

**DPS FRAMEWORK SCHEDULE 4: LETTER OF APPOINTMENT AND CONTRACT TERMS****Part 1: Letter of Appointment**Dear **Letter of Appointment**

This letter of Appointment dated Friday, 1<sup>st</sup> October 2021 is issued in accordance with the provisions of the DPS Agreement (RM6018) between CCS and the Supplier.

Capitalised terms and expressions used in this letter have the same meanings as in the Contract Terms unless the context otherwise requires.

Order Number:	PS21086 - UK Research and Development (R&D) Workforce Survey 2021/22
From:	<b>The Department for Business, Energy &amp; Industrial Strategy (BEIS)</b> of 1 Victoria Street, London, SW1H 0ET ("Customer")
To:	<b>Ipsos MORI</b> of 3 Thomas More Square, London, United Kingdom, E1W 1YW ("Supplier")

Effective Date:	Wednesday, 6 <sup>th</sup> October 2021
Expiry Date:	Friday, 29 <sup>th</sup> July 2022

Services required:	Set out in Section 2, Part B (Specification) of the DPS Agreement and refined by: the Customer's Project Specification attached at Annex A and the Supplier's Proposal attached at Annex B.
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Contract Charges (including any applicable discount(s), but excluding VAT):	£145,147.00 excluding VAT.
Insurance Requirements	Additional public liability insurance to cover all risks in the performance of the Contract, with a minimum limit of £5 million for each individual claim.  Additional employers' liability insurance with a minimum limit of £5 indemnity  Additional professional indemnity insurance adequate to cover all risks in the performance of the Contract with a minimum limit of indemnity of £1 million for each individual claim.
Liability Requirements	<b>Suppliers' limitation of Liability</b> (Clause 18.2 of the Contract Terms);

Customer billing address for invoicing:	All invoices should be sent to should be sent to finance@services.ukpbs.co.uk or Billingham (UKPBS, Queensway House, West Precinct, Billingham, TS23 2NF)
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GDPR	As per Contract Terms Schedule 7 (Processing, Personal Data and Data Subjects.
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**FORMATION OF CONTRACT**

**BY SIGNING AND RETURNING THIS LETTER OF APPOINTMENT** (which may be done by electronic means) the Supplier agrees to enter a Contract with the Customer to provide the Services in accordance with the terms of this letter and the Contract Terms.

The Parties hereby acknowledge and agree that they have read this letter and the Contract Terms.

The Parties hereby acknowledge and agree that this Contract shall be formed when the Customer acknowledges (which may be done by electronic means) the receipt of the signed copy of this letter from the Supplier within two (2) Working Days from such receipt


**For and on behalf of the Supplier:**

**For and on behalf of the Customer:**

Name and Title:



Name and Title:



Signature:



Signature:



Date:



Date:



## ANNEX A

## Customer Project Specification

To be determined by the Customer at Call for Competition stage

## Background

The Department for Business, Energy and Industrial Strategy (BEIS) is building a stronger, greener future by fighting coronavirus, tackling climate change, unleashing innovation and making the UK a great place to work and do business.

More about BEIS's policy objectives and remit is available online<sup>1</sup>.

Boosting innovation is one of the Government's priorities and forms one of the pillars for Build Back Better: Plan for Growth<sup>2</sup>. Innovation is a key driver of economic growth and improvements to living standards, through the development of new ideas, products and processes and their adoption and diffusion across the economy. The UK Government is increasing its investment in Research & Development (R&D) and will use it to boost R&D strengths across the UK, as one of the key tools to increase innovation. In 2021/22, government is investing £14.6 billion in research and innovation grants and facilities. This investment will back the priorities set out in the UK Government's Research and Development Roadmap<sup>3</sup> and drive progress towards the target for total UK investment in R&D (public and private) to reach 2.4% of GDP by 2027. As well as this, industry, universities and other research organisations fund R&D, and in total the UK spent £36 billion on R&D in 2018 (the latest available data).

**This project will be the first survey taking in all sectors of the wider R&D workforce run by the UK government.** At present, decision makers are reliant on a patchwork of surveys and data sources for different R&D sectors (and even where R&D worker data exists it does not answer a full range of important questions and data linking is not built into its design).

The OECD's Frascati Manual<sup>4</sup> sets out an internationally recognised methodology for measuring R&D, and includes their definition of personnel: *"highly trained scientists, researchers, engineers (researchers), technicians with high levels of technical experience and training, and supporting staff who contribute directly to carrying out R&D projects and activities"*. In the UK people employed in R&D tasks increased to 463,000 FTEs in 2018 (250,000 in business). This represents 0.8 per cent of total UK employment and breaks down as:

- Researchers: tend to have the highest qualifications and are most numerous (66%)
- Technicians (22%)
- Support staff (12%)

Overall trends in staff (from the publicly available ONS BERD<sup>5</sup> data) show that the total number of R&D personnel has been rapidly increasing - from 2012 R&D jobs have been growing in the UK and (as a proportion of total employment) and this trend is expected to continue. **The R&D workforce increased fastest in the private sector.** From 2009 to 2018

<sup>1</sup> <https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy>

<sup>2</sup> <https://www.gov.uk/government/publications/build-back-better-our-plan-for-growth>

<sup>3</sup> <https://www.gov.uk/government/publications/uk-research-and-development-roadmap>

<sup>4</sup> <https://www.oecd.org/sti/inno/frascati-manual.htm>

<sup>5</sup>

<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/businessenterprise-research-and-development/previous-releases>

the total number of researchers, technicians and support staff have increased by 67% in industry. However, **we still have many data gaps at R&D worker level in industry, which this survey aims to address.**

Although we want to identify the workforce as per this Frascati definition in this survey, this is in fact narrower than the full definition we will use in this survey as we also seek to learn about all industry employees who are responsible for product and process innovation and who introduce innovative technologies to their firm. This is not the same as all employees who innovate as per the UK Innovation Survey (UKIS<sup>6</sup>), but is a group in industry who might not identify as R&D workers but who are crucial 'new to market' or 'new to firm' innovation which are concepts very relevant to R&D. See later sections in this document for further detail on the survey population definitions

For researchers working in universities, workforce data is routinely collected by the Higher Education Statistics Authority (HESA<sup>7</sup>), as well as by R&D funders such as UK Research and Innovation (UKRI) for the subset of researchers receiving direct UKRI grant funding. However, these data sources do not address our evidence gaps and do not allow for cross-sectoral comparisons. This UK R&D Workforce Survey aims to gather more robust data, asking new questions, building in data linking by design, and by covering a wider range of R&D occupations and sectors. This will help to inform government's policy efforts to make the UK the most exciting place in the world for top research and innovation talent.

An important feature of this survey is that it will go beyond the Frascati definition of R&D workforce, and will instead **use Standard Occupational Classification (SOC) codes to reach the wider workforce needed for UK R&D.** There is no list of SOC codes that are universally accepted as covering all R&D workforce. The scoping phase will confirm the occupations to be used for this survey, but it is likely to be similar to those being used by the Warwick Institute for Employment Research<sup>8</sup> in recent work for BEIS (i.e., the SOC codes listed in Section 2). Additionally, the Royal Society is currently consulting on a detailed list of 6-digit SOC codes that cover all STEM workforce. Full details of both research reports will be made available to the supplier. **The supplier will be required to work closely with the UK R&D Workforce Survey Steering Group to develop a commonly agreed set of SOC codes that capture the R&D workforce as fully as possible.** BEIS is currently engaging key stakeholders for this survey and will be setting up a Steering Group in due course, which will include UKRI, national academies and industry bodies.

This survey will be **the first UK R&D Workforce Survey to target all sectors of R&D**, with potential to become a repeat annual survey with a longitudinal/repeat sub-sample (note: this ITT covers the first wave only). This survey will be used for future analysis of R&D and business innovation policies and will also be a key vehicle to measure the outcomes of the government's forthcoming R&D People and Culture Strategy.

## Aims & Objectives

This dataset will help to inform a wide range of R&D policy decisions including how to meet the 2.4% R&D target and how to increase business innovation. Currently, the available workforce data is partial and focuses on university and UKRI researchers only, with missing data on industry, third sector and government researchers as well as non-researcher R&D roles (e.g. research managers). This survey will cover all R&D sectors and funders. This

<sup>6</sup> <https://data.gov.uk/dataset/29e719be-534d-4a83-8919-1014b26e89f9/uk-innovation-survey>

<sup>7</sup> <https://www.hesa.ac.uk/data-and-analysis>

<sup>8</sup> <https://warwick.ac.uk/fac/soc/ier/>



will be the first survey to get comparable data from researchers, technicians, R&D managers and engineers who are not researchers but whose roles are essential for R&D and new-to-market and new-to-firm innovation.

### **UK R&D Workforce Survey objectives**

- 1) To build a robust dataset for current and future research on:
  - R&D workforce characteristics, in particular those working in industry sectors
  - Differences and similarities in the careers and skills of people with different characteristics and working in different roles and sectors
  - UK R&D workforce career paths, sector mobility and talent attraction/retention
  - R&D culture, diversity and inclusion
  - Evaluation data on the outcomes from government policy and funding (eg using this survey data to estimate policy impacts by allowing counterfactual groups to be tracked)
  
- 2) To improve strategic analysis of current and future R&D policies helping to:
  - Maximise value from BEIS and R&D funder schemes to develop talent and the skills needed most.
  - Inform how best to attract global talent and retain domestic talent
  - Improve the R&D workforce conditions to attract and retain R&D workers
  - Promote diverse and inclusive cultures
  - Minimise the obstacles in creating a mobile and porous R&D workforce
  - Inform the implementation and specific policy design under the People and Culture Strategy and the Innovation Strategy

This dataset will be one of the key evidence sources for a range of policy decision impacting the R&D workforce, including talent policies and schemes, and importantly will help us to estimate both the size of the R&D policy issue at hand and track what works, to improve the allocation of resources.

- 3) To improve evaluation of R&D policies through:
  - Improve evaluation of R&D policies
  - As the first representative UK R&D workforce survey, this will enable potential repeat annual surveys plus a longitudinal/repeat sub-sample. This would track the UK R&D workforce over time, and use this data to compare each R&D sectors, job roles, groups of the workforce , etc.
  - This will increase the value of existing data assets. BEIS will aim to match the survey data with existing datasets where possible (e.g., we have started scoping and this looks possible for funder data, HESA data, and the Longitudinal Education Outcomes data). Contractors should note that any data matching will be conducted by BEIS analysts.
  - BEIS will use its unique position to open up the data asset for academics and analysts to maximise its usage and impact.

This survey will also be a key vehicle to measure the outcomes of the government's forthcoming R&D People and Culture Strategy.

**Research questions**

Final questions will have to be agreed with our key stakeholders through a prioritisation exercise. Therefore, bidders should not be discouraged by the length of the list below. Our aim is to limit the questionnaire to 20 minutes.

Research questions for this project:

- 1) What are the characteristics of R&D workforce in the UK?
- 2) What are skills of the UK R&D workforce?
- 3) What incentives matter the most in pursuing a career in UK R&D?
- 4) How mobile is the UK R&D Workforce? Both in terms of sectors and disciplines.
- 5) What obstacles R&D workers face in their careers for a) promotions b) R&D impacts and c) cross-sectoral mobility?
- 6) How can the UK attract global talent and what procedural obstacles (e.g., visa processes) need to be addressed?
- 7) What is the working culture different R&D workers experience and how can it be improved?
- 8) How diverse is the R&D workforce (broken down in many ways) and how can it be improved?
- 9) How prevalent is bullying and harassment in R&D careers?
- 10) Are there any significant differences in experiences, views and perceptions of working in R&D across different groups (e.g., R&D worker types, people with protected characteristics, etc.)?

This survey questions will be **tailored depending on the type of R&D worker** and filtered based on early answers to questions. Overall, BEIS is interested in cross-sector workforce tracking data on:

- **R&D workforce characteristics (up to 10 questions)**
  - Including (SOC) occupations, research discipline, career stage, nationality, location/region, industry sector/technology category, working hours, salary and personal characteristics protected under the Public Sector Equality Duty (age will need collecting via date of birth for data linking purposes).
- **R&D skills, qualifications and training needs to identify strengths and skills gaps (up to 4 questions)**
  - Including both qualifications, technical skills and more transferable skills (e.g., leadership skills).
- **R&D career enabler and barriers (up to 8 questions)**
  - Job satisfaction, job security
  - Cross-sectoral working experience, and any potential blockers to understand how cross-sector mobility could be increased.
  - Whether the person has been funded by a talent scheme/ fellowship in their career (if so, which funder)
- **Attracting/retaining talent and organisational culture (up to 6 questions)**
  - Career plans
  - Perceptions about culture e.g., experiences of bullying and harassment, diversity and inclusion
  - Views on incentives in UK R&D careers and ways government could help
  - Reasons for applying to current position
  - Reasons for being attracted/retained to work in UK R&D
- **R&D and innovation outputs (up to 2 questions)**

- This will be high level to understand the type of innovation outputs produced by different workers and/or their teams in recent years (eg new knowledge, I.P, new or better products, processes, technologies etc)

However, we are aware that we may not be able to obtain all the above data for each person. The supplier is expected to work with BEIS and the UK R&D Workforce Steering group to prioritise research questions and data needs. We assume the survey will need to be kept to around 20 minutes, but please advise on the optimal length of this online survey (trading off response rates with depth of data).

#### **Relevant data sources that will influence this survey design**

Regular surveys:

- Higher Education Statistics Agency (HESA)<sup>9</sup> – collect data from universities, colleges, and other HE providers annually about their student population and their research staff. The most relevant data to link with this survey will be ‘staff record’ data and ‘graduate outcomes’ data.
- Culture, Employment and Development in Academic Research Survey (CEDARS)<sup>10</sup> – a survey of academic and research staff run by Vitae which asks various relevant questions concerning culture, employment and development in academic research
- ResearchFish<sup>11</sup> – research outcomes data across a wide range of R&I output and outcome types submitted by UKRI awardees and researchers in receipt of an award from a different funders that also requires Researchfish reporting.
- Business Enterprise Research and Development (BERD)<sup>12</sup> – an annual ONS business level survey focused on spending and numbers employed on research and development in the UK, broken down by product sector and civil and defence work.
- Postgraduate Research Experience Survey (PRES)<sup>13</sup> – an annual survey conducted by Advance HE of post-graduate students focusing on their experiences of supervision, resources, research community, progress and assessment, skills and development and wellbeing.
- UK Innovation Survey (UKIS)<sup>14</sup> – a BEIS and ONS business level survey conducted every 2 years and a major data source on the nature and functioning of the innovation system. The UK Innovation Survey is largely consistent with a wider Community Innovation Survey (CIS) covering EU countries.
- COVID-19 Vitae Survey of researchers<sup>15</sup> – an ad hoc survey conducted between 26<sup>th</sup> May and 9<sup>th</sup> June 2020 on initial impacts of COVID-19. Some questions may be reused/adapted to the R&D Workforce Survey. This survey achieved responses from 10,000 researchers (mainly from academia) using online campaign by Vitae, BEIS and UKRI. The contractor will be expected to consider how Vitae’s sampling strategy can be used/adapted in addition to other ways of reaching a wider sample of the UK R&D workforce such as how best to pitch this survey to those working on business sectors

<sup>9</sup> <https://www.hesa.ac.uk/data-and-analysis>

<sup>10</sup> <https://www.vitae.ac.uk/impact-and-evaluation/cedars/culture-employment-and-development-in-academic-research-survey>

<sup>11</sup> <https://researchfish.com/>

<sup>12</sup>

<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/businessenterprise-research-and-development/2019>

<sup>13</sup> <https://www.advance-he.ac.uk/reports-publications-and-resources/postgraduate-research-experience-survey-pres>

<sup>14</sup> <https://www.ons.gov.uk/surveys/informationforbusinesses/businesssurveys/ukinnovationsurvey>

<sup>15</sup> <https://www.vitae.ac.uk/impact-and-evaluation/impact-of-covid-19-on-researchers-and-the-uk-research-base>



**Project delivery timings**

Contract awarded	October 2021
Project initiation meeting	October 2021
Sampling strategy agreed with BEIS	October 2021
Questionnaire drafted to circulate with stakeholders	late Oct/early Nov 21
Cognitive testing and functionality testing (pilot)	mid Nov 21
Fieldwork	Nov-Feb 2021/22
Survey analysis and dataset produced	March 2022
Draft report submitted to BEIS	April 2022
Report findings presentation to stakeholders	Early May 2022
Report signed off by BEIS and all final outputs (raw data, data tables and syntax) submitted	31 May 2022

**Suggested Methodology**

The methodology for this project is an **online UK representative survey of R&D Workforce** as specified in Section 2. The survey will be based on Likert, single and multiple-choice questions with minimal use of open-ended questions due to survey length constraints.. As such, collected data will require primarily quantitative analysis.

We expect the analysis to include:

- Descriptive analysis of each question
- Comparative analysis of survey answers for significant differences between key groups (e.g., industry, academia, gender, ethnicity, seniority, etc.) for each question
- Correlation and regression analysis where this can insight into associations or drivers

Please outline how you will analysis and report on the dataset you produce. It should answer all key questions specified in Section 2 of this specification.

**Sampling requirements and challenges**

There is no one sampling frame for the UK R&D workforce, so bidders are expected to suggest a creative sampling approach to maximise the coverage of the UK R&D population and minimise the risk of non-response bias. We expect probability sampling to be unachievable for this survey, thus an open survey promoted via a mix of methods will be required. For example:

- Invitation emails to individuals
- Invitation emails to key organisations conducting research for distribution (e.g. universities, Public Sector Research Establishments, research intensive businesses and business membership bodies) where individual emails addresses are not available
- Tweets (BEIS will coordinate any tweets from government and partner R&D organisations, e.g. from Ministers, UKRI, national academies and other governmental departmental communication teams), but the contractor will be expected to oversee any survey tweet campaign from themselves and other R&D stakeholders.



- Invitation letters where email is not an option - with QR codes to make filling in the survey as easy as possible
- Possibly text messages/calls for any key groups with particularly low response rates where we can obtain phone numbers

The minimum viable approach will be for this to be an online survey, using an open survey link, with corrective weighting after data has been collected – using the ONS Labour Force Survey data for the SOC codes we choose to define the R&D workforce.

UKRI will also help to promote this survey and are checking whether GDPR will allow survey invites to UKRI funded researchers and/or organisations. However, bidders should note that R&D workers in industry will be potentially more challenging to reach.

We have already secured an agreement from ONS (data owners) to use UK Innovation Survey (UKIS<sup>16</sup>) 2019 as part of the sampling frame for this survey. This means that suppliers will have details (including postal address and telephone for approx. 40% of businesses, but not email) for approximately 4100 businesses who said they did either product or process innovation or both in the UKIS 2019 (approx. 30% of the total 14,000 sample). The contractor will need to ask these businesses to pass the online survey link to their R&D staff via an advance letter and send a reminder depending on response. Please tell us your initial proposal for such ways to maximise response.

Internal R&D firms (including product and process innovators)	2,842
Product innovators only	816
Process innovators only	529
<b>Total</b>	<b>4,187</b>

We have also secured an agreement to use email addresses of: 1) UKRI grant funded applicants (but not unsuccessful applicants), and 2) Innovate UK grant applicants (both funded and unfunded).

Bidders are also asked to propose possible sample frames or other routes to target the survey population (for example there are lists of large firms investing in R&D<sup>17</sup>. Bidders are also encouraged to present their ideas for maximising the response rate and numbers (e.g., an engagement event with R&D funders).

Bidders are also asked on ideas to incentives those working in the private sector to complete this survey. These workers are likely to be less familiar with the term R&D and are unlikely to be funded directly by public bodies directly (as any public funding for them is likely to be at firm level, via R&D tax credits or IUK grants), so the survey might be better describes as the Research and Innovation Workforce survey to industry, and we would like bidders to offer initial ideas for advertising/promoting the survey and wording advance emails or letters to encourage voluntary participation.

<sup>16</sup> <https://data.gov.uk/dataset/29e719be-534d-4a83-8919-1014b26e89f9/uk-innovation-survey>

<sup>17</sup> <https://www.ideatovalue.com/inno/nickskillicor/2019/08/top-1000-companies-that-spend-the-most-on-research-development-charts-and-analysis>

**Statistical weighting**

Statistical weighting to correct for bias in the achieved sample is expected to be essential to ensure the data is representative of the R&D workforce. We expect the following datasets to be used for weighting: the Labour Force Survey (LFS) and Annual Population Survey (APS) at worker level; ONS BERD at employer level; and HESA at university level.

**Bidders should outline their approach to effectively collecting SOC codes in the online survey.**

For the purposes of this survey, we expect R&D workers will be defined using the following Standard Occupational Classification (SOC) codes (approximately 1.5 million people in 2019):

- 151251 Computer Programmers
- 151256 Software Developers and Software Quality Assurance Analysts and Testers
- 2111 Chemical Scientists
- 2112 Biological Scientists and Biochemists
- 2113 Physical Scientists
- 2114 Social and Humanities Scientists
- 2119 Natural and Social Science Professionals not elsewhere classified
- 2121 Civil Engineers
- 2122 Mechanical Engineers
- 2123 Electrical Engineers
- 2124 Electronics Engineers
- 2126 Design and Development Engineers
- 2127 Production and Process Engineers
- 2129 Engineering Professionals not elsewhere classified
- 2142 Environment Professionals
- 2311 Higher Education Teaching Professionals
- 2425 Statisticians
- 3111 Laboratory Technicians
- 2150 Research and Development Managers
- 7211 Research & experimental development on biotechnology
- 7219 Other R&D on natural sciences and engineering
- 7220 R&D on social sciences and humanities

Please note that STEM occupations are likely to be further broken down by 6 digit SOC codes. We are working with UKRI, the Royal Society, the Royal Academy of Engineering and other key stakeholders to advise on a final SOC as part of the design phase of this project.

Please include all options to reduce survey time, such as split samples or data matching (for example please advise on the minimum Labour Force Survey questions we need to ask for weighting purposes, and then which further Labour Force Survey data can be approximately mapped back to the groups defined by this survey. This could be useful to reduce questions such as those on personal characteristics.

**Key subgroups**

It is particularly important to BEIS to achieve representative survey data for (in sufficient numbers to permit subgroup analysis on) the UK R&D Workforce with respect to:

- R&D occupations
- R&D sectors
- Industry type
- Size of firm
- R&D disciplines
- Career stage (early or later)
- Nationality
- Region
- Gender
- Age
- Ethnicity
- Disability

We expect to agree targets for each group with the contractor. Details and the feasibility of such targets will be agreed with the contractor during the design stage. Nonetheless, bidders should propose how to best boost response in each group and how to use corrective weighting to reduce sampling bias.

Suppliers are asked to set out how they will optimise 'effective sample sizes' whilst weighting for nonresponse. Although a probability sampling strategy and thus confidence intervals are not possible, we would like the contractor to advise on how to measure and maximise data accuracy (for example estimating confidence intervals by bootstrapping).

### **Cognitive testing**

As this is the first survey of an important series that is likely to run annually, all new questions will need to be cognitively tested. If questions are re-used from other questionnaires and have a record of robust data quality, no further assessment will be required. Please advise how you would do this.

### **Piloting**

We would expect a small-scale pilot of the online survey. Suppliers are expected to outline their approach to piloting/testing online surveys.

### **Qualitative research options**

This project is primary to deliver quantitative data and insights. However, suppliers can propose open-ended questions/qualitative research addition (e.g., in-depth interviews) if they think this would add insight to this project. Please note that any additions need to remain within the total budget set for this project, and the survey design, dataset, analysis and reporting are the priority deliverables.

### **Data linking**

BEIS analysts plan to link this survey to other datasets such as UKIS, HESA, Longitudinal Education Outcomes ([LEO<sup>18</sup>](https://explore-education-statistics.service.gov.uk/find-statistics/graduate-outcomes-leo/2018-19)), BERD, ResearchFish, LFS, etc. **This is contingent on BEIS securing a DSA with relevant data owners.** While the *contractor will not be responsible for data matching* due to the complexity of data ownership, they will have to ensure questions

<sup>18</sup> <https://explore-education-statistics.service.gov.uk/find-statistics/graduate-outcomes-leo/2018-19>



and data protection agreements necessary for data matching are included in the survey. Contractors will need to review questions in relevant surveys and avoid duplicating them in the R&D Workforce Survey where the same information can be obtained via data linking. Please include plans to review relevant data fields from these sources as part of questionnaire development. A decision on whether the survey report will include findings from any data linking BEIS conduct (after the contractor has produced a clean dataset) will be made at the survey design stage of the project.

### **Reducing data collection burden**

Contractors will be required to carefully consider and implement a plan for reducing burden on respondents. This is particularly relevant for R&D workers in academia and those funded by UKRI, who have existing data collections in place as set out in this ITT. BEIS have worked closely with UKRI analysts since March to jointly map past and existing surveys of the R&D workforce (to try to identify all relevant surveys) and whilst there remains a strong need for a UK-wide R&D workforce survey capturing both industry and academic R&D staff, we need to ensure we avoid asking any non-essential questions (for example where we could link with the existing data sources mentioned throughout this ITT), and that we use the survey to increase the usefulness of existing data. Questions are also expected to be filtered depending on the respondent, and if they are a university research or UKRI funded researcher, they should not be asked questions for which we already have answers through data matching.

We estimate the survey needs to take no more than 20 minutes to complete to ensure response, but please comment on this data depth versus data quality trade off in your design.

Bidders should outline how they will ensure the survey is visually appealing, easily accessible on laptops and smartphones and accessible to those with disabilities.

### **Deliverables**

- **Clean and accessible survey dataset** handed over to BEIS, a version of which will also be archived to the ESRC UK Data Service for public use (with all personal data removed)
- **Draft research report circulated as soon as possible for stakeholders to comment** – this will use survey data to pull out insights relevant to government research and innovation policy
- **Final research report** that is fully quality assured, presents all key findings in an accessible manner and is understandable to lay audiences.

The report will start with analysis of the composition of the UK R&D workforce and go on to break down the key themes from the survey, including comparisons between workforce characteristics to identify group-specific issues. Statistical analysis such as key driver regression analysis would be welcome, to further explain key results.

- **Regular updates on project progress**
- **Questionnaires** agreed by BEIS and stakeholders
- **Raw data, data tables and syntax** collected and produced as part of this project shared with BEIS for future use

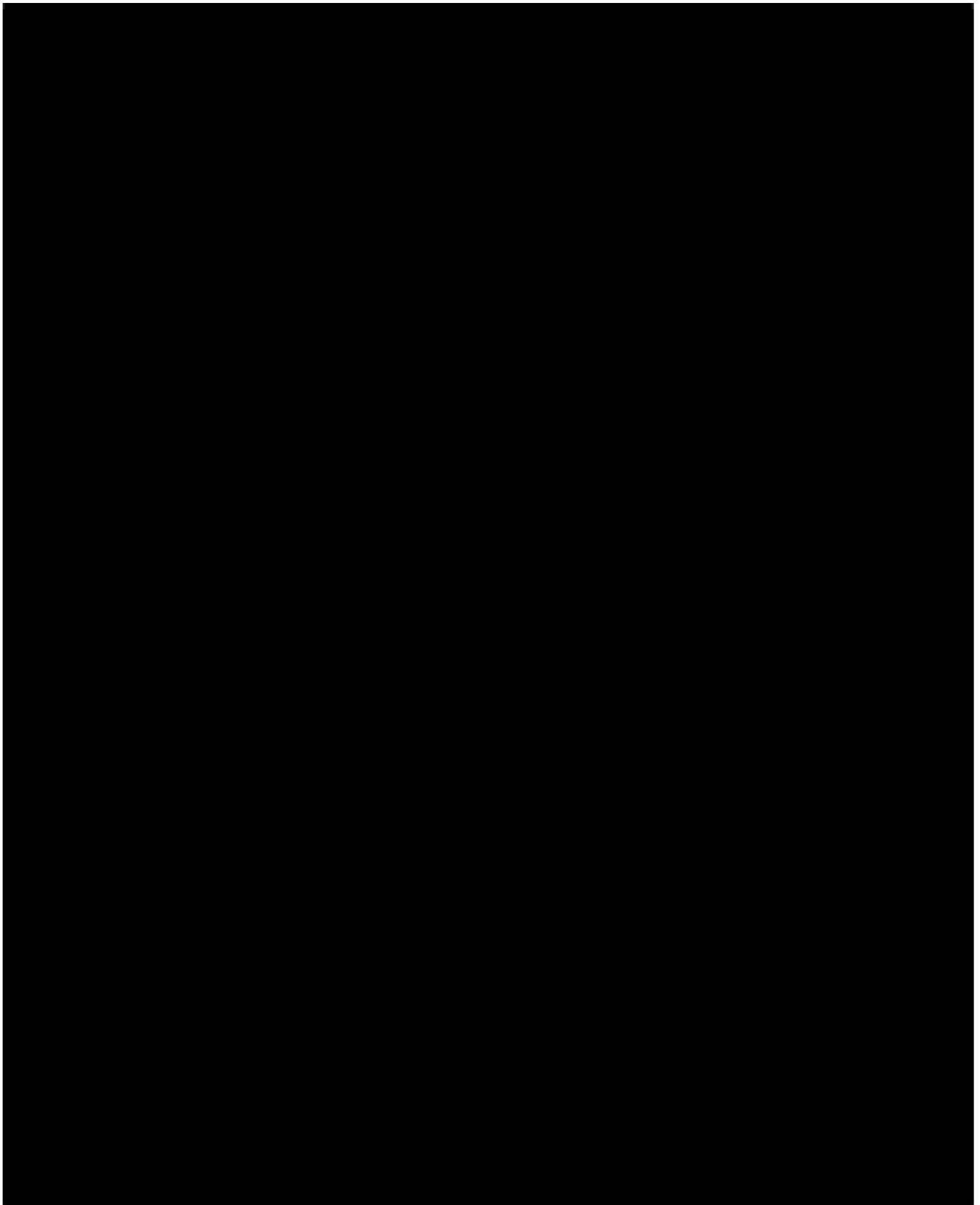


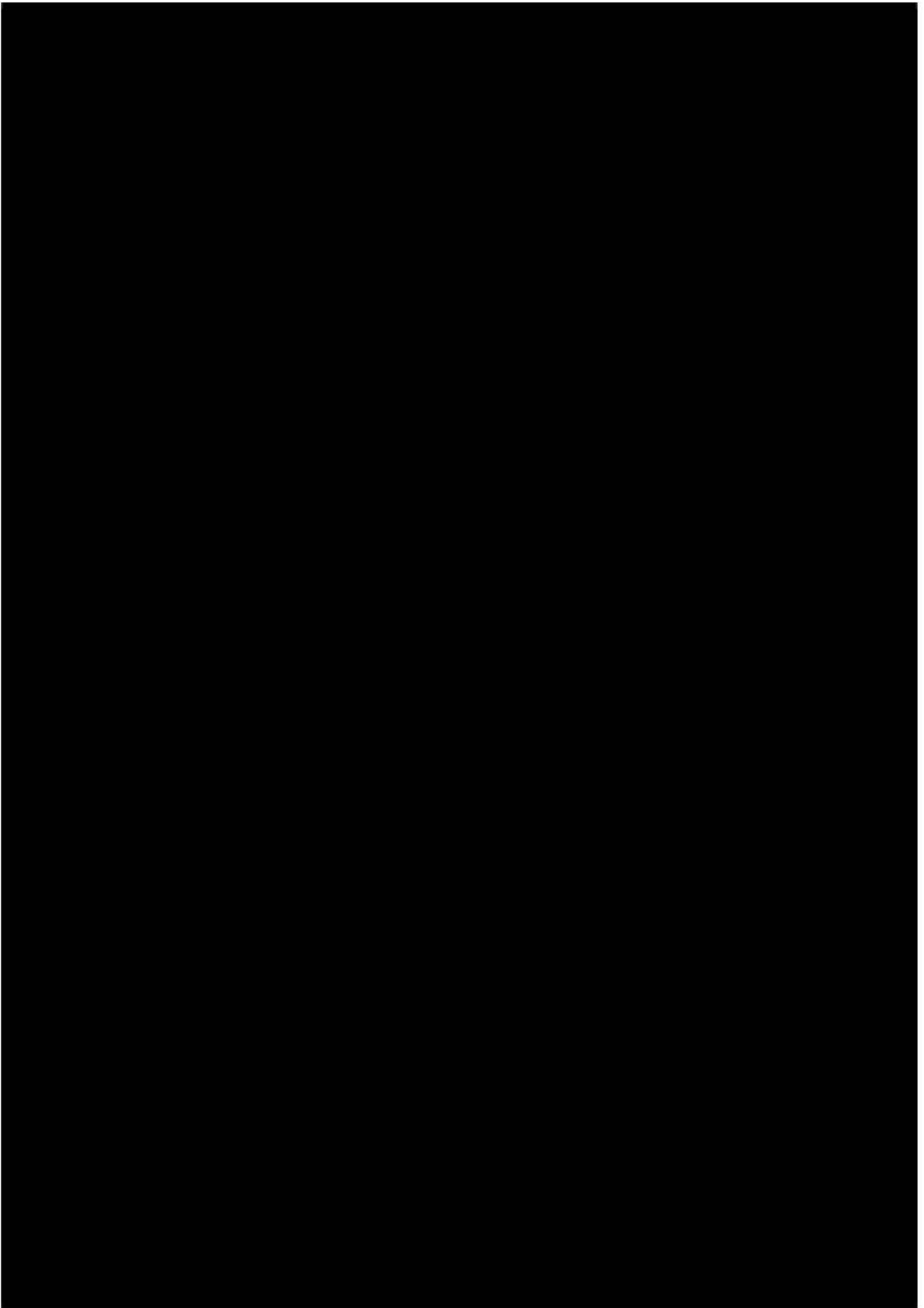
- **A PowerPoint slide deck of key findings and a presentation to key stakeholders**

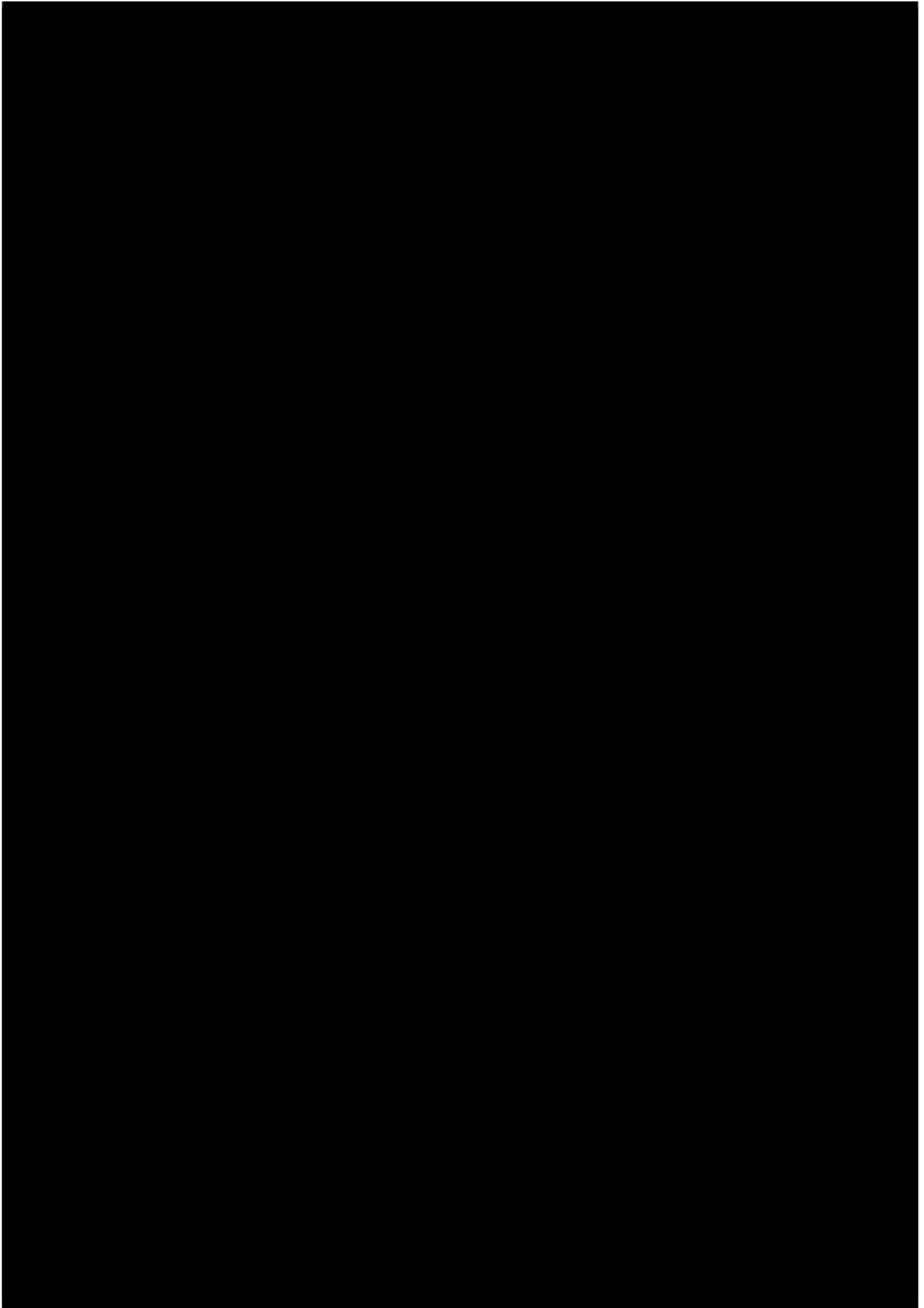
**Please note that BEIS will own all data collected as part of this project and the contractor will act as a data processor.**

**ANNEX B**

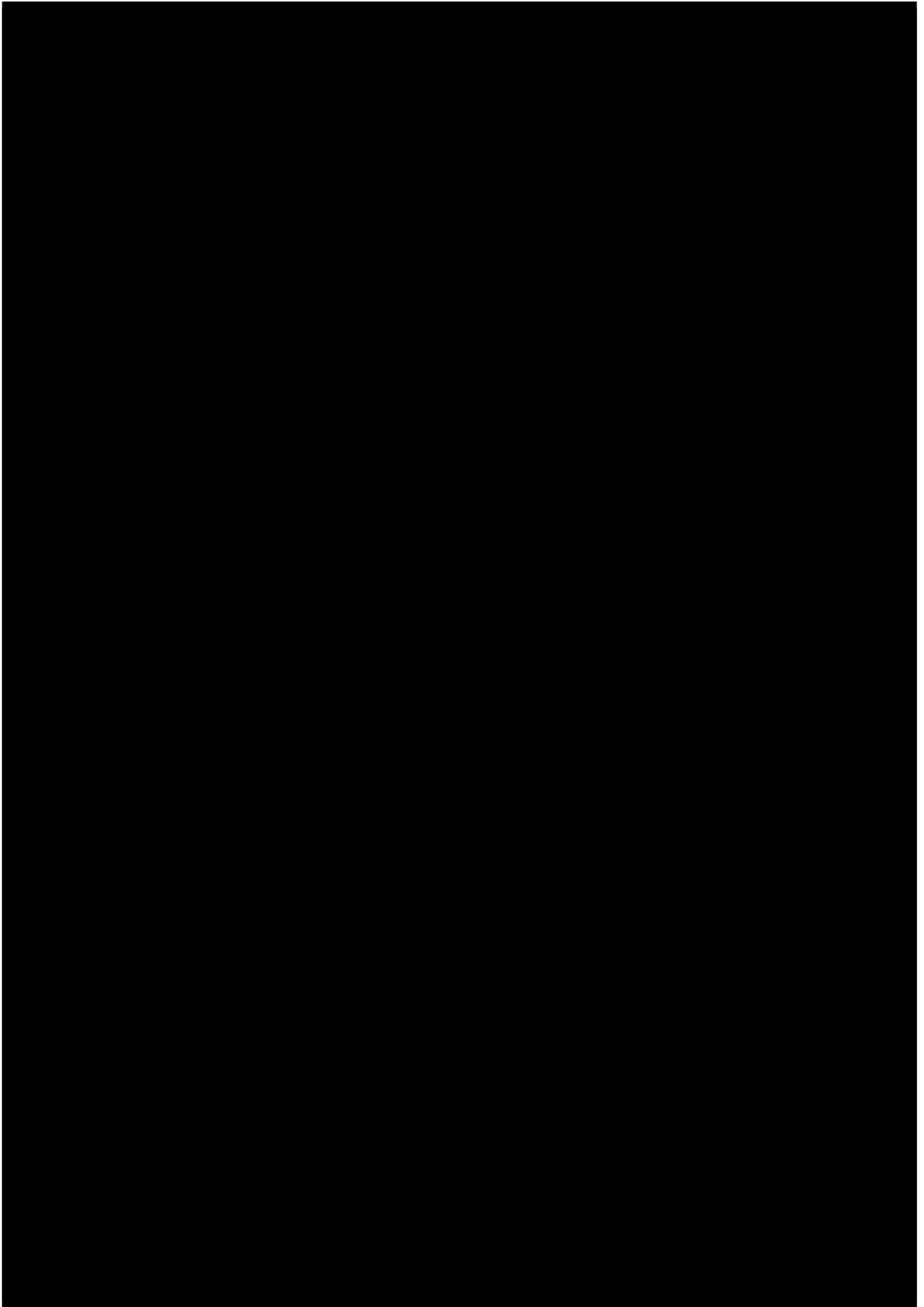
**Supplier Proposal**

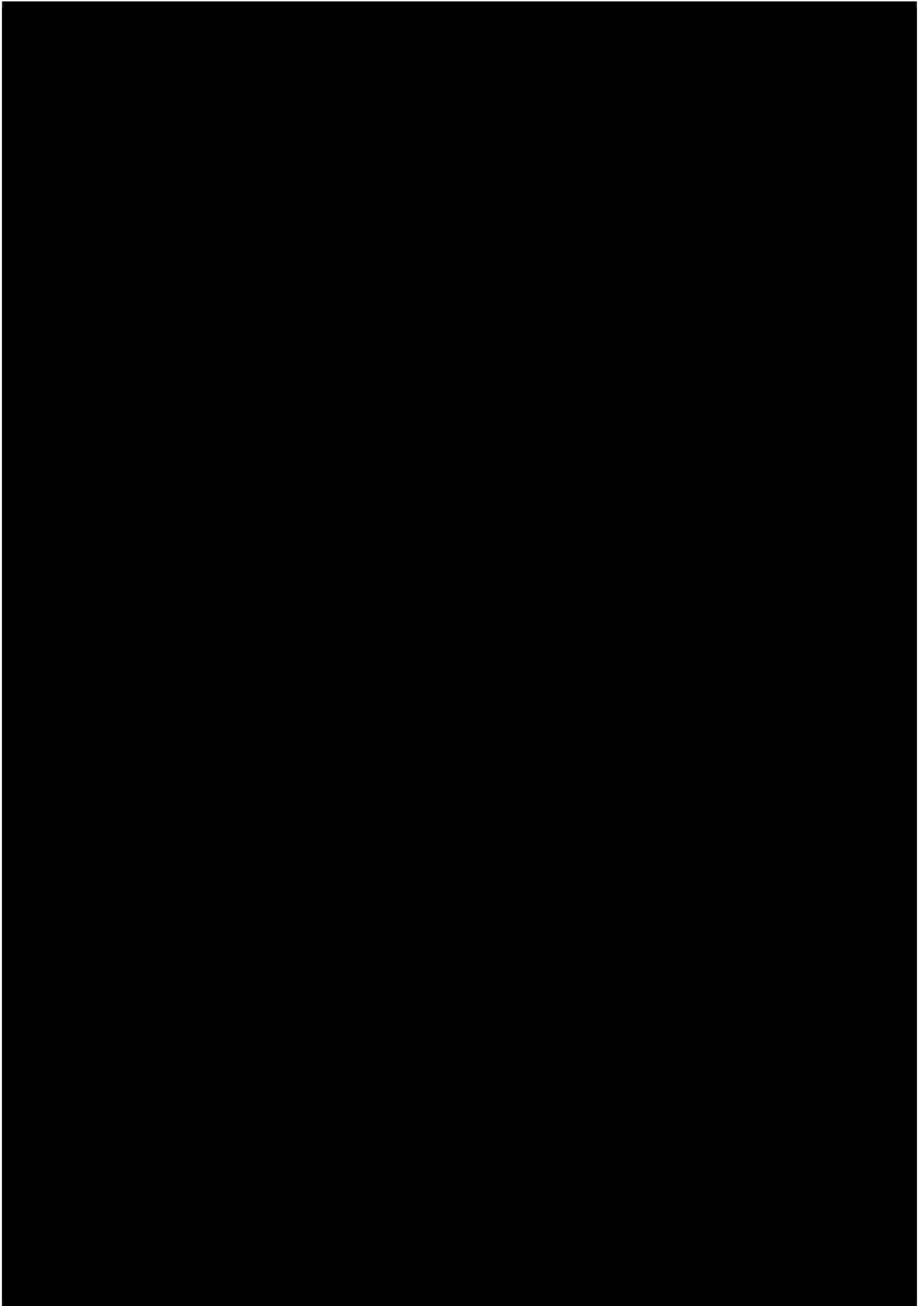


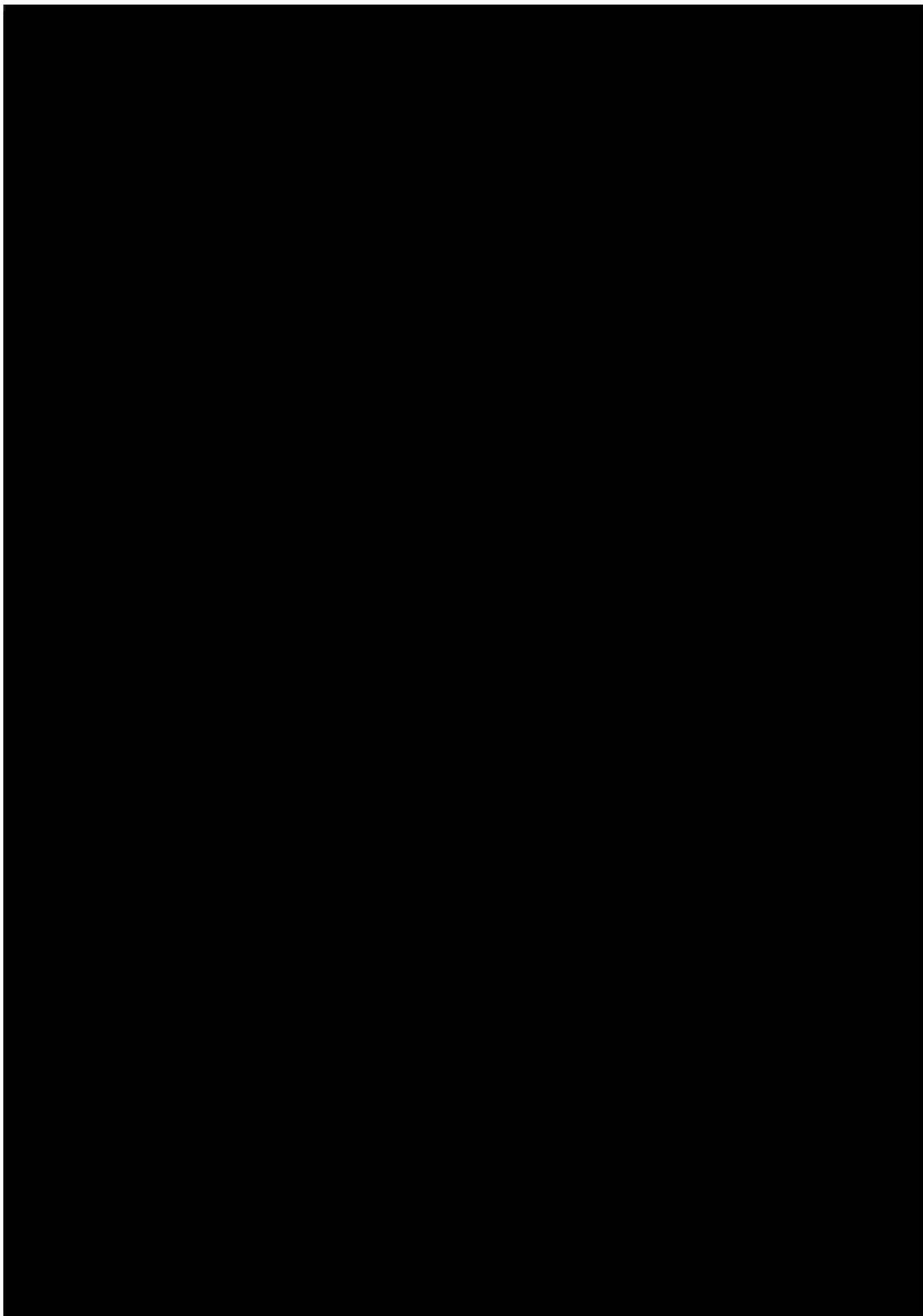


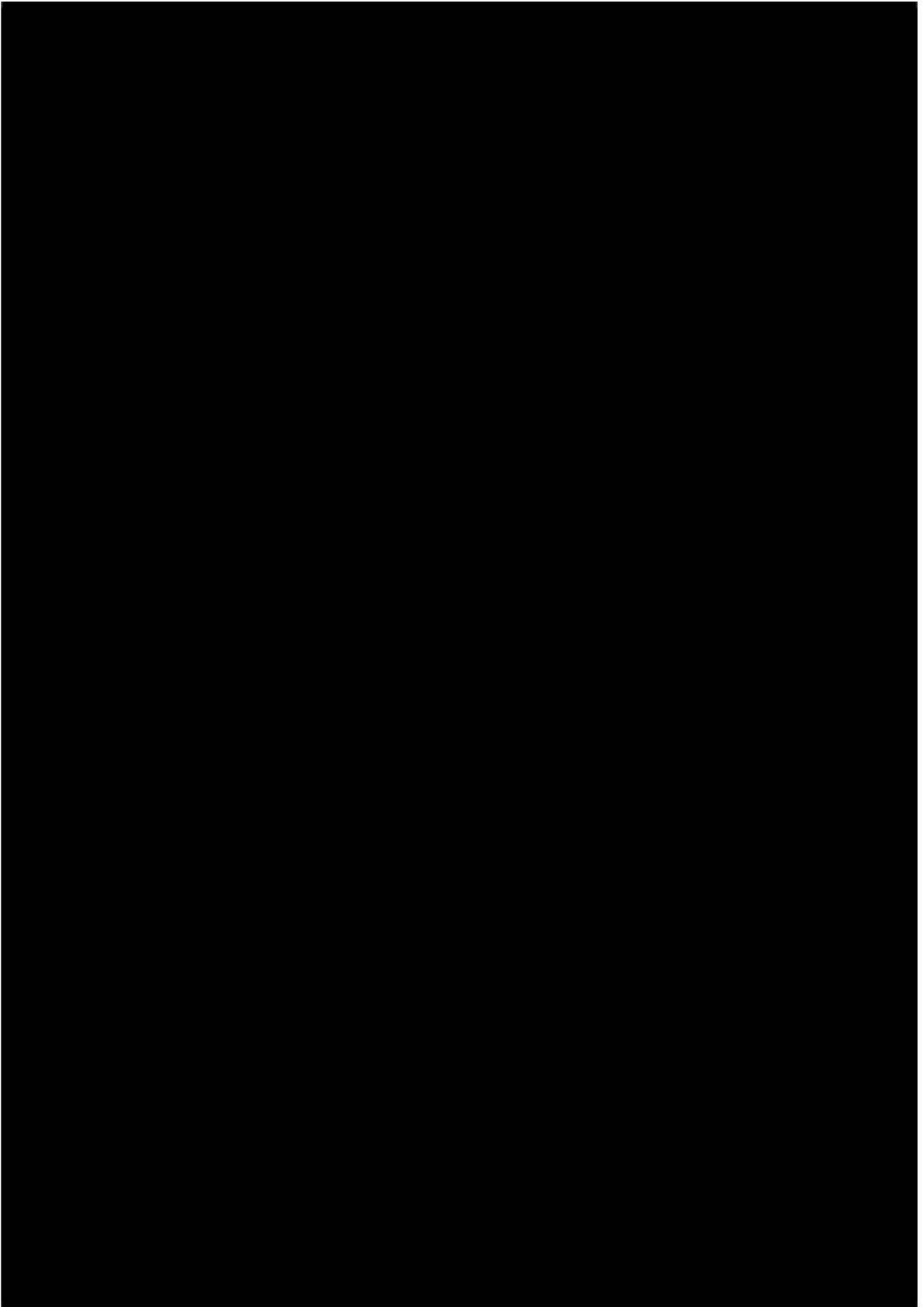




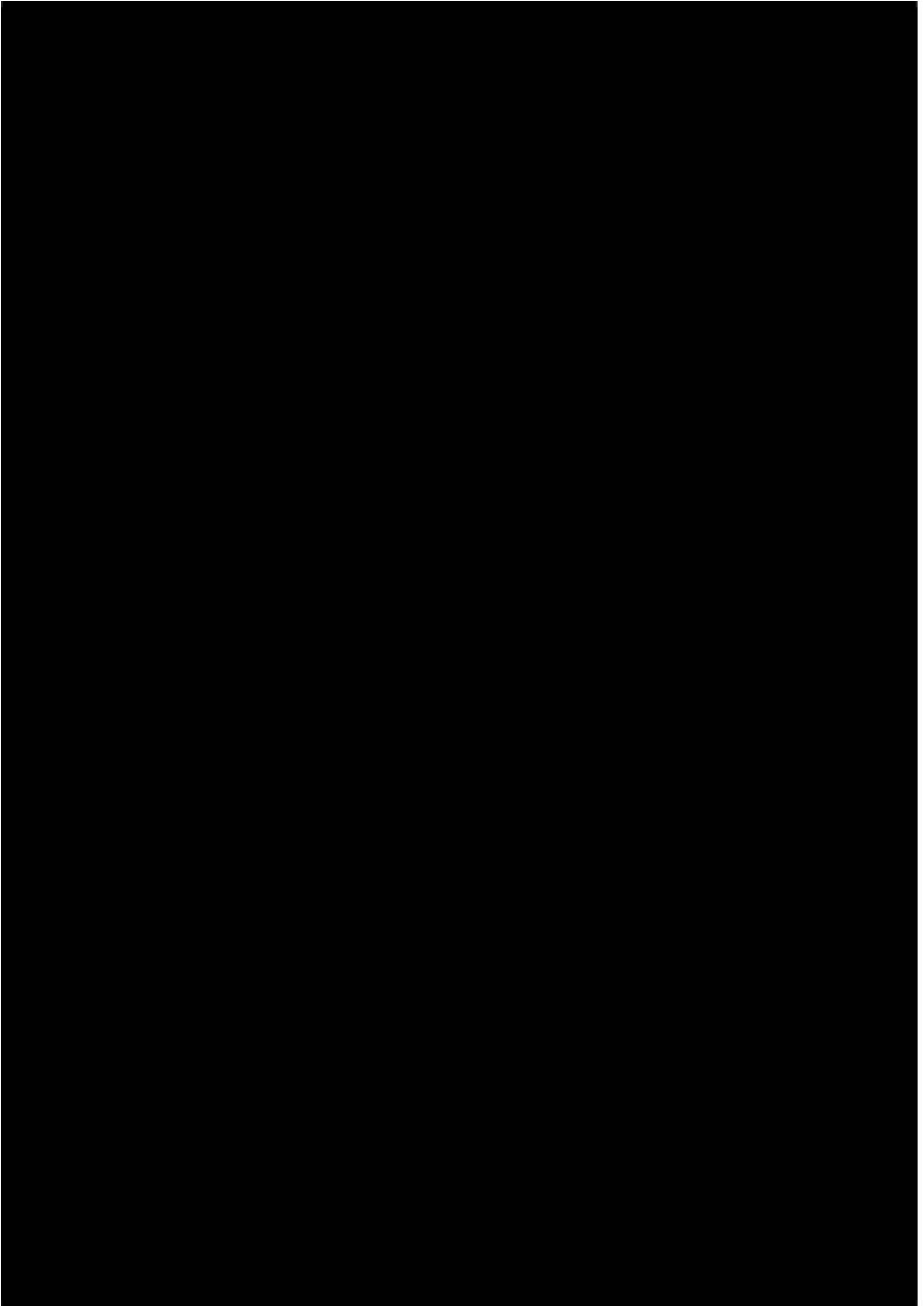


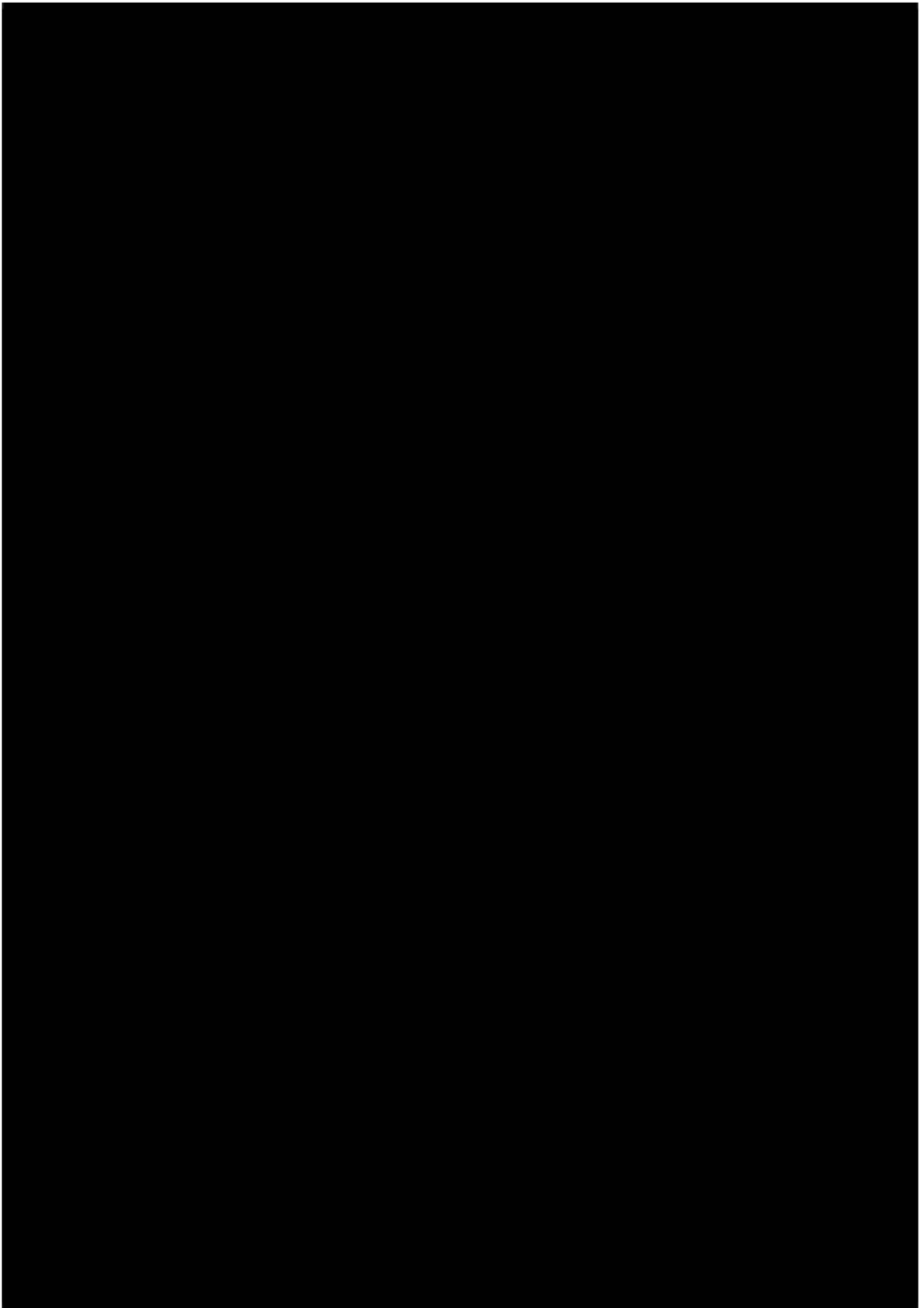


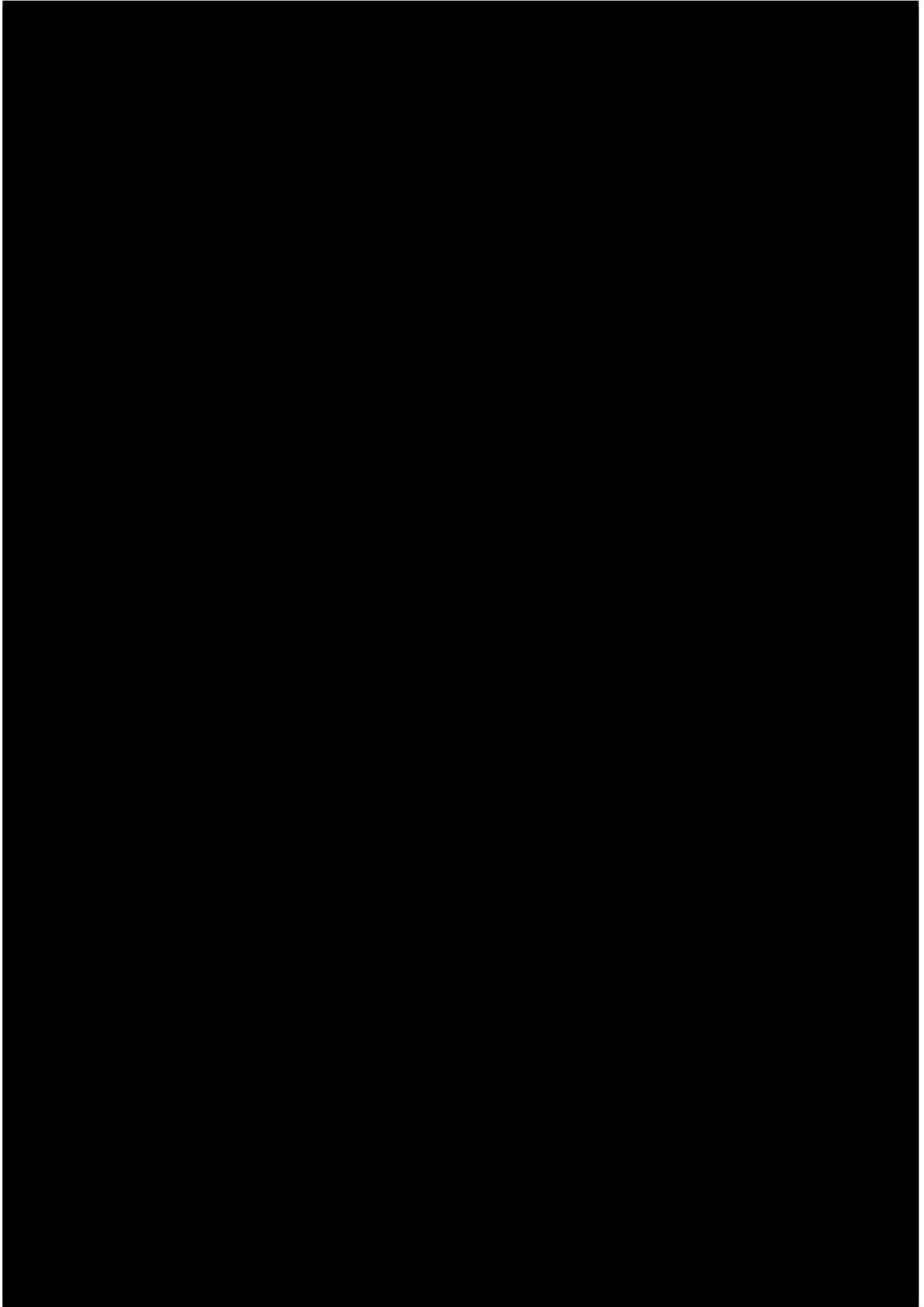


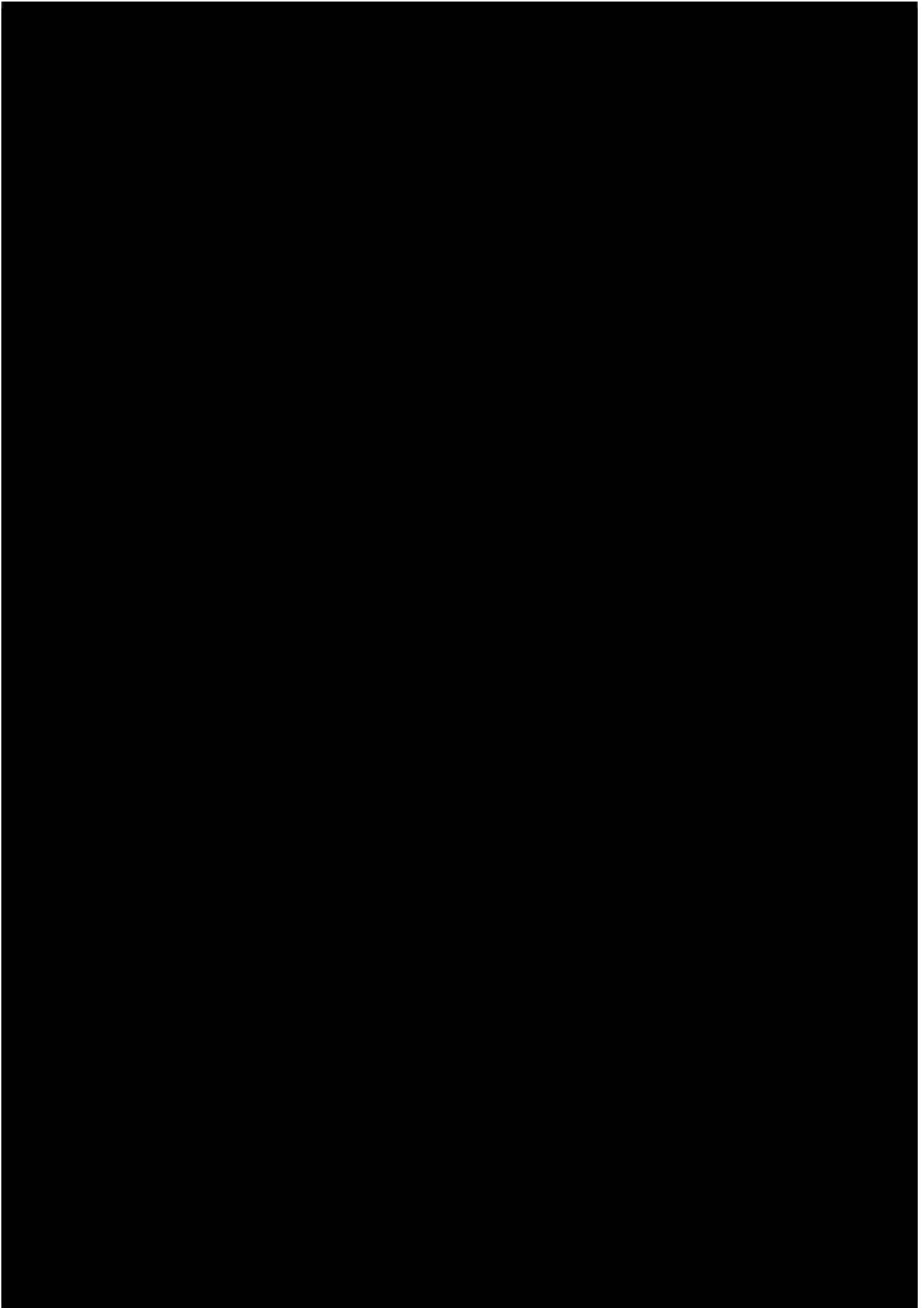




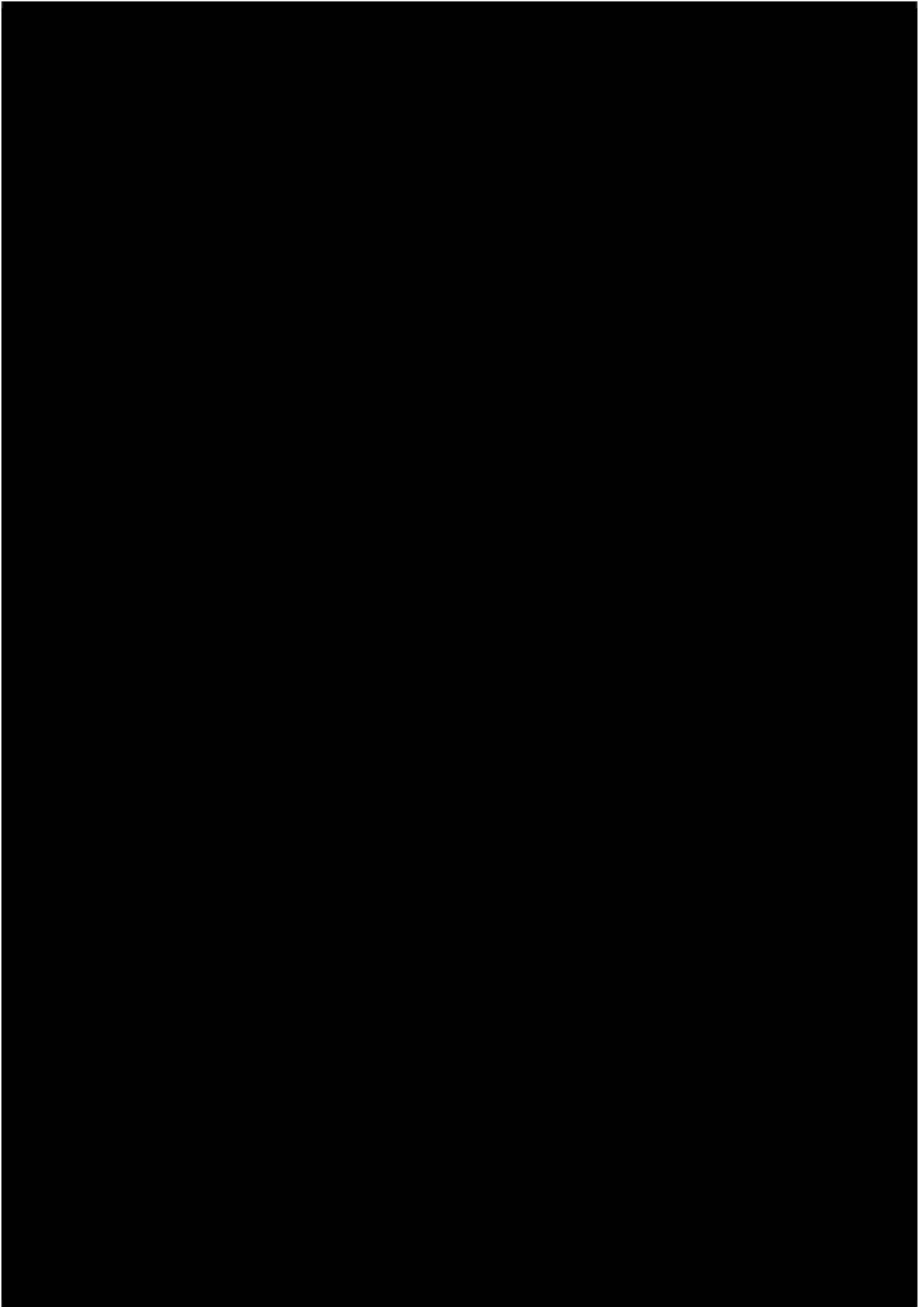


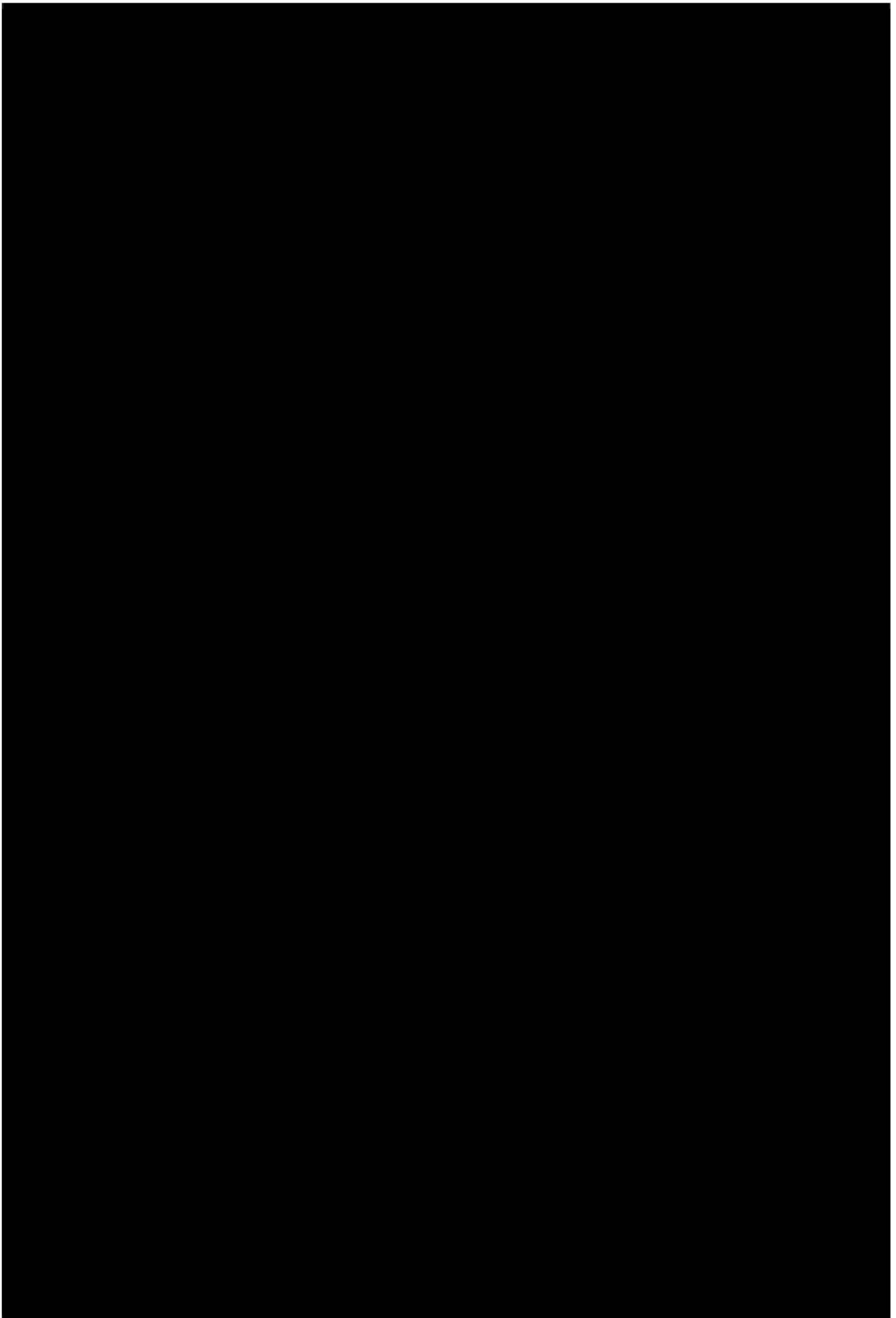


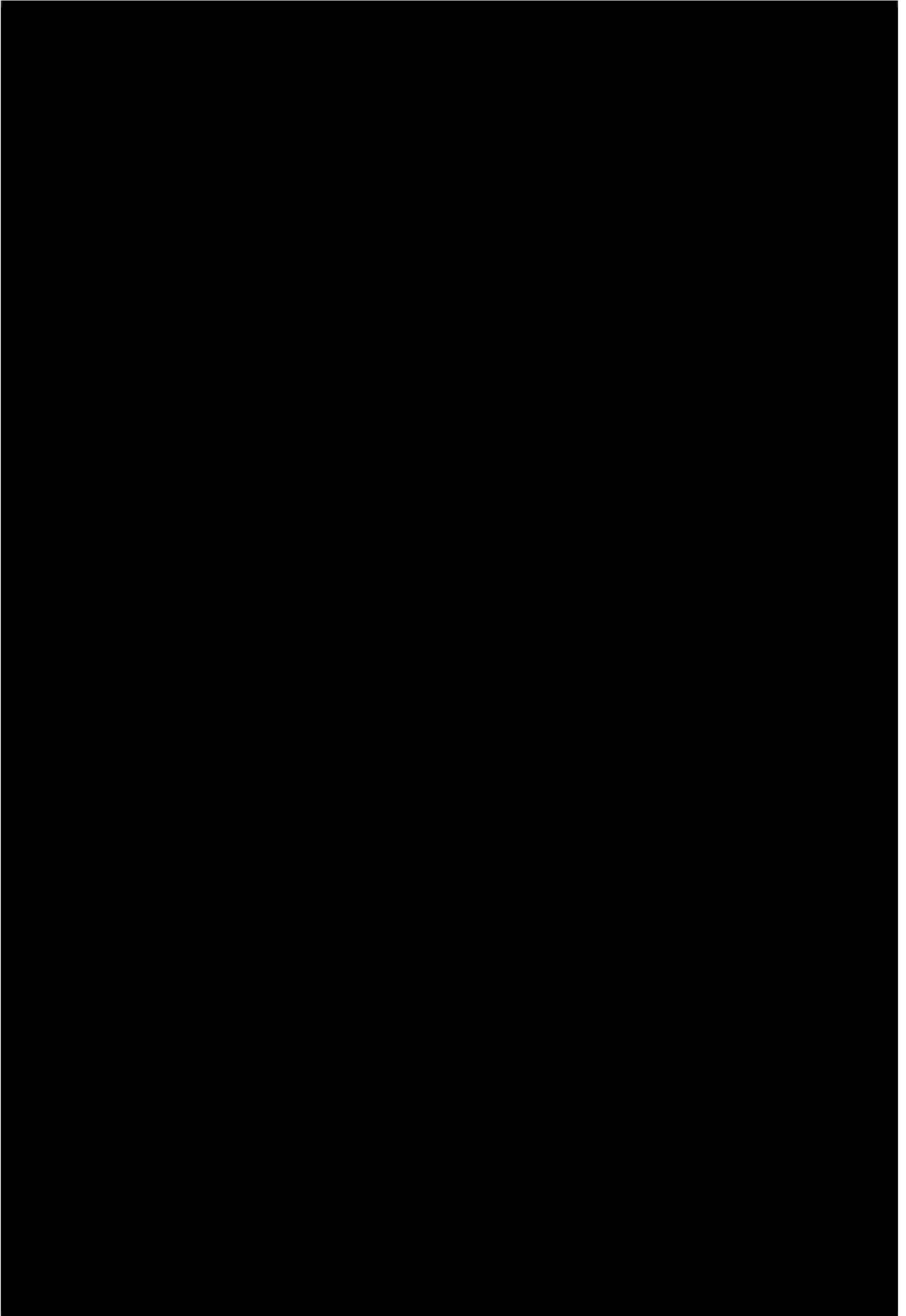


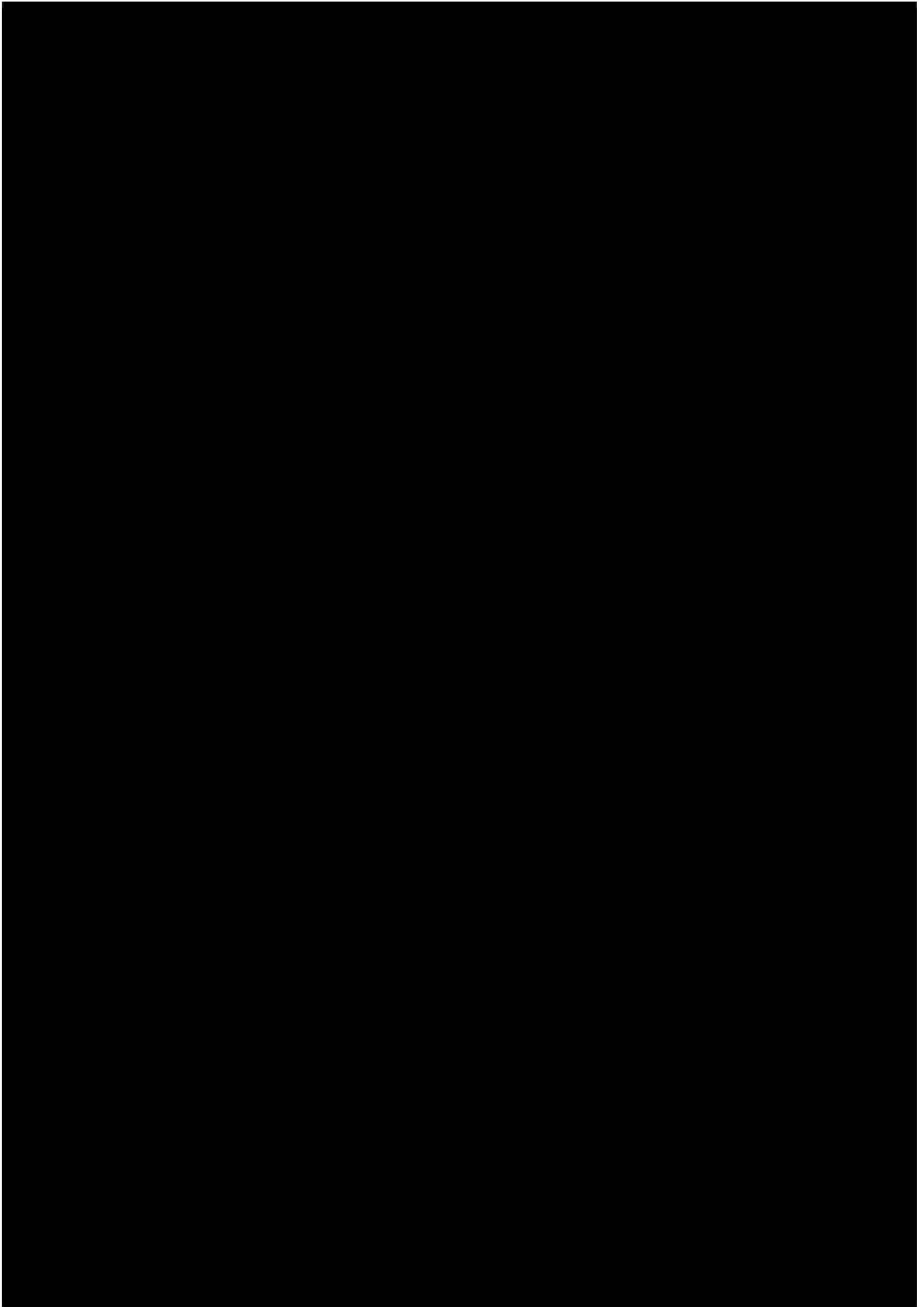




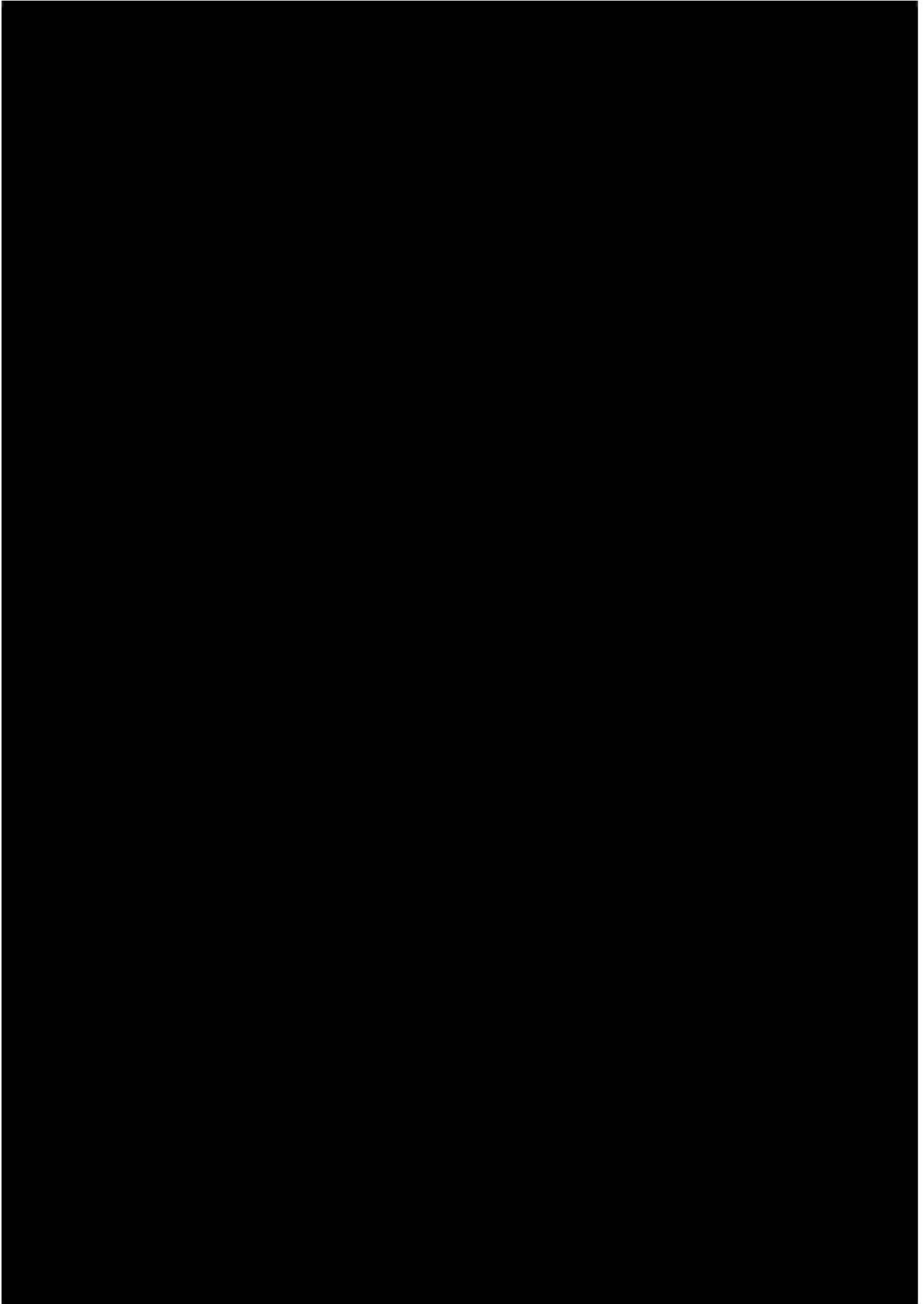


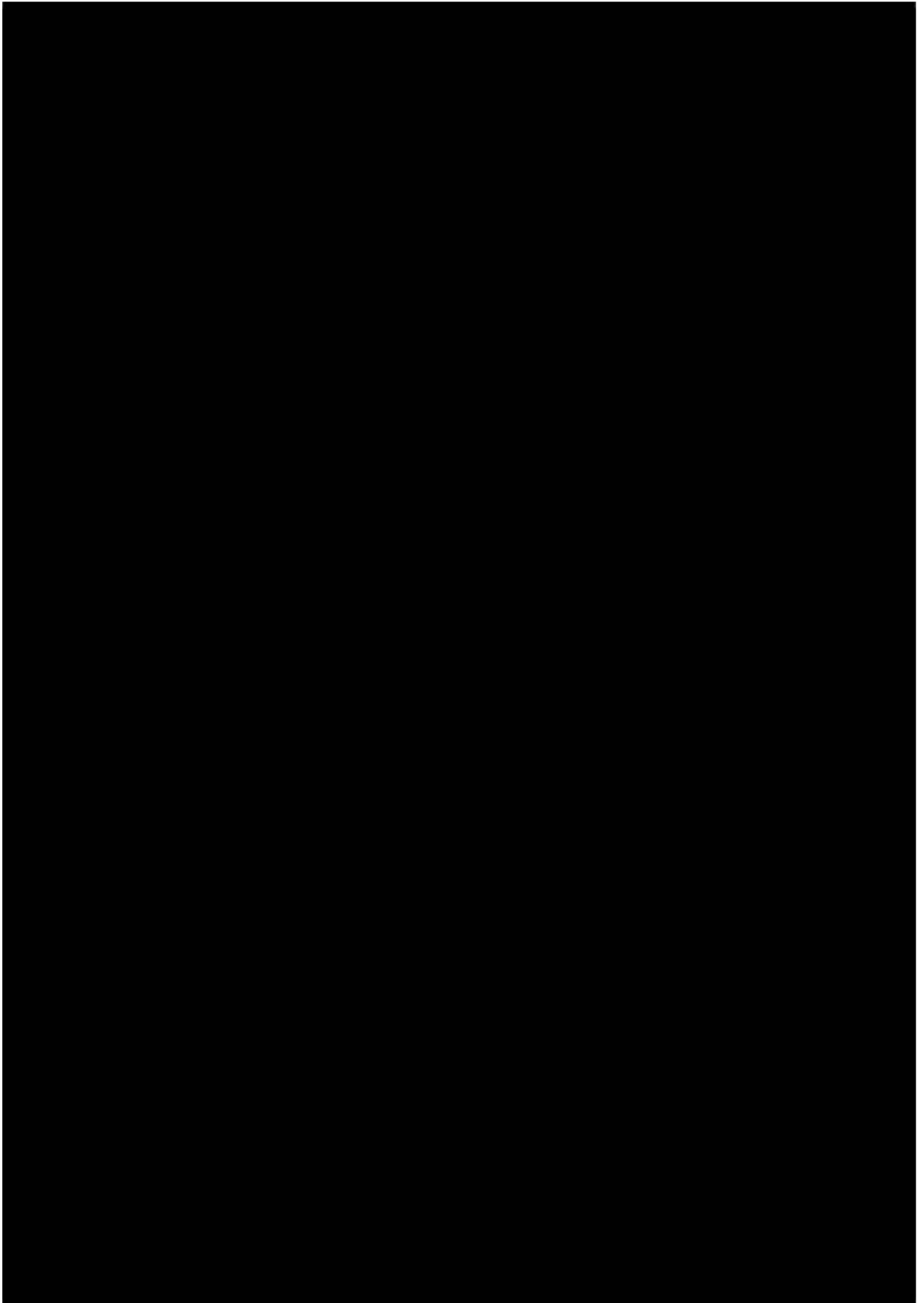


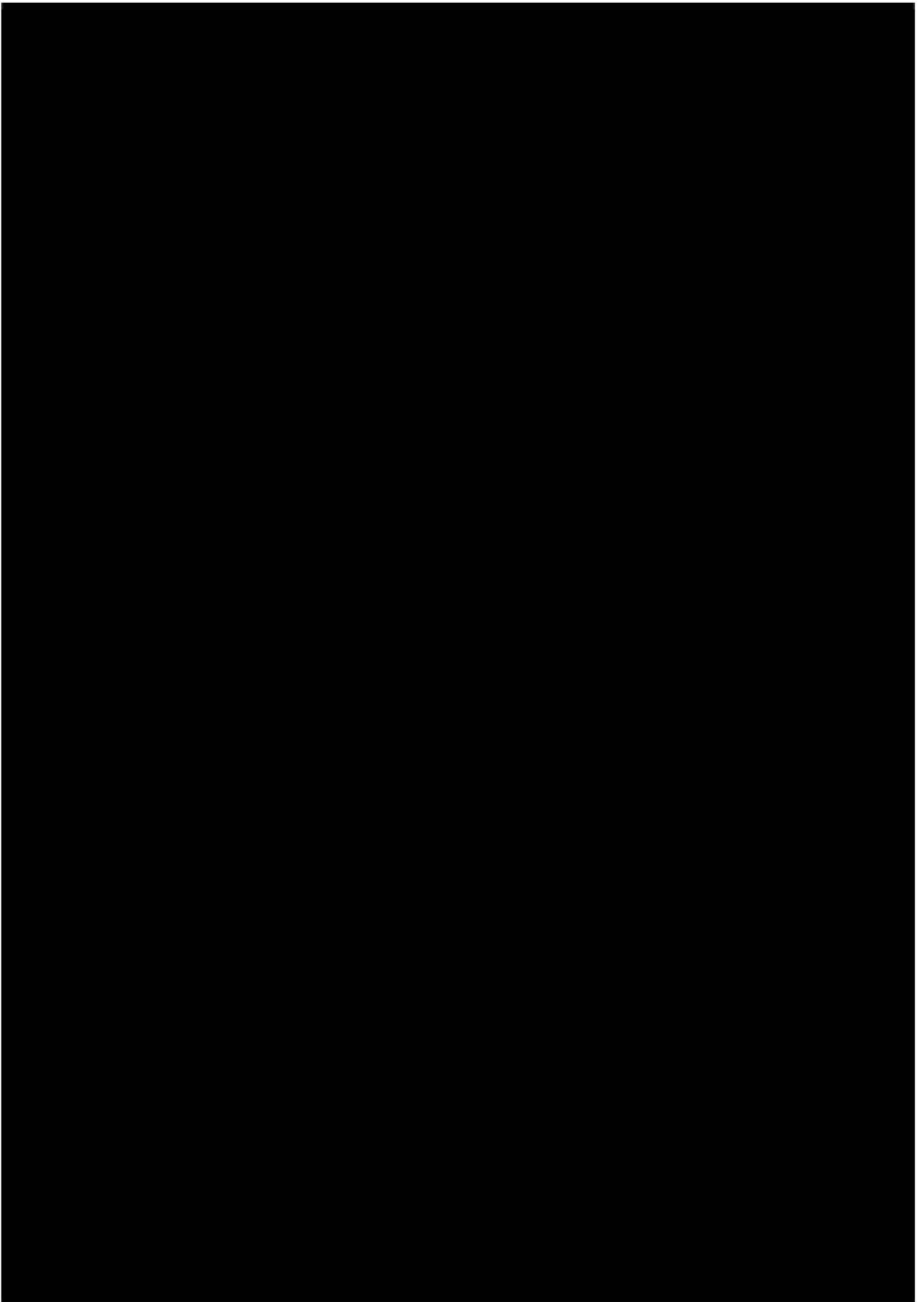


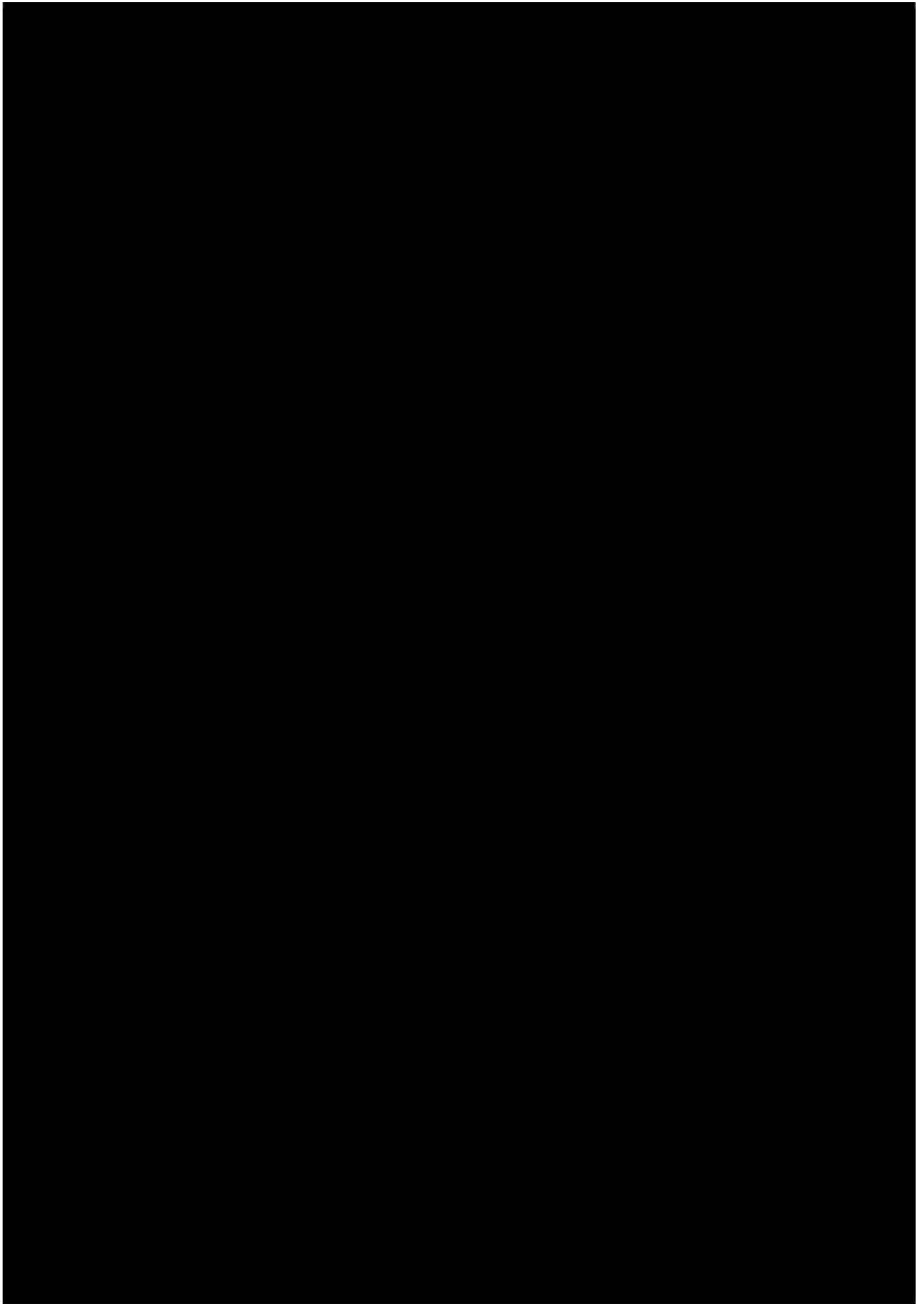


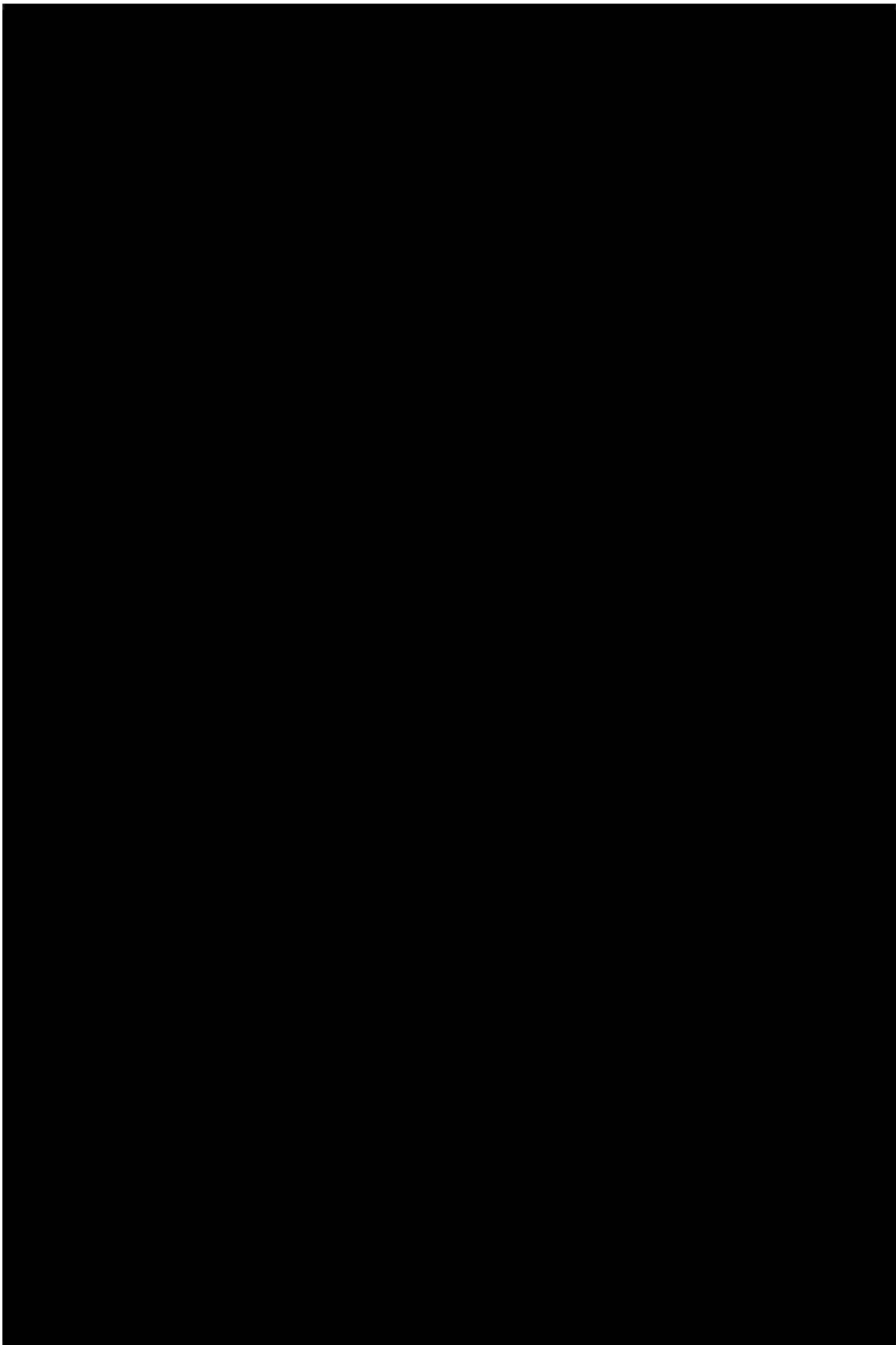














## **Part 2: Contract Terms**

