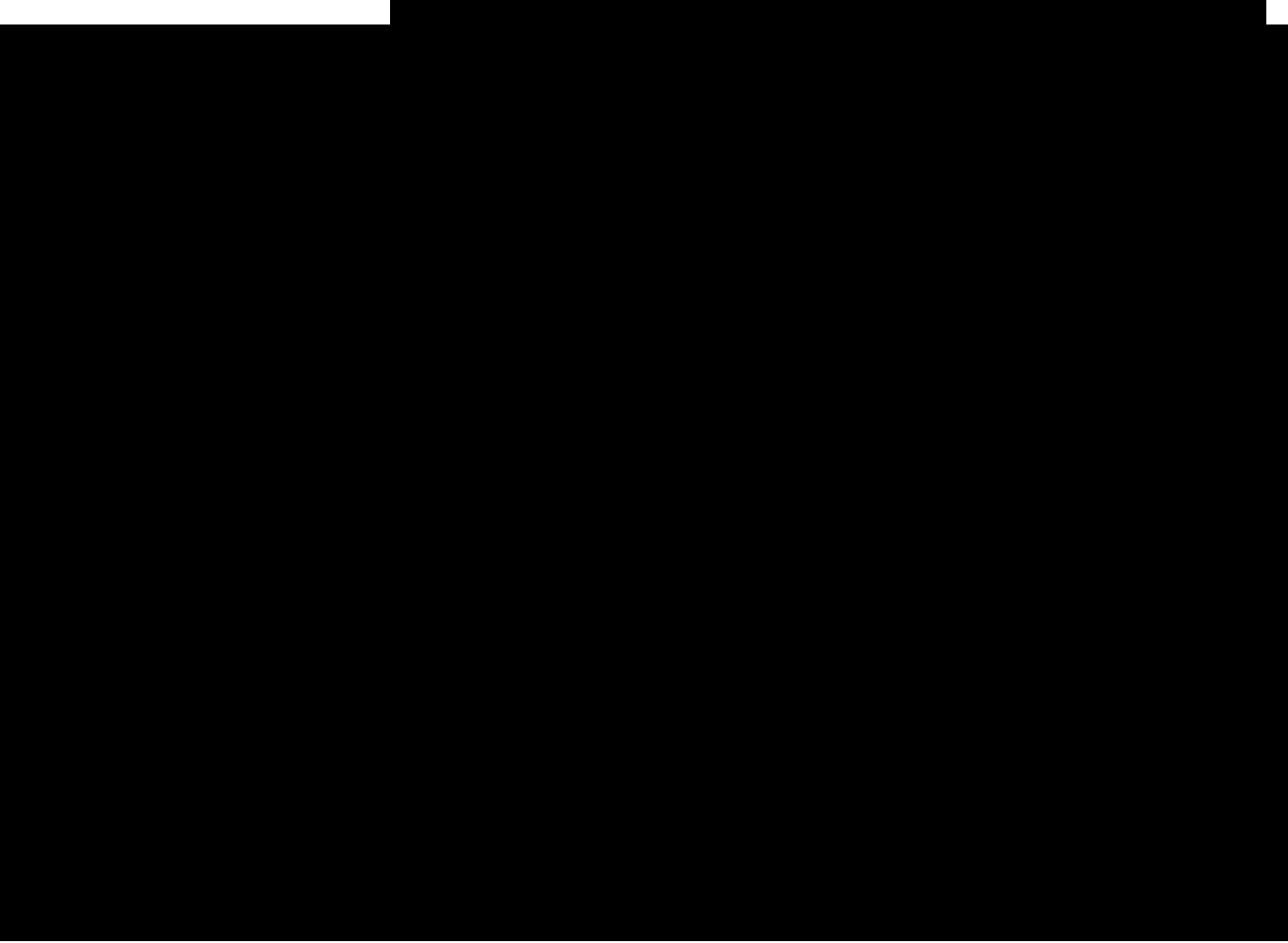
This makes the dataset less attractive for modelling Defra's optimal requirements. Railway modelling at 'route level' has been acceptable to Defra in previous rounds, although other DAs have relied on 'line level' geometries. Other datasets which can be used to generate rail centreline data include the OS MM Topography Layer which presents the location of railheads, and OpenStreetMap which presents pairs of railheads as a single line for all types of guided transport. The selection of line geometries is principally based on whether 'route' or 'line' level modelling is desired. It is proposed that bi-directional 'line' level modelling is undertaken and that this modelling is based on the objects available from OpenStreetMap. This approach would significantly improve the accuracy of the maps particularly along major stretches of wide (>50m) rail corridors. It will also cater for the majority of track ITT Reference 6561 E01 – Identification and Preparation of Strategic

Noise Modelling Input Data

Page 9 of 10

configurations in the UK. The use of OSM is considered acceptable as it is unlikely that new rail lines would be introduced at rate which could not be addressed by selected additions and amendments to the centreline dataset initially developed. Whilst manual processing of these objects will be necessary, this will only be required once with automation available thereafter. Through the generation of a rail centreline network, the curve radius of tracks will be calculated by splitting the rail objects up into 300m line sections. A geospatial query will be developed to inform of the curve radius so to allow a correction to be applied. For non-NR rail sources, a data standard will be developed to allow rail centrelines to be ingested. This data standard will require complementary data sources to be provided so to link rail activity data to the rail centrelines in order to calculate emissions.

Number and Type of Railway Vehicles – The calculation methods require that railway flows are available in the form of annual daily averages for day, evening and night-time periods. These flows must further be broken down by train type and allocated against a series of types and/or



Train Speeds – during previous rounds of the Regulations, train speeds were assumed whereby different line speeds were applied depending upon whether the line was inside or outside an agglomeration boundary. The continuation of this assumption in the context of stated accuracy requirements is unlikely to be acceptable and already results in clear discontinuities in the existing noise maps. For both the strategic and optimal purposes the proposed solution will seek to calculate average rail vehicle speeds between the points rail flows have been provided. In the context of the RTT data outlined above, the times trains pass through Timing Point Locations (TIPLOCS) and Station Numbers (STANOX) can be extracted and then calculated with the length of line to provide an average train speed. This approach will be used to satisfy the strategic requirements and can be automated within a workflow. For other datasets required for optimal coverage, it is unclear how speed data could be processed. As such this would again be addressed through the issuing of data standards. Railhead Roughness and Jointed Track – railhead roughness and acoustic track quality (ATQ) are inputs of both CNOSSOS and the adapted CRN. In previous rounds, railhead roughness has been changed from an average determined from a 2006 exercise using the NR Measurement Train, to a broad assumption that the rail network is ITT Reference 6561 E01 – Identification and Preparation of Strategic Noise Modelling Input Data acoustically smooth. This has a significant influence on calculated noise levels and is geographic specific. However, it is unclear whether such information is captured in the UK. It is recommended that a bespoke study takes place to generate assumptions for railhead roughness, however as this requires expertise outside the team this is cost as an option. In the absence of such a study being commissioned it is proposed that testing is undertaken to identify what the 'equivalent' assumptions are to that used in previous rounds. In addition to railhead roughness, CNOSSOS also requires an indication of the amount of jointed track and the number of joints per meter. In previous rounds of mapping NR have advised that they only use Continuous Welded Rail (CWR) hence no joints. This is likely to be the case across the whole rail network due to UK rail standards. No joints will therefore be assumed for strategic and optimal coverage unless otherwise advised by stakeholders and NR.

Railbed and Bridge Constants – railbed information was assumed during the previous round of mapping. CNOSSOS requires information about the transfer function of the track and provides several options for this. This information is required for all stretches of rail line. Bridges developed for the previous round of mapping allow the bridge construction to be derived. As part of developing bridges for the ground model, the construction types will be re-categorised to allow bridge constants to be used from CNOSSOS. A basic toolkit will be prepared to map any information held by stakeholders such as NR ORBIS to the CNOSSOS options. This can be applied by stakeholders through the User Portal. As per railhead roughness, detailed studies to determine such constants for UK bridges is available as an option.

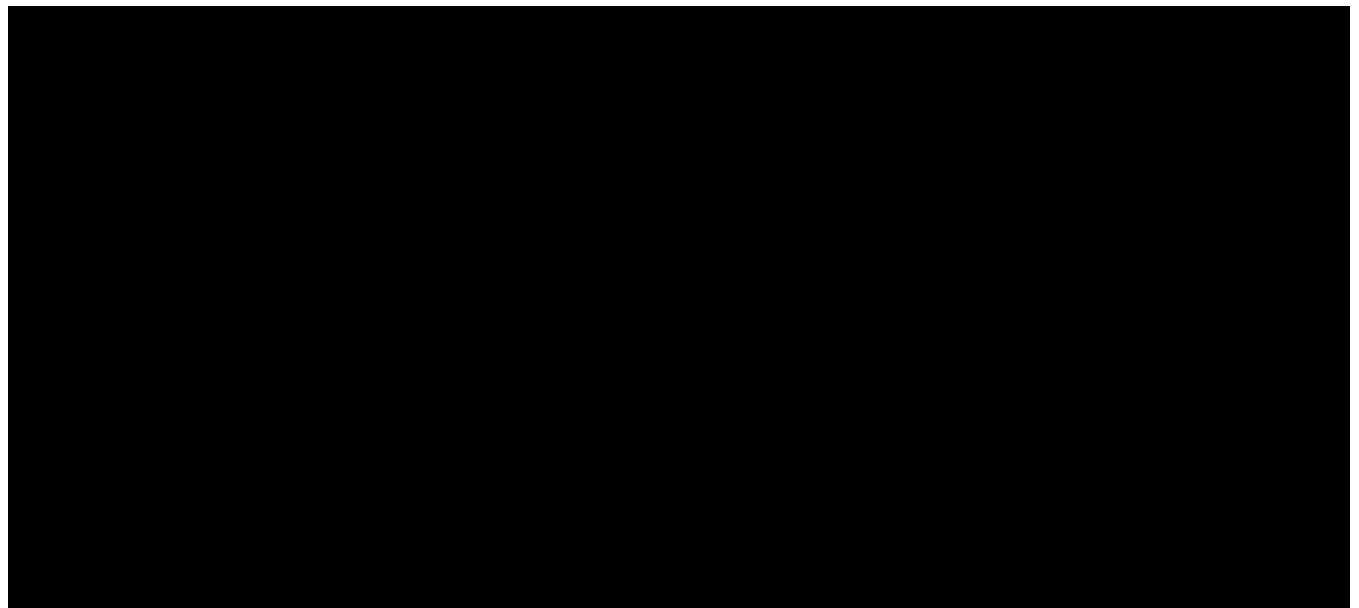
Processing Activities for Rail Emission Sources – FME Workflows

Page 10 of 10

Step	Processing Activity	Automation
------	---------------------	------------

0	Apply Data Schema to Rail Centreline Geometries – data standard is applied to the OSM rail centrelines with relevant attributes from the geometries stored	Fully Automated
1	Edit Centreline Geometries and Attribute Train Directions – OSM rail centreline geometries are manually edited to allow the rail network to be represented as two polylines representing either direction of the rail movements. The centrelines are attributed where necessary to identifying direction of travel where this is non-standard.	Manually (to allow automated updates)
2	Attribute TIPLOC/STANOX – rail centrelines are attributed taking into account the TIPLOC/STANOX the lines are running between e.g. StationA_StationB. This is attribution reflects direction of travel. The attribution will be based on all TIPLOC and STANOX listed within the RTT database. For non-NR sources, data standards will allow importation of such line attributed data.	Semi-Automated (to allow automated updates)
3	Assign Rail Roughness and Joint Assumptions – the selected toolkit approach is applied to provide rail roughness and track condition assumptions. Data is incorporated where this is made available through data standards / User Portal. This is applied directly to the rail centrelines.	Fully Automated
4	Join Movement and Speed Data – movement data informing number and type of trains is extracted from the RTT database and joined using relationships based on the TIPLOC/STANOX encoding. As part of the join, look-ups are applied to translate rail vehicle data into CNOSSOS/CRN types. Speed data will then be calculated based on distances between encoding points and average time between these from the database.	Fully Automated
5	Bridge Conditions – Bridge types are assigned to centrelines. This will be done by splitting centrelines at bridge extents and spatially joining the bridge type. The bridge types will then be looked up using the developed toolkits.	Fully Automated
Final	Run Emissions Calculation Tool – noise emissions levels are calculated in accordance with CNOSSOS and CRN. This calculation will take place by running a python script from FME. Emissions calculations code will be developed for the project based on existing tools. This tool can will remain in the ownership of Defra and will be developed in collaboration with rail industry stakeholders, namely NR and RSSB.	Fully Automated

Initial data management processes will focus on populating a resilient cloud-hosted central database with datasets identified for Defra's statutory and optimal noise modelling requirements; as explained and listed under the E01 response. To accommodate datasets from Authorised Organisations and enable future proofing of this, an effective and automated flow of data through the system is necessary. The system will be developed allowing for two main data entry points. This is to allow for flexibility in data inputs and at the same time to control data standards, data integrity, validity and conflict resolution within the system. We propose that raw UK-wide, national and local datasets as well as structured, analysis-ready datasets such as ground model and emissions datasets are entered through the system back-end, to which Approved User (AU) will have access to. The back-end data entry point will enable AU to upload and download following datasets: 1) Raw UK-wide datasets; 2) Raw local scale datasets; 3) Analysis Ready Data (ARD); 4) Output Acoustic and other pollutants datasets. Each of these datasets will have either existing or clearly defined data standards and data schema based on an automated validation process which will run using Safe Software FME - Export, Transform, Load (ETL) software. The validation process will run prior to any raw dataset pre-processing. The front-end data entry point, through User Portal will enable AU to interrogate data within the system and to upload and download datasets. The front-end will also allow for data publishing and reports generation.



General Principles - open data standards are at the forefront of our development and we recognise data standards are key to effectively manage the flow of data through the system, in and out of the central database. Our approach is to use existing open data standards where they already exist to ensure interoperability of data among different software packages. However, we anticipate that for some datasets open standards may not be readily available. In these cases, we propose to develop standards that will define how data management, statistical and analytical activities at all stages of the data flow are carried out. The origin, IP, data ownership and other characteristics of the input, pre-processed, post-processed data and final products and information on which components it has

been generated from will be built into the metadata schema and made available to the AU. Data standards that we propose to develop and maintain will ensure adoption of a consistent, rule-based, transactional approach to data management and that data flow comply with developed data standards. These will be developed specifically to allow acoustic modelling elements to be uploaded to the system by AU following their own processing.

By data management activities we refer to activities related to data sourcing, validation, integration, derived products generation, metadata creation and maintenance, final output generation, data updates and data change management as well as all activities related to how AU interacts with the Modelling System data.

ITT Reference 6561 E02 – Approved User Portal – Data management

Page 2 of 2

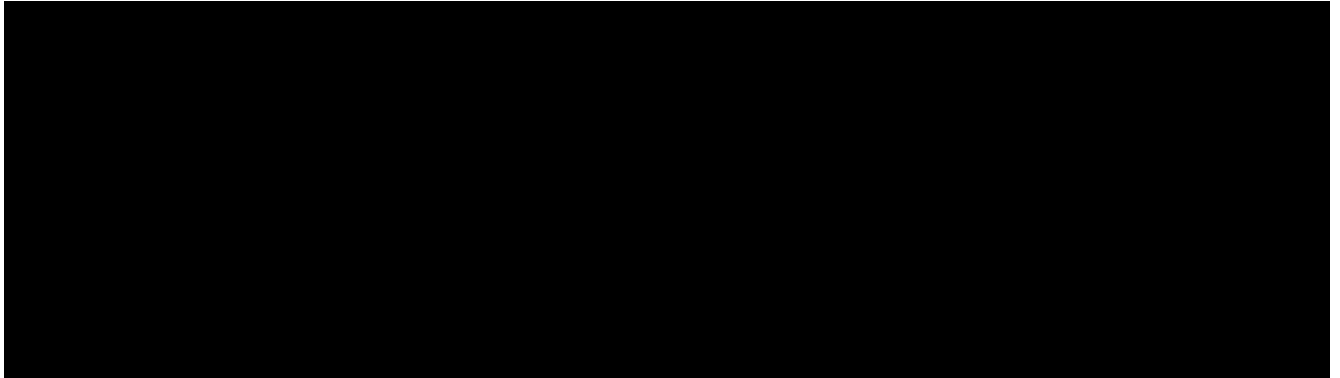
Data standards development and the use of existing data standards - where data standards exist, we propose to use and maintain these. Most datasets, such as, terrain, buildings, ground cover and road and rail centrelines that build the ground model, will be sourced from such organisations as OS which follow existing open geospatial data standards including metadata. For some of the datasets of the ground model, for example, bridge and noise barrier data that may be sourced from such organisations as Highways England or Network Rail, data standard will need to be developed to facilitate data interoperability between different approved organisations and the acoustic modelling components of the system. Similarly, for the input datasets that build an acoustic model, for which clear open standards have not yet been developed, for example, road surface data or different traffic flow datasets, we propose to define these standards including metadata compliant with INSPIRE/GEMINI open metadata standards. This will be achieved through stakeholder engagement and by following the principles of the Quality Assurance Interface (QSI) format which allow exchange of acoustic model data with other noise calculation software thus future proofing potential changes to calculation architecture.

For output datasets, standards will be produced for common output formats such as noise level grids and contours. These standards will also consider INSPIRE/GEMINI open metadata and will have regard for metadata that is to be reported through the Environmental Noise Directive Reporting Mechanism (ENDRM).

Development of data standards will broadly comprise defining and agreeing on: project data naming convention; industry standard formats for geospatial and non-geospatial data; data schemas where mandatory attributes and their domains will be defined; relational dependences between different datasets and all primary and secondary keys; metadata schema and content including data origin; ownership; IP; processes run; and other mandatory information. We propose to facilitate an early stakeholder engagement session to review data standards at the design stage to enable Defra to provide feedback so the project team can implement the agreed data standards.

Post-launch data standards development for new datasets - national or local scale datasets that are to be injected into the main central database through the back-end data entry point will need to have data standards developed for them if such don't exist prior to data injection. For new additional datasets we propose to follow the data standards development methodology explained in the data standards development section of this document. The system will expect that any uploaded data through the front-end user interface will be in accordance with agreed schemas, including content. However, if the user data inputs are to be provided through the front-end user interface, then on-the-

fly data validation will be performed, and any non-compliances will need to be fixed before data can be further used for analysis. The attributes that will not conform to the agreed schemas will be set to null and the user will need to fix all non-compliances outside the system and re-upload or edit within the modelling system.



Data selection and boundary issues – it is proposed that early data selection and boundary issues are addressed through metadata relating to data extents, ground model object densities and the number of emitters. These three parameters can be used as a general guide for the potential processing load faced by the system in terms of generating acoustic models and their calculation times. This can be communicated through the User Portal as part of uploading datasets through the front and back ends.

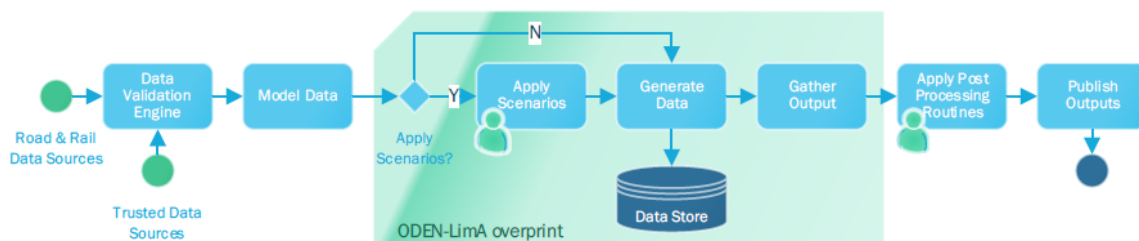
Derived IP - we understand that each input dataset that we are planning to use will be subject to specific terms and conditions of use. Therefore, we propose to review these terms of conditions for each dataset and adhere to them at the same time referencing the owner in the pre-processed and post-processed datasets. Any derived datasets, to which we applied intelligence, analytics and/or merged with other datasets, will have references to their origin included within the metadata with ownership and IPR clearly stated.

The Acoustic Modelling components of the Approved User Portal will be delivered around the ODEN-LimA solution. ODEN-LimA is a cost effective “off-the-shelf” software system that provides most of/or can be extended to support the Business Requirements laid out in Appendix D. The system comprises: a spatially enabled web-application and the LimA acoustic modelling and calculation software system. The web-application orchestrates the interaction between the user, taking into account roles, and LimA and provides a web-based interface for users to carry out the following functionality:

- Noise model creation and management
- Noise calculation, job control and monitoring
- Management of multiple projects and scenarios
- Statistical analyses, charting, reporting and printing
- Road, rail, aircraft and industry noise calculation
- Automated workflows

While ODEN-LimA can be deployed with its own data management function, a loosely coupled approach is proposed to allow Defra to receive full ownership of the central database approach as described in E02. An ‘open architecture’ is therefore proposed to allow Defra to couple and decouple different aspects of the system, including LimA and Oden itself in the future but allowing the core processing of datasets into acoustic models to remain under Defra ownership.

The system will receive data from the central database in E02. The following diagram illustrates the Oden-LimA overprint as it relates to the Level 0 Business Process Model presented in D.2.1 in Annex D. This shows data being ingested from the database, validated by Oden, converted into acoustic models before being sent to calculation.

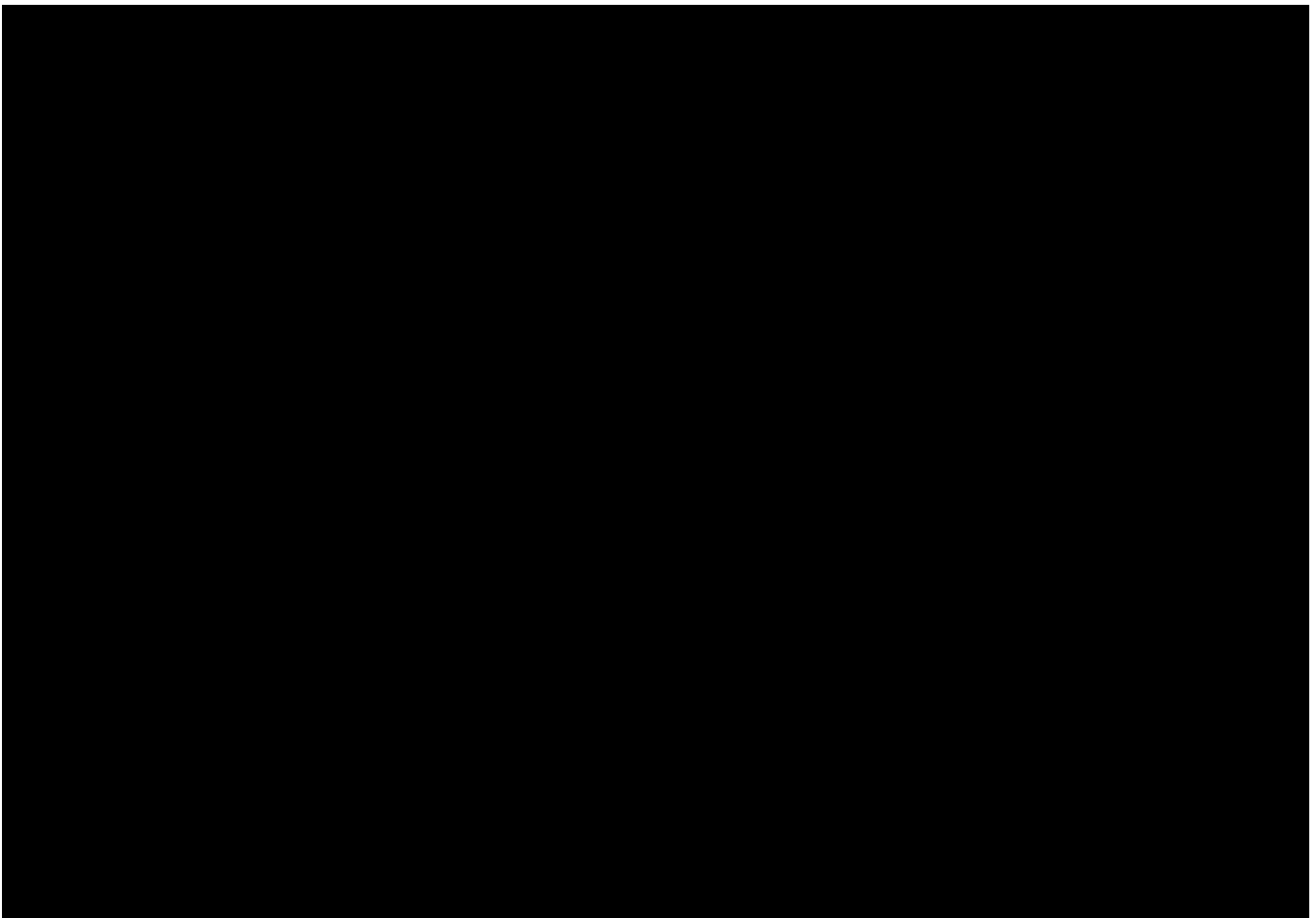


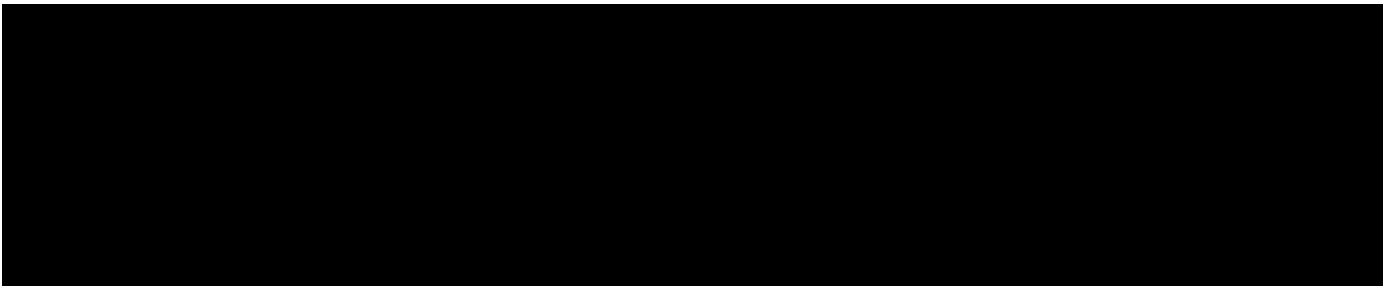
QA/QC Procedures – the initial QA procedures commence at the point the data is ingested. **Data Layer QA (DLQA)** is performed for each modelling layer e.g. barriers, buildings etc. DLQA is performed against the attributional and geometrical aspects of the model’s data specification. For example, QA checks confirm all barrier objects are configured as polylines, and that the attributional contents are appropriate. Whilst this is effectively undertaken within the main database, DLQA is also performed automatically at two points within the Acoustic Modelling environment: upon data ingested to Oden, and by LimA as the data is transferred. Both LimA and Oden are configured so that non-conforming data is reported. The risk of this is considered very low due to the proposed use of FME as part of the database. **Acoustic Model QA (AMQA)** occurs principally within LimA. It is at this point in the acoustic modelling process where the 3D ground model datasets are processed to produce the 3D noise propagation models. LimA has been developed to include a range of QA checks. These include for example: **(1) Pure Geometrical Checks** e.g. geometric conflicts between barriers and buildings, whether

barriers are parallel to bridges; **(2) Geometrical Checks Reliant on Attributional Information** e.g. road width attribution combined with road position indicating conflict with obstacles, and incompatible barrier height attribution given the objects they are digitised against. **(3) Geometrical Checks Against Terrain Model** e.g. identifying obstacles such as buildings and barriers which may fall under the stated terrain at any point; whether bridges are correctly digitised with respect to the underlying terrain; potential emission sources which have been draped over badly defined terrain resulting in erroneous gradient corrections. The outcome of these checks will be reported back to Oden and the user alerted in the form of a **Model QA Report (MQAR)**. The Report will identify the modelling

objects which have failed any of the QA checks. Through the contents of this report, the User will be able to rectify the issues within the User Portal or through GIS software such as QGIS as connected to the database. Such QA procedures will be subject to extensive testing by our testing team who will work between the data and acoustic calculation teams to confirm that processes and dataflows developed are reducing risk of non- conformance. As outlined in E02, this commences with the database design and associated processes being designed around the data standards required within the acoustic model.

The noise calculations are also an area which are to be subject to QA. The selection of noise calculation settings can improve calculation speeds but introduce uncertainties. In previous rounds, testing has been undertaken to identify appropriate calculation settings balancing performance with accuracy. It is proposed that a similar exercise be undertaken to support a set of approved calculation settings depending upon end-use. This work will take into consideration the procedure described in DIN 45687.





Post-Processing and Analysis – ODEN-LimA already provides users with access to post-processing material in line with para 101 of the ITT. Spatial results are stored in standard GIS formats (e.g. ASC, TIF etc) which can be download and processed further. This processing allows noise exposure data at points, grids, and façades to be analysed alongside acoustic model and demographic datasets if necessary. Map production tools are available along with visualisations and comparison tools. Existing processing routines allow for analysis reports to be generated to allow automated statutory reporting requirements or custom queries as may be applicable in delivery of the 25YEP. Wider integration of population data and the application of dose-response relationships from WHO ENG18, such as those reported in Directive 2020/347 can be used to generate health impact statistics.

It is worthy of note is that ODEN-LimA can already support the capabilities stated in 10 & 11 of the ITT as well as many of the aspirations described in paragraphs 12-13 including combined noise source calculation (methodology dependent e.g. VDI3722, WHO2018), multi-height façade based exposure assessment as well as the ability to execute based on common datasets (ground model and source geometry) other pollution models including air pollution models.

Future Functionality – the design of the system is developed on a customisable geospatial platform with project and user levels at its centre. Within this concept, any type of geospatial data can be ingested by the system providing the developed data standards are met, and through Azure, the system is scalable. Recognising Defra’s vision, there are range of potential end users. Each end-user may have different requirement from the system. In this context, the system is a processing framework. This means that any user specific requirements can be captured and built-in as they are identified. Where requirements are shared, user management can allow for inheritance rights to share data. This means that data used by LAs, Highways and Rail Authorities could be inherited by Defra for statutory requirements and vice versa. With regards to noise calculations, whilst not costed, LimA has implemented all UK calculation methods and as such the implication of any new British Standard for the Calculation of Sound Levels Outdoor as being developed by BSI EH/001/02 can be implemented.

Beyond Defra’s statutory requirements, the ODEN platform already allows for additional datasets from other systems and databases to be readily integrated, such as emissions inventories, integrations to local and regional traffic models, noise barrier condition and scheme information. This can also include the results of airport noise exposure modelling, with the system already having successfully imported data from AEDT. Through the development of data standards any type of geospatial dataset can be imported to the system. However, importation of such data or information is not just possible. The ODEN platform already provides functionality to support the calculation of other pollutant data. For example, air quality emissions and other environmental models such as AUSTAL2000, MISKAM, EMFAC, AERMOD & CALINE4 are already supported. When allied to the wider geospatial platform described in E02, any type of pollutant or receptor dataset can be integrated with metadata and used to perform a variety of custom analysis routes to explore

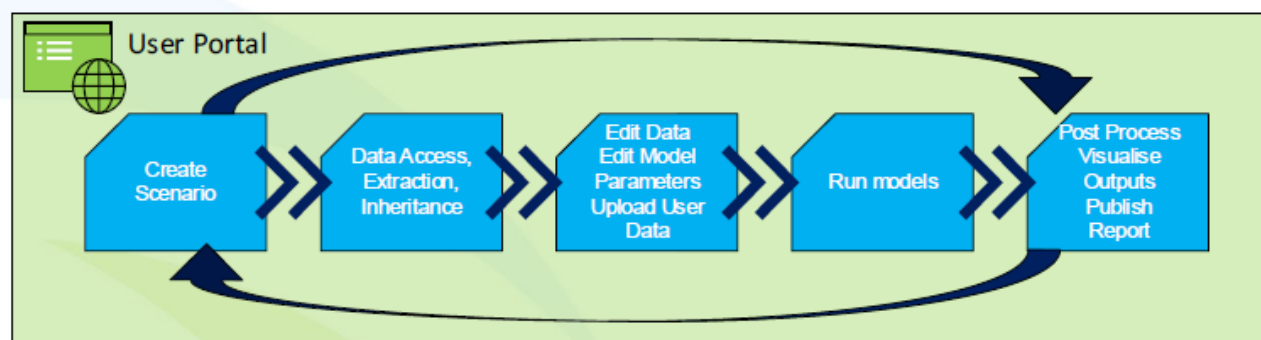
synergies between, for example, air quality and noise, socioeconomic groups and pollution, and the success of policy interventions.

With regards to the aspirational aspects in para 103 of the ITT, the ODEN-LimA platform can already perform most of these with commentary as follows:

- Impact of planning decisions by assessing changes in the local noise environment: Oden already offers granular editing of acoustic model objects via web-map interface. The proposed solution allows this to also be addressed through convention GIS software tools as well as through database connectors.

- The impacts of noise on different sectors of the community (e.g. by age, ethnicity, socio-economic group): As the platform is GIS based, this requirement can be met as long as a methodology is developed to support this. The team has experience of integrating census data into aircraft noise exposure modelling allowing noise exposure to be presented against socio-economic and ethnic groups.

For the purpose of illustration, a typical Oden-LimA workflow looks as follows, however this will be adapted/extended as required to meet Defra's requirements.



Calculation Methods and Output Options (Table 2 Requirements)

Criteria	Requirement	Response
----------	-------------	----------

Metric / Indicator	L _{day} , L _{eve} , L _{night} , ability to combine to generate L _{Aeq,16hr} and L _{den} for all methods (i.e. CNOSSOS- EU, CRTN and CRN)	Already Available – LimA already has support for CNOSSOS-EU, CRTN and CRN. LimA has been used to deliver CRTN and CRN calculations as part of previous rounds of the Regulations in England, NI and Wales.
Metric / Indicator	L _{A10,18hr} , L _{Aeq,18hr} , L _{Aeq,6hr} , (A and Z or linear-weighted) for appropriate methods and sources	A-Weighted – Available Z-Weighted – Feasible but will require assumptions for CRTN, CRN calculations with additional emission levels. Defra input and approval required.
Metric / Indicator	L _{max} , (A and Z or linear-weighted, fast or slow) N _{x,p} (x and p definable by user) for appropriate methods and sources	Feasible with existing functionality to support development. Will require methodological agreement. Defra input and approval required.
Indicator	The Modelling System should have the capability to support ISO 9613-2 and Harmonoise methodologies	Functionality Already Available - ISO9613-2 is supported including the ISO17534 test case demands.
Range	Sufficient to calculate L _{den} in the range of 40dB upwards and L _{night} in the range 35dB upwards	Functionality Already Available – LimA can support low noise level calculation however this will impact calculation loads
Time	Hourly data (if and when available) to look at differences between peak and average traffic flow or diurnal patterns	Functionality Already Available – LimA can support hourly noise profiles and such functionality has been developed for other projects
Resolution	1dB steps, ability to combine to generate 5dB contours	Functionality Already Available
Source apportionment	Ability to interrogate receiver (or group of receivers) to identify contribution from: <ul style="list-style-type: none"> • Different roads/set of tracks • Vehicle category for road/rail, e.g. electric, HGV, freight, etc • Regulation definition, e.g. major or non-major 	Functionality Already Available LimA supports grouping results to identify emission influences at receptors. Groups may consist of source segment or of one or more sources. The principle component for providing source-receiver noise impact information for source apportionment are available. This will be established during design phase whether extra development is required and the most efficient method to handle this with respect to processing time, storage and use.
Frequency	Octave band data for L _{eq,t} , Z weighted or linear	Functionality Already Available support to different frequency weighting already available
Green Infrastructure	Ability to include additional shielding at a later date	Functionality Already Available however later inclusion of this functionality would require recalculation.
Assessment height	Ability to assess at different heights: <ul style="list-style-type: none"> • to distribute population across building height as well as around building footprint at a set height • to consider ecosystem impacts for ground- or tree-based species 	Functionality Already Available - LimA supports façade receptors definitions around the building footprint at different heights as required in CNOSSOS. Grid calculations can be undertaken at reference heights to support consideration of eco-system impacts. Specific areas of these receptors can be defined separately and calculations configured to occur within at multiple heights or in cross-section.

Managing Ongoing Costs - Costs have been provided associated with hosting and managing the modelling system, including database and software licences. These costs would be the responsibility of Defra. For any users Defra approves (Approved Users) the following breakdown of user management, including QA procedures and charging rationale is proposed.

0	<p>User Configuration and Privileges: The Approved User is provided with a user account. This can be done by a System Administrator (SA) and a subset role User Administrator (UA). The SA has an overseeing role and can approve functionality whereas the UA will be responsible for the management of accounts as they are used, including licencing and usage costs. In this respect, approved organisations may have different users who may be trained to different usage levels of the system. For example, some users may be trained and approved to simply view the system whereas other may be considered expert users and therefore may be approved for advanced user privileges. Under the proposed system architecture, the UA role could be provided directly to the approved organisation.</p>
1	<p>Study Area and Data Licencing - the Approved User (AU) shall indicate the study area for any strategic or focused projects. Utilising an existing feature within Oden, users can already define study areas and see which datasets are available to them through a central database. They can also see any existing noise models prepared by Defra and any processing of these that they may wish to inherit. This study area will be used by the UA to calculate licencing costs. In the event datasets are not available, the AU can request datasets be priced and ingested into the central dataset. This is likely to be the case for DA's such as Northern Ireland and Gibraltar who rely on non-OS datasets. Alternatively, the system will be configured so that advanced users can upload their own data directly, thus negating the need for the UA to confirm licencing costs providing proof and expiry of any licencing is provided so that this can be incorporated into the system. Where the UA provides costs for licencing / use this must be approved by the approved organisation before proceeding. To this end, user accounts will be configured so that certain levels of spend can be authorised as either a single and/or accrued value.</p>
2	<p>System Usage – the following charging elements relating to system usage are explored below.</p> <p>User Portal Use – in order to support the commercial licencing charges for the system, it is proposed that use of the User Portal for acoustic modelling purposes is charged based on the number of 'project hours' it is used for. These hours will be calculated based on login times of the organisations approved users. This approach therefore ignores the number of users and instead is based on system usage.</p> <p>Storage Costs – the Azure platform underpinning the proposed system will be subject to additional hosting charges as the system grows. To ensure this remains sustainable for Defra, a flat rate will be levied against each organisation per 100GB storage used. This unit can be estimated by the system.</p> <p>Calculation Charges – the proposed system includes built-in calculation power however 'on demand' calculation resource is available through Azure. It is proposed that calculations using the system's readily available calculation resources are charged in line with the user portal use. This approach covers both the software licencing and core Azure charges. However, where 'on demand' calculation resource is requested from Azure, the cost of this will be directly transferred to the approved user organisation. This 'on demand' feature will require the UA cost estimation and approval. It is therefore proposed that a minimum of 12 hours is provided for the costs of this service to be established and approved before the feature is available. An element of planning is</p>

	therefore required. This feature will only be required for significant calculation tasks requiring expedient completion. The accumulation of the charges outlined will be visible at a user, project and organisational level. These will be captured and managed by the UA and will be visible through the User Portal.
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3	Commercial Management – the above processes are consistent with a general ‘Software as a Service’ (SaaS) approach. As use of the system will be approved by Defra, it is proposed that monthly commercial usage reports and meetings are held to ensure Defra is aware of uptake, ongoing costs and external charges and can therefore arrange billing for the system split by its own and AU usage.
---	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

User Management QA/QC Procedures – given the nature of the system being requested, there are number of different end users. Each of these end users will require different functionality from the system and in some instances may require an intimate understanding and knowledge of the system. To manage this, and to avoid the system being compromised by inexperienced users, the system by design will be developed to provide broadly three levels of user access privilege:

1. System Administrator, to allow modification of the system
2. User Administrator, to allow user representative or administrator to perform user account management for the user as well as to assign level of access by their user group.
3. End User(s), to allow normal user to access and operate the system at different levels of functionality depending upon completed training.

Noting that access privilege between user of different roles at a project/scenario level (e.g. Manager, User or Viewer) can be configured, by User Administrator, by assigning them onto different pre-defined User Groups. User groups can be customized to suit different deployment requirements. A high-level diagram presenting access privilege is shown. This structure translates into the following user roles and privileges.

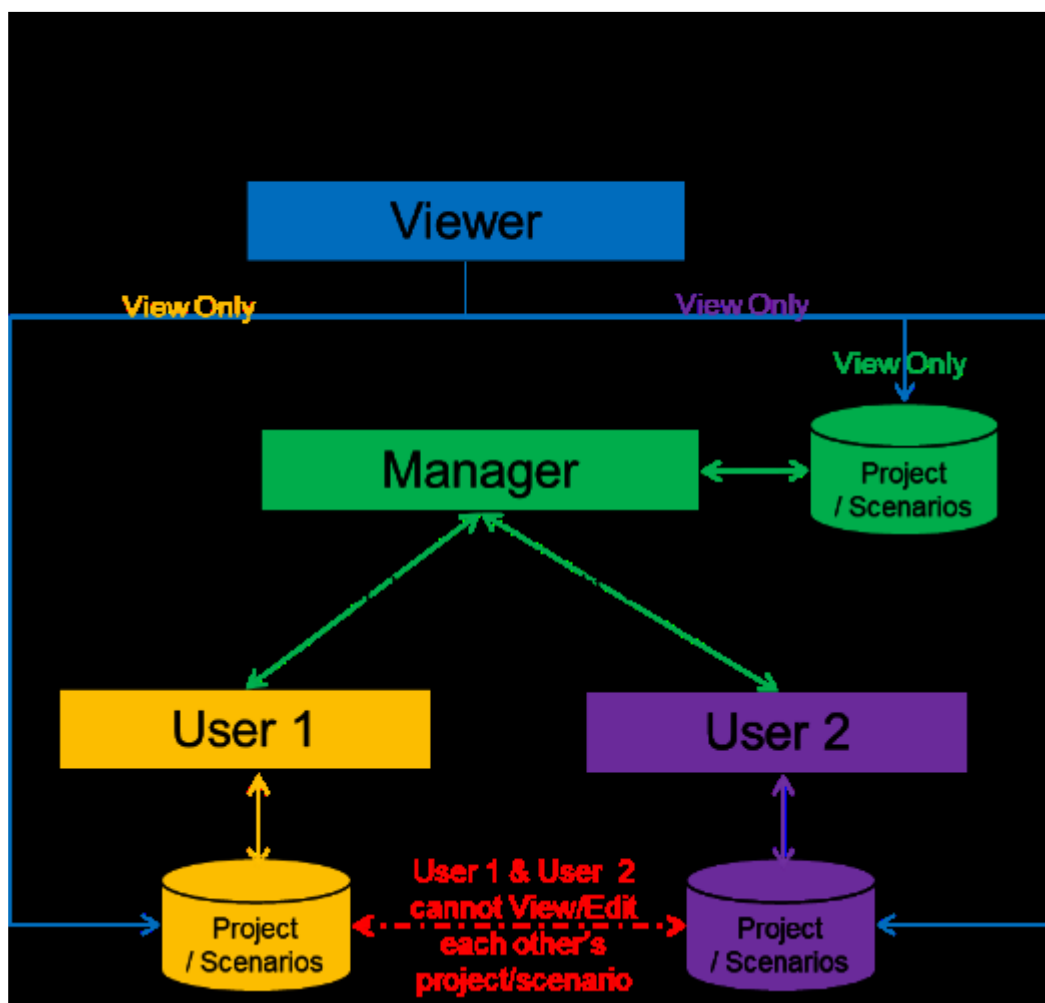
1. System Administrator, to allow modification of the system
2. User Administrator, to allow user representative or administrator to perform user account management for the user as well as to assign level of access by their user group.
3. End User(s), to allow normal user to access and operate the system at different levels of functionality depending upon completed training.

Noting that access privilege between user of different roles at a project/scenario level (e.g. Manager, User or Viewer) can be configured, by User Administrator, by assigning them onto different pre-defined User Groups. User groups can be customized to suit different deployment requirements. A high-level diagram presenting access privilege is shown. This structure translates into the following user roles and privileges.

Administrator	User Administrator	Normal User
----------------------	---------------------------	--------------------

	(Manager)	(User)
UA Roles and Privileges + Ultimate Control of the System Create / edit user groups Assign privileges to user groups	Normal User + Create new users Assign system functionality to Normal Users based on training Manage Cost / Charge Approvals Monitor User Performance including suspension and relinquishing of rights	System access and modelling rights according to completed training and UA approval View acoustic modelling, calculations and reports

Project Level Model

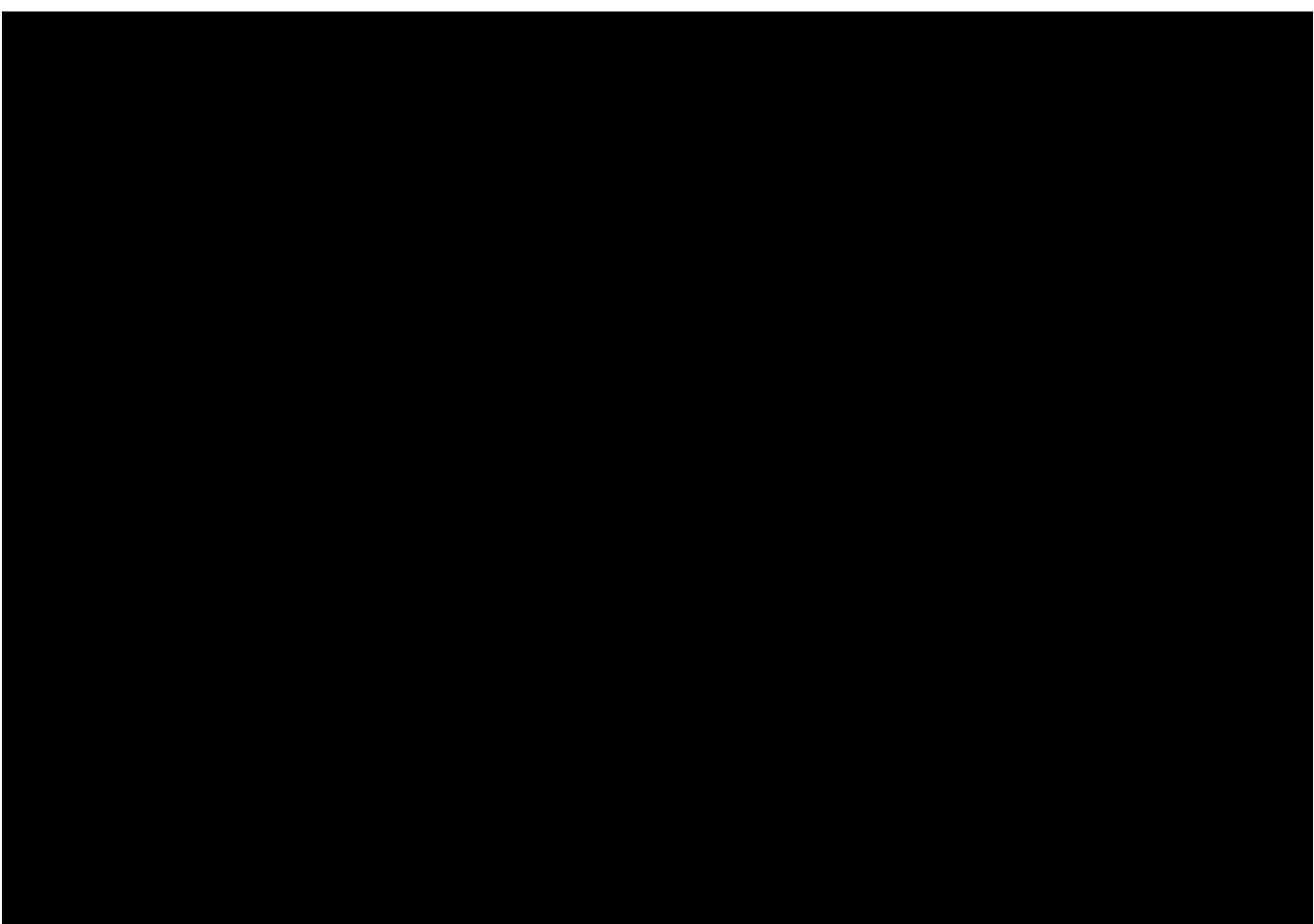


As indicated above, a normal user is a general description. In practice there will be various levels of end users and their privileges and ability to use certain system functionality will be set by the UA subject to the completion of successful training. Training will be developed to cover common aspects of the system which can be broadly grouped. At this stage and based on our experience it is anticipated that four rounds of training may be required for an end user to be given full functionality of the system. The ongoing competencies of users will be monitored through interactions with the proposed training and support team. User accounts will be configured so that access privileges could be time limited. In the event that a SA or UA identifies consistent non-conforming use of the system by end users, it will be possible for rights to be suspended.

With respect to the public portal, the existing Oden viewer will be utilised as part of the system. Through Oden, the public portal is configured so that only the UA or SA can permit information to appear. Approval processes will be put in place so that only representatives from either Defra or other approved organisations can enable data to be published through the public portal so to avoid licenced material to appear without authorisation. All publication risks and commentary would be captured through metadata.

Additional security requirements can be placed on users with administrative roles to ensure that the system does not become compromised. We note that Defra's requirements include 'Two Factor Authentication' (2FA). This can be built into the system through the firewall and User Portal components of the system and can be configured so that those with privileges that affect the performance and configuration of the system have to provide 2FA to obtain access. This will further increase the security of the system. 2FA could also be set by the UA to certain users if it is felt that this could avoid unauthorised and untrained logins as a result of people sharing login details.

Outline Description of the System – an overview of the system is presented in the flow chart below.



requirements and will be subject to independent review by a third party under the NCSC CHECK scheme, however this will need to be addressed through the system design stage. System maintenance and backups will be taken regularly with full backups and system reports every 6 months. The backup site would need to be confirmed by Defra. As part of the solution we have included a Web Application Firewall in order to secure the web interfaces of the solution. If the user interfaces are accessible via the internet it would secure them from outside threats.

Appendix D – the appended D4 Response Template shows that for all aspects of the system requested by Defra that we feel that these are feasible, and have been included within our proposals and are also accounted for in the system build and support costs. We are confident in this response as:

1. **Azure provides a platform to allow the scalability** in line with the concept of ‘elastic computing’. As demand requires the resource can be scaled up or down allowing the solution to remain cost-efficient. As outlined

in our E04 response, this scalability based on usage provides the basis for Defra to communicate and agree clear charges with other approved users.

2. **Oden is a proven solution which has been used to deliver similar successful solutions elsewhere with many of the requirements listed in D4 are already in existence.** Whilst some development is required, the use of the Oden platform reduces development risks to Defra and brings existing added value. A project of this nature if developed from the 'ground up' will introduce significant development risks. A 'ground up' approach to Defra's requirements is unlikely to be delivered within the timeframes requested by the ITT

which is underlined by the fact the Oden platform has been developed over a period of 10 years.

3. **LimA has a strong track record of delivering large scale mapping products.** The licencing arrangements which have been agreed on this project allows the system to use unlimited licences. This means that calculation costs and bandwidths are dependent upon the amount of Azure calculation resource required. This means that turnaround time requirements can be met.

4. **Use of existing architecture and software platforms allows the project to focus on Defra-specific requirements.** The computing and software platforms utilised within the proposed system are all considered 'best in class' in their respective domains i.e. FME, LimA, Azure, Oden. They are all built on open architecture using standard open data formats. This allows for immediate integration so that even at a conceptual stage the team has complete confidence in our ability to deliver the system as shown. Given these existing platforms more time can be devoted to further developing the functionality that Defra seeks from the system. This means that all 'could' and 'should' requirements from D4 can be developed at an early stage as part of the system. This is reflected in our project plan which shows a development environment reflecting the system flowchart about being available in Q4 2020.

System Build Progress Milestones – the following progress milestones are proposed as part of the system build to the fully functional prototype. These milestones centre around the development of the core components.

M1 Development Platform – this milestone represents the basic architecture of the system being in place.

At this milestone, the Azure platform is in place with all VM and connections to each system component

ready wider integration. This will allow system architecture and security to be addressed early.

M2 Input Data Flows and Processing – the completion of this is a key milestone as this demonstrates that

data can be ingested into the system and processed into a format for the acoustic modelling. At this point

the implications of addressing data gaps will be known through the Toolkit development. In addition, this

milestone will address the system's flexibility for including other data via the developed data standards.

M3 User Portal Integration – the integration of the User Portal with the system will be the first opportunity

for Defra to see how the system will look and feel. It will provide Defra with the opportunity to feed back

on how this looks and the level of functionality available.

M4 Noise Calculation Testing – at this milestone the system will be capable of calculating noise exposure

levels. It will also be the first indication to Defra as to the potential performance of the system with respect

to full calculation speeds and required bandwidth, and scenario-based source apportionment

M5 Analysis and Reporting Routines – the development of the analysis routines to support reporting

statutory and, if required, optimal outputs.

M6 Prototype Demonstration and Technical Report – full demonstration of the prototype which will be of the same functionality to the full system build.

Prototype Proposal - In order to demonstrate that the system will meet the required specification, a testing team has been proposed. The testing team will represent end use. They will test the system against the specification outlined in Appendix D as confirmed by System Design Report independently of other workstreams. This will also include checking that various toolkits and processes developed to support the acoustic modelling are applied correctly. The ultimate test for this will be from the testing of the prototype for the area of [Manchester](#). The datasets described in E01 will be gathered for a 1000km² area centred on the [Manchester Agglomeration](#). This area also includes major and non-major road and rail sources responsible by stakeholders such as Highways England and Network Rail, but also Transport for Greater Manchester e.g. Metrolink. It also has a major airport and areas of industry, available air quality mapping and AQMA, and other forms of receptors which may be of interest to Defra such as National Parks and Gardens. This makes the location suitable for testing data standards and integrations to support optimal coverage as well demonstrating the wider processing potential. The testing team will work in parallel during the development of the system. Using the prototype area, the testing will seek to confirm that the system produces the same noise level datasets as would be produced using conventional GISnoise calculation approaches adopted during previous rounds. As part of the development of the prototype, the testing team will carry out uncertainty propagation analysis to inform the potential accuracy of the resultant calculations. This testing will focus on, but is not limited to: Application of Toolkits i.e. application of data hierarchies and assumptions; and Noise Calculation Settings i.e. implications of and development of approved settings for various end-uses. This analysis will be undertaken based on a series of geographic and source specific scenarios e.g. within 1km of motorways. It is anticipated that by doing this testing that Defra can provide an indication of the confidence which can be placed on the resultant noise exposure data. This may be important in understanding whether the system and the resultant maps are fit for purpose for certain activities such as quantifying health effects. Beyond the delivery of the strategic requirements, the testing team will begin to focus on potential end uses.

User Training and Support (1st Line) - user training and support will be developed by the testing team. The development of training materials will focus on Approved Users and their requirements. Advanced user training will also be prepared which will go beyond the normal use of the User Portal and will explore additional functionality such as data ingestion via the front-end as described in E02. It is anticipated that a training team of 3 people will be assembled along with the expert support. The nature of the training levels is described below.

To supplement training, wider user and technical support will be provided for the duration of the framework through an online helpdesk service and hotline with a 24-hour response commitment. This will run a formal ticketing system allowing.

Support (2nd Line) - as well as training and user support, system support will be made available and our costing has included '2nd line' system support for all system components including Azure, Oden, LimA and FME. Second line support is for problems that are too time-consuming, uncommon, or technical for first-line support i.e. those which can normally be resolved by the helpdesk and hotline service (i.e. 1st line support). This is a key point in the difference between first and second line support. Second line agents are more specialist in their knowledge of mechanics of the system. They do not use their time for queries that can answered by the 1st line. Rather, they focus on solving problems that need in-depth knowledge about the system components. As such, 2nd line support staff are those that handle escalations and technical queries from the 1st line. They are will handle issues that span more than one interaction with the end user.

Please refer to Question E05. Please complete and upload as an attachment to your response

Description MoSCoW Response

BR1 The business requires the capability to estimate noise levels in England, with the capability and capacity to expand to the rest of the UK if required by the Devolved Administrations (cost of additional data collation and processing to be borne by the DA) Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR2 The business requires the capability to ingest data from trusted and verified sources Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR3 The business requires the capability to apply post processing routines on noise levels calculated and/or imported to create outputs for business use. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR4 The business requires the capability to format and present the core outputs (key results) differently depending on end use, e.g. policy development, END requirements, 25YEP and PHOF Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR5 The business requires the capability to publish key results as reports Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR6 The business requires the capability to store data generated, data input from other trusted sources, reports and other related data in compliance with data retention policies and beyond to allow trend analysis etc. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR7 The business requires the capability of inputting scenario specifics to model noise levels in England with the capability and capacity to expand to the rest of the United Kingdom if required by the Devolved Administration (cost to be borne by the DA) including management of multiple projects and scenarios as

described in Table 2 and elsewhere Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR8 The business requires user management for its noise modelling solution Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR9 The business requires the capability to maintain & store different versions of datasets Must feasible, included in the proposal and costed in the build and/or support costs for the framework

BR10 The business requires the datasets as described in Section 1 to the standards agreed in paragraph 67 Must feasible, included in the proposal and costed in the build and/or support costs for the framework

ID Requirement MoSCoW feasible, included in the proposal and costed in the build and/or support costs for the framework

S1 The modelling system must have the capability of allowing authorized users to upload (suitably caveated) data and configure parameters as a scenario to generate data for further processing; thereby creating another version of the dataset. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S2 The modelling system must have a user access management feature where users can be created and given specific access as determined by Core Defra as Defra wants to only provide permission, but the Service Provider to manage access. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S3 The modelling system must allow users to download noise modelling input and results data within the limits of user access for specified parameters Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S4 The modelling system must have a web portal that facilitates the viewing, interrogation, analysis & printing of noise maps in England initially then UK if DA on boarded and use of the scenario tools. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S5 The web portal must be interactive, allowing users to configure and define the views (ground and acoustic model, post-processing data and maps) based on parameters available & run their scenarios including defining geographic scope Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S6 The modelling system must have United Kingdom address finder available on the web interface Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S7 The modelling system must have a default System Admin User that can carry out all tasks including creating and managing users Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S8 The modelling system must have the capability to support the calculation of Road Traffic Noise (CRTN) methodology including LA10 (with and without adaptations), Railway Noise (CRN) methodology (with and without adaptations) & the Commission Directive (EU) 2015/996 methodology (known colloquially as CNOSSOS-EMU) of the modelling system meet the most recent specifications, legislation, guidelines and S9 The modelling system should also allow for the application of improved noise calculation techniques as these become available to enable better prediction of how and where changes in noise levels occur e.g. rail wheel squeal; the effects of driving patterns Should feasible, included in the proposal and costed in the build and/or support costs for the framework

S10 The modelling system must provide the facility to upload & ingest noise modelling results and input data or datasets in a variety of common Vector and Raster formats (e.g. Shp, CSV, Tiff, etc.) Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S11 The modelling system must validate noise modelling results and input data from trusted sources to preserve the integrity of the database Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S12 The modelling system must be enabled to monitor performance and System Usage, as well as keep an audit of users downloading noise maps or other data Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S13 The modelling system must be able to store and provide access to data received from all authorized users, data output from all applicable mapping & modelling, and reports stored in Cloud Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S14 The modelling system must have Print & Extract into PDF (Not limited to) format functionality & not just noise maps, but also the other data resulting from post-processing in the GIS environment. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S15 The modelling system must be capable of generating business templates (e.g. PHOF spreadsheet) with data from noise levels and other relevant data Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S16 The modelling system must be capable of undertaking 'Test runs' that do not result in automated outputs for modification leading to publishing and sharing services Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S17 The modelling system could allow for the swapping-out of one noise calculation executable for another without major impacts to the service Could feasible, included in the proposal and costed in the build and/or support costs for the framework

S18 The modelling system must provide a managed input, output & reference data download service which is accessible to approved 3rd parties Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S19 The modelling system must provide a geospatial analytics capability that has access to both the results database and reference data Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S20 The modelling system could auto notify specified users when new data is published if requested Could feasible, included in the proposal and costed in the build and/or support costs for the framework

S21 The modelling system must facilitate post processing tasks carried out by authorized users, on noise modelling results data. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S22 The modelling system's database must maintain & store all the versions of the data aligned to data retention policies. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S23 The modelling system must have the capability of presenting parameters and its customization on data ingested according to the user profiles Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S24 The modelling system must ensure imported datasets, even when published, do not overwrite existing data however they must be available for scenario modeling by Defra and other authorized users. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

S25 The modelling system should have the capability to support ISO 9613-2 and Harmonoise methodologies Should feasible, included in the proposal and costed in the build and/or support costs for the framework

S26 The modelling system must not publish or share any data or outputs without the owner's express permission Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_01 RTO (Recovery Time Objective) for critical infrastructure components which falls under the scope of this contract 4hrs (e.g. VPN Circuits) Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_02 RPO (Recovery Point Objective) for infrastructure components - 24hrs (For data and retention of configuration information) Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_03 Availability for the overall service (SLA) for Infrastructure components which falls under the scope of this contract – 99.5% Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_04 All components of the modelling system must undergo annual disaster recovery testing at a time to be agreed with Defra. Supplier(s)/project teams must provide a full report of the results and correct any

shortfalls. The content and format of this report must be agreed with Defra. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_05 Planned maintenance must be agreed between suppliers and Defra at least 15 working days in advance. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_06 All component changes must be in accordance with a change management schedule agreed between suppliers and Defra. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_07 No single change will impact the performance or availability of any other component. In particular, component upgrades must be able to be undertaken without impacting the performance or availability of any other component. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_08 The application and supporting infrastructure must be hosted within European Economic Area data centres. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_09 Supplier must be able to migrate into UK only data centres if legislation changes during the life of the contract Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_10 Supplier(s) must provide full application availability monitoring and report the results to Defra when requested to do so. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_AV_11 Service will implement the following fault priorities: Must feasible, included in the proposal and costed in the build and/or support costs for the framework

- 1 – Defra is unable to fulfil its core services & Obligations.
- 2 - Major impact on critical processes, or many users/devices affected.
- 3 - Partial loss of application functionality or non-critical business process.
- 4 – Minor impact on business processes and/or service to the public.

NM_AV_12 Fault priorities should have the following resolution times: Should feasible, included in the proposal and costed in the build and/or support costs for the framework

- 1 – 1 working day
- 2 – 3 working days
- 3 – 5 working days
- 4 – 10 working days

NM_AV_13 Fault priorities should have the following response times: Should feasible, included in the proposal and costed in the build and/or support costs for the framework

- 1 – 4 Hours
- 2 - 1 working day
- 3 - 2 working days
- 4 - 5 working days

Table 4 Avail. & Resi. NFRs

D.1.1 Performance and Capacity

ID Requirement MoSCoW feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_01 The platform must be licensed for a minimum of 100 named (Modeller) users on a pay-as-you use basis Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_02 The platform should support a minimum of 20 concurrent named (Modeller) user sessions Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_03 The platform must be able to support the simultaneous calculation of acoustic models Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_04 The platform should be able to complete processing the calculations for a national model in England within 21 days. Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_05 The platform must be able to complete processing the calculations for a national model in England within 35 days. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_06 The platform should have the capability to flex up/down in terms of allocated computer resource to meet the demands of the business Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_07 Running system maintenance, software updates and database back-up(s) procedures should have no impact on the service during core hours. Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_08 A full system and database backup should complete once a day and should be retained for a minimum period of 90 days Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_09 The system should include archiving and purging functionality so there is no performance degradation as data volumes grow Should feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_10 The database must be provisioned with an initial storage capacity of 5 Terabytes with a capability to flex to meet year on year growth requirements for the duration of the contract Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_11 The platform could provide data access to the general public mirroring the same solution (as a minimum) implemented by the Defra Data Sharing Platform (<https://environment.data.gov.uk/>) Could feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_12 The platform must apply error checking routines to external data imports & feeds to maintain data integrity Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_PC_13 The Platform should support a minimum of 40 Read Only (Viewer Users) Should feasible, included in the proposal and costed in the build and/or support costs for the framework

We need to define the concurrency for Read-Only (users if we are to provide a Public Web Portal - Defra Data Services Platform Specifications will be used.

NM_PC_14 Full data migration (full system and database backup – current and archived) must occur to Defra servers on request and at scheduled intervals detailed in paragraphs 134-137 inclusive Must feasible, included in the proposal and costed in the build and/or support costs for the framework

Table 5 Perform & Cap NFRs

D.1.2 Systems Management

ID Requirement MoSCoW

NM_SM_01 Where supplier staff access the modelling system for administrative purposes, appropriate access controls must be in place. This may include the use of a second factor authentication. A username and password alone are not enough. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_SM_02 Authorised users must have role-based access to the modelling system, with each user potentially having multiple roles. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_SM_03 Must have a change journal report of all system configuration changes made by automated and manual processes by both internal and external agents, detailing, who, what, when, and before & after values Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_SM_04 Must have system generated event logs to report all system events Must feasible, included in the proposal and costed in the build and/or support costs for the framework

NM_SM_05 The supplier must manage third-party user accounts. Must feasible, included in the proposal and costed in the build and/or support costs for the framework

Table 6 Serv Mgmt. NFRs

We have 100 modellers and 40 viewers, does that balance feel right?

And should it be a should? Or a must?

Is this something we need to do before we go out to tender? ie does it affect the spec?

Yes I would think so

So I propose:

-If the public portal option is taken, then 40 concurrent read only users – I can't imagine more than 40 members of the public would want to view data at the same time

-If the public portal option is NOT taken, they will be on DSP so we don't need to define anything as we will be using a system already up and running with whatever limits it has.

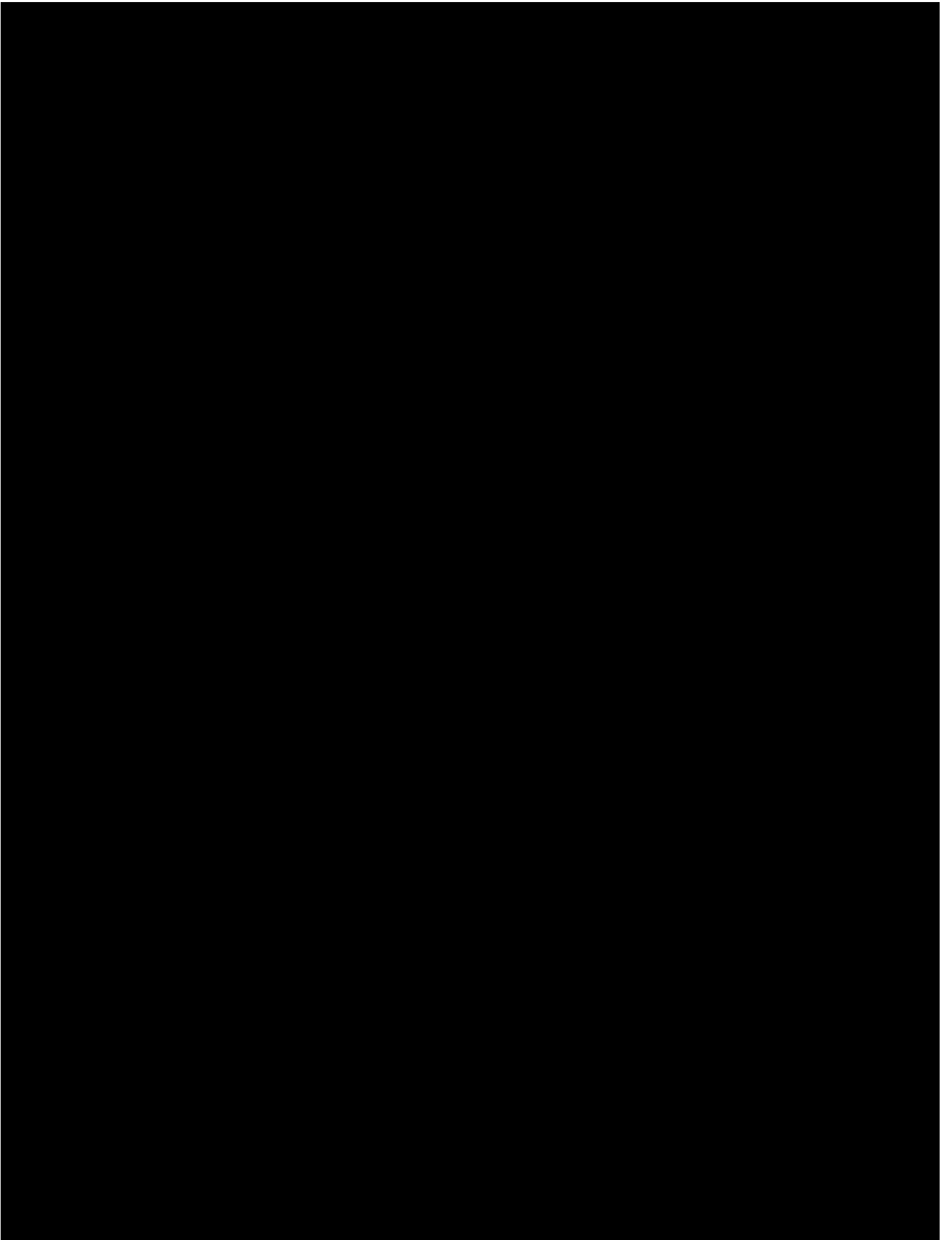
-any public body viewers can come out of the 100 licences and view within the firewall as I doubt we'll get that many users in 2 years and then we reassess for the next framework Work for you? Let me know and I'll make the changes.

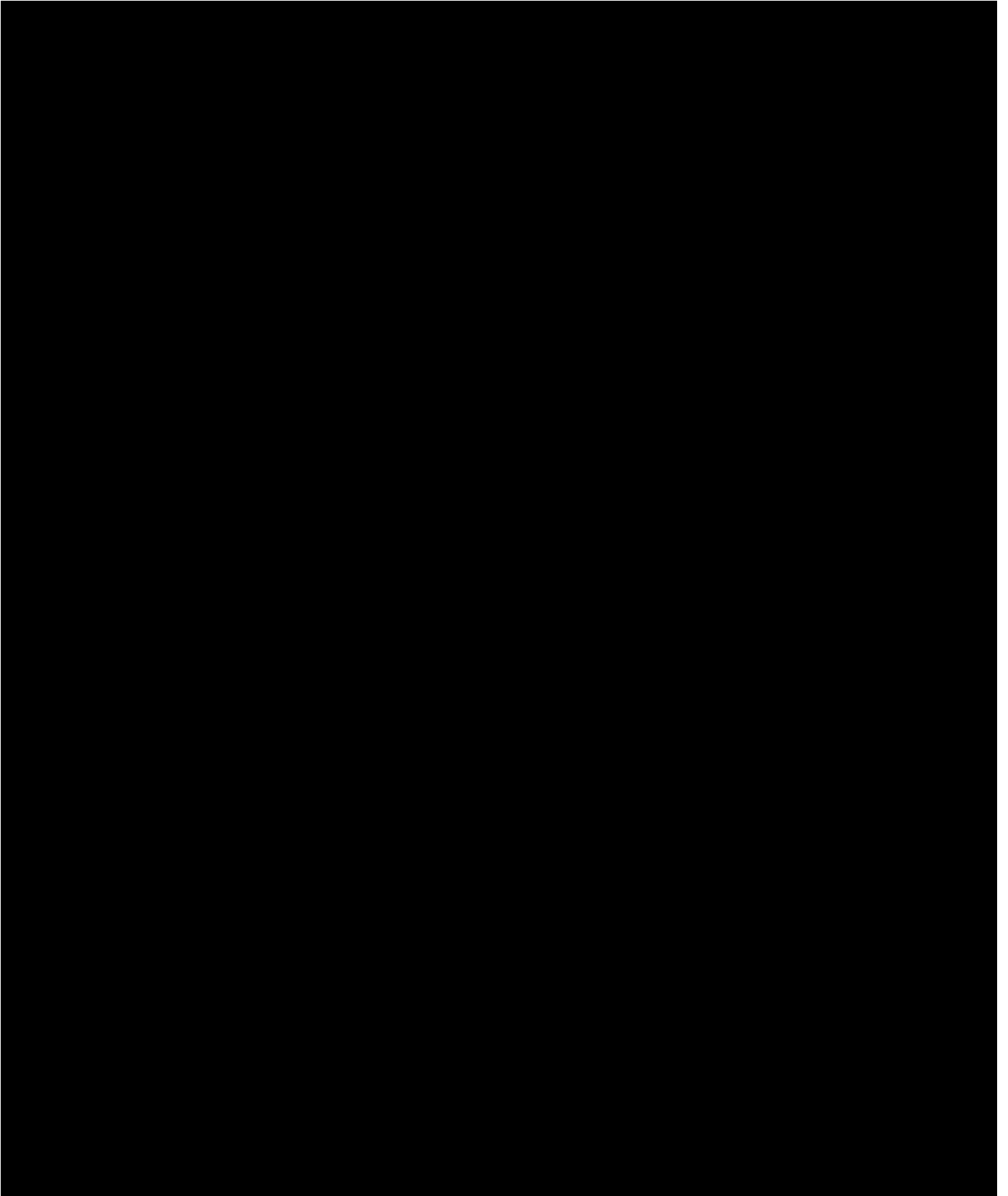
ITT Reference 6561 E05 – Demonstration and Launch of the System

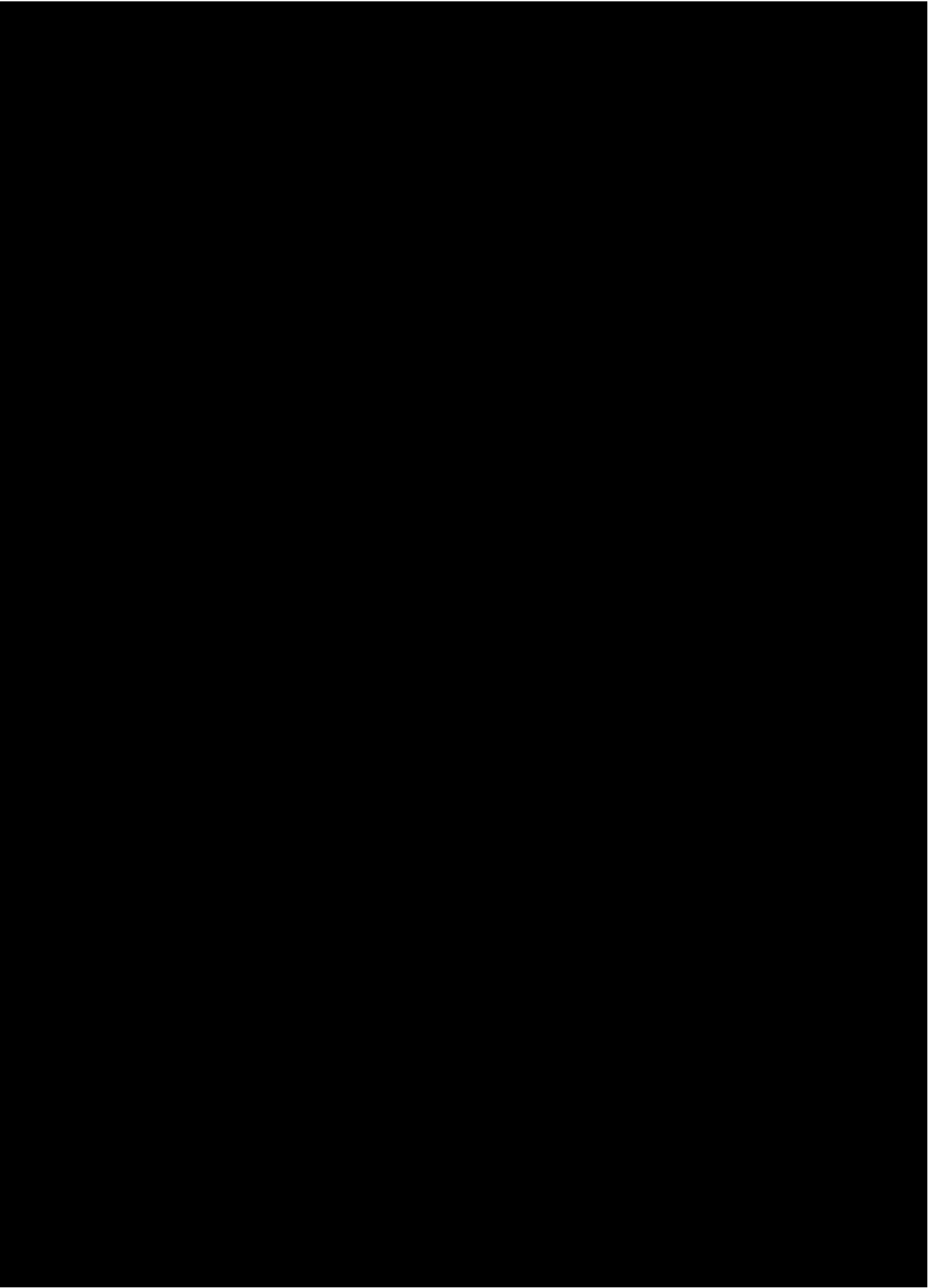
Page 1 of 2

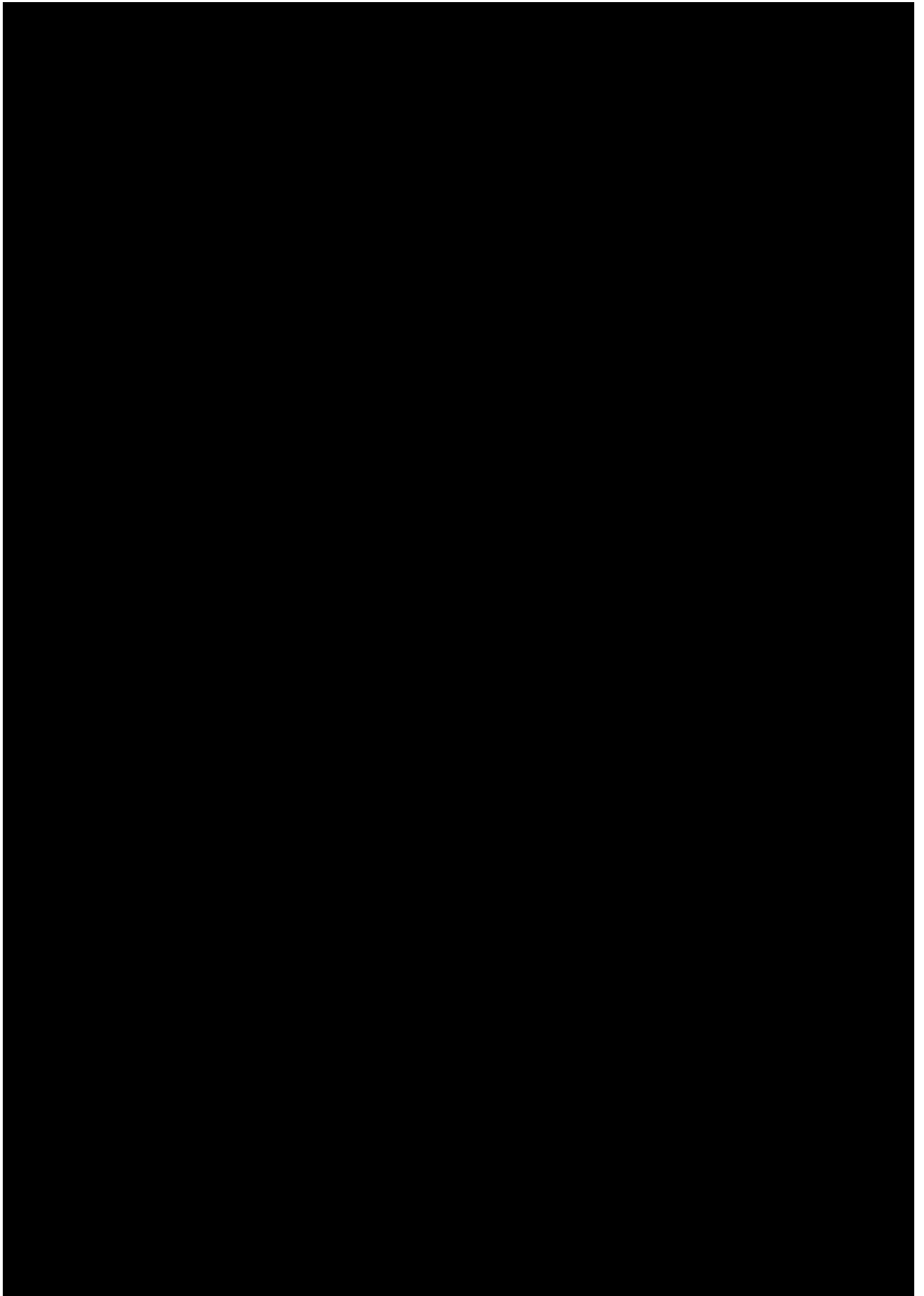
NCL will lead the delivery of all outputs outlined in the ITT supported by technical leaders managing key workstreams. NCL will ensure technical and contractual coordination. Our appended Project Plan describes our effective and comprehensive delivery system for the project, including; Critical timelines including a detailed project programme, Key personnel including roles, responsibilities and adequacy of resources, Communication Methods (including reporting), Quality Assurance and Quality Control Procedures.

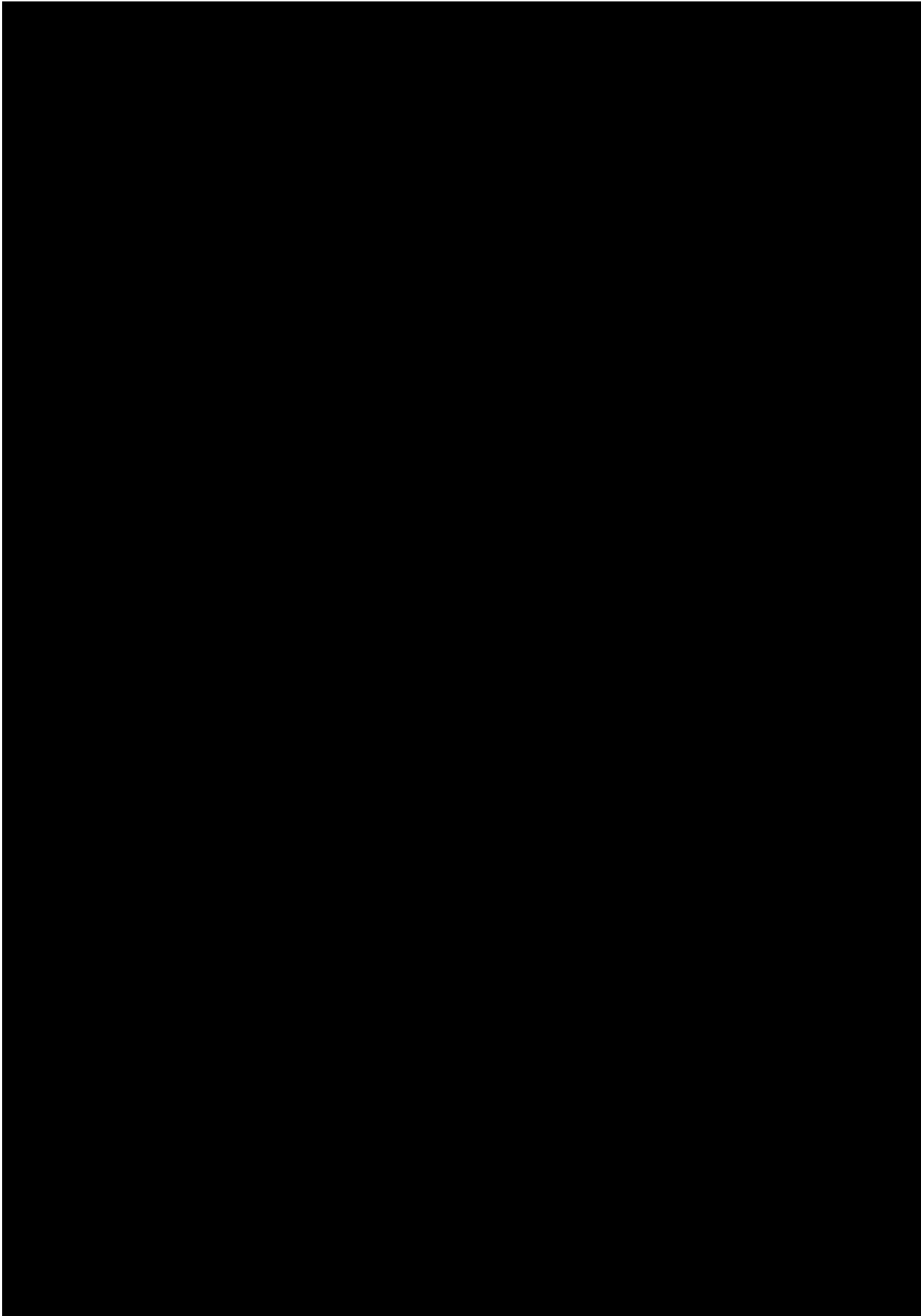
Based on our experience and understanding of Defra's needs of this project, we have identified world class expertise and a proven delivery system which will meet those needs, both now and in the future. We fully understand Defra's requirements having worked on all rounds of the regulations in the UK since 2006, and on original noise mapping scoping studies and policy projects since 2003. Our experience also includes initial research into the feasibility of such systems for Defra in 2004. Recognising the technical competencies required we have assembled an extremely strong delivery team, with high quality expertise across five organisations. This brings together world class experience and expertise in strategic noise mapping, noise calculation software, data management, and IT, along with existing proven solutions to provide the economies of scale Defra require not just for this contract but for the future delivery of the Regulations, while also maximising the potential usefulness of the tools and outputs in wider environmental policy development. Our proposed project team structure and organogram is included within the Project Plan together with CV's of our proposed key project members. We have structured our team as 'expert led' to ensure that the delivery of the system is led by those with the most experience and expertise in such projects and deliverables. The resource section of our appended Project Plan demonstrates our wider team experience. The project plan and programme shows our structure with the delivery broken into five integrated workstreams: Data; Database/Cloud; User Portal & Modelling; Acoustic Calculations and Testing and Training.

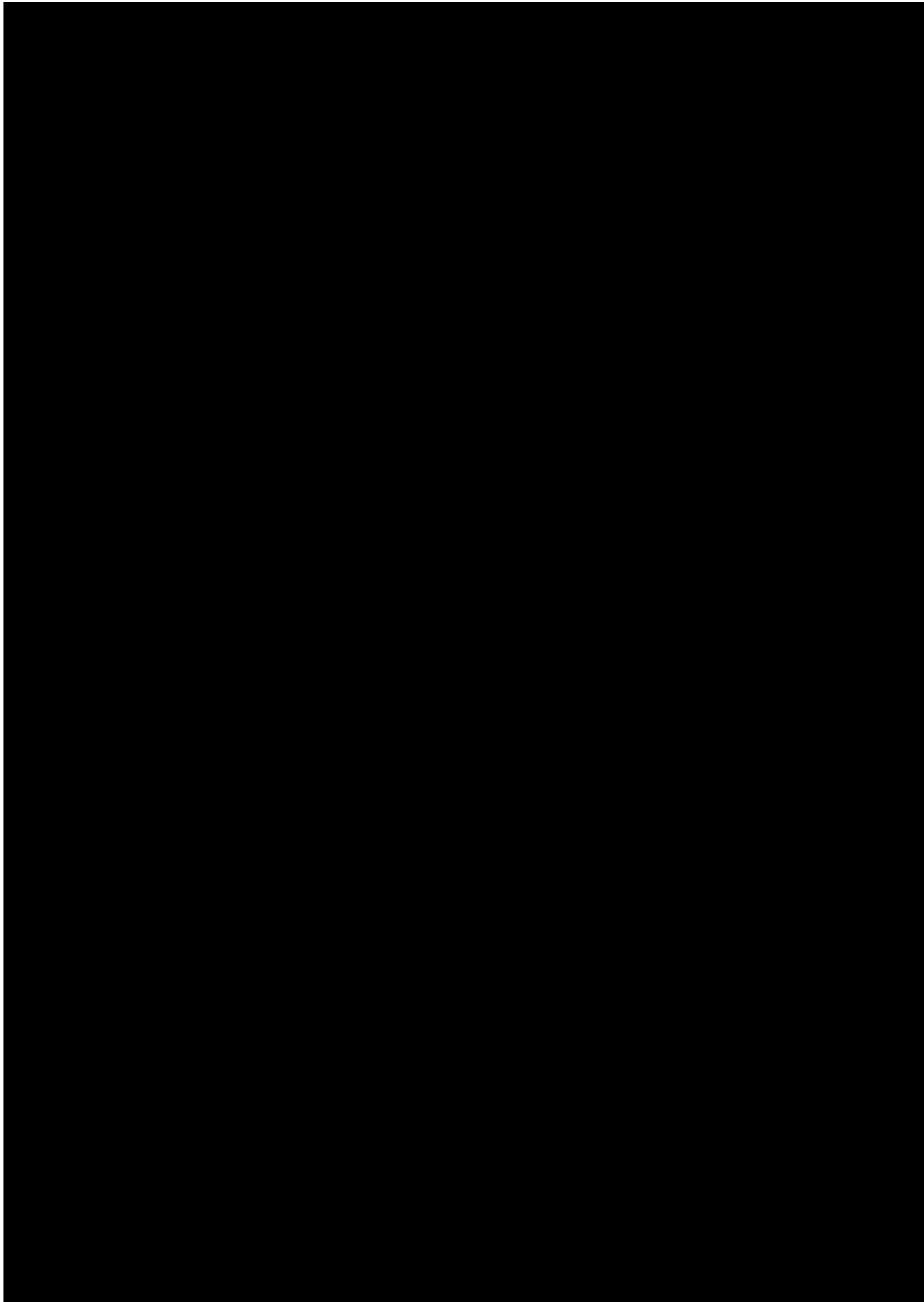


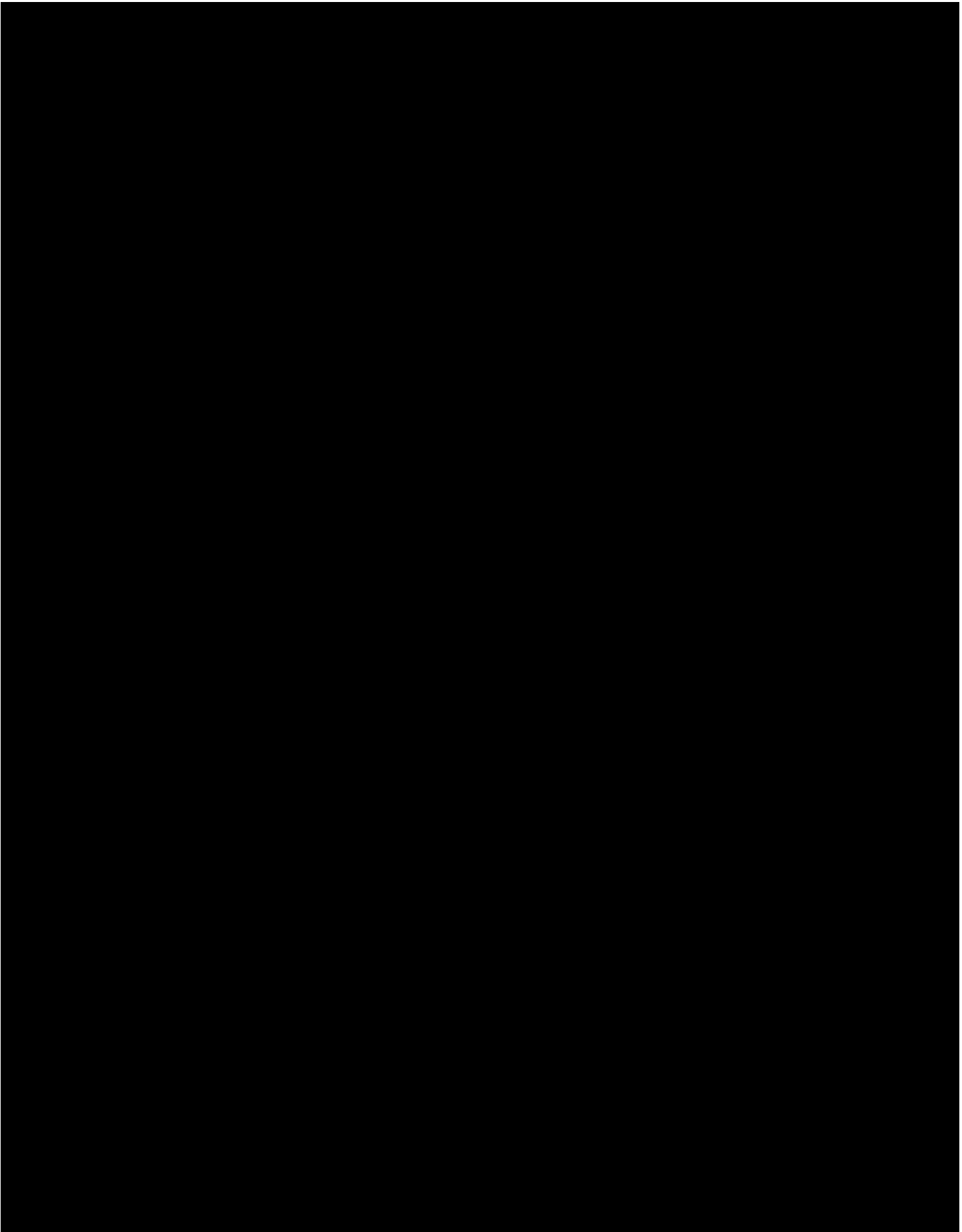












Question Number	Clarification Question	ITT Section	ITT Paragraph
1	The bid proposal does not appear to be part of the contract. Can clarification responses be bound to the contract?	Framework Agreement	Entire Agreement Clause (Clause 33)
2	There appears to be missing text from Question E5. Can this missing text be provided?	Technical Questions	Question E5
3	There appears to be missing text from the Assessment Criteria question and no page / word count provided. Can the missing text and page / word count be provided?	Technical Questions	Question E6
4	General and Specific Conditions – Can Defra provide confirmation as to whether there are general or specific contract conditions for the framework and/or call-off contracts?	Framework Agreement	Other Framework or Contract Conditions
5	Can Defra describe what take precedence, the ITT Specification or the Technical Scope appended to the Framework Agreement?	General Question	
6	Paragraph 22 of the ITT states that: <i>“The solution design needs to account for these in that it will be able to expand to incorporate different spatial or temporal resolutions as required.”</i> The ITT indicates that data of different temporal resolution may need to be accessible in order to produce backward looking noise models. Can Defra confirm that this is a requirement and if so how far back (i.e. to which year) does Defra envisage going?	Policy Context	Paragraph 22

8	Paragraph 32 of the ITT states that? <i>“Support costs following launch and delivery of Sections 1-3 until the end of the Framework Term are separate from this budget and remain to be secured but are hoped to follow from April 22 for the remainder of the Initial Call-Off Contract.”</i>	Proposed Timelines	Paragraph 32
---	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------	--------------

	Can Defra confirm that the support costs referred to in this paragraph of the ITT should be priced as part of this tender?		
9	<p>Paragraph 44 of the ITT states that: <i>“For both options, tenderers are to identify each necessary dataset in their tender documentation and discuss the suitability of each dataset including sensitivity on output and the pros and cons in the context of both delivering compliant output for Defra’s requirements and the wider aims of the Specification.”</i></p> <p>Can Defra confirm which datasets it has access to through the Ordnance Survey Public Sector Geospatial Agreement (PSGA) to support pricing?</p>	Identification and Preparation of Strategic Modelling Input Data	Paragraph 44
10	<p>Paragraph 50 of the ITT states that <i>“Once the Initial Call-Off Contract is let, any dataset subsequently selected, not specified in the tender will be subject to agreement with Defra, within the original fixed cost”</i></p> <p>For clarity “any dataset subsequently selected” is based on the view of the successful bidder and not by Defra i.e. Defra or any other third parties will be unable to insist or select datasets which cannot be accommodated within the fixed price?</p>	Identification and Preparation of Strategic Modelling Input Data	Paragraph 50
11	<p>Paragraph 66 of the ITT states that? <i>“Defra will have the mandate to approve organisations for access at different levels (described at Appendix D). Once an organisation is approved, the successful tenderer will manage individual user accounts for the Framework Term”</i></p> <p>Can Defra provide an indication for the purposes of fair pricing the number of users accounts over the 4 year framework terms?</p>	Design, Development, Demonstration and Launch of the Modelling System	Paragraph 66
12	<p>Paragraph 86 of the ITT states that; <i>“In this scenario, a communication plan needs developing for all users of the previous version of that dataset identifying potential implications”</i></p> <p>Can Defra confirm that a Communication Plan is required as this statement conflicts with the Technical Scope.</p>	Design, Development, Demonstration and Launch of the Modelling System	Paragraph 86

13	<p>Paragraph 93 of the ITT states that: <i>“Output must be to a sufficient level of accuracy”</i> Can Defra please confirm what is considered “sufficient” in terms of the accuracy of the outputs from the system and its models? Can any insight be provided as to what would comprise the stated’ approval process’?</p>	Design, Development, Demonstration and Launch of the Modelling System	Paragraph 93
	<p>Paragraph 103 of the ITT states that: <i>“Potential future uses of the Noise Modelling may include, but are not restricted to assessment of....:</i> Can Defra confirm whether the requirements listed in the bullet points of Paragraph 103 are requirements which should be included or excluded as part of costing for the prototype?</p>	Design, Development, Demonstration and Launch of the Modelling system	Paragraph 103
14	<p>Paragraph 107 of the ITT states that: <i>“To be able to update the Modelling System and use it to support policy development in the way Defra anticipates, it is expected that there will be future support costs. These need to be detailed and broken-down to a level sufficient to undergo scrutiny”</i> This requirement indicates more detail is required that can be made available through the price card. Can Defra provide clarity as to where and how this can be provided as part of tender return?</p>	Design, Development, Demonstration and Launch of the Modelling System	Paragraph 107
15	<p>Paragraph 109 of the ITT states that: <i>“For the Framework Term, Defra will be responsible for the costs associated with the hosting and managing the Modelling System.”</i> Does the statement in Paragraph 109 mean that the costs of hosting and managing the modelling system should be excluded from the fixed price, and that hosting of the system is out of scope?</p>	Design, Development, Demonstration and Launch of the Modelling System	Paragraph 109
16	<p>Paragraph 112 of the ITT states that: <i>“The full functionality of the Modelling System must be available in the prototype, but the geographic scope is to be limited to a representative area in England”</i> It is unclear from Paragraph 112 whether the fixed price to be provided in the tender return is for the development of the prototype system and the modelling of an area of a limited geographic scope or for the delivery of Defra’s regulatory requirements? This is also unclear from the price card too.</p>	Design, Development, Demonstration and Launch of the Modelling System	Paragraph 112
17	<p>Paragraph 125 states that: <i>“Datasets not covered by this contract (population location data, airport noise data, industry noise emission data, agglomeration boundary data) will be provided by Defra no less than 4 weeks prior to the start date of this section on the project plan provided by the successful</i></p>	Delivery of Statutory and Policy Requirements	Paragraph 125

	tenderer in their tender documentation.” Would it be possible for Defra to indicate what population datasets will be provided as this may influence proposals?		
18	Paragraph 137 of the ITT states that: “The system must be designed to handle most standard formats and therefore this scenario is expected to be an exceptional one.” Can Defra define that is considers to be “standard formats”?	Strategic Modeller (DAs) Requirements	Paragraph 137
19	Paragraph 49 of the ITT states that: “Some data (e.g. OS) may be subject to licensing on a case by case basis, which will need to be determined at point of use and may be managed through wider agreements such as the Public Sector Geospatial Agreement (PSGA)” Can it be confirmed that the successful tenderer will have access to Ordnance Survey datasets through the Public Sector Geospatial Agreement (PSGA)?	Approved User Portal – Licencing and Access	Paragraph 49
20	Appendix D NM_PC_10 states that “The database must be provisioned with an initial storage capacity of 5 Terabytes with a capability to flex to meet...” Does Defra have a feel for ballpark growth rates in storage capacity requirements or an indication of system usage which could inform potential requirements? e.g. is it up to 5Tb per year?	Appendix D	NM_PC_10
21	Appendix D NM_PC_10 states that “Availability for the overall service (SLA) for Infrastructure components which falls under the scope of this contract 99.5%” There is no mention of penalties associated with the SLA - this is quite common. Can Defra clarify whether penalties will apply to the SLA and any other requirements from the system as outlined in Appendix D?	Appendix D	NM_AV_03
22	Paragraph 14 of the ITT states that: “Allow strategic scenario modelling (forward and backward looking) to be undertaken to inform policy planning and development at the strategic national (England) level;” Historical data may be of different characteristics, spatial accuracy and resolution. Please can you define how many years backward and forward should be assumed for pricing and system design purposes?	Objectives	Paragraph 14
23	Paragraph 14 of the ITT states that: “Allow strategic scenario modelling (forward and backward looking) to be undertaken to inform policy planning and development at the strategic national (England) level;” For the backward looking scenario modelling, would the successful tenderer need to rebuild the ground and acoustic model or use the most recent ground model and just rerun the acoustic modelling?	Objectives	Paragraph 14

24	<p>Paragraph 19 of the ITT states that: “The Regulations require noise mapping and action planning for major sources of road, rail and aviation noise and noise in large urban areas (agglomerations) on a five yearly cycle. They also require Defra to produce Noise Action Plans based on the maps for road and rail noise and noise in agglomerations”</p> <p>Can Defra provide a list of datasets that it currently uses and will share with the successful tenderer promptly after contract award? Can the formats of these dataset be provided?</p>	Policy Context	Paragraph 19
25	<p>Paragraph 30 of the ITT states that: “These opportunities can be harnessed in delivering not only the statutory requirements for Round 4, but also the wider aim of developing a Modelling System suitable for scenario and policy development. The following resources are therefore provided for information, but in no way set a direction for this tender. However, where still appropriate or where thought to provide a cost-effective option, there is nothing to prevent their being drawn upon to inform the solution for this new generation of strategic Modelling System.”</p> <p>Can Defra confirm whether following Round 3 methodology and reusing Round 3 ground model datasets plus updating the acoustic model datasets meets the statutory requirements of Round 4?</p>	Background Resources for Information	Paragraph 30
26	<p>The ITT indicates that “if required for the purposes of tendering, agglomeration boundaries from Round 2 should be assumed”</p> <p>Can Defra confirm what is the required coverage of the optimal dataset? Do the agglomeration boundaries referred to in paragraph 43 define the optimal data coverage requirements or should tenderers assume that national coverage is required?</p>	Section 1 – Identification and Preparation of Strategic Noise Modelling Input Data	Paragraphs 40, 42 and 43
27	<p>Paragraph 42 of the ITT indicates that the coverage for the basic Defra statutory requirement is to include all A-roads motorways and in accordance with the END definition all Major Railways in England.</p> <p>This coverage does not necessary align with the requirements of the Regulations. Can Defra confirm that for the purposes of pricing that this reflects the desired coverage. Can Defra also please confirm the statutory data coverage. Is it all A roads and major railways irrespective of agglomerations and vehicle and train passages?</p>	Section 1 – Identification and Preparation of Strategic Noise Modelling Input Data	Paragraph 42
28	<p>Paragraph 98 of the ITT states that <i>“Sufficient buffer zones need to be employed in the Ground Model to allow all relevant sources to be included in the calculations. Additionally, where it is anticipated that the calculation area will be sub-divided for processing efficiency, sufficient overlap between adjacent sub-areas will be required to ensure no boundary steps in output data occur. The tender must explain how these two points will</i></p>		Paragraph 98

	<i>be addressed.”</i>		
29	Paragraph 98 of the ITT states that: <i>“Care must be taken to ensure that conflicts between datasets do not occur (for example roads and building occupying the same space, step changes in ground height”</i> Can Defra confirm the minimum acceptable step changes and tolerances within the ground model e.g. less than 2m, no more than 5m?	Detailed Brief	
30	Paragraph 69 of the ITT states that <i>“Where no data standard can be identified, they are to be developed and provided as part of the Modelling System delivery so data can be managed in an efficient and cost-effective manner. The Government guidance on data standards will be adhered to – useful information can be found here⁴ and here⁵. Metadata should draw on ISO15836”</i> Can Defra please clarify where it expects data standards to be developed in case they don't exist? For example, for input, pre processed and post processed data?	Data Standard	Paragraph 69
31	Paragraph 81 of the ITT states that <i>“a supplier of data retains responsibility for the accuracy of that data;”</i> Can Defra Please clarify what is meant by data and accuracy in this paragraph? For example: is supplier(tenderer) responsible for the accuracy of the Ordnance Survey data?	Adding New Data	Paragraph 81
32	Paragraph 81 of the ITT states that <i>“the successful tenderer is responsible for the QC and QA of any subsequent pre-processing of data from the point of upload to the provision of that data within the database and details of this are to be made available. These processes are to be agreed with Defra and the data owner informed;”</i> Can Defra clearly define what is meant by 'data owner' in this paragraph?	Adding New Data	Paragraph 81
33	Paragraph 125 of the ITT states that: <i>The database will contain all necessary data for strategic national Noise Modelling and population exposure assessment. Datasets not covered by this contract (population location data, airport noise data, industry noise emission data, agglomeration boundary data) will be provided by Defra no less than 4 weeks prior to the start date of this section on the project plan provided by the successful tenderer in their tender documentation. Logically, this date must follow the anticipated date for the prototype being approved for full development. The Supplier must use dummy data for the prototype test where necessary for these datasets. The Supplier must work with Defra to ensure the data standards for these datasets are developed in consultation and are available in sufficient</i>	Paragraph 125	

	<p><i>time (no less than 4 weeks) to allow the data to be formatted appropriately.</i></p> <p>Can Defra confirm that this data will be provided before the data design stage?</p>		
34	<p>Appendix D Paragraph D.4.6 states that <i>“The Supplier must comply with the Defra Security Assurance process (process can be provided on request).”</i></p> <p>Can this be provided in response to this clarification question?</p>	Appendix D	Paragraph D.4.6
35	Does the Defra Call-off Contract, that is to be priced, cover Tier 1 requirements only?	General Question	

36	Can Defra clarify that it is expecting the successful bidder to collate current source datasets in order to develop a new noise model dataset representative of the next relevant year of the Regulations (i.e. 2021).	General Question	
37	Will Defra confirm that it would be considered compliant if any proposal relies on the use of noise model datasets produced from previous rounds of the Regulations in order to meet the requirements of this framework?	General Question	
38	Can Defra indicate what arrangements may already be in place with stakeholders such as Network Rail and Highways Agency for the provision of datasets which have been relied on in the delivery of strategic noise maps under previous rounds of the Regulations?	General Question	
39	Will the datasets relied on for all previous rounds of the strategic noise mapping including the noise model datasets be provided to the successful contractor?	General Question	
Will the results of previous rounds of the strategic noise mapping be provided and if so in what format?		General Question	
40	Will the requirement for ‘source apportionment’ as mentioned in Paragraph 14, 43, 61, 63, 100 of the ITT apply to any backward looking or previous rounds of the strategic noise mapping under the Regulations?	Paragraphs 14, 43, 61, 63 and 100	
41	<p>Paragraph 76 of the ITT states that:</p> <p>“However, the choice between the two should be able to be user-selected depending on the type of analysis being undertaken, coupled with sensible calculation times and processing effort”</p> <p>Can Defra indicate what it considers to be a ‘sensible calculation time’?</p>	Adding New Data	Paragraph 75

42	<p>Paragraph 94 to 96 of the ITT describe the different calculation standards which have been identified as requirements of the modelling system. Table 2 of the ITT states that the system should be sufficient to calculate down to 40 dB L_{den} and 35 dB L_{night}. It is then stated in Footnote 6 that:</p> <p><i>“It is accepted that at these levels, there may be other more dominant sources of noise (either natural or anthropogenic). Where the proposed software/calculation methodology is not validated at these low levels, implications must be discussed in the tender document. Cost implications of extending to down to these levels should also be considered.”</i></p> <p>Can Defra please clarify where the cost implications for extending down to these levels should be covered in the tender return? Should the form options as part of the price card, for example?</p>	Approved User Portal – Acoustic Modelling	Paragraphs 94 - 96
43	<p>Appendix D.4.2 ID NM_PC_05 states that <i>“The platform must be able to complete processing the calculations for a national model in England within 35 days”</i>.</p> <p>Can Defra confirm whether this requirement relates to the calculation of road or railway noise, or both, and whether any requirements relating to the range and quality of the calculations and outputs can be indicated e.g. levels the calculations must be calculated down to; the grid resolution; noise calculation settings; and anticipated output uncertainty / accuracy?</p>	Appendix D	NM_PC_05
44	<p>Appendix D, Strategic Modeller (Defra) requirement 6 states that <i>“As a Strategic Modeller (Defra), I must be able to calculate airport and industrial sources using CNOSSOS-EU separately from every other user, so that I can determine the noise levels in England.”</i></p> <p>Can it be confirmed whether this is a ‘must’ or ‘could’ requirement?</p>	Appendix D	Strategic Modeller (Defra) Requirement 6
45	<p>Can Defra confirm, for the avoidance of doubt, that the limits of liability for the initial work package as described in the Specification in the ITT will be at the levels of insurance as specified in the Qualification Envelope for ITT 6561 on the Bravo platform.</p> <p>Furthermore, can Defra confirm whether future work packages which may or may not be commissioned by Defra or any of the named bodies in the OJEU Notice and the ITT will carry the same level of liability as the level of insurances specified in the Qualification Envelope for ITT 6561 on the Bravo platform.</p>	General Question	
46	<p>This is a new framework, with the first call off to be procured as part of this Tender. However, Schedule 3 of the Framework T&Cs reference 'General Terms' and 'Special Terms'. We are unable to locate these. It is anticipated that these Terms would include clauses such as insurance requirements and limits of liability. Can these be provided in response to this clarification?</p>	General Question	

We have prepared the following response in relation to the following clarification question:

“In relation to the evaluation methodology and corresponding Specification for question 5, please clarify (or direct us to the relevant section in your response) the testing approach that you would use for this project to ensure quality is built into delivering the product into the live environment. The aspects of testing such as:

- Clarification of your development and test methodology*
- Use of test resources (in-house or external)*
- Collaborate in Test/QA with 3rd party clients*
- Testing tools and techniques employed”*

The Specification describes a series of requirements which are vital to the delivery of a functional, scalable noise modelling system. These principally relate to system infrastructure and security, performance and scalability, and functionality. Our approach to the testing of these aspects is described below. The testing tools and techniques employed are described throughout.

Development and Test Methodology

At project inception, it will be our intention to review the system requirements with Defra and the set of Acceptance Test Criteria (ATC) for each of these. Whilst the specification has set requirements, it is important that the conditions and criteria under which these can be demonstrated to have been met are agreed. This will be a key input into the development of the system in Stage 1.

These will be agreed for all aspects of the system and its components, including those which are not already available within any pre-existing solutions delivered by the ‘off the shelf’ components i.e.

LimA and Oden. All development and testing that is undertaken shall be set against meeting the ATC.

As part of project inception, and within Stage 1 of our proposed program, each technical workstream will draft specifications for each system component. These will be developed with respect to the Defra requirements, ATC and component integration requirements. In this regard, each system component will be developed to have clear inputs and outputs so that they function as a comprehensive single system. These specifications will be developed so that internal acceptance criteria linked to the main ATC, which will be available, can be shared with Defra at any time.

For all main ATC and sub-criteria ATC, the project will deliver and agree test scripts with Defra.

These test scripts will be used by those developing the system infrastructure and components, as well as our proposed testing team. These scripts will be developed so that all testing can be recorded and independently audited or executed by any external third party.

All testing and QA of the system will be recorded and managed using the testing tool, PractiTest.

This tool allows ATC, sub-criteria and testing scripts to be created and shared, and for all testing against these to be recorded in an auditable form. The tool allows developers and testers to work together so that issues identified as part of the testing can be reported back to the developer. The tool allows reports to be generated which can be provided to Defra or any other third party on request and as part of monthly management reports.

System Infrastructure and Components (Unit and Integration Testing) - The system comprises of a platform, which is to be delivered through Microsoft Azure and components or ‘units’ which comprise of separate functional aspects of the system which are to be integrated with each other to deliver the overarching system and its requirements.

The development and testing approach to the system will take a standard approach. ‘Unit Testing’ will be undertaken by developers to ensure that individual components of the system function on their own and are meeting their individual specifications and ATC. ‘Integration Testing’ will take place where the individual components of the system will be tested as a collective group. This allows the testing to identify issues or

ITT Reference 6561 – Testing Approach

problems which arise by connecting the different components of the system together. To maintain independence from the development workstreams, 'Integration Testing' will be carried out by our proposed testing team.

The development of the system will occur on a dedicated development platform which will be delivered by Mott MacDonald, through their Technology Services (TS) team. The development platform will be separate to the production platform used to deliver the prototype and subsequent model delivery. Within the development environment, the system components will be assembled and configured to deliver the requirements. All unit and integration testing will take place within this environment.

This infrastructure will be built using Hashicorps Terraform, allowing the team to utilise infrastructure as code (IAC) workflow which may include unit testing of our infrastructure code before deploying. The IAC may make use of tools such as TerraTest or other non-specified but suitable testing mechanisms for IAC. In this respect the infrastructure will be internally tested to ensure that the components are visible to each other, as is appropriate, having regard for system and information security, data workflows and that as each component calls upon hardware resources, the system is capable of delivering this.

As part of contractual obligations to Noise Consultants Limited (NCL), these tests will need to be reproduced by NCL.

Testing Team – we have proposed an internal testing team. This team will test the performance of the functional aspects system separate from those who are developing it. The testing team's objective is to ensure that the system is meeting its respective functional and performance specifications.

The testing team's involvement will occur at the 'Integration Testing' phase and will be involved in the testing of the system through to a full 'System Test' and 'Acceptance Test'.

Each component of the system has a very specific requirement of it in delivering the overarching system. However, the main overarching functions and processes of the system are not materially different to those used in the conventional delivery of strategic noise maps and acoustic models. To this end the main objective of the testing team during the 'Integration Testing' will be to demonstrate that the processes, acoustic models, calculations and post-processing generated by the system will be delivered identically using the system as if conventional techniques had been employed.

This approach will be reflected in the testing scripts. The testing team includes people who have routinely worked on strategic noise mapping exercises, using the datasets and processes reported in our E01 response, and have direct experience of using calculation cores and carrying out most of the functionality required. We also see our testing team as being representative of 'end users' and as such can therefore feedback more subjective commentary on the system, such as its usability and layout. Whilst these matters will be considered through proposed ongoing stakeholder engagement,

The testing team is also comprised of purely NCL employees which reflects the requirements of our supply chain management processes to ensure that the products and services are as required. Whilst testing will be carried out by each of the project workstreams responsible for the system infrastructure and components, internal sign off will only be given if the testing team identifies that the requirement of a component or process is meeting specification and has delivered against a conventional equivalent using the testing scripts.

The first significant 'System Testing' will commence with the prototype delivery. This will be delivered in a development environment which is extremely similar to the production environment.

Consequently, this will provide the ultimate functional and performance test of the system. Our proposal is to create an acoustic model and associated results of Manchester using conventional approaches to fully test the performance of the system against its specification and the quality of the results it produces. This is to make sure that even if the performance requirements of the system are met, the quality, compliance and accuracy of the noise calculations are not overtaken by the need for the system to be functional.

The prototype will allow the system to be tested against all ATC and all associated test scripts based on a single 'mock' project.

Acceptable Testing – acceptance testing will be the final stage of the testing. It is our view that acceptance testing cannot be delivered through the prototype as the prototype does not allow for all of Defra's requirements to be fully tested. Whilst aligning the 'System Testing' to the prototype can indicate whether or not ATC can or will be met, acceptance testing can only be truly confirmed through the full system build stage, as proposed in Stage 3 of our project plan. To this end, during Stage 3, we will report back with clear evidence that the system has achieved ATC. All completed test scripts will be provided in a format that will allow Defra to seek external review.

Use of Test Resources

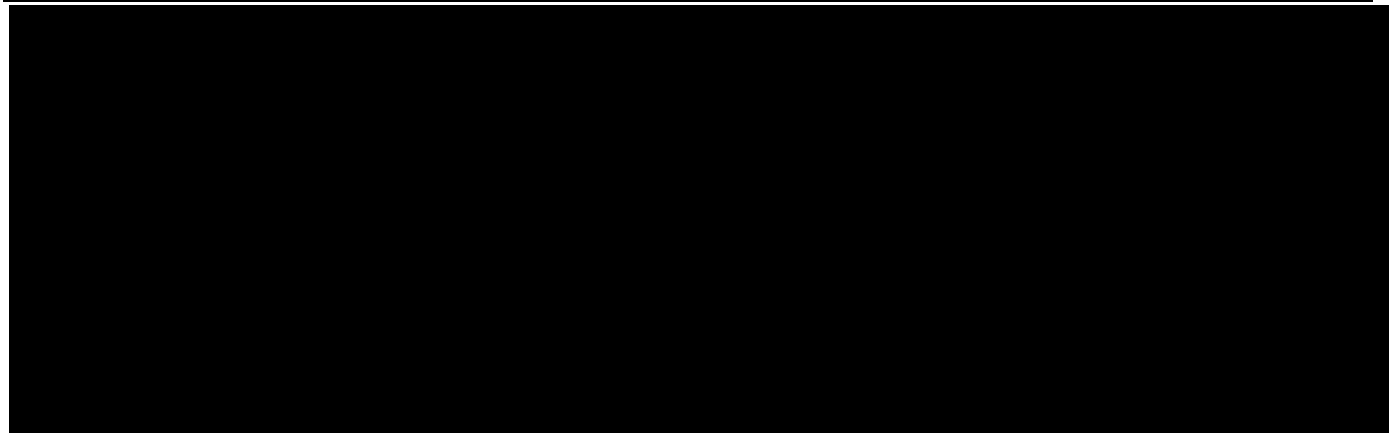
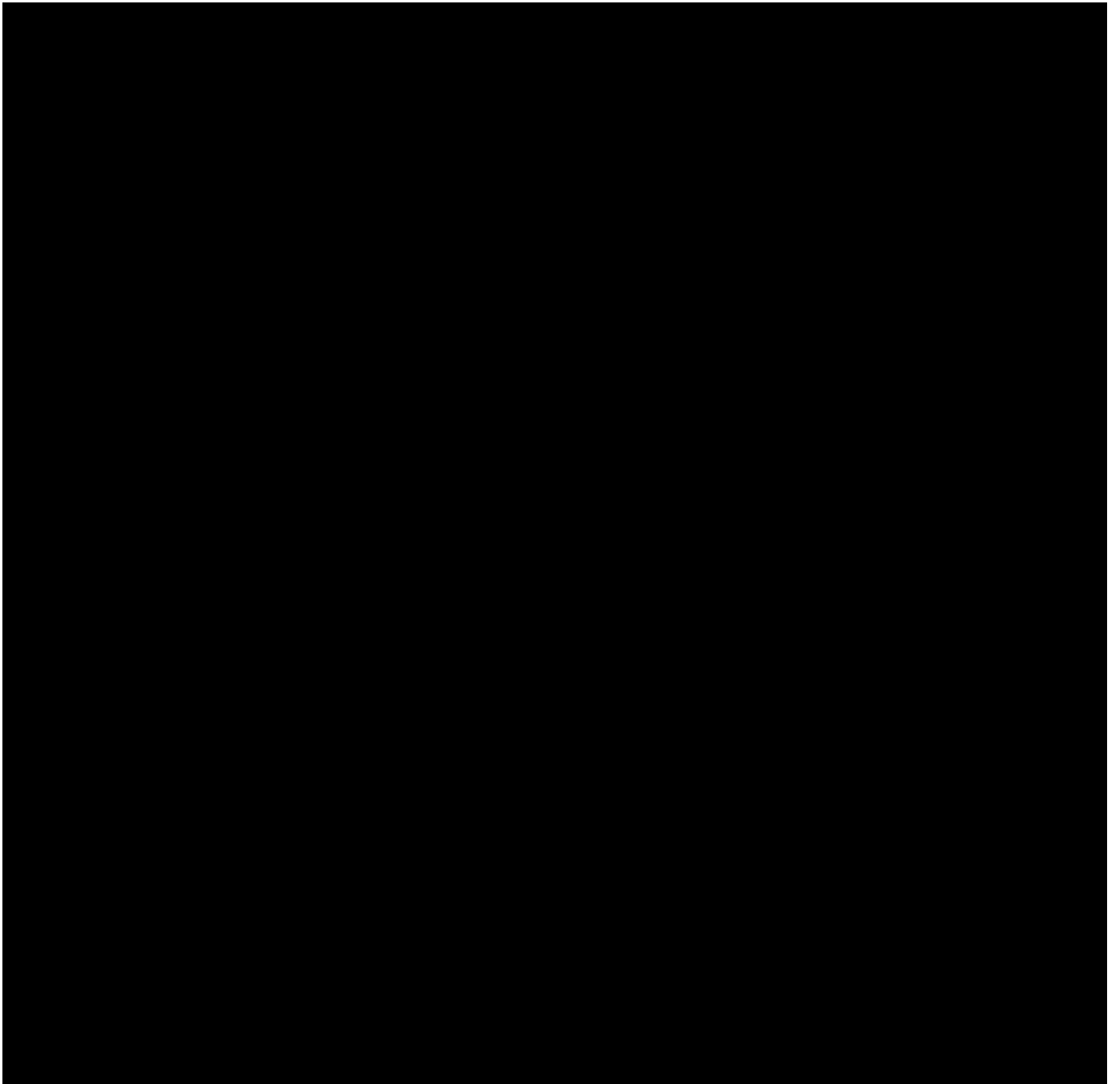
As outlined above, internal testing resources will be used to ensure that the system is performing against the agreed ATC. Whilst we propose to use internal resources for most of the testing, we are happy to communicate and share this testing with Defra and other third-parties.

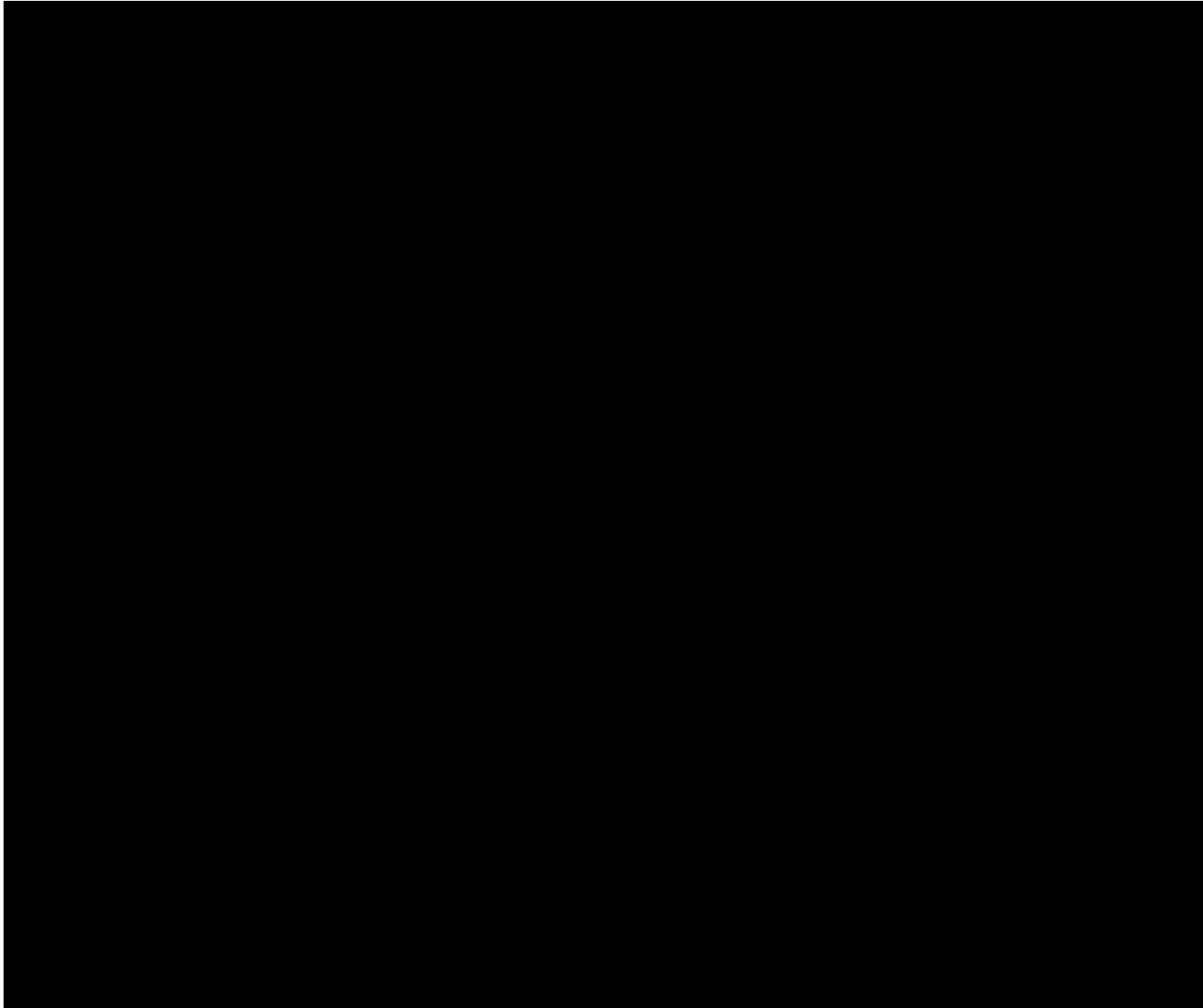
Should Defra have specific requirements for third-party functional and performance testing then we will be happy to discuss and adapt our approach accordingly. However, as we have envisaged that Defra would seek its own independent third party functional and performance testing of the system, we have ensured that our testing approach sets clear testing routines and scripts that align with agreed ATC so that testing of the system can be reproduced by the third-party.

External testing resources will be used with respect to the system and data security. We will use an independent third party to test these aspects of the system under the NCSC CHECK scheme, which will be addressed through the system design stage.

Collaborate in Test/QA with Third Party Clients

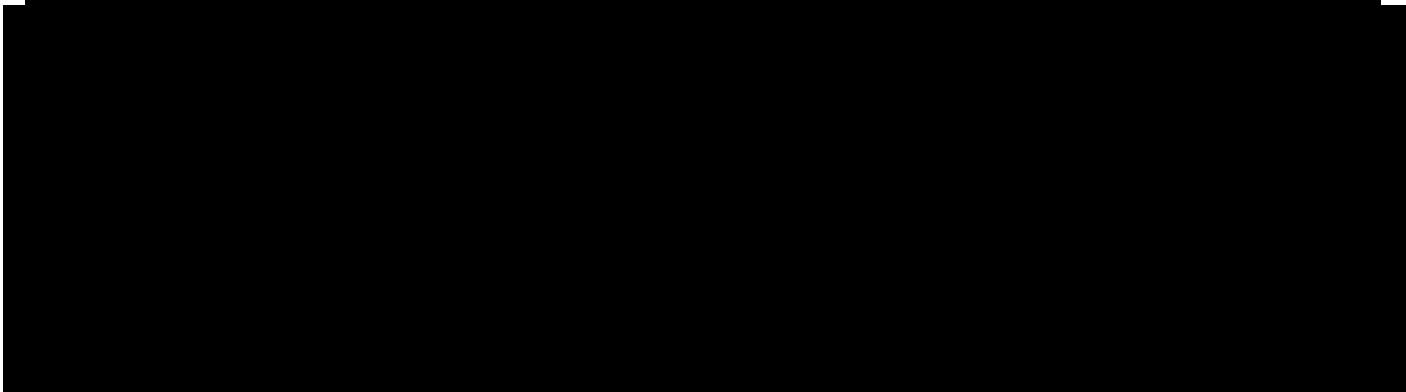
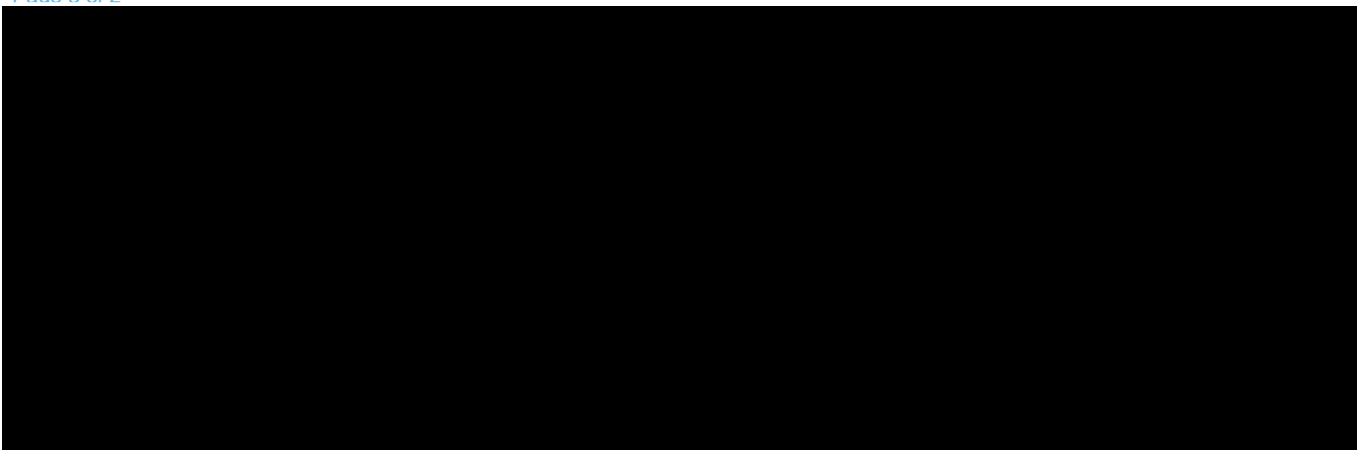
We are happy to collaborate in testing and system QA with third party clients. As outlined above, our approach is to agree ATC with Defra at the outset of the project, and to ensure that testing routines and scripts are developed that can adequately evidence that the system can meet ATC. In the event that Defra wishes functional and performance testing to be carried out with or by third party clients, we are happy to receive inputs from these clients with respect to the nature of our proposed test routines and to have our internal testing audited by them.

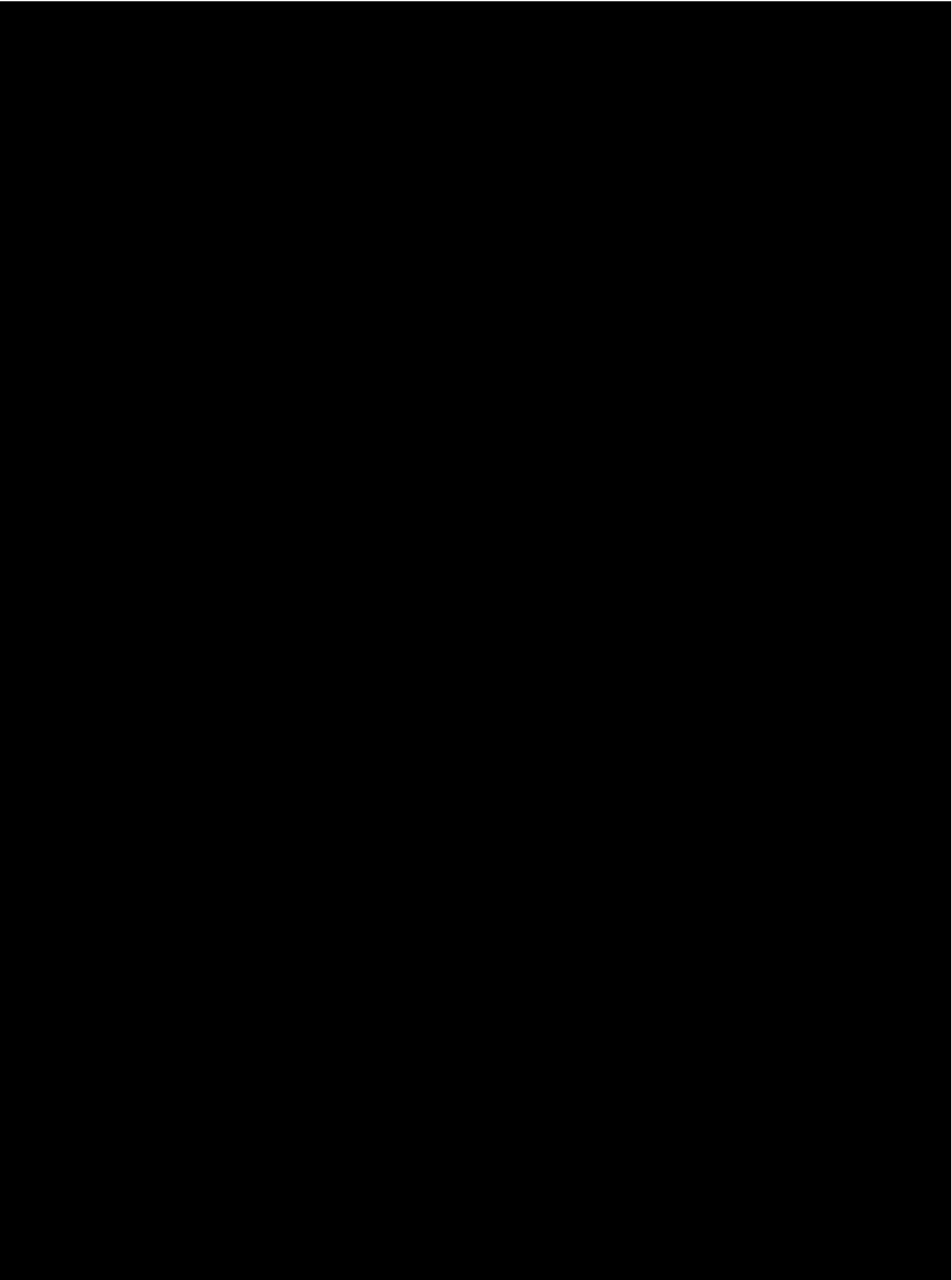


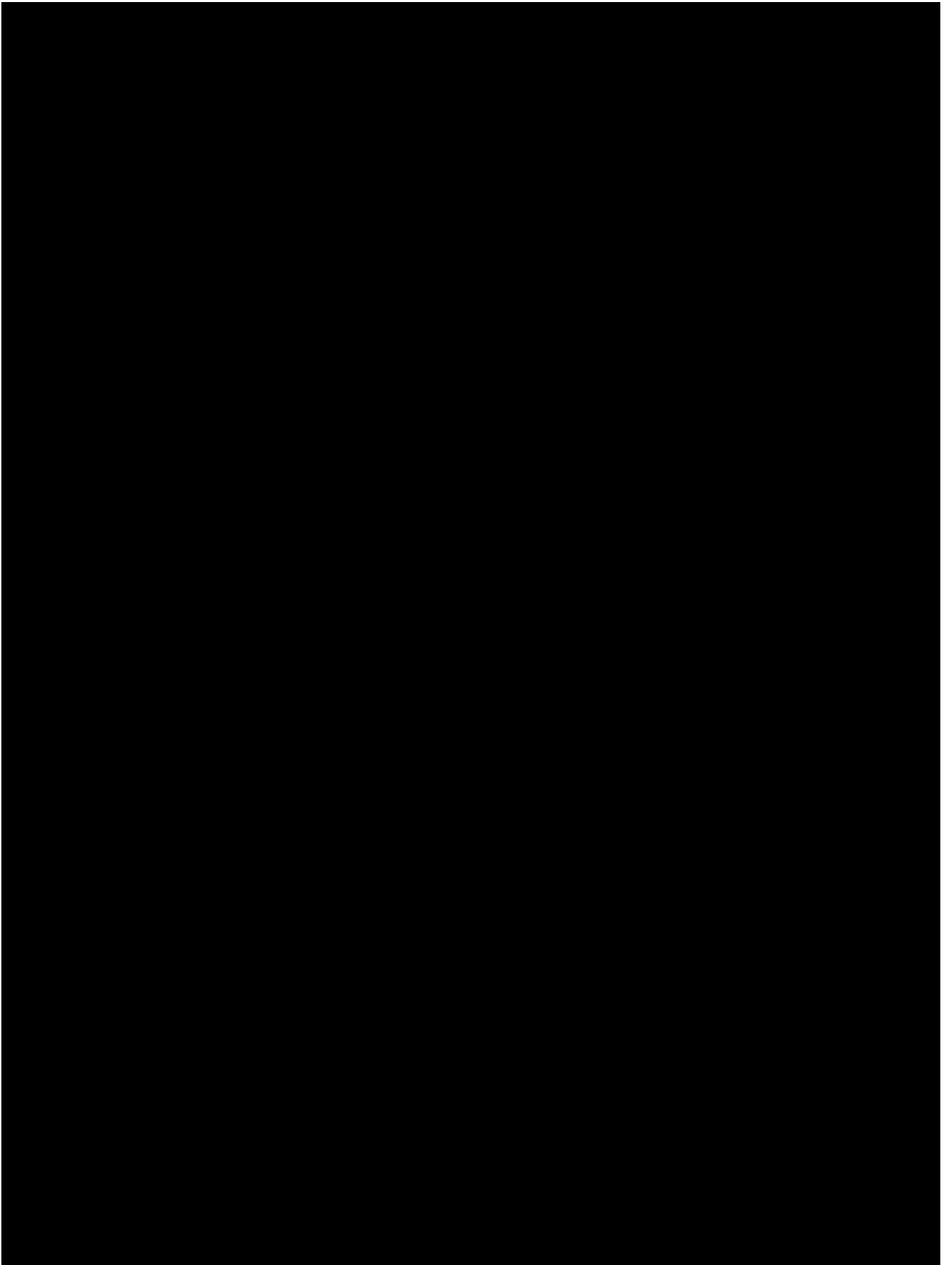


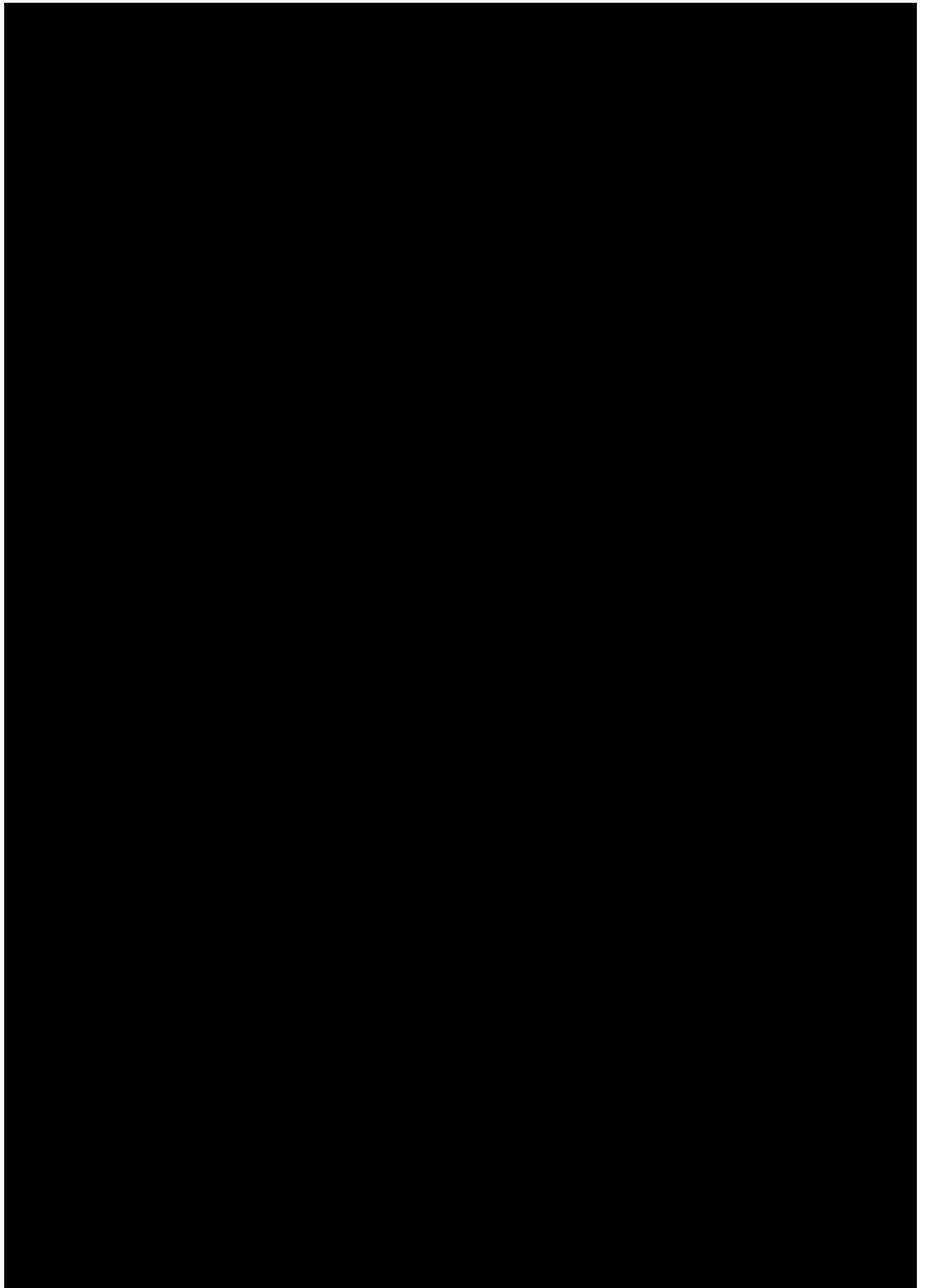
ITT Reference 6561 – Data and System Security

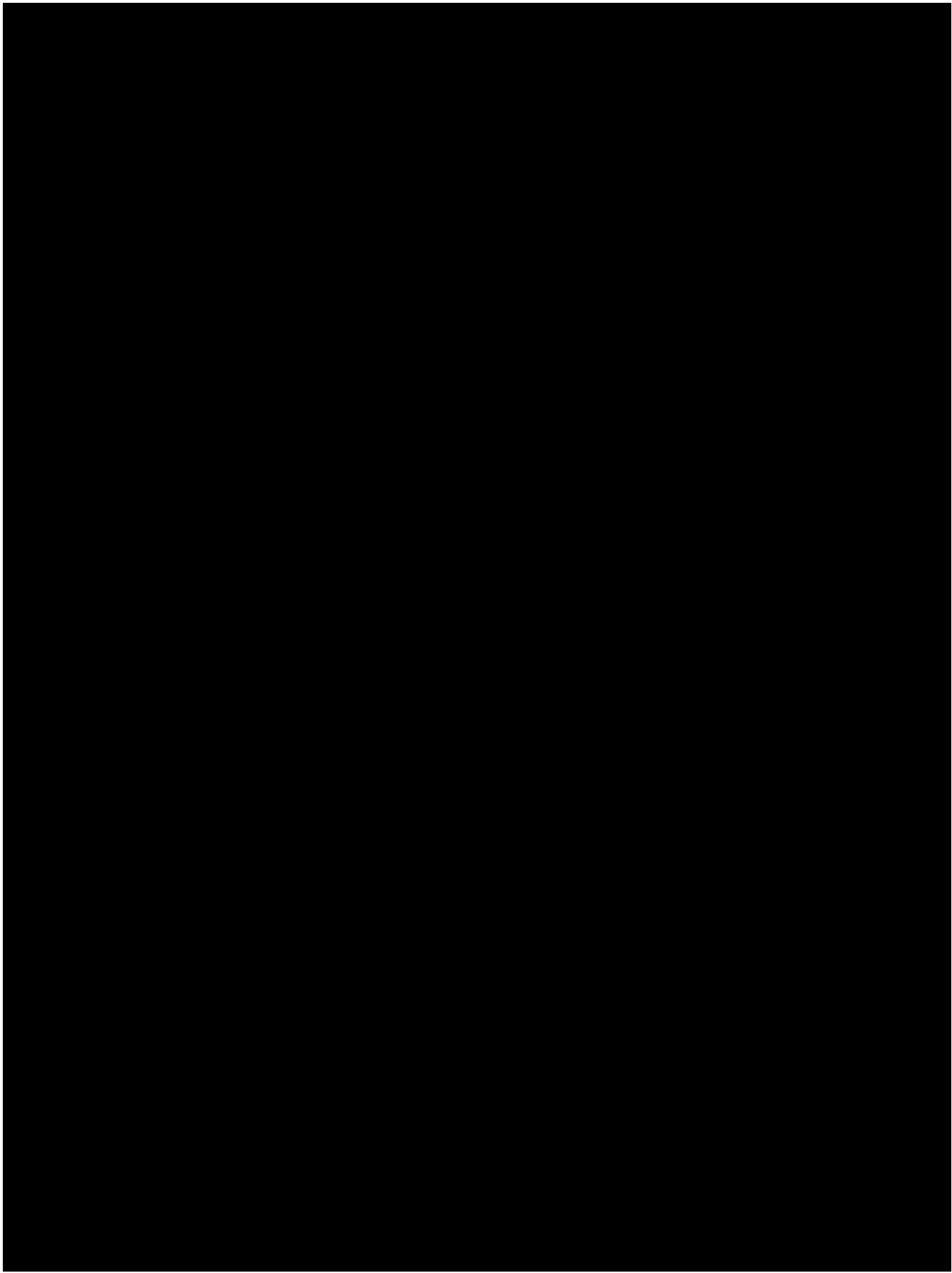
Page 3 of 2

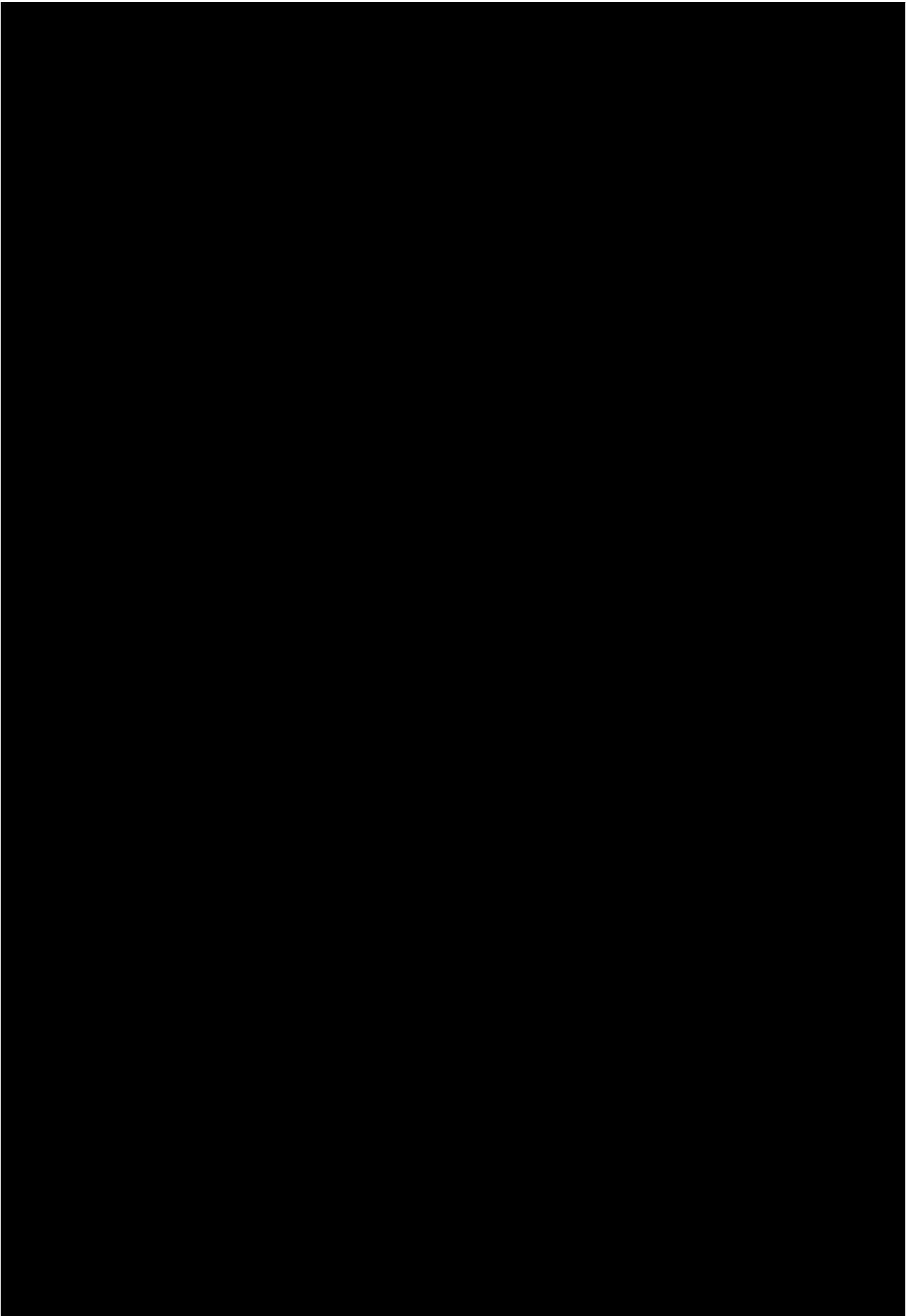


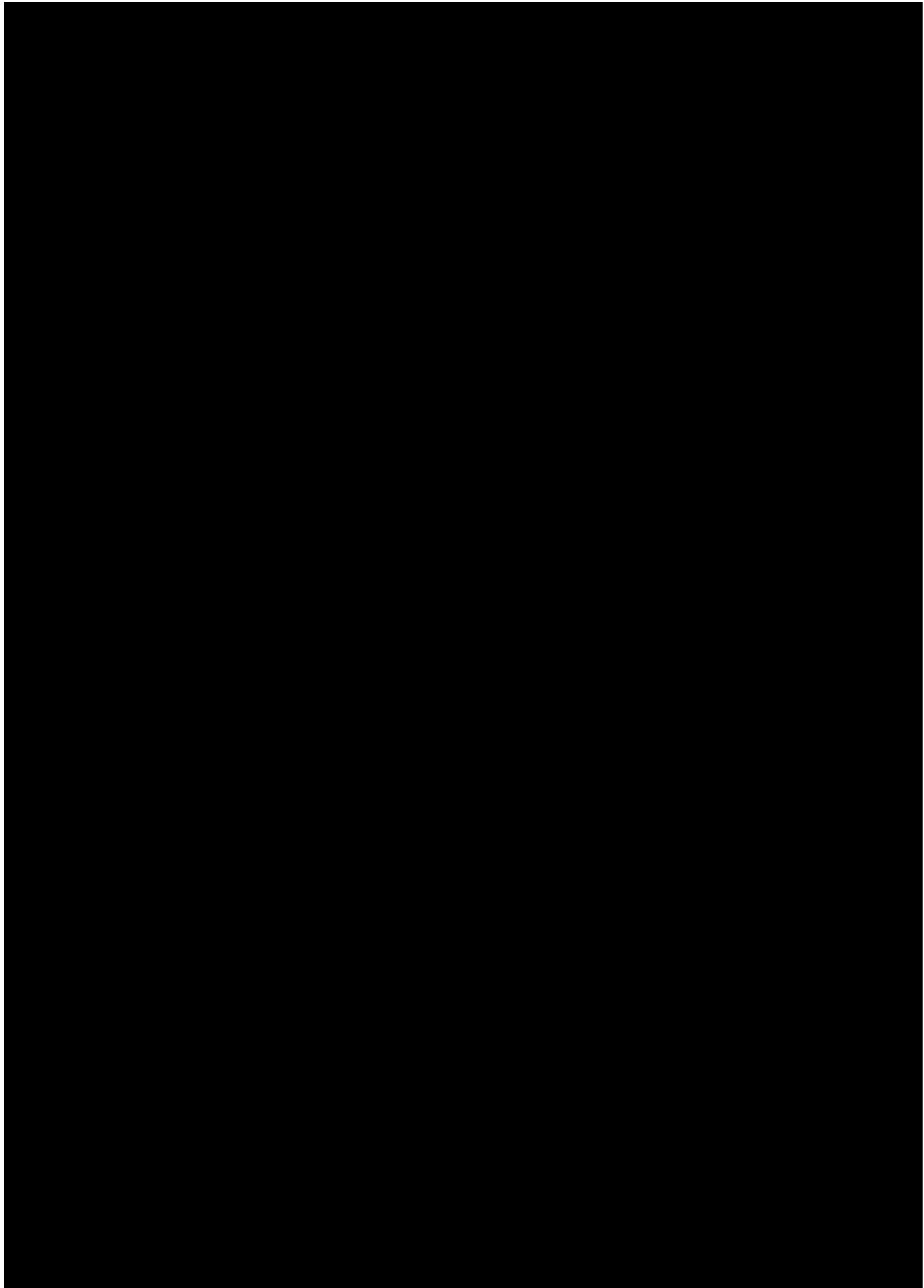


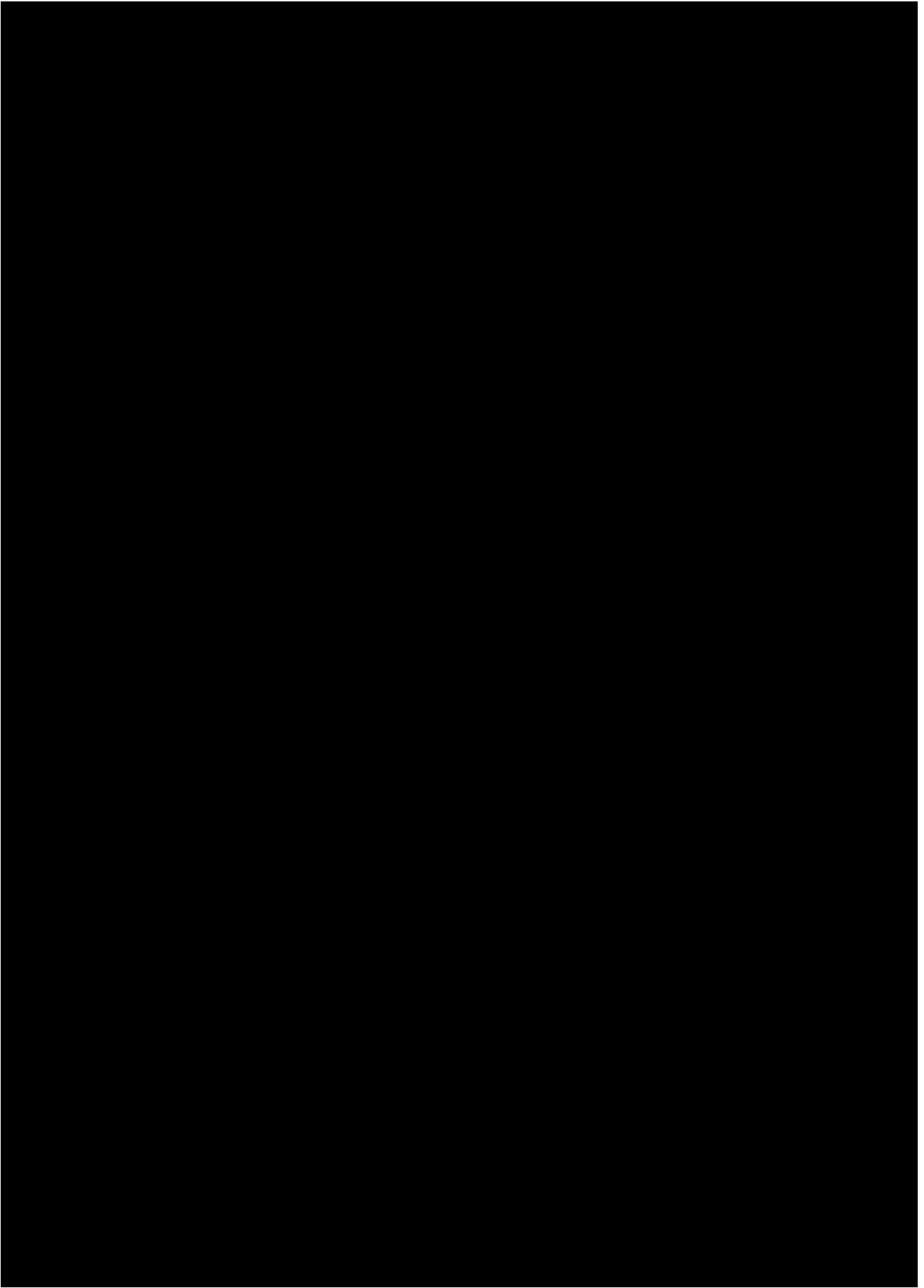


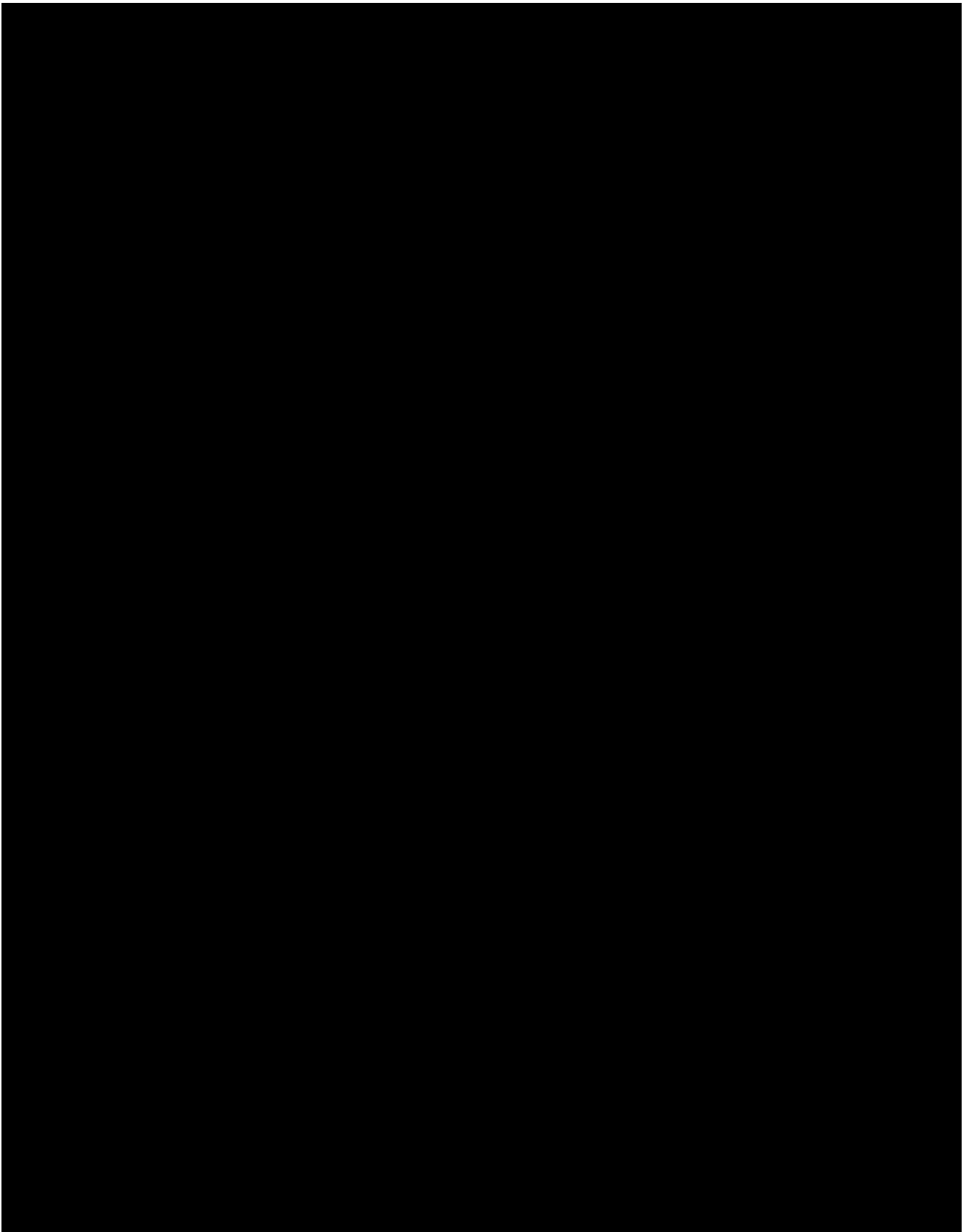












Q = Question, R = Response

Request Number 1

Request Number 2

1	Q	The bid proposal does not appear to be part of the contract. Can clarification responses be bound to the contract?
	R	Do not understand the question Please advise what you mean by the bid proposal
2	Q	There appears to be missing text from Question E5. Can this missing text be provided?
	R	Uploaded on 28/09/20
3	Q	There appears to be missing text from the Assessment Criteria question and no page / word count provided. Can the missing text and page / word count be provided?
	R	Uploaded on 28/09/20
4	Q	General and Specific Conditions – Can Defra provide confirmation as to whether there are general or specific contract conditions for the framework and/or call-off contracts?
	R	This is in the first instance a framework and each call off contract placed by a contracting authority as named in the OJEU Notice would have its own nuances
5	Q	Can Defra describe what take precedence, the ITT Specification or the Technical Scope appended to the Framework Agreement?
	R	Do not understand the question. The Technical Scope which h bidders are being asked to price will form the initial call off from the Framework

6	Q	<p>Paragraph 22 of the ITT states that:</p> <p><i>“The solution design needs to account for these in that it will be able to expand to incorporate different spatial or temporal resolutions as required.”</i></p> <p>The ITT indicates that data of different temporal resolution may need to be accessible in order to produce backward looking noise models. Can Defra confirm that this is a requirement and if so how far back (i.e. to which year) does Defra envisage going?</p>
	R	<p>The “oldest” year envisaged at present is the first year that the model goes “live”, dependent on tenderers proposals but potentially 2020 and definitely 2021. An example of backward looking would be that in the future, we wish to look back to 2021. However, “temporal resolution” is also intended to convey that we may wish to consider other time periods in addition to annual averages, as and when data is available.</p>
7	Q	Missing?
8	Q	<p>Paragraph 32 of the ITT states that?</p> <p><i>“Support costs following launch and delivery of Sections 1-3 until the end of the Framework Term are separate from this budget and remain to be secured but are hoped to follow from April 22 for the remainder of the Initial Call-Off Contract.”</i></p> <p>Can Defra confirm that the support costs referred to in this paragraph of the ITT should be priced as part of this tender?</p>
	R	<p>Yes, categories 4, 5 and 6 of the commercial assessment are relevant. Categories 5 and 6 relate to repeat costs associated with data. Category 4 relates to all other support, hosting and running costs.</p>
9	Q	<p>Paragraph 44 of the ITT states that:</p> <p><i>“For both options, tenderers are to identify each necessary dataset in their tender documentation and discuss the suitability of each dataset including sensitivity on output and the pros and cons in the context of both delivering compliant output for Defra’s requirements and the wider aims of the Specification.”</i></p> <p>Can Defra confirm which datasets it has access to through the Ordnance Survey Public Sector Geospatial Agreement (PSGA) to support pricing?</p>
	R	<p>https://www.ordnancesurvey.co.uk/business-government/products?Licence%20or%20agreement=0%2F154%2F168%2F172 gives the product list filtered for the PSGA.</p>

10	Q	<p>Paragraph 50 of the ITT states that</p> <p><i>“Once the Initial Call-Off Contract is let, any dataset subsequently selected, not specified in the tender will be subject to agreement with Defra, within the original fixed cost”</i></p> <p>For clarity “any dataset subsequently selected” is based on the view of the successful bidder and not by Defra i.e. Defra or any other third parties will be unable to insist or select datasets which cannot be accommodated within the fixed price?</p>
	R	<p>It is expected that the datasets proposed by the successful bidder will be those used to deliver the contract. This paragraph is intended to cover the situation where a proposed dataset is unexpectedly unavailable or unviable for some reason. Any substitute must be agreed by Defra, so they can ensure the solution is not weakened in any way and within the original cost to prevent increases to the contract price. However, it is not the intention of Defra to impose alternative datasets for any other reason. It is not anticipated that any third party will be involved.</p>
11	Q	<p>Paragraph 66 of the ITT states that?</p> <p><i>“Defra will have the mandate to approve organisations for access at different levels (described at Appendix D). Once an organisation is approved, the successful tenderer will manage individual user accounts for the Framework Term”</i></p> <p>Can Defra provide an indication for the purposes of fair pricing the number of users accounts over the 4 year framework terms?</p>
	R	<p>This is very hard to predict as it depends entirely on the success of the project. NM_PC_01 sets a maximum limit, however, we would expect far less over the life of the framework. In terms of the first 2 years of the framework, we would expect no more than a few depending on when the system is launched as before then, no users will be granted access. Initially, at most we would expect <5 from Defra and a similar number from any DA taking advantage of the framework. We then anticipate targeting a few LHAs and HE to be able to demonstrate the value of the system. Again, there would be only a few users per LHA, but potentially for HE, with its structure of consultants and sub-consultants, the numbers could be higher. However, at this stage we can only guarantee the Defra users.</p>
12	Q	<p>Paragraph 86 of the ITT states that;</p> <p><i>“In this scenario, a communication plan needs developing for all users of the previous version of that dataset identifying potential implications”</i></p> <p>Can Defra confirm that a Communication Plan is required as this statement conflicts with the Technical Scope.</p>
	R	<p>We would not want the comms plan referred to in para 86 over-ridden</p>

13	Q	<p>Paragraph 93 of the ITT states that:</p> <p><i>“Output must be to a sufficient level of accuracy”</i></p> <p>Can Defra please confirm what is considered “sufficient” in terms of the accuracy of the outputs from the system and its models? Can any insight be provided as to what would comprise the stated ‘approval process’?</p>
	R	<p>Defra are looking for the tenderers to outline what a sufficient level of accuracy is for the different scenarios in which the output will be used. It is not thought necessary to define say $\pm x$ dB throughout, as the accuracy necessary for a strategic national model will be different to that required at e.g. a local level for a planning application. The CNOSSOS-EU methodology contains some detail on accuracy. The tenderers are likely to have experience in modelling in many situations and are therefore best placed to know what is sufficient and what is not.</p>
?	Q	<p>Paragraph 103 of the ITT states that:</p> <p><i>“Potential future uses of the Noise Modelling may include, but are not restricted to assessment of....”</i></p> <p>Can Defra confirm whether the requirements listed in the bullet points of Paragraph 103 are requirements which should be included or excluded as part of costing for the prototype?</p>
	R	<p>As per paragraph 112, the full functionality must be available in the prototype. The prototype demonstration must be sufficient, in Defra’s opinion, to provide a high degree of confidence that the system is capable of delivering the required future uses, given appropriate data. However, it does not need to be populated with data, beyond that commissioned by Defra to deliver the initial strategic national outputs, unless considered necessary by the tenderer to provide that convincing demonstration. The costing should contain all costs felt by the tenderer to be necessary to develop a prototype suitable for that demonstration.</p>
14	Q	<p>Paragraph 107 of the ITT states that:</p> <p><i>“To be able to update the Modelling System and use it to support policy development in the way Defra anticipates, it is expected that there will be future support costs. These need to be detailed and broken-down to a level sufficient to undergo scrutiny”</i></p> <p>This requirement indicates more detail is required that can be made available through the price card. Can Defra provide clarity as to where and how this can be provided as part of tender return?</p>
	R	<p>Categories 4, 5 and 6 of the commercial spreadsheet allow for all support costs and detail to be added as required by the tenderer. Up to 100 rows can be added for the formulas within the excel spreadsheet. The tenderer can adjust the formulas if more than 100 rows are necessary. Categories 5 and 6 relate to repeat costs associated with data. Category 4 relates to all other support, hosting and running costs.</p>

15	Q	<p>Paragraph 109 of the ITT states that:</p> <p><i>“For the Framework Term, Defra will be responsible for the costs associated with the hosting and managing the Modelling System.”</i></p> <p>Does the statement in Paragraph 109 mean that the costs of hosting and managing the modelling system should be excluded from the fixed price, and that hosting of the system is out of scope?</p>
	R	<p>No. The costs of hosting and managing the modelling system should be included in Categories 4, 5 and 6 of the commercial spreadsheet. Categories 5 and 6 relate to repeat costs associated with data. Category 4 relates to all other support, hosting and running costs. The statement was merely to inform potential tenderers that this funding is not yet guaranteed, hence the breakpoints throughout the intended contract.</p>
16	Q	<p>Paragraph 112 of the ITT states that:</p> <p><i>“The full functionality of the Modelling System must be available in the prototype, but the geographic scope is to be limited to a representative area in England”</i></p> <p>It is unclear from Paragraph 112 whether the fixed price to be provided in the tender return is for the development of the prototype system and the modelling of an area of a limited geographic scope or for the delivery of Defra’s regulatory requirements? This is also unclear from the price card too.</p>
	R	<p>The prototype is to enable demonstration that the full functionality will be available in the final modelling system, so that funds can be committed to allow the full build to proceed. The prototype does not need to be populated with data for the full geographic scope, just a representative area sufficient to provide a high degree of confidence to Defra. The final deliverable will extend that geographic scope to the whole of England and deliver the statutory and policy requirements and deliver the functionality to allow the system to meet the broader requirements. The delivery of the statutory and policy requirements will be the means by which some of the functionality is demonstrated for the full build. All costs (except data which are relevant to Categories 1 and 2) are to be included in Category 3 of the commercial spreadsheet. It is accepted that the examples for Category 3 appear to only relate to the prototype and demonstration. Category 3 should also include costs associated with taking the prototype to full build, launch and associated tasks such as training of the initial cohort of users (see paras 118 and 119).</p>

17	Q	<p>Paragraph 125 states that:</p> <p><i>“Datasets not covered by this contract (population location data, airport noise data, industry noise emission data, agglomeration boundary data) will be provided by Defra no less than 4 weeks prior to the start date of this section on the project plan provided by the successful tenderer in their tender documentation.”</i></p> <p>Would it be possible for Defra to indicate what population datasets will be provided as this may influence proposals?</p>
	R	<p>Unfortunately not. We do not yet know what population dataset will be used. For the purposes of costing, please assume it will be the same as used previously and state how changing this assumption might affect the design of the solution. The linked report from the ITT describes how the population dataset was generated previously.</p>
18	Q	<p>Paragraph 137 of the ITT states that:</p> <p><i>“The system must be designed to handle most standard formats and therefore this scenario is expected to be an exceptional one.”</i></p> <p>Can Defra define that is considers to be “standard formats”?</p>
	R	<p>See S10 of Appendix D - common Vector and Raster formats (e.g. Shp, CSV, Tiff, etc.).</p>
19	Q	<p>Paragraph 49 of the ITT states that:</p> <p>“Some data (e.g. OS) may be subject to licensing on a case by case basis, which will need to be determined at point of use and may be managed through wider agreements such as the Public Sector Geospatial Agreement (PSGA)”</p> <p>Can it be confirmed that the successful tenderer will have access to Ordnance Survey datasets through the Public Sector Geospatial Agreement (PSGA)?</p>
	R	<p>Yes, for data required to meet Defra’s requirements.</p>
20	Q	<p>Appendix D NM_PC_10 states that <i>“The database must be provisioned with an initial storage capacity of 5 Terabytes with a capability to flex to meet...”</i></p> <p>Does Defra have a feel for ballpark growth rates in storage capacity requirements or an indication of system usage which could inform potential requirements? e.g. is it up to 5Tb per year?</p>
	R	<p>Defra feels that 5Tb initially will be more than sufficient, unless advised otherwise by the tenderer’s in their response to E05. However, we have no feel for how successful the “vision” will be in terms of growth. It is hoped that the tenderers will have experience of working with the datasets from other potential users (e.g. HE, LHAs) and will be able to estimate better than Defra what their needs will be, but even then, we do not know if the organisations will take up this opportunity.</p>

21	Q	Appendix D NM_PC_10 states that <i>“Availability for the overall service (SLA) for Infrastructure components which falls under the scope of this contract 99.5%”</i> There is no mention of penalties associated with the SLA - this is quite common. Can Defra clarify whether penalties will apply to the SLA and any other requirements from the system as outlined in Appendix D?
	R	Any penalties will be defined in each individual call-off contract.
22	Q	Paragraph 14 of the ITT states that: <i>“Allow strategic scenario modelling (forward and backward looking) to be undertaken to inform policy planning and development at the strategic national (England) level;”</i> Historical data may be of different characteristics, spatial accuracy and resolution. Please can you define how many years backward and forward should be assumed for pricing and system design purposes?
	R	The “oldest” year envisaged at present is the first year that the model goes “live”, dependent on tenderers proposals but potentially 2020 and definitely 202. An example of backward looking would be that in the future, we wish to look back to 2021.
23	Q	Paragraph 14 of the ITT states that: <i>“Allow strategic scenario modelling (forward and backward looking) to be undertaken to inform policy planning and development at the strategic national (England) level;”</i> For the backward looking scenario modelling, would the successful tenderer need to rebuild the ground and acoustic model or use the most recent ground model and just rerun the acoustic modelling?
	R	Geography, e.g. location of roads, buildings, would need to be representative of the time period being considered.
24	Q	Paragraph 19 of the ITT states that: <i>“The Regulations require noise mapping and action planning for major sources of road, rail and aviation noise and noise in large urban areas (agglomerations) on a five yearly cycle. They also require Defra to produce Noise Action Plans based on the maps for road and rail noise and noise in agglomerations”</i> Can Defra provide a list of datasets that it currently uses and will share with the successful tenderer promptly after contract award? Can the formats of these dataset be provided?
	R	An example of the available data has already been provided and detail of the coverage for this data is available in the linked report from the tender. Tenderers should note that the geographic scope is wider in this tender to that previously delivered, so data provided by Defra will not be complete.

25	Q	<p>Paragraph 30 of the ITT states that:</p> <p><i>“These opportunities can be harnessed in delivering not only the statutory requirements for Round 4, but also the wider aim of developing a Modelling System suitable for scenario and policy development. The following resources are therefore provided for information, but in no way set a direction for this tender. However, where still appropriate or where thought to provide a cost-effective option, there is nothing to prevent their being drawn upon to inform the solution for this new generation of strategic Modelling System.”</i></p> <p>Can Defra confirm whether following Round 3 methodology and reusing Round 3 ground model datasets plus updating the acoustic model datasets meets the statutory requirements of Round 4?</p>
	R	<p>No. Previous rounds used CRTN as the calculation method. Statutory requirements now mean that CNOSSOS-EU must be complied with.</p>
26	Q	<p>The ITT indicates that <i>“if required for the purposes of tendering, agglomeration boundaries from Round 2 should be assumed”</i></p> <p>Can Defra confirm what is the required coverage of the optimal dataset? Do the agglomeration boundaries referred to in paragraph 43 define the optimal data coverage requirements or should tenderers assume that national coverage is required?</p>
	R	<p>The coverage for the basic Defra statutory requirement is to include all A-roads and motorways and in accordance with the END definition all Major Railways in England.</p> <p>The optimal solution is to assume the coverage is to include (along with a justification of how the infrastructure will be identified which meet the criteria):</p> <ul style="list-style-type: none"> • all roads in England which will have an effect on the calculation of the number of people exposed to $L_{DEN}>40dB$ and $L_{night}>35dB$; and • all guided transport infrastructure (not just railways) in England which will have an effect on the calculation of the number of people exposed to $L_{DEN}>40dB$ and $L_{night}>35dB$.
27	Q	<p>Paragraph 42 of the ITT indicates that the coverage for the basic Defra statutory requirement is to include all A-roads motorways and in accordance with the END definition all Major Railways in England.</p> <p>This coverage does not necessary align with the requirements of the Regulations. Can Defra confirm that for the purposes of pricing that this reflects the desired coverage. Can Defra also please confirm the statutory data coverage. Is it all A roads and major railways irrespective of agglomerations and vehicle and train passages?</p>
	R	<p>Defra can confirm that they <u>are</u> looking for a greater coverage than that associated with the Regulations, which aligns with feedback received from stakeholders. For the “basic” option, we are looking for all A-roads and motorways irrespective of agglomerations. For railways, we are looking for compliance with the Regulations (in terms of movements), irrespective of agglomerations.</p>

28	Q	Paragraph 98 of the ITT states that <i>“Sufficient buffer zones need to be employed in the Ground Model to allow all relevant sources to be included in the calculations. Additionally, where it is anticipated that the calculation area will be sub-divided for processing efficiency, sufficient overlap between adjacent sub-areas will be required to ensure no boundary steps in output data occur. The tender must explain how these two points will be addressed.”</i>
	R	Please can Defra define what is considered ‘sufficient’? ‘Sufficient’ means that the results take account of all noise sources which would change the output within the tolerance of the model proposed or that any step change would be within the tolerance of the model proposed (see response to clarification 13) such that the results are fit for purpose for the task being undertaken.
29	Q	Paragraph 98 of the ITT states that: <i>“Care must be taken to ensure that conflicts between datasets do not occur (for example roads and building occupying the same space, step changes in ground height”</i> Can Defra confirm the minimum acceptable step changes and tolerances within the ground model e.g. less than 2m, no more than 5m?
	R	It is not possible to state a single minimum value for all scenarios in all locations as what is necessary depends on the context particularly when considering the interaction with other datasets. Tenderers need to consider the effect on the output and what is trying to be achieved. Tenderers are likely to have experience in modelling in many situations and are therefore best placed to know what is sufficient (and what is not) such that the results are fit for purpose for the task being undertaken.
30	Q	Paragraph 69 of the ITT states that <i>“Where no data standard can be identified, they are to be developed and provided as part of the Modelling System delivery so data can be managed in an efficient and cost-effective manner. The Government guidance on data standards will be adhered to – useful information can be found here⁴ and here⁵. Metadata should draw on ISO15836”</i> Can Defra please clarify where it expects data standards to be developed in case they don’t exist? For example, for input, pre processed and post processed data?
	R	At all stages to ensure the data workflow is controlled throughout the process and for transparency.
31	Q	Paragraph 81 of the ITT states that <i>“a supplier of data retains responsibility for the accuracy of that data;”</i> Can Defra Please clarify what is meant by data and accuracy in this paragraph? For example: is supplier(tenderer) responsible for the accuracy of the Ordnance Survey data?

	R	The supplier in this case is the supplier of data, so for OS data, OS would be the supplier. If the successful tenderer appointed to the framework were to manipulate the data in some way (e.g. sample), the successful tenderer would be responsible for the accuracy of that process (in this example, sampling at an appropriate level across the dataset), but OS would remain responsible for the accuracy of the underlying data. By accuracy, we mean ensuring that the values are correct within stated tolerances. The intention of this paragraph is to ensure that neither Defra, nor the successful tenderer are held responsible if a third-party uploads data containing factual errors.
32	Q	Paragraph 81 of the ITT states that <i>“the successful tenderer is responsible for the QC and QA of any subsequent pre-processing of data from the point of upload to the provision of that data within the database and details of this are to be made available. These processes are to be agreed with Defra and the data owner informed;”</i> Can Defra clearly define what is meant by ‘data owner’ in this paragraph?
	R	In the context of paragraph 81, the ‘data owner’ is intended to mean the supplier of the data and, in the context of paragraph 81, these are intended to be data suppliers such as approved users of the system, e.g. HE, LHAs, etc uploading new datasets.
33	Q	Paragraph 125 of the ITT states that: <i>The database will contain all necessary data for strategic national Noise Modelling and population exposure assessment. Datasets not covered by this contract (population location data, airport noise data, industry noise emission data, agglomeration boundary data) will be provided by Defra no less than 4 weeks prior to the start date of this section on the project plan provided by the successful tenderer in their tender documentation. Logically, this date must follow the anticipated date for the prototype being approved for full development. The Supplier must use dummy data for the prototype test where necessary for these datasets. The Supplier must work with Defra to ensure the data standards for these datasets are developed in consultation and are available in sufficient time (no less than 4 weeks) to allow the data to be formatted appropriately.</i> Can Defra confirm that this data will be provided before the data design stage?
	R	No. It will be provided no less than 4 weeks before the “Full Build” stage.
34	Q	Appendix D Paragraph D.4.6 states that <i>“The Supplier must comply with the Defra Security Assurance process (process can be provided on request).”</i> Can this be provided in response to this clarification question?
	R	We have referred this to DDTS and will respond in due course
35	Q	Does the Defra Call-off Contract, that is to be priced, cover Tier 1 requirements only?
	R	The Tier 1 / Tier 2 concept from the supplier engagement event is not present in the ITT. The price is to cover the requirements in the ITT.

36	Q	Can Defra clarify that it is expecting the successful bidder to collate current source datasets in order to develop a new noise model dataset representative of the next relevant year of the Regulations (i.e. 2021).
	R	Please advise what is meant by “current source datasets”?
37	Q	Will Defra confirm that it would be considered compliant if any proposal relies on the use of noise model datasets produced from previous rounds of the Regulations in order to meet the requirements of this framework?
	R	Defra are content for data used in previous rounds to be reused, providing it is compliant with the Regulations (see para 30) and produces output fit for purpose.
38	Q	Can Defra indicate what arrangements may already be in place with stakeholders such as Network Rail and Highways Agency for the provision of datasets which have been relied on in the delivery of strategic noise maps under previous rounds of the Regulations?
	R	No formal arrangements have been put in place, however both RSSB and HE are aware of this project and have expressed a willingness to assist. RSSB will be approached ahead of NR, as they may already hold any required data. Defra will facilitate conversations between the successful tenderer and these three organisations should data be required from them, as required.
39	Q	Will the datasets relied on for all previous rounds of the strategic noise mapping including the noise model datasets be provided to the successful contractor?
	R	An example of the available data has already been provided and detail of the coverage for this data is available in the linked report from the tender. Tenderers should note that the geographic scope is wider in this tender to that previously delivered, so data provided by Defra will not be complete.
??	Q	Will the results of previous rounds of the strategic noise mapping be provided and if so in what format?
	R	Results of the road and rail strategic noise mapping are available from Round 2 (here) and Round 3 (here). It may be possible to make data available at 10m grid squares resolution, where mapped, for road and rail sources in a number of ascii files.
40	Q	Will the requirement for ‘ <i>source apportionment</i> ’ as mentioned in Paragraph 14, 43, 61, 63, 100 of the ITT apply to any backward looking or previous rounds of the strategic noise mapping under the Regulations?
	R	Source apportionment is also mentioned in para 91. It will be expected for backward looking as defined in question 6, but not for previous rounds of the strategic noise mapping.

41	Q	<p>Paragraph 76 of the ITT states that: <i>"However, the choice between the two should be able to be user-selected depending on the type of analysis being undertaken, coupled with sensible calculation times and processing effort"</i></p> <p>Can Defra indicate what it considers to be a 'sensible calculation time'?</p>
	R	<p>Defra are looking to the tenderers to provide a justification in this respect, as a balance between the cost of additional processing effort versus the calculation time. However, as a rough guide we would hope a full strategic national model to take ≤ 21 days (see NM_PC_04) and expect it to take ≤ 35 days (see NM_PC_05). For more local assessments, we would expect the calculation time to be in the same order as would be seen currently for typical assessments of that type. The tenderers are likely to have experience in modelling in many situations and are therefore best placed to know what this would be.</p>
42	Q	<p>Paragraph 94 to 96 of the ITT describe the different calculation standards which have been identified as requirements of the modelling system. Table 2 of the ITT states that the system should be sufficient to calculate down to 40 dB L_{den} and 35 dB L_{night}. It is then stated in Footnote 6 that:</p> <p><i>"It is accepted that at these levels, there may be other more dominant sources of noise (either natural or anthropogenic). Where the proposed software/calculation methodology is not validated at these low levels, implications must be discussed in the tender document. Cost implications of extending to down to these levels should also be considered."</i></p> <p>Can Defra please clarify where the cost implications for extending down to these levels should be covered in the tender return? Should the form options as part of the price card, for example?</p>
	R	<p>Where the proposed software/calculation methodology is not validated to these levels, implications should be discussed in response E03 in terms of range of validity and potential and likely impact on accuracy of results etc when going beyond the valid range to the levels proposed. The cost should be included in the price card in categories 1, 2, 5 and 6 (for data, licensing, pre-processing, etc), category 3 (for build) and category 4 (for ongoing support, hosting, etc) as for all other requirements. However, should the cost implications be considered to be high and not form value for money for Defra, then this should also be outlined in the response to E03 along with an indication of where, in the opinion of the tenderer, the lower end of the range should occur. All bids will be considered on a like-for-like basis as all will include costs and methodology for meeting the desired lower limit.</p>

43	Q	<p>Appendix D.4.2 ID NM_PC_05 states that <i>“The platform must be able to complete processing the calculations for a national model in England within 35 days”</i>.</p> <p>Can Defra confirm whether this requirement relates to the calculation of road or railway noise, or both, and whether any requirements relating to the range and quality of the calculations and outputs can be indicated e.g. levels the calculations must be calculated down to; the grid resolution; noise calculation settings; and anticipated output uncertainty / accuracy?</p>
	R	<p>Defra can confirm that this requirement relates to the calculation of road noise, as it is expected that the calculation of rail noise will be quicker than road. If this is not the case, then whichever is the most resource intensive applies. The outputs must be fit for purpose, i.e. meet legislative requirements and be no less than legislative requirements for the 25YEP.</p>
44	Q	<p>Appendix D, Strategic Modeller (Defra) requirement 6 states that <i>“As a Strategic Modeller (Defra), I must be able to calculate airport and industrial sources using CNOSSOS-EU separately from every other user, so that I can determine the noise levels in England.”</i></p> <p>Can it be confirmed whether this is a ‘must’ or ‘could’ requirement?</p>
	R	<p>For Defra, and hence the first call-off contract, this is a ‘could’ requirement. It is currently not anticipated that Defra will use this framework for industrial or airport modelling and if that changes, a separate call-off contract will be sought. For the DAs, it is a ‘must’ requirement. However, the externally generated industrial and airport modelling results must be imported and population exposure assessments undertaken as part of the full build demonstration and the functionality to carry out population exposure assessments in the future for these types of data must be available within the proposed solution.</p>
45	Q	<p>Can Defra confirm, for the avoidance of doubt, that the limits of liability for the initial work package as described in the Specification in the ITT will be at the levels of insurance as specified in the Qualification Envelope for ITT 6561 on the Bravo platform.</p> <p>Furthermore, can Defra confirm whether future work packages which may or may not be commissioned by Defra or any of the named bodies in the OJEU Notice and the ITT will carry the same level of liability as the level of insurances specified in the Qualification Envelope for ITT 6561 on the Bravo platform.</p>
	R	<p>It is not envisaged that the liability levels for future call offs would exceed the levels stated but in the event that another contracting authority as named in the OJEU Notice required higher levels then we would anticipate that the framework provider would price that appropriately</p>

46	Q	This is a new framework, with the first call off to be procured as part of this Tender. However, Schedule 3 of the Framework T&Cs reference 'General Terms' and 'Special Terms'. We are unable to locate these. It is anticipated that these Terms would include clauses such as insurance requirements and limits of liability. Can these be provided in response to this clarification?
	R	See response to Q45

Request Number 3

(1)	Q	You have provided as an example an ArcGIS DB to be used for modelling. It seems these files do not have any real noise measurements. Do you intend we to model noise using the CNOSSOS-EU and END standard methods for the noise emission and noise propagation (with no real measurements)?
	R	We intend that CNOSSOS-EU methods for noise emission are used when calculating in accordance with CNOSSOS-EU and CRTN / CRN methods for noise emission are used when calculating in accordance with CRTN / CRN.
(1a)	Q	If so, we will need detailed information regarding roads (including traffic and bedding), railway info, agglomerations, airports etc. Who will be responsible for collecting and providing such a data?
	R	The tenderer is to propose their solution for sourcing this data and will be responsible for delivering that proposal if successful. See paras 36-56 of the specification in the ITT and E01.
(1b)	Q	If we need to use a real noise data, who will be responsible for data collection?
	R	Not applicable, 1a applies. Para 48 of the ITT also applies.
(2)	Q	The DB provided does not have buildings height (probably, is named L_Z). Can we use an average values or we should have a real data.
	R	The tenderer is to propose all input data required to generate a noise model to meet Defra's requirements. The implications of any choice (including that identified in the question) are to be discussed in the response to E01 and will form part of the technical assessment.
(2b)	Q	If so, who will be responsible for data collection?
	R	The tenderer is to propose their solution for sourcing this data and will be responsible for delivering that proposal if successful.
(3)	Q	Do you have any preferences in calculation method (which met 25YEP and CNOSSOS requirements)? We would like to use both the approved and Machine Learning ones.

	R	Calculation methods are referred to in paras 23-29, 94, Table 2 and Appendix D S8. Any calculation process may be used to deliver these requirements, providing the results are legally compliant (where appropriate) and fit for purpose (with respect to policy requirements and other user requirements, e.g. planning applications, EIA, etc) such that any challenge has a high confidence of being successfully defended.
(4)	Q	Would you prefer in-premise or cloud-based (DB) solution?
	R	Appendix D S13 applies. For all other elements, the most cost-effective solution should be proposed.
(5)	Q	Could you provide a detailed Scenario example with data providers information?
	R	Examples of likely scenarios are provided within the ITT. However, they are not exhaustive as this allows the tenderer to demonstrate their understanding of the requirement. Data providers will depend on the data sources identified and proposed by the tenderer. However, examples of data used in previous rounds can be found in the linked report from the ITT for information, but do not set a preferred direction for the tender. Para 30 applies.

Request Number 4

1	Q	Para 61 – “Source apportionment should also be available.” Does this requirement apply to the previous rounds of mapping to be included in the platform as per para 60?
	R	No. Source apportionment is only expected to be available for this round onwards.
2	Q	Para 76 – what are the acceptance criteria for “sensible calculation times and processing effort”?
	R	Defra are looking to the tenderers to provide a justification in this respect, as a balance between the cost of additional processing effort versus the calculation time. However, as a rough guide we would hope a full strategic national model to take ≤ 21 days (see NM_PC_04) and expect it to take ≤ 35 days (see NM_PC_05). For more local assessments, we would expect the calculation time to be in the same order as would be seen currently for typical assessments of that type. The tenderers are likely to have experience in modelling in many situations and are therefore best placed to know what this would be.
3	Q	Para 121 - can Defra provide any estimates of the number and nature of HelpDesk requests envisaged?

	R	This would be dependent on the level of uptake from other users. The more detailed the online user notes and more sophisticated the ability to search those notes, the less queries are expected. Defra would not expect to raise many requests themselves if the initial training offer is adequate.
4	Q	In the “Aims and Objectives” it is stated that the aim is for a “new environmental noise model”, please confirm if revision and recalculation of previous R2 or R3 model datasets comply with this aim?
	R	It is not expected that R2 or R3 will be recalculated.
5	Q	Timeline on page 43 runs from Jan 2020 to Dec 2023, please confirm relevant timeline
	R	The timeline is indicative as a guide
6	Q	Timeline indicates action plans are to be prepared by July 2023, in line with the Regulations. Is it envisaged that Defra will amend the Regulations to align the timetable with EU Regulation 2019/1010?
	R	Delivery of action plans are not part of this ITT.
7	Q	5.1 Stage 1 to deliver by mid-Mar 2020, please confirm required completion date?
	R	Please advise which document you are accessing
8	Q	5.2 prototype build stage April 2020 to mid-March 2021, please confirm required dates?
	R	Table 1 outlines the timetable and the “Prototype Demonstration and Report” is estimated for October 2021. However, Defra is open to alternative suggestions for delivery of this milestone – para 32 applies.
9	Q	5.3 dates from April 2021 to December 2022, please confirm all required dates, including delivery of data for 25YEP and PHOF
	R	Table 1 outlines the timetable and para 32 applies. Delivery of statutory and policy requirements, results and report are required by June 2022.
10	Q	“if delivered as a SaaS (Software as a Service), need to ensure the market can adapt if need be.” What does this mean?
	R	SaaS is not part of the spec which document are you accessing
11	Q	8.2 what are the acceptance criteria for “sensible calculation times and processing effort”?
	R	There is no 8.2 in the spec please advise which document you are accessing. Defra are looking to the tenderers to provide a justification in this respect, as a balance between the cost of additional processing effort versus the calculation time. However, as a rough guide we would hope a full strategic national model to take ≤

		21 days (see NM_PC_04) and expect it to take ≤ 35 days (see NM_PC_05). For more local assessments, we would expect the calculation time to be in the same order as would be seen currently for typical assessments of that type. The tenderers are likely to have experience in modelling in many situations and are therefore best placed to know what this would be.
12	Q	8.3 input data scenario for Tier 1 is to be 2021, what is the maximum allowable age of any input dataset which may be used to build this first Tier 1 model?
	R	The Tier 1 / Tier 2 concept from the supplier engagement event is not present in the ITT.
13	Q	8.4 what are the acceptance criteria for “sufficient level of accuracy”?
	R	Defra are looking for the tenderers to outline what a sufficient level of accuracy is for the different scenarios in which the output will be used. It is not thought necessary to define say $\pm x$ dB throughout, as the accuracy necessary for a strategic national model will be different to that required at e.g. a local level for a planning application. The CNOSSOS-EU methodology contains some detail on accuracy. The tenderers are likely to have experience in modelling in many situations and are therefore best placed to know what is sufficient and what is not.
14	Q	8.4 The list of obligatory elements includes 2.3 which is all roads and rail systems where they have a noise impact, which indicates their inclusion is mandatory. However, the Commercial Scoring Systems asks for costs to be split between “Statutory” and “Optimal” data which appears to be in conflict with the Optimal coverage being mandatory. Please clarify the coverage which is obligatory?
	R	There is no 8.4 or 2.3 in the spec. Paras 36-56 apply.
15	Q	8.7 Requires third octave data model outputs, however the methods required do not generate third octave band outputs, please confirm the required outputs?
	R	Table 2 applies.
16	Q	11 Please confirm SRCE report delivery date?
	R	There is no SRCE in the ITT
17	Q	We note that the pricing evaluation takes into account two specific options, with option 2 being a “fall back” option if the optimal option is unaffordable. We would welcome Defra’s clarification on how the overall pricing evaluation links to these two options without double-counting costs?
	R	This is covered in the information tab
18	Q	Can Defra clarify that Ordnance Survey geospatial data required for this service will be made available to the Supplier at no licensing cost under the terms of the Public Sector Geospatial Agreement?

	R	https://www.ordnancesurvey.co.uk/business-government/products?Licence%20or%20agreement=0%2F154%2F168%2F172 gives the product list filtered for the PSGA to which Defra has access. The successful tenderer will have access to Ordnance Survey datasets through the PSGA for data required to meet Defra's requirements.
19	Q	Can Defra clarify if they will arrange access to data held by Highways England, Network Rail, EA, NE & RSSB at no licensing cost to the Supplier? If not, and within the limited time-line for tender responses, how should bidders account for these costs?
	R	No formal arrangements have been put in place, however both RSSB and HE are aware of this project and have expressed a willingness to assist. RSSB will be approached ahead of NR, as they may already hold any required data. Defra will facilitate conversations between the successful tenderer and these three organisations should data be required from them, as required, and Defra will cover any licensing costs for Defra's own requirements. EA and NE are part of the Defra family and data should be available at no cost. Once the relevant datasets are identified, Defra will approach the relevant areas to confirm and will cover any necessary licensing cost.
20	Q	E04 states " <i>Defra will be responsible for the costs associated with hosting and managing the modelling system (including the database)</i> ". Does this imply Defra have and will stipulate a platform on which the service will operate or is it up to the supplier to recommend (and cost) a suitable platform?
	R	This means that Defra will not pass these costs onto other public bodies during this framework. The supplier is to recommend and cost a suitable platform, and cost-effectiveness will be addressed as part of the commercial assessment.
21	Q	E04 - Please also define how you define " <i>managing the modelling system (including database)</i> " – does this imply a Defra team will undertake the relevant service management operations? – and if, so how does this relate to the service management and security questions in Appendix D?
	R	The supplier is to cost and undertake all aspects of delivering, hosting and supporting the system throughout the life of the framework.
22	Q	E05 state that "There will be an additional column for comments and this must be completed where a requirement is annotated as "not feasible". There is no additional column for comments in the D4 Response Template. Can Defra supply a revised template?
	R	Please complete the template as supplied
23	Q	Please confirm that "page" and "side" response length limits are equivalent
	R	Yes

24	Q	We believe that the answers to these questions will fundamentally impact bidder proposals. Consequently, will Defra consider an extension to the deadline to allow bidders to digest answers provided and shape their proposals accordingly
	R	There will be no extensions

Further Clarification Documentation detailed in Tender response and to be referred to in Contract



Assurance Process
v0.4 (002).pdf

Assurance Process



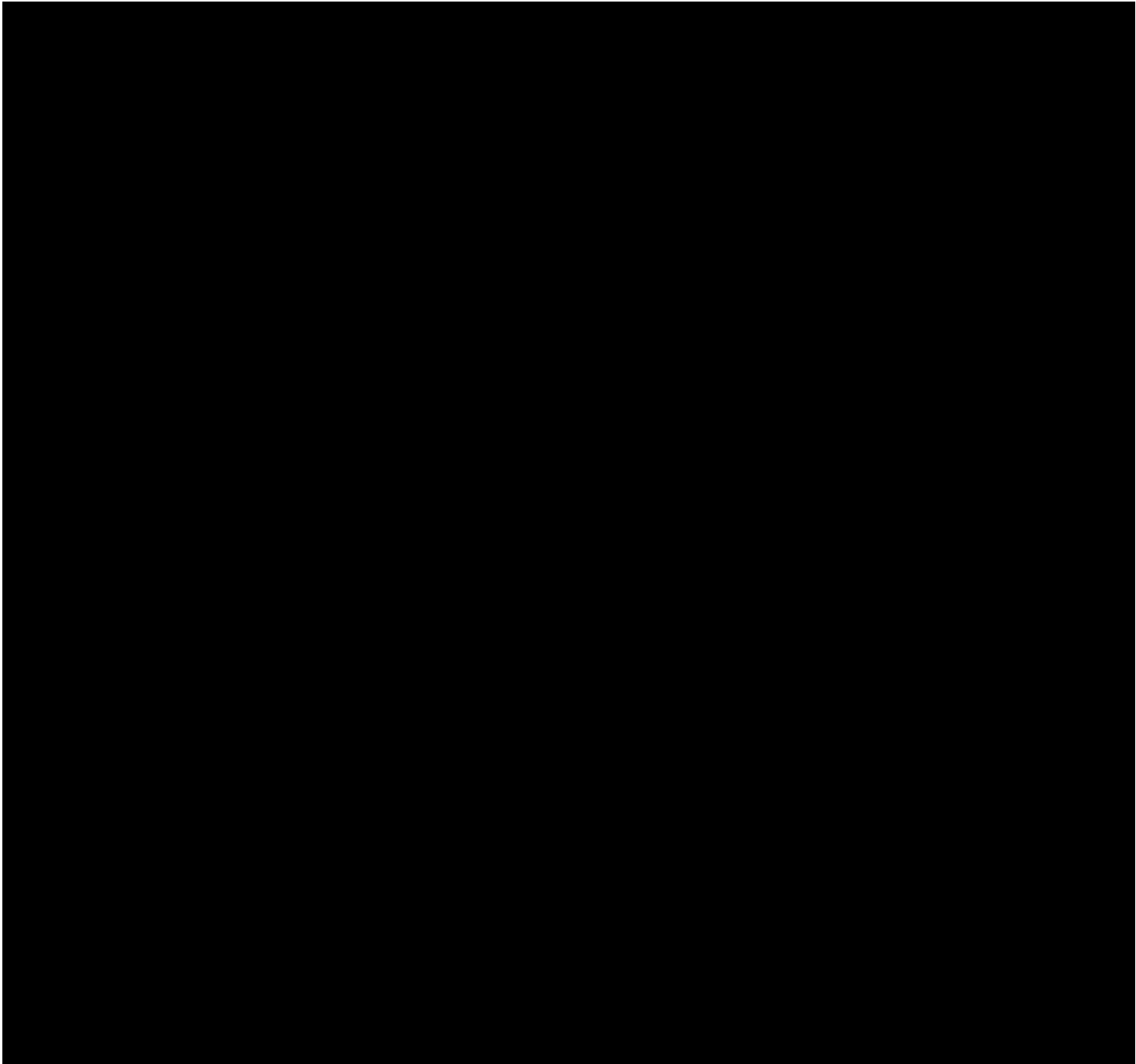
Messages
Noise.xlsx

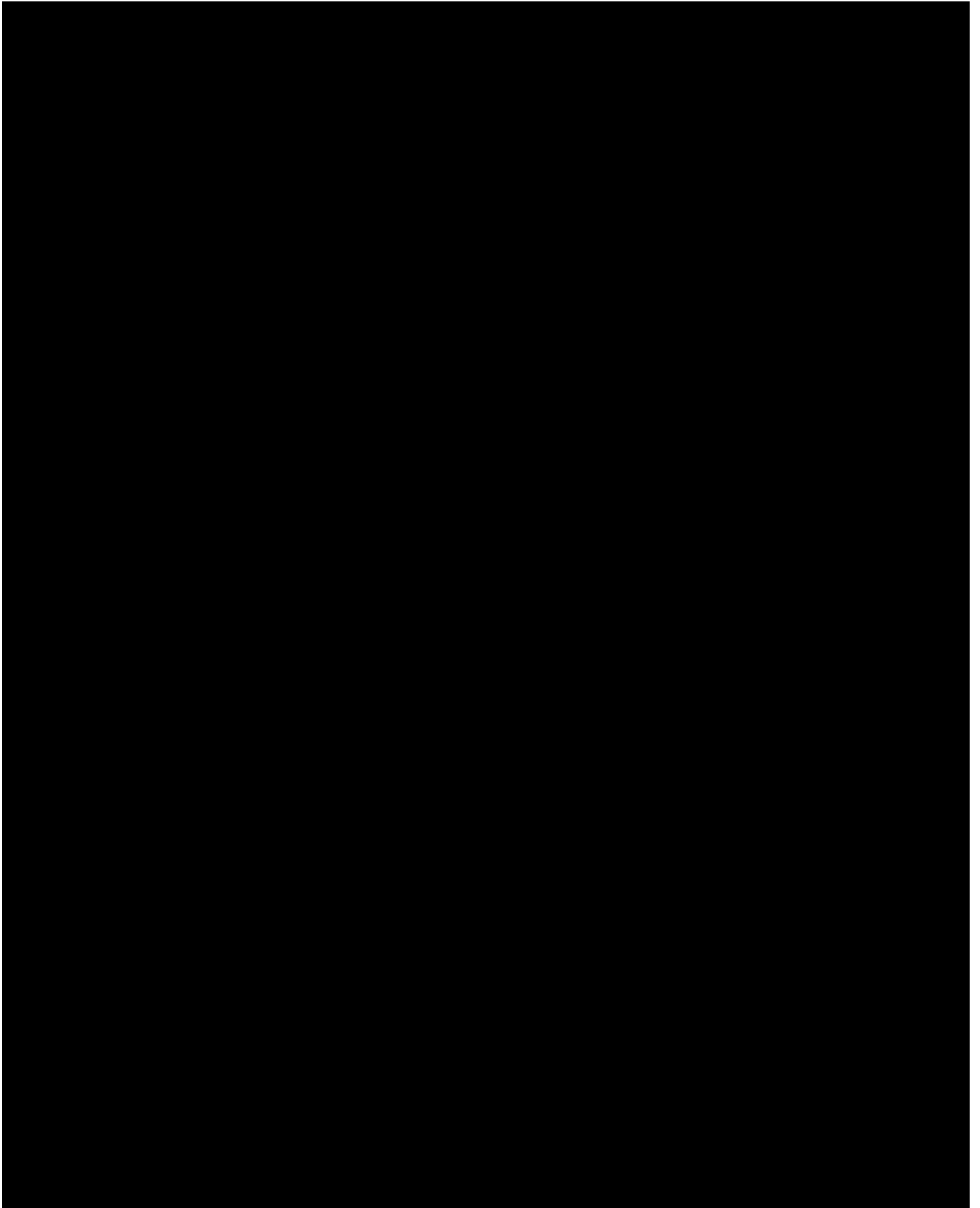
Messages Sent and Received

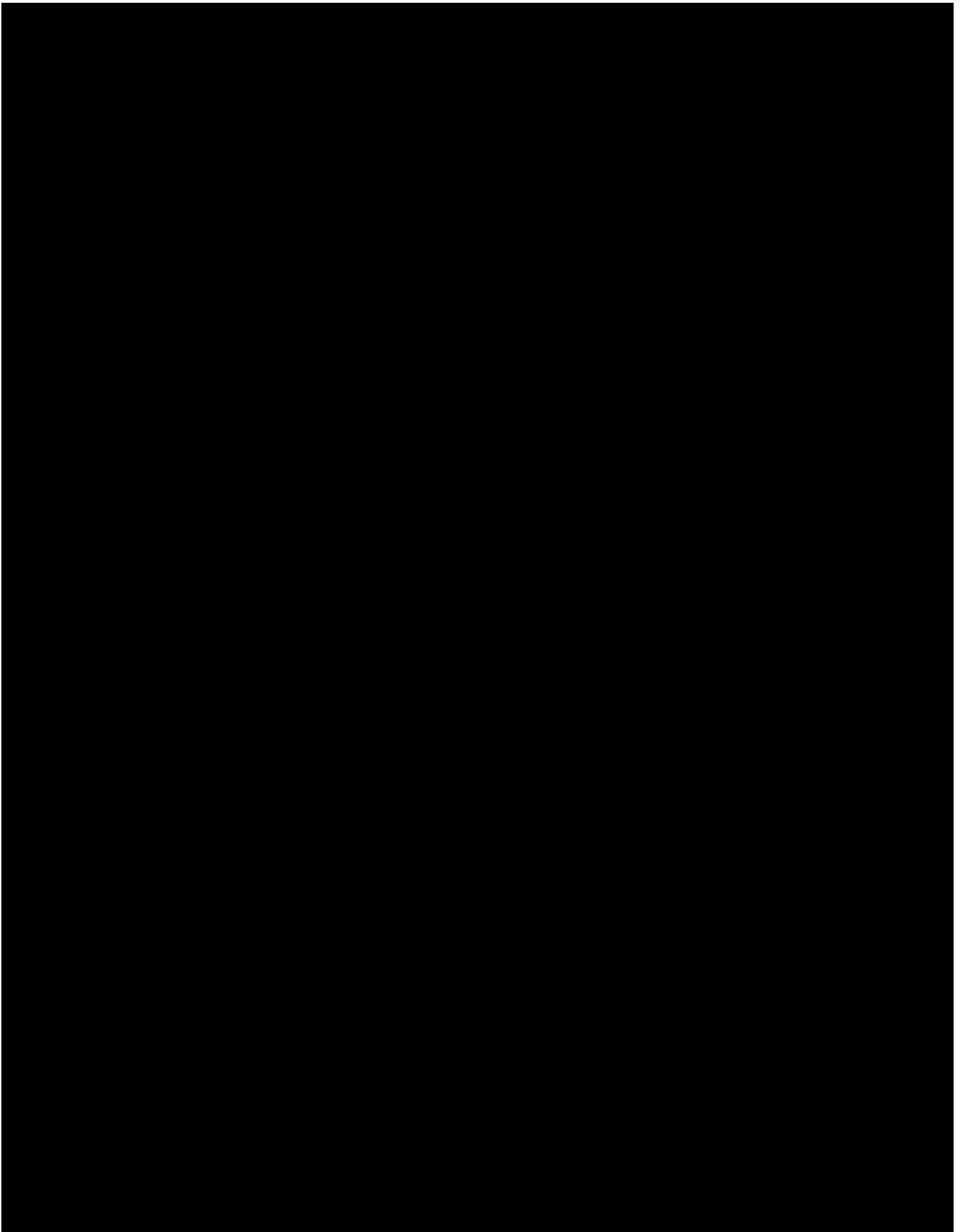


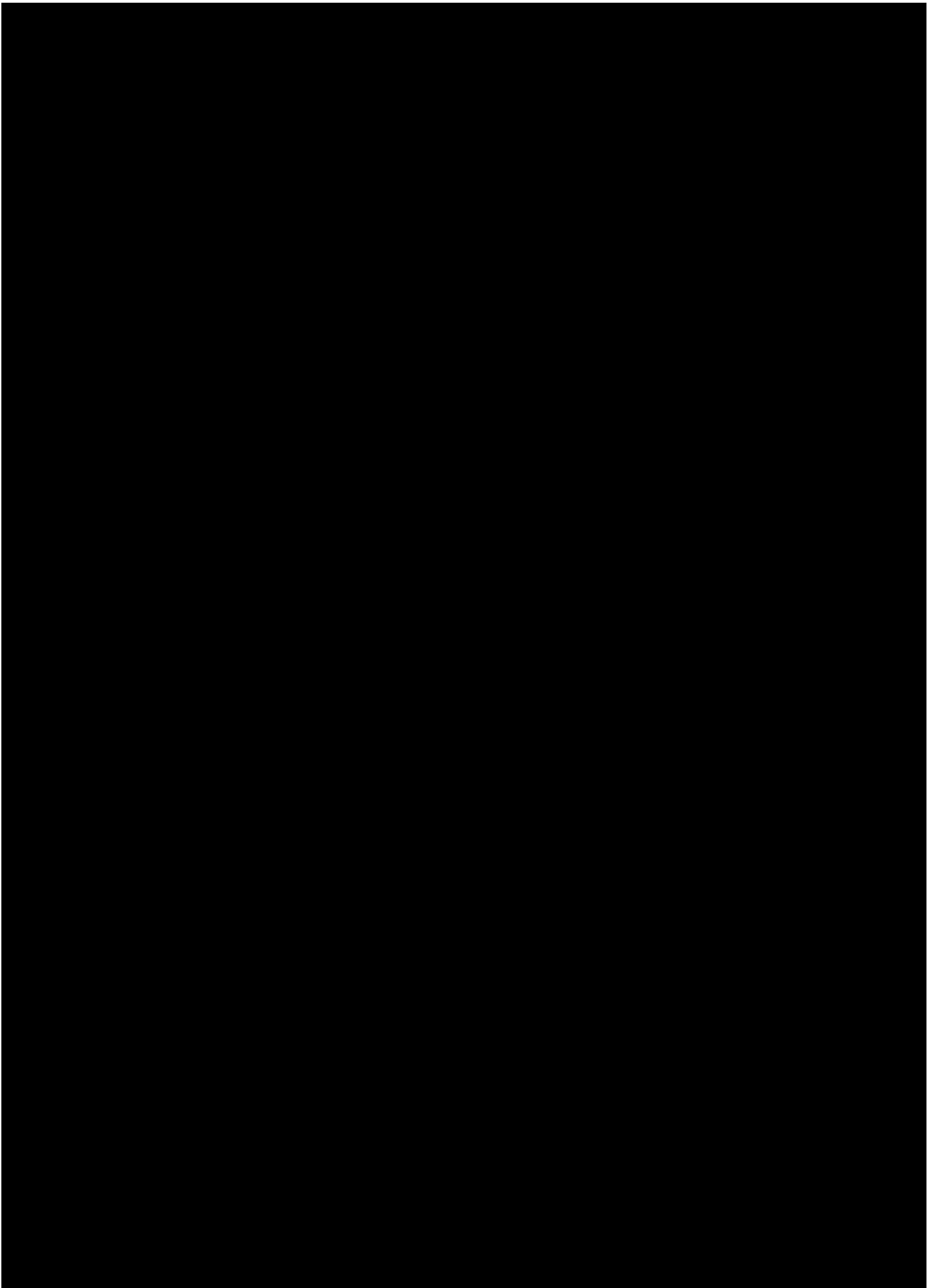
Q&A.pdf

Q&A

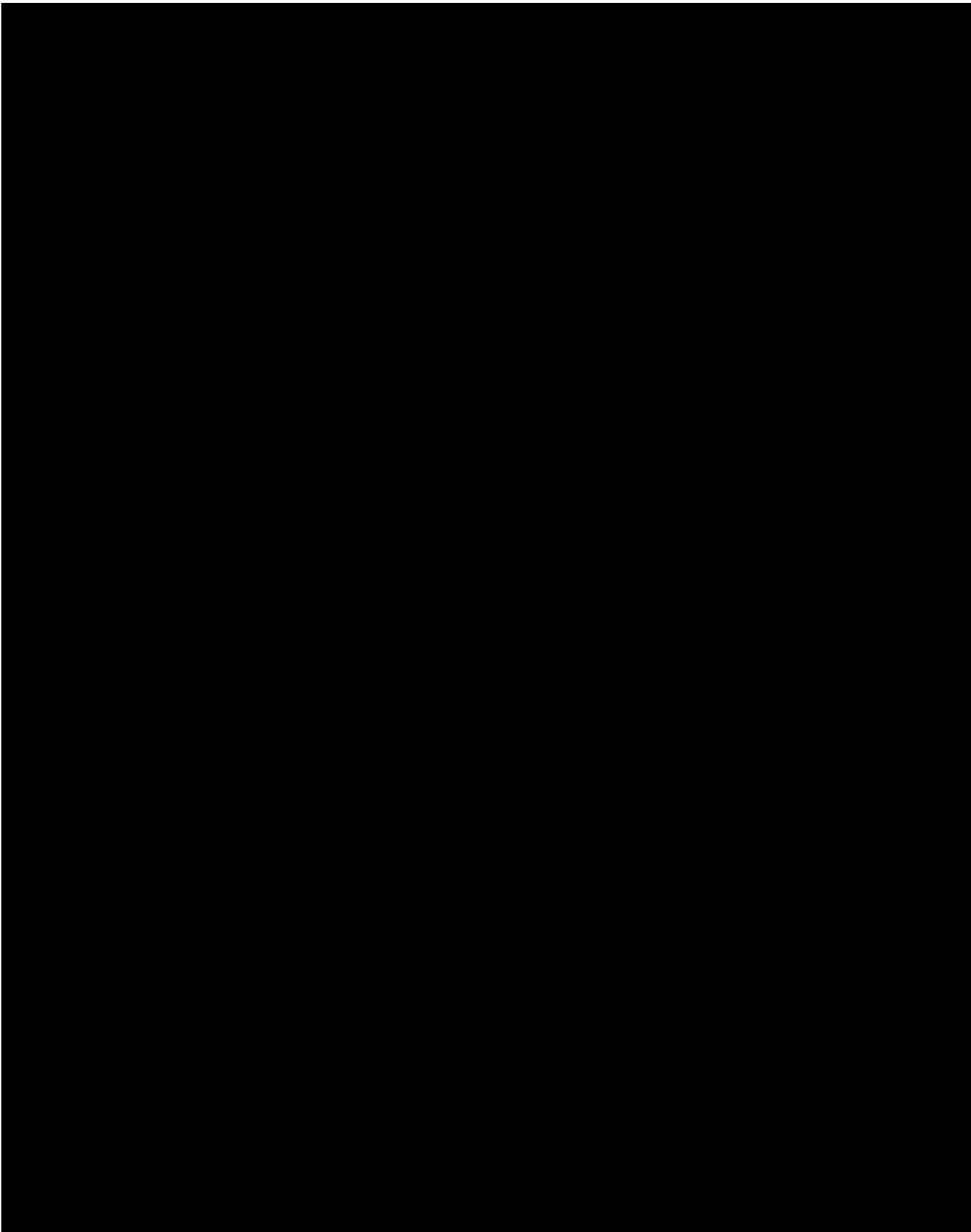


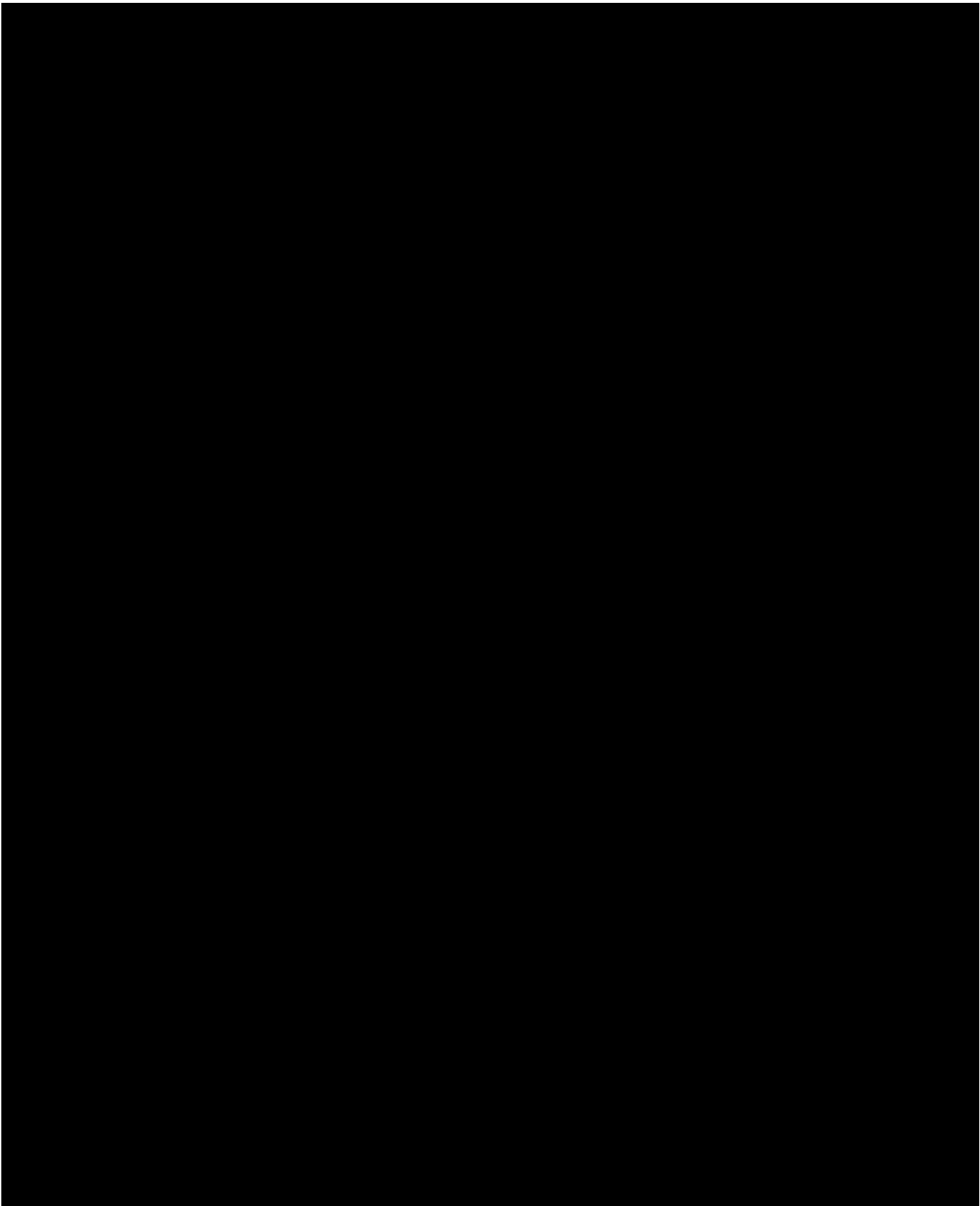














ID	Dataset Name	Model	Description	Publisher Organisation	Commercial Assumption (1) Open Data or (2) Assumed to be fully free of charge to the bidder or (3) Under commercial license	Recurring licensing costs that Defra will need account for separately
1	LIDAR Composite DTM 2019 - 2m resolution	Ground	Terrain	Environment Agency	1 Open Government Licence	N/A
2	LIDAR Composite DSM 2017 - 2m resolution	Ground	Terrain	Environment Agency	1 Open Government Licence	N/A
3	OS Terrain 5	Ground	Terrain	Ordnance Survey	3	N/A
4	OS Mastermap Topography Layer	Ground	Buildings	Ordnance Survey	2 Free under Defra PSGA	Yes
5	OS Mastermap Building Heights Attributes	Ground	Buildings	Ordnance Survey	2 Free under Defra PSGA	Yes
6	OS MasterMap Topography Layer	Ground	Bridges	Ordnance Survey	2 Free under Defra PSGA	Yes
7	Land Cover Map 2019	Ground	Ground Cover	UK Centre for Ecology and Hydrology	3	N/A
8	OS Addressbase Plus	Ground	Address	Ordnance Survey	2 Free under Defra PSGA	Yes
9	Areas of Outstanding Natural Beauty (England)	Ground	Land Use	Natural England	1 Open Government Licence	N/A
10	Sites of Special Scientific Interest (England)	Ground	Land Use	Natural England	1 Open Government Licence	N/A
11	Priority Habitat Inventory (England)	Ground	Land Use	Natural England	1 Open Government Licence	N/A
12	Noise Barriers	Acoustic	Noise Barriers	DEFRA Round 3 Stakeholder data obtained through Data Standards	2	N/A – obtained from stakeholders via data standards
13	Office for National Statistics population data	Acoustic	Population	ONS	1	N/A
14	OS MasterMap Highways Network	Ground	Roads	Ordnance Survey	2 Free under Defra PSGA	Yes
15	Road Traffic Statistics	Acoustic	Roads	Department for Transport	1	N/A