

Dated 2016

(1) CUBIC TRANSPORTATION SYSTEMS LIMITED

(2) TRANSPORT TRADING LIMITED

**Licence for
Transport for London's
Revenue Collection
Back Office Software**

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THIS AGREEMENT is made this day of 2016

BETWEEN

- (1) **CUBIC TRANSPORTATION SYSTEMS LIMITED ("Cubic")** (company registration number 01381707) whose registered office is at AFC House, Honeycrook Lane, Salfords, Redhill, Surrey RH1 5LA, and
- (2) **TRANSPORT TRADING LIMITED ("TTL")** (company registration number 03914810) whose registered office is at Windsor House, 42-50 Victoria Street, London SW1H 0TL (a subsidiary of Transport for London, a body corporate established under section 154 of the Greater London Authority Act 1999).

BACKGROUND

TTL wishes to grant Cubic, and Cubic wishes to be granted, a licence to use the Licensed Materials, on the terms and conditions of this Agreement.

OPERATIVE PROVISIONS

1. DEFINITIONS AND INTERPRETATION

In this Agreement:

1.1 the following words and expressions have the following meanings:

- "Ad Hoc Materials"** shall have the meaning given to it in **Clause 30.1**
- "Agreement"** this licence agreement including its Schedules and all ancillary documents as amended from time to time in accordance with its terms
- "Agreement Information"** (i) the Agreement in its entirety (including from time to time agreed changes to the Agreement) and (ii) information from the invoices submitted or issued pursuant to the Agreement which shall consist of Cubic's name, the expenditure account code, the expenditure account code description, the document number, the clearing date and the invoice amount
- "Applicable Law"** any laws, regulations, directives, statutes, subordinate legislation, common law, regulatory guidance, civil codes of any jurisdiction, all judgments, orders, notices, instructions, decisions and awards of any court or competent authority or tribunal, obligations or rules (including binding codes

of conduct and binding statements of principle incorporated and contained in such rules) applicable to the existence or operation of this Agreement or to the Parties from time to time

“Bug-fix Updates”	any updates to the TTL Software in order to fix bugs or faults in the TTL Software
“Business Day”	a day that is not a Saturday, Sunday or public or bank holiday in England
“Confidential Information”	all information (whether written or verbal) that is marked as confidential or that by its nature may reasonably be regarded as confidential (whether commercial, financial, technical or otherwise) including information which relates to the business affairs, customers, suppliers, products, software, telecommunications, networks, trade secrets, Know-how or personnel of a Party
“Cubic Account Manager”	the person appointed and authorised by Cubic to request TTL Consultancy Services from TTL in accordance with Clause 30 and to attend consultancy review meetings
“COTS”	means commercially off the shelf software including software or hardware products to the extent that they are ready-made and available for sale by a Third Party (other than TTL or any member of the TfL Group) to persons generally on standard terms that are not normally negotiated (save in respect of the cost of such software or hardware products)
“Costs”	all costs (on a full indemnity basis) including legal and other professional costs and costs of enforcement
“Documentation”	the Tier 1 Information and Tier 2 Information
“End User”	any customer (which may include Group Companies of that customer) of Cubic and/or of any Cubic Group Company, who is or are in the business of providing transportation and/or ticketing services
“FOI Legislation”	means the Freedom of Information Act 2000 (the “FOIA”), all regulations made under it

and the Environmental Information Regulations 2004 (the "EIRs") and any amendment or re-enactment of any of them; and any guidance issued by the Information Commissioner, the Ministry of Justice or the Department for Environment Food and Rural Affairs (including in each case its successors or assigns) in relation to such legislation

"Group Companies"

in respect of a Party or Third Party, its Holding Companies, its Subsidiaries and the Subsidiaries of any of its Holding Companies from time to time ("**Holding Company**" and "**Subsidiary**" having the meanings set out in section 1159 Companies Act 2006, and for the purposes of section 1159(1) a company (the first company) will be treated as a member of another company if:

- (a) any of its subsidiaries is a member of that other company; or
- (b) any shares in that other company are held by a person acting on behalf of the first company or any of its subsidiaries; or
- (c) any shares in that other company are registered in the name of a person (or its nominee) by way of security or in connection with the granting of security over those shares by the first company.)

"Information Request"

a request for any information under the FOI Legislation

"Insolvency Event"

any of the following:

- (a) Cubic and/or its Holding Company, or TTL making any voluntary arrangement with its creditors or becoming subject to an administration order;
- (b) a receiver, administrative receiver, manager, or administrator being appointed over all or part of the business of Cubic and/or its Holding Company, or TTL;

- (c) being a company, Cubic and/or its Holding Company, or TTL having passed a resolution for its winding-up or being subject to a petition for its winding-up (except for the purposes of a voluntary amalgamation, reconstruction or other re-organisation without insolvency);
- (d) Cubic and/or its Holding Company, or TTL ceasing or threatening to cease to carry on its business for any reason and/or being unable to pay its debts within the meaning of the Insolvency Act 1986; or
- (e) any similar event to those in (a) to (d) above occurring in relation to Cubic and/or its Holding Company, or TTL under the law of any applicable jurisdiction for those purposes

“Intellectual Property Rights”

or

“IPR”

any patents, rights to inventions, trademarks, service marks, trade names and domain names, rights in get-up, rights in goodwill and to sue for passing off, unfair competition rights, rights in designs, copyright and related rights, rights in computer software, database rights, moral rights, confidential information, commercial information and technical information (including Know-how), research and development data, manufacturing methods and data, specifications and drawings, formulae, algorithms, prototypes and research materials, and other intellectual property rights, whether registered or unregistered and including all applications (and rights to apply) for, and renewals or extensions of, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist, now or in the future, anywhere in the world

“Know-how”

all ideas, concepts, schemes, information, knowledge, techniques, processes, methodology and anything else in the nature of know-how

“Liability”

liability arising out of or in connection with this Agreement, whether in contract, tort,

misrepresentation, restitution, under statute or otherwise, including any liability under an indemnity contained in this Agreement and/or arising from a breach of, or a failure to perform or defect or delay in performance of, any of a Party's (or their Group Company's) obligations under this Agreement (whether to the other Party, their Group Companies or otherwise) and/or any defect in TTL Software or any of it or any part of it, in each case howsoever caused including if caused by negligence

“Licence Fee”	the fee for the licences granted by TTL and services to be performed by TTL under this Agreement, being the amounts set out in Schedule 2
“Licensed Materials”	(a) the TTL Software (including its Source Code); and (b) the Documentation; and (c) any Intellectual Property Rights owned by TTL or any member of the TfL Group in connection with the TTL Software; and (d) from the date of delivery of any finalised Ad Hoc Materials, the Ad Hoc Materials
“Losses”	all losses including all direct, indirect and consequential losses
“New York Project”	the New Fare Payment and Collection System project in New York in relation to which tender documents have been issued by the Metropolitan Transportation Authority / New York City Transit Authority under tender reference number 0000131308
“Object Code”	means the representation of computer/machine programming code in machine readable form that a computer programme generates by processing Source Code
“Open Source Software”	third party software code which is supplied with, incorporated in or aggregated (and, for the purposes of this Agreement, will need to be aggregated by Cubic) with the TTL

Software and which software is or is to be licensed upon terms which materially conform to either (i) the open source definition laid down by the body known as the Open Source Initiative or (ii) any generally accepted replacement for or alternative to such open source definition as well as any software, applications, computer programs, instructions for execution by a computer processor or other such products (including the code in such software, applications, computer programs, instructions or products) licensed or provided on an open source, freeware or shareware basis in a manner that requires or may require the computer code to be generally disclosed in Source Code to third parties, licensed to third parties for the purpose of making derivative works and/or redistributable to third parties

“Parties”

Cubic and TTL, and **“Party”** shall be construed as each of them accordingly

“Purpose”

purpose of integrating TTL Software with any existing and/or future product of Cubic or a Cubic Group Company for use with End Users and/or using the Documentation and IPR owned by TTL or any member of the TtL Group in connection with the TTL Software to develop new products which are to be licensed to End Users and to promote, use, install, implement, maintain and operate any such products to provide goods and services to such End Users

“Recoverable Liabilities”

all direct (and for the avoidance of doubt not special, not consequential and not indirect) Losses, liabilities, Costs, damages and expenses that Cubic and/or any Cubic Group Company suffers or incurs, all claims or proceedings made, brought or threatened against Cubic and/or any Cubic Group Company by any person and all Losses, liabilities, Costs, damages and expenses that Cubic and/or any Cubic Group Company suffers or incurs as a result of defending or settling any such actual or threatened claim or proceedings

“Start Date”	the date of this Agreement
“Source Code”	means computer/machine programming code (other than Object Code) and related source code level system documentation, comments and procedural code such as utilities, libraries, job control, language, header files, parameter files, definitions files, build and make files, configuration files and any other included file referenced in any source file, in each case which may be printed out or displayed in an eye readable and understandable form by a competently skilled computer programmer and correctly and completely rebuilt without additional files or information (and including embedded commentary procedures and ancillary documents in either paper or electronic format)
“Sub-Licence”	a perpetual, geographically limited licence in the territory for which the applicable End User is responsible for transport and ticketing for that End User to receive the benefit of and use, modify, adapt, promote, exploit and sub-license all of or part of the TTL Software and Documentation where such TTL Software is incorporated into a ticketing solution from Cubic (and its applicable linked documentation)
“Term”	a period commencing on the Start Date until the date which is the earlier of; <ul style="list-style-type: none"> (a) 5 years after the date of the first award of a contract or contract variation to Cubic or to a Cubic Group Company, by an End User (as described in paragraph 2.1, 2.2 or 2.3 of Schedule 2 of this Agreement) or (b) 15 years after the Start Date
“Termination Date”	the date on which this Agreement expires or terminates for whatever reason
“TfL Group”	Transport for London and all of its subsidiaries (as defined in section 1159 of the Companies Act 2006) from time to time together and reference to any “member of

	the TfL Group	will refer to Transport for London and/or any such subsidiary
“Tier 1 Information”		the information listed as Tier 1 Information in Schedule 1
“Tier 2 Information”		the information listed as Tier 2 Information in Schedule 1
“TTL Account Manager”		the person appointed and authorised by TTL to respond to requests for TTL Consultancy Services from Cubic in accordance with Clause 30 and to attend consultancy review meetings
“TTL Consultancy Services”		the consultancy services to be provided by TTL pursuant to Clause 30.1
“TTL Consultant”		any employee, contractor or person who is engaged by TTL or a TfL Group Company in providing the TTL Consultancy Services
“TTL Software”		the Transport for London Revenue Collection Back Office software described in Schedule 1 which was deployed and in operation in London as of 6 May 2016, but always excluding any Open Source Software
“Transparency Commitment”		means TTL’s (or any member of the TfL Group) commitment to publish its contracts, tender documents and data from invoices received in accordance with the Local Government Transparency Code 2015 and TTL’s (which shall include any member of the TfL Group) own published transparency commitments
“Upgraded Version”		any updated version, upgraded version, revision, new release or new version of the TTL Software
“VAT”		value added tax
1.2		a reference to the singular includes the plural and vice versa, and a reference to any gender includes all genders;
1.3		a reference to any statute, enactment, order, regulation or other similar instrument will be construed as a reference to the statute, enactment, order, regulation or instrument as amended or re-enacted by any subsequent statute, enactment, order, regulation or instrument and will include all statutory instruments or orders made pursuant to it whether replaced before or after the date of execution of this Agreement;

- 1.4 a reference to any document other than as specified in **Clause 1.3** and save as expressed otherwise will be construed as a reference to the document as at the date of execution of this Agreement;
- 1.5 headings are included in this Agreement for ease of reference only and do not affect the interpretation or construction of this Agreement;
- 1.6 references to Clauses and Schedules are, unless otherwise provided, references to clauses of, and schedules to, this Agreement and any reference to a paragraph in any Schedule will, in the absence of provision to the contrary, relate to the paragraph in that Schedule;
- 1.7 the Schedules form part of this Agreement and will have the same force and effect as if expressly set out in the body of this Agreement;
- 1.8 the expression “person” means any individual, firm, body corporate, unincorporated association, partnership, government, state or agency of a state or joint venture;
- 1.9 the words “including”, “includes” and “included” will be construed without limitation unless inconsistent with the context;
- 1.10 in the event, and only to the extent, of any conflict between the Clauses, the Schedules and any other document referred to in or incorporated into this Agreement, the order of priority for the purposes of construction is:
 - 1.10.1 the Clauses;
 - 1.10.2 the Schedules (save where the conflicting part of the Schedule is explicitly expressed to take precedence over a Clause); and
 - 1.10.3 any other document referred to or incorporated into this Agreement:
- 1.11 any obligation on a Party to comply with standards, policies, procedures and/or analogous obligations will be an obligation on that Party to comply with the same as they will be amended from time to time and communicated to the other Party in advance; and
- 1.12 Subject to **Clause 26.3**, any benefits or rights of, or obligations owed to, a Party under this Agreement will be for the benefit of, or owed to, each member of their Group Companies (which in the case of TTL shall include the TfL Group) mutatis mutandis, which Group Companies (including the TfL Group) shall will be entitled to enforce the same against the other Party.

2. **SUPPLY OF SOFTWARE**

- 2.1 In accordance with the programme and dates in **Schedule 1**, TTL will deliver to Cubic the Object Code version and the Source Code version of the TTL Software and the Documentation on an encrypted hard drive (which Cubic shall return to TTL once the Object Code version and Source Code version of the TTL Software and the Documentation have been transferred to Cubic's

system). TTL will advise Cubic of the identity of the encryption software and key (which shall be Confidential Information of TTL).

- 2.2 Risk in the media on which the TTL Software and Open Source Software is recorded will pass from TTL to Cubic on delivery. If any part of that media is subsequently lost, destroyed or damaged TTL will promptly replace it, subject to Cubic paying the cost of such replacement.

3. LICENCE

- 3.1 Cubic acknowledges that to use the TTL Software effectively Cubic will need to obtain from third parties licences of software, the Intellectual Property Rights in which are vested in those third parties, and that TTL has no responsibility for procuring or otherwise in relation to such licences or software including in relation to all Open Source Software or COTS . Tfl has set out a list of the relevant Open Source Software, third party software and COTS which is incorporated in and/or is aggregated with and/or needs to be downloaded by Cubic, as further set out in **Part A of Schedule 4**, to work with the TTL Software which Cubic must and shall ensure it will download and/or ensure it is licensed to use and which Cubic agrees to obtain in order to achieve the intended use of the Licensed Materials as envisaged in this Agreement.

- 3.2 With effect from the Start Date, TTL hereby grants to Cubic and to Cubic Group Companies a non-exclusive, perpetual, transferable, irrevocable, world-wide licence (in respect of the period after and including the Start Date, including after termination, partial termination or expiry of this Agreement) to:

3.2.1 use, disclose, copy, reproduce, install, display, distribute, exploit, promote, modify, adapt and enhance the Licensed Materials for the Purpose; and

3.2.2 grant Sub-Licences in relation to the Purpose.

- 3.3 The licence granted at **Clause 3.2** is subject to the following obligations and restrictions:

3.3.1 Cubic will make its Group Companies and permitted subcontractors (if any) aware of the permitted scope of the licences and the related obligations on Cubic and will procure their compliance with the licence and related obligations;

3.3.2 Cubic will not remove or alter any copyright notices or similar proprietary devices, including any electronic watermarks or other identifiers, that may be incorporated in the Licensed Materials;

3.3.3 Cubic will ensure that where any Open Source Software is used, Cubic and/or its Group Companies will comply with the terms of the relevant licenses and obligations for the use of such Open Source Software;

3.3.4 Cubic will not, without the prior written consent of TTL, use the Licensed Materials for any purpose other than the Purpose or as otherwise set out in **Clause 3.2**; and

3.3.5 Cubic will notify TTL as soon as it becomes aware of any unauthorised use of such Licensed Materials by any person.

4. **BUG-FIX UPDATES AND UPGRADED VERSIONS**

4.1 TTL will not be under any obligation under this Agreement to make Bug-fix Updates or Upgraded Versions of the TTL Software available to Cubic or otherwise to support the Licensed Materials save as expressly set out.

5. **Not Used**

6. **NEW YORK EXCLUSIVITY**

6.1 TTL will not (and will ensure that no member of the TfL Group will) offer a licence or any rights to the Licensed Materials, engage with, support or provide consultancy services to any person or entity (other than a Cubic Group Company) who is bidding in relation to the New York Project until after a contract is awarded by the Metropolitan Transportation Authority / New York City Transit Authority to the winning bidder for the New York Project.

7. **TTL WARRANTIES**

7.1 TTL warrants to Cubic that the TTL Software delivered by TTL to Cubic pursuant to **Clause 2.1** will be identical to the version which TTL deployed and was operating in London as at 6 May 2016.

7.2 TTL warrants to Cubic that the Tier 1 Information delivered by TTL to Cubic pursuant to **Clause 2.1**

7.2.1 will be a fully descriptive, complete and accurate representation of the TTL Software which TTL was using in London as at 6 May 2016; and

7.2.2 will be a fully descriptive, complete and accurate representation of the functional, integration, user and performance test cases of the system in use in London as at 6 May 2016.

7.3 TTL warrants to Cubic that the Tier 2 Information delivered by TTL to Cubic pursuant to **Clause 2.1** was used by TTL in creating and delivering the TTL Software which TTL was using in London as at 6 May 2016, but otherwise such Tier 2 information is provided "as is".

7.4 TTL warrants to Cubic that:

7.4.1 the list of Open Source Software set out in **Part A of Schedule 4** is a complete list of all the Open Source Software incorporated in or aggregated with or which TTL has used with the TTL Software as at 6 May 2016; and

7.4.2 the list of third party software and COTS set out in **Schedule 3** is a complete and accurate list of the third party and COTS software used by TTL as at 6 May 2016 to run, develop and modify the TTL Software.

7.5 Subject always to **Clause 10**, TTL shall indemnify and keep indemnified Cubic and each Cubic Group Company against all Recoverable Liabilities howsoever arising (including without limitation in contract or tort) from or in connection with any breach of any of the warranties given by TTL in **Clauses 7.1, 7.2, 7.3** and **7.4** above, provided however that in relation to the warranties given by TTL to Cubic in **Clause 7.2** TTL shall have a reasonable period (being no less than 30 days) to remedy the breach or non-compliance prior to the right to this indemnity applying.

7.6 Subject to **Clause 10.3** and without prejudice to **Clauses 7.4.1, 10.10** and **paragraph 1** of **Schedule 4**, TTL gives no warranty, condition and/or representation in respect of Open Source Software. **Schedule 4** will apply to all Open Source Software.

8. **CUBIC OBLIGATIONS AND RESTRICTIONS**

8.1 Cubic will comply with all Applicable Laws governing the use of the Licensed Materials.

8.2 Cubic shall ensure that Cubic has the following software in order to access and read the TTL Software and Documentation:

8.2.1 Microsoft Test Manager;

8.2.2 Specflow/Selenium;

8.2.3 Microsoft Office;

8.2.4 Microsoft Visio;

8.2.5 Microsoft Team Foundation Server;

8.2.6 Microsoft Visual Studio;

8.2.7 Enterprise Architect;

8.2.8 JPEG reader; and

8.2.9 Virtual Machine and Wiki site.

9. **LICENCE FEE AND PAYMENT**

9.1 Cubic will pay the Licence Fee to TTL in accordance with **Schedule 2**.

9.2 TTL will invoice Cubic for the Licence Fee in accordance with the timings and subject to the conditions in **Schedule 2**.

9.3 Each invoice will be payable by Cubic within 30 days following the date on which the invoice is issued. All payments will be made in pounds sterling in cleared funds by BACS (Bank Automated Clearing System) transfer to the following bank account or such other bank account as TTL may nominate from time to time:

BANK: HSBC Bank plc, Belgravia Branch, The Peak, 333 Vauxhall Bridge Road, London

ACCOUNT NUMBER: [REDACTED]

SORT CODE [REDACTED]

9.4 If any sum payable under this Agreement is not paid on or before the due date for payment TTL will be entitled to charge Cubic interest on that sum at 3% per annum above the base lending rate from time to time of HSBC Bank plc from the due date until the date of payment (whether before or after judgment), such interest to accrue on a daily basis.

9.5 Any sum payable under this Agreement is exclusive of VAT which will be payable in addition to that sum in the manner and at the rate prescribed by law from time to time.

10. EXCLUSIONS AND LIMITATIONS OF LIABILITY

10.1 Subject to **Clause 10.5**, TTL's (which term shall include TTL and all of TTL's Group Companies) maximum aggregate Liability;

10.1.1 in respect of the indemnities given by TTL in **Clause 11** (Intellectual Property Rights Indemnity) shall be limited to [REDACTED] and [REDACTED]

10.1.2 in respect of all other Losses and Liability shall be limited to [REDACTED]

10.2 TTL (which term shall include TTL and all of TTL's Group Companies) will have no Liability to Cubic (and/or any Cubic Group Companies) for any:

10.2.1 loss or damage arising out of any failure by Cubic, any Cubic Group Company or any Third Party User to keep full and up to date security copies of any computer programs and data held or used by or on behalf of Cubic, a Cubic Group Company and/or that Third Party User (whether direct, indirect or consequential); or

10.2.2 indirect, consequential or special losses or damages,

subject always to **Clause 10.5**.

10.3 Subject to **Clause 10.5**, Cubic's (which term shall include Cubic and all of Cubic's Group Companies) maximum aggregate Liability shall be limited to [REDACTED]

- 10.4 Cubic (which term shall include Cubic and all of Cubic's Group Companies) will have no Liability to TTL (and/or any TTL Group Companies) for any indirect, consequential or special loss or damage, subject always to **Clause 10.5**.
- 10.5 Nothing in this Agreement will operate to exclude or restrict a Party's (including their Group Companies') Liability (if any) to the other (and to their Group Companies):
- 10.5.1 for death or personal injury resulting from its negligence or the negligence of a person for whom it is vicariously liable (negligence being as defined in Section 1(1) Unfair Contract Terms Act 1977);
 - 10.5.2 for its fraud or fraudulent misrepresentation or fraud or fraudulent misrepresentation by a person for whom it is vicariously liable;
 - 10.5.3 for breach of its obligations arising under section 12 Sale of Goods Act 1979;
 - 10.5.4 for breach of its obligations arising under Section 2 Supply of Goods and Services Act 1982;
 - 10.5.5 for breach of its obligations arising under Section 8 Supply of Goods (Implied Terms) Act 1973;
 - 10.5.6 arising under Section 2(3) Consumer Protection Act 1987; or
 - 10.5.7 for any matter for which it is not permitted by law to exclude or limit, or to attempt to exclude or limit, its liability.
- 10.6 Nothing in this **Clause 10** will prevent or restrict the right of a Party (or their Group Companies) to seek injunctive relief or specific performance or other discretionary remedies of the court.
- 10.7 The Parties agree that they have negotiated this **Clause 10** and the allocation of risk in this clause is a fair and equitable position.
- 10.8 The exclusions from and limitations of liability contained in this Agreement will apply after as well as before the Termination Date.
- 10.9 The exclusions from, and limitations of, liability set out in this **Clause 10** will be considered severally. The invalidity or unenforceability of any one sub-clause or clause will not affect the validity or enforceability of any other sub-clause or clause and will be considered severable from each other.
- 10.10 Subject to **Clause 10.5** and/or except where otherwise expressly set out, all warranties, conditions and other terms (whether implied by law or otherwise and whether by statute, common law or otherwise) are excluded from this Agreement.
- 10.11 Notwithstanding any other term of this Agreement neither Party (nor any of its Group Companies) shall be in breach of this Agreement to the extent its

failure to perform or delay or defect in performance of its obligations under this Agreement arises as a direct result of any breach by the other Party (or any of its Group Companies) of its obligations contained in this Agreement.

10.12 **Schedule 4** will apply to any Open Source Software.

10.13 Subject to **Clause 26.3** each Party's employees, agents and sub-contractors and each Party's Group Companies will be entitled to enforce all the terms of this **Clause 10** subject to and in accordance with the Contracts (Rights of Third Parties) Act 1999 and the terms of this Agreement. Accordingly, subject to **Clause 10.5**, the financial limits on Liability set out in **Clauses 10.1** for TTL and **Clause 10.3** for Cubic are the maximum Liability for each Party and their Group Companies and, in each case, their employees, agents and sub-contractors in the aggregate.

11. **INTELLECTUAL PROPERTY RIGHTS**

11.1 Cubic acknowledges and agrees that its rights to the Licensed Materials are as set out in **Clause 3** and that title to and all Intellectual Property Rights in or relating to the Licensed Materials, are and will remain the exclusive property of TTL.

11.2 Cubic acknowledges and agrees that it will not register or use any trade mark of TTL or register or use any other Intellectual Property Rights owned or licensed by TTL in its own right as proprietor.

11.3 TTL acknowledges and agrees that all modifications, changes, adaptations and enhancements to the Licensed Materials made or created by Cubic, Cubic Group Companies or any sub-licensees, as permitted under **Clause 3**, will become Cubic's property (or the property of the party who made or created the modification, change, adaptation or enhancement), immediately on their making or creation. TTL shall have no rights over any such modifications, changes, adaptations and enhancements and Cubic shall be under no obligation to disclose or to license any such modifications, changes, adaptations or enhancements to TTL.

11.4 TTL warrants to Cubic, for the Term of the Agreement and for up to 12 years after termination or expiry of this Agreement, that the Licensed Materials shall not infringe or otherwise misappropriate the Intellectual Property Rights of any Third Party and that TTL has the full capacity and authority and all approvals, licences and consents necessary to enable it to grant the licences and rights it has in relation to the Licensed Materials.

11.5 Subject always to **Clauses 10** and **11.10**, TTL shall indemnify and keep indemnified Cubic and each Cubic Group Company against all Recoverable Liabilities howsoever arising (including without limitation in contract or tort) from or in connection with any claim or threatened claim which may be brought against Cubic and/or any Cubic Group Company by a Third Party by reason of any infringement or other misappropriation or alleged infringement or other misappropriation of any Intellectual Property Rights in connection with the circumstances referred to in **Clause 11.4** (a "**Claim**").

- 11.6 If Cubic becomes aware of a Claim or any matter that might give rise to a Claim, Cubic shall immediately give written notice to TTL of that fact (stating in reasonable detail the nature of the claim or action or matter and, if practicable, the amount claimed). On receipt of notice of any Claim from Cubic, TTL shall provide Cubic with relevant information in respect of such Claim and TTL's assessment of the potential impact of the Claim on the operation and effect of this Agreement.
- 11.7 TTL shall at its own cost and expense conduct any litigation or proceedings arising from any infringement or other misappropriation or alleged infringement or other misappropriation of a Third Party's Intellectual Property Rights and all negotiations in connection therewith in such a way as to attempt to minimise damage to the reputation of Cubic. Cubic hereby agrees to grant to TTL the exclusive control of any such litigation, proceedings and negotiations save that TTL shall consult with Cubic (and take due account of matters raised by Cubic) at all times in respect of TTL's conduct of any such litigation, proceedings and negotiations and Cubic agrees to consult with TTL.
- 11.8 If Cubic becomes aware of a Claim or any matter that might give rise to such a Claim:
- 11.8.1 Cubic will not, will procure its Group Companies will not and Cubic will use reasonable endeavours to procure that any End Users will not, settle or compromise or make any admission of liability, agreement or compromise in relation to that Claim or matter that may give rise to a Claim without the prior written consent of TTL, such consent not to be unreasonably withheld or delayed;
- 11.8.2 Cubic will at all times disclose in writing to TTL all information and documents relating to the Claim or the matter that might give rise to a Claim;
- 11.8.3 if requested by TTL, Cubic will give and procure its Group Companies give, and Cubic will use reasonable endeavours to procure that any End Users give, TTL and its professional advisers reasonable access within usual business hours to the personnel and premises of, and to all assets, accounts, documents and records within the power, possession or control of, Cubic and its End Users for the purpose of interviewing or examining them (as appropriate) and allow TTL to take photographs of the premises and assets and copies of the accounts, documents and records at its own expense;
- 11.8.4 Cubic will take and procure its Group Companies take, and will use reasonable endeavours to procure that all End Users take, all such actions and provide all such reasonable assistance as TTL may request to dispute, resist, defend, appeal, settle, compromise, remedy or mitigate the Claim or matter that might give rise to a Claim including using professional advisers nominated by TTL; TTL being responsible to reimburse Cubic for all Costs reasonably and

properly incurred by Cubic, a Cubic Group Company or an End User as a result of such a request by TTL;

- 11.8.5 Cubic will allow and procure its Group Companies allow, and will use reasonable endeavours to procure that all End Users allow, TTL exclusive conduct of all proceedings in relation to the Claim in the name of and on behalf of Cubic, at the cost and expense of TTL; and
 - 11.8.6 TTL will give reasonable information on a reasonably regular basis to Cubic as to the progress of the Claim.
- 11.9 In consideration of the Licence Fee due to TTL (if and to the extent they become payable in accordance with this Agreement), if an injunction is granted as a result of a Claim and that injunction prevents Cubic's use of the Licensed Materials TTL shall, at TTL's option, cost and expense:
- 11.9.1 obtain for Cubic the right to continue using Licensed Materials in accordance with the terms and conditions of this Agreement free from any liability for such infringement; or
 - 11.9.2 modify, substitute or replace the Licensed Materials or any part thereof so as to avoid the infringement, without adversely affecting or limiting the functionality of such Licensed Materials.
- 11.10 **Clauses 11.4, 11.5, 11.7, 11.8 and 11.9** will not apply to the extent that any claim or action is caused by:
- 11.10.1 any modification to the Licensed Materials made by any person other than TTL or a member of the TfL Group;
 - 11.10.2 any breach of this Agreement by Cubic;
 - 11.10.3 use of the Licensed Materials in combination with software other than the Open Source Software set out in **Schedule 4** (being the specific versions and licences set out therein), third party software, or COTS set out in **Schedule 4**;
 - 11.10.4 failure of Cubic, a Cubic Group Company or an End User to use replaced or modified Licensed Materials (or parts of it) provided by TTL;
 - 11.10.5 use of the Licensed Materials in a manner outside of the Purpose;
 - 11.10.6 use of materials and/or consultancy services which are not licensed as part of this Agreement.
- 11.11 Subject to the provisions of **Clause 10.5**, this **Clause 11** states TTL's and TTL's Group Companies' entire Liability arising from an infringement (or alleged infringement) of an Intellectual Property Right of a third party.

12. EXPIRY AND TERMINATION

- 12.1 Subject to earlier termination in accordance with this **Clause 12**, this Agreement will expire at the end of the Term.
- 12.2 Either Party may terminate this Agreement immediately by giving written notice to that effect to the other Party, if that other Party:
- 12.2.1 commits a material breach of this Agreement which cannot be remedied; or
 - 12.2.2 commits a material breach of this Agreement which can be remedied but fails to remedy that breach within thirty days (or such other later period agreed between the Parties in writing or in this Agreement) of a written notice being given by the Party not in breach, setting out the breach and requiring it to be remedied; or
 - 12.2.3 is subject to an Insolvency Event.
- 12.3 Each Party will notify the other Party immediately upon becoming subject to an Insolvency Event.
- 12.4 The rights of termination set out in this Agreement are in addition to and not in substitution for any rights of termination which may exist at common law.

13. CONSEQUENCES OF EXPIRY AND TERMINATION

- 13.1 Termination or expiry of this Agreement shall not affect the coming into force or the continuance in force of any provision of this Agreement which is expressly or by implication intended to come into or continue in force on or after termination, including the following Clauses and Schedules: **Clauses 3, 4, 7, 8, 10, 11.1 – 11.3 (inclusive), 11.4 (for the duration stated therein) 11.5 - 11.11 (inclusive), 13 – 16 (inclusive), 18 – 29 (inclusive), 31, Schedule 1 (to the extent referred to in any of the above Clauses) and Schedule 4**. All other rights and obligations will immediately cease without prejudice to any rights, obligations, claims (including claims for damages for breach) and Liabilities which have accrued prior to the Termination Date.
- 13.2 Within thirty days after the Termination Date each Party will, subject to **Clause 13.3** and excluding the Licensed Materials:
- 13.2.1 return to the other Party all Confidential Information (including all copies and extracts) and all other property (whether tangible or intangible) of the other Party in its possession or control;
 - 13.2.2 destroy or permanently erase (if technically feasible) all documents and all records (in any media) created by it or on its behalf that use, concern or are based on any Confidential Information of the other Party ("**Records**"); and
 - 13.2.3 cease to use the Confidential Information of the other Party.

13.3 Each Party may retain any Confidential Information of the other Party and/or Records which it has to keep to comply with any Applicable Law or which it is required to retain for insurance, accounting or taxation purposes.

14. **CONFIDENTIALITY AND TRANSPARENCY**

14.1 Each Party acknowledges that it may acquire or receive Confidential Information of the other Party or of a Group Company of a Party, as the case may be. Each Party undertakes that it will:

14.1.1 receive and/or maintain any such Confidential Information in strictest confidence and it acknowledges that such information is of a proprietary and confidential nature;

14.1.2 not use any such Confidential Information for any purposes whatsoever other than for the proper performance of its obligations and/or receipt of its rights (or in each case the Group Companies' rights or obligations) under this Agreement; and

14.1.3 not disclose any such Confidential Information to any Third Party without the prior written consent of the other Party, except to the extent permitted under this Agreement or necessary for the exercise of rights or the performance of obligations under this Agreement. Cubic and TTL may disclose Confidential Information to their Group Companies who reasonably need to see it subject to procuring their compliance with this **Clause 14**.

14.2 Cubic will ensure that any Group Companies, employee, consultants, contractors or agents of Cubic and their Group Companies to whom TTL Confidential Information is disclosed or third party to whom Cubic discloses TTL Confidential Information complies with the provisions of this **Clause 14**. In relation to End Users, Cubic shall ensure that such End Users are aware that TTL Confidential Information is confidential and should be treated as confidential and not shared.

14.3 Each Party acknowledges that damages would not be an adequate remedy for any breach of **Clause 14.1** and that (without prejudice to all other remedies to which a Party may be entitled as a matter of law) each Party (and to the extent relevant their Group Companies) will be entitled to the remedies of injunction, specific performance and other equitable relief to enforce the provisions of **Clause 14.1** and no proof of special damages will be necessary for the enforcement of the provisions of this **Clause**.

14.4 The obligations on a Party set out in this **Clause 14** will not apply to any Confidential Information:

14.4.1 which either of the Parties can demonstrate is in the public domain (other than as a result of a breach of this **Clause 14**);

14.4.2 which a Party is required to disclose by any law, legislation or order of a court of competent jurisdiction, but then only to the extent of such required disclosure; or

- 14.4.3 to the extent that such disclosure is to the Secretary for Transport (or the government department responsible for public transport in London for the time being) the Office of Rail Regulation, or any person or body who has statutory responsibilities in relation to transport in London and their employees, agents and sub-contractors.
- 14.5 The obligations with respect to Confidential Information disclosed under this Agreement will survive termination of this Agreement and continue for as long as the information remains confidential.
- 14.6 Cubic acknowledges that TTL is subject to the Transparency Commitment. Accordingly, notwithstanding **Clauses 14.1 to 14.5** inclusive above and **29**, Cubic hereby gives its consent for TTL to publish the Agreement Information to the general public.
- 14.7 TTL may in its absolute discretion redact all or part of any Agreement Information prior to its publication. In so doing and in its absolute discretion TTL may take account of the exemptions/exceptions that would be available in relation to information requested under the FOI Legislation. TTL may in its absolute discretion consult with Cubic regarding any redactions to the Agreement Information to be published pursuant to **Clause 14.6**. TTL will make the final decision regarding publication and/or redaction of the Agreement Information.

15. **BRANDING AND PUBLICITY**

- 15.1 The Parties agree that, in any publicity, branding, media, promotional or marketing materials, statement or communication relating to this Agreement or its subject matter, each Party may use the following wording (or wording which is substantially similar) without the prior written consent of the other Party:

“Cubic has obtained a licence of the rights to Transport for London’s EMV Contactless Back Office consisting of the software code, detailed design documentation and business design documentation. In addition TfL is providing consultancy support to Cubic for 5 years under this agreement”.

- 15.2 Use of either Party’s logos, brands or any form (or substantially similar form) of words other than those in **Clause 15.1** relating to this Agreement or its subject matter will be subject to separate written agreement between the Parties on a case by case basis.

16. **ASSIGNMENT**

- 16.1 Neither Party shall be entitled to assign, transfer, charge, hold on trust for any person or deal in any other manner with any of its rights under this Agreement without the prior written consent of the other Party except where the assignment or transfer is to a Group Company.

17. **SUB-CONTRACTING**

17.1 Neither Party shall be entitled to sub-contract any of its obligations under this Agreement without the prior written consent of the other Party.

18. **NOTICE**

18.1 Subject to **Clause 18.4**, any notice, communication or demand required to be given in accordance with this Agreement will be in writing, in the English language and:

18.1.1 delivered by hand; or

18.1.2 sent by pre-paid first class post or recorded delivery post

to the relevant Party.

18.2 Any notice, communication or demand given in accordance with **Clause 18.1** will be deemed to have been duly served:

18.2.1 if delivered by hand, at the time of delivery; or

18.2.2 if sent by pre-paid first class post or recorded delivery post at 9.00 am two (2) Business Days after the date of posting

provided that if a notice or demand is served before 9.00 am on a Business Day it will be deemed to be served at 9.00 am on that Business Day and if it is served on a day which is not a Business Day or after 5.00 pm on a Business Day it will be deemed to be served at 9.00 am on the immediately following Business Day.

18.3 To prove service of a notice or a demand it will be sufficient for a Party to prove its compliance with the provisions of **Clause 18**.

18.4 This **Clause 18** will not apply to the service of any proceedings or other documents in a legal action to which the Civil Procedure Rules apply.

19. **ENTIRE AGREEMENT**

19.1 Subject to **Clause 19.2**, each of the Parties confirms that this Agreement represents the entire understanding, and constitutes the whole agreement, in relation to its subject matter and supersedes any previous agreement between the Parties with respect to its subject matter.

19.2 Each Party confirms that in entering into this Agreement it has not relied on any representation, warranty, assurance, covenant, indemnity, undertaking or commitment which is not expressly set out or referred to in this Agreement and, in any event, without prejudice to any liability for fraudulent misrepresentation or fraudulent misstatement, the only rights or remedies in relation to any representation, warranty, assurance, covenant, indemnity, undertaking or commitment given or action taken in connection with this Agreement are pursuant to this Agreement, and without limitation, neither

Party has any other right or remedy (whether by way of a claim for contribution or otherwise) in tort (including negligence) or for misrepresentation (whether negligent or otherwise, and whether made prior to, and/or in, this Agreement).

20. **WAIVER**

20.1 The rights and remedies of the Parties shall not be affected by any failure to exercise or delay in exercising any right or remedy or by the giving of any indulgence by any other Party or by anything whatsoever.

20.2 No single or partial exercise of any right or remedy shall prevent any further or other exercise thereof or the exercise of any other right or remedy.

20.3 Save as expressed to the contrary in this Agreement, each Party's rights and remedies under this Agreement are cumulative and shall not apply to exclude or limit any right or remedy at statute, common law or any claim for equitable relief.

21. **SEVERANCE**

21.1 If any provision or part of this Agreement is void or unenforceable due to any Applicable Law, it shall be deemed to be deleted and the remaining provisions of this Agreement shall continue in full force and effect. If any invalid, unenforceable or illegal provision of this Agreement would be valid, enforceable and legal if some part of it were deleted, the provision shall apply with the minimum deletion necessary to make it valid, legal and enforceable.

21.2 In the event of a holding of invalidity so fundamental as to prevent the accomplishment of the purpose of this Agreement, Cubic and TTL shall immediately commence good faith negotiations to remedy such invalidity.

22. **VARIATION**

No variation of this Agreement shall be valid unless it is in writing and signed by or on behalf of each of the Parties to it by its respective duly authorised representatives. The expression "**variation**" shall include any variation, amendment, supplement, deletion or replacement however effected.

23. **NO PARTNERSHIP OR AGENCY**

23.1 Nothing in this Agreement or any document referred to in it or any arrangement contemplated by it shall constitute, or shall be deemed to constitute, either Party a partner of the other, nor shall the execution, contemplation and implementation of this Agreement confer on either Party any power to bind or impose any obligations to any third parties on the other Party or to pledge the credit of the other Party.

23.2 Except as expressly provided to the contrary in this Agreement, neither Party shall have any right or authority to and shall not do any act, enter into any contract, make any representation, give any warranty, incur any liability,

assume any obligation, whether express or implied, of any kind on behalf of the other Party or bind the other Party in any way.

- 23.3 Nothing contained in this Agreement shall be construed or have effect as creating or constituting any employment, agency or partnership relationship between Cubic and TTL and each Party shall be solely responsible for making appropriate deductions for tax and national insurance contributions from the remuneration paid to its employees and personnel.

24. **INDEPENDENT CONTRACTORS**

Each Party agrees that it is an independent contractor and is entering into this Agreement as principal and not as agent for or for the benefit of any other person.

25. **COUNTERPARTS**

This Agreement may be executed in any number of counterparts and by the Parties to it on separate counterparts, each of which when so executed and delivered shall be an original, but all the counterparts together shall constitute one and the same agreement.

26. **RIGHTS OF THIRD PARTIES**

- 26.1 Subject to **Clauses 10.11, 26.2 and 26.3**, the Parties do not intend that any of the terms of this Agreement will be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 ("**Third Party Act**") by any person not a party to it.
- 26.2 Subject to **Clause 26.3**, any Group Company of a Party has the right to enforce the terms of this Agreement in accordance with the Third Party Act.
- 26.3 The Parties agree that any Losses of a Group Company under or in connection with this Agreement shall not be deemed to be consequential, irrecoverable or excluded under this Agreement merely by virtue of the fact they are Losses of a Group Company and, as far as permissible by law, such Losses shall be deemed to be Losses which are Losses of the Party to which the Group Company relates. As such, any claims in connection with this Agreement relating to a Party and/or their Group Companies must be brought by the relevant Party on its and Group Companies' behalves except to the extent this is prevented by mandatory local laws applicable to the relevant Party and/or Group Companies, as appropriate, in which case the relevant Group Companies of that Party shall and, subject to **Clause 10**, be entitled to enforce any term of the Agreement which is expressly or impliedly intended to benefit them and to bring claims directly in relation to such matter and to enforce the Agreement under the Third Party Act, provided always that in no circumstance shall either Party's liability shall be increased as a result and there shall be no right of double recovery.
- 26.4 The Parties reserve the right to rescind, novate or vary this Agreement or vary any terms, or part of it, without the consent of any other person or any member of the Parties

27. EXPORT CONTROLS AND SANCTIONS

- 27.1 Notwithstanding any other provision of this Agreement, each Party shall retain responsibility for its compliance with Applicable Law concerning export control and economic or trade sanctions imposed by the EU and/or the UK from time to time relating to the provision of TTL Software and Documentation to a Third Party End User. No Party shall be required under the terms of this Agreement to be directly or indirectly involved in the provision of TTL Software or Documentation that may be prohibited by Applicable Law concerning export control and economic or trade sanctions imposed by the EU and/or the UK.
- 27.2 Each Party shall provide all assistance to the other Party as that other Party may reasonably require in respect of its compliance with Applicable Law concerning export control and economic or trade sanctions imposed by the EU and/or the UK, for example, in obtaining and maintaining any applicable export licence, providing any end-user or end-use undertakings or other certificates or documents as are reasonably requested to obtain authorisations, consents, licences and/or permits required for any payment or any export or import of TTL Software or Documentation under this Agreement. The Parties agree to comply with the requirements of all applicable export licences obtained. Neither Party shall do or omit to do anything which would or could give rise to any non-compliance, revocation, suspension, additional constraints or limitations or non-renewal (where renewal is required) of any applicable export licences.
- 27.3 Failure by Cubic to comply with the requirements of this provision may be treated by TTL as a material breach of this Agreement which cannot be remedied and to which **Clause 12.2** applies.

28. FUTURE MARKET STRATEGY MEETINGS

- 28.1 Representatives from senior management of the Parties shall meet every six (6) months to share ideas on how the market for transportation and contactless payment ticketing services is developing, what opportunities are expected and what new product features are likely to be required. Any joint commercial exploitation or implementation by the Parties of new features in the market which have been developed by either Party shall be subject to agreement in a separate licence agreement or as a written variation to this Agreement.

29. FREEDOM OF INFORMATION

- 29.1 Cubic acknowledges that TTL is subject to the FOI Legislation and agrees to assist and co-operate with TTL to enable TTL to comply with its obligations under the FOI Legislation and that TTL may be obliged under the FOI Legislation to disclose information without consulting or obtaining consent from Cubic.
- 29.2 Cubic will transfer to TTL each Information Request relevant to this Agreement or any member of the TfL Group that it receives as soon as

practicable and in any event within two (2) Business Days after receiving such Information Request and in relation to information held by Cubic on behalf of TTL, provide TTL with details about and/or copies of all such information that TTL requests and such details and/or copies will be provided within five (5) Business Days of a request from TTL (or such other period as TTL may reasonably specify), and in such forms as TTL may reasonably specify.

- 29.3 TTL will be responsible for determining whether information is exempt information under the FOI Legislation and for determining what information will be disclosed in response to an Information Request in accordance with the FOI Legislation. Cubic will not itself respond to any person making an Information Request, save to acknowledge receipt, unless expressly authorised to do so by TTL.

30. TTL CONSULTANCY OBLIGATIONS

- 30.1 TTL shall provide, at TTL's cost and expense (subject to **Clause 30.6**), a total of 3,140 hours of consultancy services, which shall be limited to TTL assisting Cubic to understand the TTL Software and Documentation and to TTL supporting Cubic and any Cubic Group Company in bidding for contracts with End Users where Cubic or any Cubic Group Company proposes to use the Licensed Materials or any products which incorporate or are based on the Licensed Materials. Any such bidding support shall include TTL generating supporting information and material to form part of the bid submission, reviewing bid material, preparing for and attending oral presentations, responding to customer queries and hosting customer site visits as required ("**Ad Hoc Information**"). TfL shall own all Intellectual Property Rights in such Ad Hoc Information. Any tangible documents which arise from such Ad Hoc Information ("**Ad Hoc Materials**") shall be licensed as if they were Licensed Materials from the date of delivery of the final versions of such Ad Hoc Materials.
- 30.2 The availability of TTL Consultants for the TTL Consultancy Services will be limited to specific personnel for a specified number of days per week, per month and in total is as set out in **Schedule 5**.
- 30.3 In order to call off any TTL Consultancy Services or use any of TTL Consultants, the Parties shall follow the following process:
- 30.3.1 at least four (4) weeks before the required start date for any international work, or two (2) weeks before the required start date for any UK work, the Cubic Account Manager shall complete and submit, by email, the consultancy request form set out in **Part A of Schedule 6** ("Consultancy Request Form") to the TTL Account Manager;
- 30.3.2 on receipt of the Consultancy Request Form the TTL Account Manger will review the request and shall within five (5) Business Days respond (by email) to the Cubic Account Manager:

- 30.3.2.1 by completing the form set out in **Part B of Schedule 6** (“Consultancy Request Response”), which shall include the TTL resources allocated to meet the consultancy requirements, taking into consideration the TTL Consultants availability set out in **Schedule 5**; or
 - 30.3.2.2 with an alternative timeframe and resources available, where the Consultancy Request Form requests resources, which are not available for the requested time period, as determined by TTL at its sole discretion; or
 - 30.3.2.3 to clarify the scope of work included in the Consultancy Request Form or any part of the Consultancy Request Form where such request is unclear and the TTL Account Manager shall liaise with the Cubic Account Manager to clarify the TTL Consultancy Services being requested.
- 30.3.3 Where TTL responds in accordance with **Clause 30.3.2.2** or **30.3.2.3** above, the Cubic Account Manager shall either submit a revised and updated Consultancy Request Form in accordance with **Clause 30.3.2** or cancel the Consultancy Request Form.
- 30.3.4 Where TTL responds in accordance with **Clause 30.3.2.1**, the Cubic Account Manager shall, within five(5) Business Days confirm the acceptance of the TTL Consultancy Services by signing and returning a copy of the Consultancy Response Form to the TTL Account Manager.
- 30.3.5 Once TTL has received the signed Consultancy Response Form, TTL will provide the agreed Consultancy Services in accordance with the Consultancy Response Form.
- 30.4 The Cubic Account Manager and TTL Account Manager shall at the end of each TTL 4 week period, meet to discuss and review the number of consultancy hours that were used during the previous period, discuss any future work, and discuss such other items as the Cubic Account Manager and TTL Account Manager agree. The dates, times and attendees to the meeting will be agreed by both the Cubic Account Manager and the TTL Account Manager.
- 30.5 If Cubic requires technical or general consultancy services from TTL, other than the TTL Consultancy Services, TTL will provide such services under a separate consultancy agreement (“**Consultancy Agreement**”). All rights and obligations of the Parties in relation to such other consultancy services shall be as set out under the relevant Consultancy Agreement including in relation to ownership of Intellectual Property Rights.
- 30.6 All travel and subsistence expenses incurred by TTL Consultants (in accordance with TfL’s Travel and Subsistence Policy, as updated from time

to time) in carrying out the TTL Consultancy Services will be reimbursed by Cubic to TTL, provided that such travel and subsistence arrangements were authorised by the Cubic Account Manager prior to being incurred and that the amount of such expenses is supported by documented receipts.

31. **LAW AND JURISDICTION**

This Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the laws of England. The Parties irrevocably agree that the courts of England shall have exclusive jurisdiction to settle any dispute or claim that arises out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims). Notwithstanding the foregoing, nothing in this Agreement shall prevent either Party from seeking injunctive relief in any court of competent jurisdiction.

IN WITNESS whereof this Agreement has been **EXECUTED AS A DEED** by the Parties hereto and is intended to be and is hereby delivered on the day and year first above written

EXECUTED AS A DEED

by **CUBIC TRANSPORTATION**

SYSTEMS LIMITED

acting by

in the presence of

Director

.....

Name of witness

.....

Address of witness

.....

.....

The **COMMON SEAL** of

TRANSPORT TRADING LIMITED

was hereunto affixed in the presence of:

.....

Authorised Signatory

SCHEDULE 1

TTL SOFTWARE and DOCUMENTATION

TTL Software

Payment and Risk Engine (“PaRE”) – this module obtains tokenised transaction data from a payment card services module (which does not form part of the Software) to be processed for risk assessment and payments; and determines using the supplied business rules (which do not form part of the Software) whether a contactless payment card is valid for travel on the transport network and whether an authorisation should be sought from the merchant acquirer.

Fares and Aggregation Engine (“FAE”) – this module provides the capability to process tokenised transaction data received from the front office devices to construct journeys with an associated fare; and applies business rules (such as capping the fares to be charged for multiple pay by ride journeys, which do not form part of the Software) to determine the apportionment of revenue between transport operators.

Master Data - this group of modules creates, maintains and manages all routes, fares, apportionment, journey construction rules and reference data (which does not form part of the Software) associated with the PaRE and FAE.

Customer Account & Self Care (“CASC”) – this module is a responsive web portal which gives registered and unregistered customers access to payment and journey history, as well as allowing them to manage their contactless travel online.

Customer Account System (“CAS”) – this module is an intranet portal which provides call centre agents with customer account, payment and journey information, allowing them to investigate and resolve incoming phone enquiries.

Common Services – a group of modules which provide common capabilities to the functional modules described above, including an email notification mechanism, file transfer mechanism and, messaging application programming interface.

Automation Test – a collection of automated test scripts, which test the modules set out above from a functional, integration and non-functional test perspective. The functional and integration test scripts can be used in conjunction with manual tests to verify the system from a regression perspective. The non-functional verifications are conducted using performance test scripts, which although automated, require a level of manual intervention towards data setup and test analysis.

Service Disruption Manager – this module is an intranet portal designed for use by operational staff to input details of current, future and (limited) previous service disruptions. These disruption events are then taken into consideration by FAE and affected journeys are corrected to avoid unfairly penalising customers for circumstances outside their control.

Single Sign On – this module is a responsive web portal which enables customers to authenticate once to gain access to multiple applications such as CASC, and

provides a single place where customers’ personal data is maintained. It is also used for authentication of internal staff (Customer Service Agents and Service Managers) for access to CAS and SDM.

TTL Software Source Code

Source Code - Base IP (third party libraries)	The actual source code, exported from our Source Control, to include change history	DOC
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Programme

Table 1: Tier 1 Information and Table 2: Tier 2 Information lists out the information that will be delivered within five (5) Business Days of the Start Date.

Conversion of Tier 2 Information into Tier 1 Information

Following signature of this Agreement, TTL and Cubic will review all Tier 2 Information and Cubic will have the option to make a request of TTL to convert selected Tier 2 Information into Tier 1 Information. Any change in the categorisation of Tier 2 Information to Tier 1 Information will be recorded as a variation to this Agreement.

The costs incurred by TTL personnel in converting Tier 2 Information to Tier 1 Information will, at Cubic’s choice and discretion, either be reimbursed by Cubic to TTL at cost or be borne by TTL as being man hours provided by TTL Consultants as part of the TTL Consultancy Services.

Table 1: Tier 1 Information

Document ID	Category	Document Name	Description	Type
TIER10001	Technical	FTP Logical Data Model	Data model describing the key logical entities and relationships within the FTP platform.	EAP
TIER10002	NOT USED			
TIER10003	NOT USED			
TIER10004	Technical	Code Dependencies and Licenses	Lists of which open-source libraries we use within our software, their license details and whether they are deployed into test, production or both environments	DOC
TIER10005	Technical	FAE Overview - Wiki	A document which gives a high level description of the features and functionality provided by FAE	WIKI
TIER10006	Technical	FAE Fares Rules	A document listing all FAE's capabilities at the sub-functional level in brief, and mentioning configurability	XLS
TIER10007	Technical	PaRE Overview - Wiki	A document which gives a brief description of the features and functionality provided by PaRE	DOC, WIKI
TIER10008	Technical	PaRE Feature Summary	A document which gives a detailed description of the features and functionality provided by PaRE	DOC, WIKI
TIER10009	Technical	SSO Functional Overview	A high level overview of SSO's architecture and functionality linking to some more details architecture design documents	WIKI
TIER10010	Technical	SSO Website screenshots	Screenshots of all SSO web pages	WIKI

Document ID	Category	Document Name	Description	Type
TIER10011	Technical	MASTER DATA - Overview - Wiki	An overview of the Master Data component, how this fits into the FTP architecture, high-level overview of the Master Data APIs and their consumers.	WIKI
TIER10012	Technical	TfL-Cubic External Interface Specifications	Documentation captured by Cubic in collaboration with TfL. Describes all interfaces between the TfL and Cubic systems (covering Taps, Authorisations, Settlement, Status List, Web, IVR)	DOC / PDF
TIER10013	Technical	Functional Test Cases	Automated sub system team tests run from Specflow Feature files. Tests are written in gherkin language: Scenario: 123 Given abc And def And ghi When jkl Then mno And pqr And stu	SPECFLOW

Document ID	Category	Document Name	Description	Type
TIER10014	Technical	Integration Test Cases	<p>Automated integration tests run from Specflow Feature files. Tests are written in gherkin language:</p> <pre>Scenario: 123 Given abc And def And ghi When jkl Then mno And pqr And stu</pre> <p>Nightly there are a set of Top 10 and Top 100 integration tests run which confirm if the current integration build is in a good position or broken.</p>	SPECFLOW, XLS
TIER10015	Technical	User Test Cases	User Acceptance scenarios are provided by stakeholders for each particular functional change. IPP then develops these into automated test scripts which are run in a similar way to integration test cases.	SPECFLOW
TIER10016	Technical	Performance Test Cases	Performance tests cases are developed/changed based on non-functional test requirements provided by the architecture team. IPP then creates/amends performance/load scripts based on those requirements.	XLS
TIER10017	Technical	Deployment Rollback Guide & Scripts	Deployment Rollback Guide & Scripts	DOC

Document ID	Category	Document Name	Description	Type
TIER10018	Technical	Deployment Plan	<p>This plan establishes activity required for the deployment of application and infrastructure changes within Customer Experience.</p> <p>The Deployment Plan has 3 parts:</p> <ol style="list-style-type: none"> 1. Pre Deployment Activity 2. Deployment <ul style="list-style-type: none"> • Deployment Documents • Deployment Resource & Escalation Path • Deployment Schedule • Communications & Deployment updates 3. Post Deployment Activity 	DOC
TIER10019	Technical	FTP Build and Deployment Dev Guide	FTP Build and Deployment Dev Guide	WIKI
TIER10020	Technical	FTP Deployment Troubleshooting Guide	FTP Deployment Troubleshooting Guide	WIKI
TIER10021	Technical	FTP Team Build Guide	FTP Team Build Guide	WIKI
TIER10022	Technical	FTP Transaction Model	Provides a description of the transaction model implemented within the London system, including detailed examples showing how the model differs between card schemes and card sub-types.	DOC
TIER10023	Technical	FTP Non Functional Requirements	Definition of the volumes used for performance testing of FTP and a summary of resilience/recovery requirements.	XLS

Document ID	Category	Document Name	Description	Type
TIER10024	Technical	Interface Register	Matrix of interfaces between FTP components (internal and external). Describes the type of interface and brief details of the purpose. Can also provide a tool that allows visualisation and navigation of the interfaces within the register.	XLS
TIER10025	Technical	Customer Portal screenshots	This contains functional description of the customer portal website guided by screenshots.	WIKI
TIER10026	Technical	List of Notification Types	A list of email notifications that are processed by the notification engine	XLS
TIER10027	Technical	Agent Portal screenshots	This contains functional description of the Agent portal website guided by screenshots.	WIKI
TIER10028	Technical	Component Functions and Data Flow	Diagram showing detailed data flows within the TfL back office components.	JPG
TIER10029	Technical	SSO Functional Specifications	Document containing the various features of SSO and the business rules pertaining to each feature.	DOCWIKI
TIER10030	Technical	MASTER DATA - Data Rules	An overview specific to the data held by Master Data e.g. a breakdown of the data and data types held in the ProjectionStore, as well as some sample data.	XLS

Table 2: Tier 2 Information

Document ID	Category	Document Name	Description	Type
TIER20001	Technical	Detailed Software Architecture	Enterprise Architect repository containing architectural diagrams. Including use case diagrams, component diagrams, activity diagrams and sequence diagrams describing aspects of the FTP solution.	EAP
TIER20002	Technical	Detailed Infrastructure Architecture	Detailed Infrastructure Architecture	DOC

Document ID	Category	Document Name	Description	Type
TIER20003	Technical	Automation Overview	PP presentation showing benefits of moving integration testing from manually run to automated	PPT
TIER20004	Technical	Integration and Performance Test Exit Report	Report produced at the end of the TfL six week development cycle which identifies what testing has been carried out by TfL on the FTP Back Office release. The document covers: Functional testing carried out by each component team over each of the six weeks; Integration testing carried out over each of the six weeks; User Acceptance testing requested by TfL stakeholders; Deployment and Rollback testing; Performance testing; and Defects raised over the course of the release.	DOC
TIER20005	Technical	Supplementary FAE Functional Specifications	A set of supplementary business rules and functional specifications documents covering the behaviour of the Fares and Aggregation Engine. The domain is broadly: journey construction, fares policy, and revenue allocation.	DOC, WIKI
TIER20006	Technical	Supplementary Customer Portal and Agent Portal Functional Specifications	A group of use cases, business rules, business scenarios and functional specifications of the "Customer Account Self Care" and "Customer Account System" applications. The package contains end to end processes/ activities that can be perform by a user on the CASC/CAS and the system functionality.	DOC
TIER20007	Technical	SSO Architecture Model	Enterprise Architect repository containing architectural diagrams, including use case diagrams, component diagrams, activity diagrams and sequence diagrams describing aspects of the SSO solution.	EAP

Document ID	Category	Document Name	Description	Type
TIER20008	Technical	Supplementary MASTER DATA Functional Specifications	<p>Discussion Papers e.g. ZMC vs. ZORC, Fares Service, Fares Revision, SNOSI, PAYG Easements, Importing MJ Files Approach.</p> <p>Specs e.g. Trainslink, Chiltern, Fares Service, HS1, Rivers, MJT, MJT Time Bands, Autofill Rule E Exclusion Lists, Charge Profiles.</p> <p>Master Data specific architecture documentation.</p>	WIKI
TIER20009	Technical	Functional Test Results	Outcome of tests which have been run. A summary of the results is included in the Test Exit Report (#8 above). Individual detail of results would be held on Visual Studio.	XLS
TIER20010	Technical	Integration Test Results	Outcome of tests which have been run. A summary of the results is included in the Test Exit Report (#8 above). Individual detail of results would be held on Visual Studio.	XLS
TIER20011	Technical	User Test Results	Outcome of tests which have been run. A summary of the results is included in the Test Exit Report (#8 above). Individual detail of results would be held on Visual Studio.	XLS
TIER20012	Technical	Performance Test Results	Outcome of tests which have been run. A summary of the results is included in the Test Exit Report (#8 above). Individual detail of results would be held on Visual Studio.	DOC, XLS
TIER20013	Technical	FTP File Sync Service User Guide	FTP File Sync Service User Guide	DOC
TIER20014	Technical	FTP Package Deployment Guide	FTP Package Deployment Guide	DOC

Document ID	Category	Document Name	Description	Type
TIER20015	Technical	Release Planning Document	The process responsible for the planning and scheduling of deployment of releases in line with the business while protecting the integrity of existing services.	DOC
TIER20016	Technical	Release Note	Release note(s) are a set of document(s) that are distributed with released products and details the additions, removals, changes and fixes including variance with the release.	DOC
TIER20017	Technical	High Level Infrastructure Architecture	High Level Infrastructure Architecture	DOC
TIER20018	Technical	Testing Strategy	Document describing what the testing strategy is for FTP (including FTP4) for the TfL side. Document would only change as new infrastructure is added to the FTP solution, like FTP4.	DOC
TIER20019	Technical	Test data - sample taps	File with a sample of taps from all card schemes/travel modes	CSV
TIER20020	Technical	High Level Architecture Presentation	Presentation material used to describe the overall platform. Covers high level details of the functionality, technology and interfaces within the platform.	PPT / VSD
TIER20021	Technical	Coding Standards	The agreed conventions and best practices which each team follows as they are writing software to ensure a consistent coding style.	DOC
TIER20022	Technical	Testing Standards	Document describing how defects should be raised on TFS and the standards to be followed.	DOC
TIER20023	Technical	Development Methodology	Overview of the development methodology used to build the TfL back office components	DOC
TIER20024	Technical	Testing Plan	Document produced for each six week release describing the testing which will be carried out over that period. Includes the TfL testing schedule and risks identified to the plan.	DOC

Document ID	Category	Document Name	Description	Type
TIER20025	Technical	Change Management Process	A document which details the process responsible for controlling the lifecycle of all changes that effect the IT services to all architectures, processes, tools, metrics and documentation, as well as changes to IT services and other configuration items.	DOC
TIER20026	Technical	Notifications overview	An overview of notifications functionality	WIKI
TIER20027	Technical	Common Services overview	Contains a overview of the Service Bus message queue audit	WIKI
TIER20028	Technical	Service Disruptions Manager overview	Provides an end to end functional description of the Service disruption Manager.	DOC
TIER20029	Technical	Tap File Data Mapping	Data mapping showing where fields from the Tap File are propagated to within the FTP databases.	XLS
TIER20030	Technical	File Transfer Mechanism Specification	Specification that describes the functionality of the File Transfer Mechanism.	DOC
TIER20031	Technical	IVR Interface Specification	Documentation captured by Cubic in collaboration with TfL. Describes all interfaces between the TfL and Cubic systems (covering Taps, Authorisations, Settlement, Status List, Web, IVR)	DOC
TIER20032	Technical	Secure Portal and IVR Parameter Mapping	Data mapping showing how the Customer Portal and IVR interact with the CPA Shield/API	DOC
TIER20033	Technical	Day in the Life of a Tap	Diagram showing the data flow in processing a tap end to end.	JPG
TIER20034	Business Design	CPC address verification - agent briefing v0.2.pptx	Presentation to brief contact centre agents on new CAS functionality to verify the address of an unregistered CPC caller. This functionality was never implemented into production.	pptx
TIER20035	Business Design	Remove CPC v1.1.docx	This document describes how customers can have their CPC removed from their online account.	docx
TIER20036	Business Design	Revised Reason Codes 1.0.doc	This document outlines the Revised FTP SAP CRM Reason Codes for use in the contact centre when logging customer contact.	doc

Document ID	Category	Document Name	Description	Type
TIER20037	Business Design	Revised SAP CRM Reason Codes 1.0.doc	This document outlines the Revised FTP SAP CRM Reason Codes for use in the contact centre when logging customer contact.	doc
TIER20038	Business Design	SAP CRM Reason Codes Process Mapping v0.1.doc	This document outlines the Revised FTP SAP CRM Reason Codes for use in the contact centre when logging customer contact and the process maps that each reason corresponds to.	doc
TIER20039	Business Design	Single Sign On Requirements v0.3.docx	Provides business requirements to TfL's Single Sign On solution and outlines the customer migration process from an Oyster account to an SSO account.	docx
TIER20040	Business Design	SSO website T&Cs v0.1.docx	Unfinished document which describes the changes required to TfL's online terms and conditions as a result of introducing Single Sign On and contactless payments	docx
TIER20041	Business Design	Customer Account Web Form Navigation v0.4.docx	The purpose of this document is to define the navigation options on the TfL website, www.tfl.gov.uk , available for customers to contact TfL in relation to Contactless Payment Cards (CPCs). This is for both registered and unregistered CPCs and general enquiries. Also links for customers wishing to create a Customer Account.	docx
TIER20042	Business Design	Token Pass Fail.pdf	This document describes different scenarios for customers entering their information into the IVR. The scenarios include IVR Pass, IVR Fail but token obtained and IVR Fail.	pdf
TIER20043	Business Design	Voiding CPC transactions in FTP V1.0 20111011.docx	The purpose of this paper is to support a discussion as to the solution that should be offered to CPC customers who wish to 'void' their transaction immediately after payment, in Phases 1 and 2 of the Future Ticketing Project (FTP).	docx
TIER20044	Business Design	Web forms 1.0.doc	This document provides screen shots of the online web forms that customers can use to check a charge. This covers both registered and unregistered customers.	doc

Document ID	Category	Document Name	Description	Type
TIER20045	Business Design	Deny List Removal.vsd	This document describes the process to manually remove a customer from the Deny/Card Not Approved For Travel List.	vsd
TIER20046	Business Design	Change Notification.vsd	This document describes the process for Service/Network Updates (e.g. station changes, capping etc.) and the FTP File Exchange for the FTP P2 Launch.	vsd
TIER20047	Business Design	Fare Setting with FTP v0.9.vsd	This document describes the process for Fares Revision at FTP P2 Launch.	vsd
TIER20048	Business Design	Fares Revision As Is Process V0.1.doc	This document details the current process for Fares Revision and details what information is exchanged between Cubic and TfL departments in order for a complete set of fares to be updated across the TfL estate. The document details Oyster fare data at field level, with descriptions of field contents and data extracts.	doc
TIER20049	Business Design	Fares Revision.vsd	This document describes the high level process for Fares Revision.	vsd
TIER20050	Business Design	FTP 2 L2 Process 2.4.1 Revise Fares v1.0.doc	This document describes the process to supply all required fare data to FTP systems in line with contractual timescales to ensure that all fares data is revised and implemented on the Fares Revision date.	doc
TIER20051	Business Design	MRVS Process v0 1a .vsd	This document describes the process for creating Manual Revision Validation Signatures, internal service teams, FTP systems and Cubic activities described in order to update the required systems.	vsd
TIER20052	Business Design	MRVS Request Form V0.0.xlsx	This document includes a template for the form to request Manual Revision Validation Signatures.	xlsx
TIER20053	Business Design	Sept Fares Revision & Functional Test v0.0.vsd	Business process diagram describing the process for the September 2013 Fares Revision include UI for test phases and Fares Generator (FG).	vsd
TIER20054	Business Design	3.2 Bill customer Process Definition 1.1.docx	Overview of Bill Customer process area	docx

Document ID	Category	Document Name	Description	Type
TIER20055	Business Design	Foreign cards address verification v0.3.docx	Options paper discussing the issues we face with verifying non-UK bank cards for registration along with recommended solutions.	docx
TIER20056	Business Design	Disruptions at Launch v0.3.docx	Discussion paper giving options for managing disruptions, prior to the Service Disruption Manager being implemented	docx
TIER20057	Business Design	FTP 2 L2 Process 3 2 1 Calculate Charge 1 3.docx	Business level document describing journey construction and charge aggregation. Also covers requirements for handling late data and incomplete journey charges	docx
TIER20058	Business Design	FTP 2 L2 Process 3 2 2 Manage Settlement 1 2.docx	Business level document describing process to prepare charges for settlement, apply transaction model issuer liability, submit settlement files and check funds are received.	docx
TIER20059	Business Design	FTP 2 L2 Process 3 2 3 Manage Debt 1 3.docx	Business level document describing process to manage debt created by cards that are declined and not covered by transaction model issuer liability	docx
TIER20060	Business Design	FTP 2 L2 Process 3 2 4 Manage Outstanding Adjustments 1 3.docx	Business document describing process for dealing with charges that are recalculated after the customer has been charged.	docx
TIER20061	Business Design	FTP 2 ID&V timeline v0.2.pptx	Timeline which described the levels of customer service provided during the launch of contactless payments	pptx
TIER20062	Business Design	Exceptions.doc	A high level description of 4 special fares scenarios which were considered when building the Fares Generator	doc
TIER20063	Business Design	Fare Revision System UI v0.3.docx	This document identifies and describes the business requirements for the Fares Revision System (FRS) User Interface. This document also briefly discusses the different components of the FRS and its relationship with the dependent components of the FTP systems.	docx
TIER20064	Business Design	FTP 2 L2 Process 3 2 5 Manage Inspection Charges 1 2.docx	Business document describing the processing and charging of cards that fail a revenue inspection	docx

Document ID	Category	Document Name	Description	Type
TIER20065	Business Design	FTP 2 L2 Process Map 3 2 1 1 Calculate Daily Spend Amount 1 1.vsd	Process contained within FTP 2 L2 Process 3 2 1 Calculate Charge 1 3.docx	vsd
TIER20066	Business Design	FTP 2 L2 Process Map 3 2 1 2 Recalculate Daily Charge 1 1.vsd	Process contained within FTP 2 L2 Process 3 2 1 Calculate Charge 1 3.docx	vsd
TIER20067	Business Design	FTP 2 L2 Process Map 3 2 1 Calculate Charge 1 1.vsd	Process contained within FTP 2 L2 Process 3 2 1 Calculate Charge 1 3.docx	vsd
TIER20068	Business Design	Gatwick v1.4.doc	This document defines the changes that need to be made to the configuration of the network within the Fares Generator to enable contactless fares to Gatwick	doc
TIER20069	Business Design	FTP 2 L2 Process Map 3 2 2 Manage Settlement 1 0.vsd	Process showing logic for submitting settlement files and processing acquirer feedback	vsd
TIER20070	Business Design	FTP 2 L2 Process 3.2.6 Manage Chargebacks 1 1.docx	This document describes the process to efficiently process Chargeback Notices passed to us by our Merchant Acquirer, and supply evidence to defend TfL revenue.	docx
TIER20071	Business Design	Traffic Day paper.docx	Discussion paper walking through implications on the FTP system of changing the hours of the Traffic Day from 04:30 to 02:30.	docx
TIER20072	Business Design	Release Zero Customer Account v0.5.xlsx	This document describes the FTP Phase 2 - Customer Account Outstanding Requirements and Issues for Release 0 (November 2012).	xlsx
TIER20073	Business Design	FTP Toolbar EDU v3.0.docx	Document describing the data required by contact centre agents to identify customers and errors which may occur on agent screens during ID&V.	docx
TIER20074	Business Design	CPC Email Notifications Requirements v1.0.docx	This document describes the email notifications sent to registered customers at various points in creating their account, password issues and updating their account.	docx
TIER20075	Business Design	FTP P2 CE Tracker 2012 07 27.xlsx	Table describing customer issues and mitigation plans (actions) and owners. Barclaycard and TfL discussion relating to customer experience maps.	xlsx

Document ID	Category	Document Name	Description	Type
TIER20076	Business Design	1354 Registered AUTHORISATIONS v1.5.pdf	Systems document on processes for obtaining an authorisation via CASC. Wireframes of to-be customer web pages and draft emails for success/failure.	pdf
TIER20077	Business Design	1354 Unregistered AUTHORISATIONS v1.5.pdf	Systems document on processes for obtaining an authorisation via CASC for an UNREGISTERED customer. Wireframes of to-be customer web pages .	pdf
TIER20078	Business Design	1444_Incorrect_Password_Entry_v0.2.docx	This document describes the CASC online account authorisation process when a registered customer unsuccessfully attempts to sign in to the website three times in a row they will be routed through the password reset process.	docx
TIER20079	Business Design	1456_Registered_Customer_Password_Reset_v0.3.docx	This document describes the process to allow registered customers to reset their password.	docx
TIER20080	Business Design	CFL workstream 0.0.vsd	This is a project document that highlights the workstreams for Customer Facing Language.	vsd
TIER20081	Business Design	CFL Workstream Tracker.xlsx	This is a project document that tracked the tasks for each stream in the Customer Facing Language workstream.	xlsx
TIER20082	Business Design	Customer Facing Language List V03 .xlsx	This document describes the different customer experience scenarios and the customer facing language that should be used in each.	xlsx
TIER20083	Business Design	FTP2 - Customer Facing Language (TfL Restricted) v0.2.xlsx	This document describes the key FTP messages for customers.	xlsx
TIER20084	Business Design	FTP2_Debt_Recovery v0.4 .docx	Summary of transaction model debt recovery. Comprises information contained in L2 process documents, such as 3.2.3 Manage Debt	docx
TIER20085	Business Design	Settlement timing scenarios 1.0.docx	Summary of process for handling late data, with example scenarios	docx
TIER20086	Business Design	FTP2 - Customer Facing Language v1.0 .xlsx	This document describes the key FTP messages for customers.	xlsx
TIER20087	Business Design	FTP2 IVR scripts 0.1.xls	This document outlines the IVR scripts for use in the contact centre.	xls

Document ID	Category	Document Name	Description	Type
TIER20088	Business Design	FTP2 Web terminology 0.3.xlsx	This document explains the Customer Facing Language terminology used on the webpage.	xlsx
TIER20089	Business Design	Phase 2 FAQs.xlsx	This document outlines some Frequently Asked Questions about FTP and the corresponding answers.	xlsx
TIER20090	Business Design	5.1 Manage Access Control Process Definition 1.0.docx	High level description of decision making at the reader to determine whether a customer can travel, and indication of the decision to the customer, staff and system.	docx
TIER20091	Business Design	5.1.2 Manage Customer Access.vsd	Process showing decision making at the reader to determine whether a customer can travel, and indication of the decision to the customer, staff and system.	vsd
TIER20092	Business Design	FTP - Customer Experience - Reader messages (Oct 2011).ppt	Describes scenarios and limitations of customer messaging on readers. Likely different criteria for Sydney	ppt
TIER20093	Business Design	FTP2 L2 Process 5.1.1 Manage Business Rules 1.0.doc	Summary of all business rules contained within Level 2 business process documentation	doc
TIER20094	Business Design	FTP CPC1 - Logging CPC Related Calls v5.0.vsd	Flow diagram describing how the contact centre handles incoming customer calls and how these calls are logged in TfL's CRM	vsd
TIER20095	Business Design	Passback Discussion Paper.docx	Describes the scenarios where passback fraud may be attempted using contactless payment cards (CPCs) when the Future Ticketing Project is launched. It identifies controls available to TfL to minimise the risk of customers successfully travelling without paying the correct fare.	docx
TIER20096	Business Design	Bus Validation Codes Phase 2 v0.2.doc	Early project document describing bus error codes and respective customer messaging	doc
TIER20097	Business Design	Bus Validator Messages Phase 1.doc	Early project document describing bus error codes and respective customer messaging	doc
TIER20098	Business Design	Card Assoc Message Guide.doc	Linked to Cubic Validation Result Code DRS document	doc

Document ID	Category	Document Name	Description	Type
TIER20099	Business Design	Common LUL issues.doc	Early project document describing rail error codes and respective customer messaging	doc
TIER20100	Business Design	FTP CPC11-19 Process Maps v1.0.pdf	Process maps showing how various contactless-related customer enquiries are handled in the contact centre.	pdf
TIER20101	Business Design	E2gate v1.1.doc	Document describing high level characteristics and limitations of E2 gates	doc
TIER20102	Business Design	LCD NTM display 1.1.doc	Document describing high level characteristics and limitations of E2 gates	doc
TIER20103	Business Design	Pgate 1.1.doc	N/A	doc
TIER20104	Business Design	5.2 Process Definition 1.0.docx	One page document describing the Level 1 Process "Collect Manage & Store Journey and System Data" including objective, key inputs, outputs, triggers, risks, issues and assumptions	docx
TIER20105	Business Design	5.3 Process Definition v 1.0.docx	One page document describing the Level 1 Process "Collect Manage & Store Journey and System Data" including objective, key inputs, outputs, triggers, risks, issues and assumptions	docx
TIER20106	Business Design	5.3.1 Monitor & Report on Receipt of Data to Devices v1.0.doc	Process document describing the Level 2 Process "Monitor & Report on Receipt of Data to Devices" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20107	Business Design	5.3.1 Monitor & Report on Receipt of Data to Devices.vsd	Process contained within 5.3.1 Monitor and Report on receipt of data to devices Word document	vsd
TIER20108	Business Design	5.3.2 Monitor and Report on Transmission of Data v1.0.doc	Process document describing the Level 2 Process "Monitor and Report on Transmission of Data" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20109	Business Design	5.3.3 Buses.vsd	Process document describing the triggers and process for reporting and escalating Bus card reader issues to BEREC and the Central System. The process included in 5.3.3 Monitor Device Availability & Performance.	vsd

Document ID	Category	Document Name	Description	Type
TIER20110	Business Design	5.3.3 Monitor Device Availability & Performance.vsd	Process contained within 5.3.3 Monitor Device Availability & Performance Word document	vsd
TIER20111	Business Design	5.3.3 Monitor Device Availability and Performance v1.0.doc	Process document describing the Level 2 Process "Monitor Device Availability and Performance" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20112	Business Design	5.3.4 Middle & Back Office Availability and Perf.vsd	Process diagram describing the monitoring of middle office performance and escalation rules. The process is included in 5.3.4 Monitor Middle & Back Office System Performance.	vsd
TIER20113	Business Design	5.3.4 Monitor Middle and Back Office Sys Perform v1.1.doc	Process document describing the Level 2 Process "Monitor Middle and Back Office System Performance" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20114	Business Design	Comparisons Table.xls	Comparisons Table that grouped by Front Office, Middle Office, Back Office and Settle Bill	xls
TIER20115	Business Design	FTP - high level process overview 0.4 (L0-1 only) OSS Impact.vsd	Process Hierarchy Map across the following 7 headers. Card fulfilment, Fares & Products, sales, Customer support, System Operations, risk and compliance and Accounting & Finance	vsd
TIER20116	Business Design	FTP Service Level Definitions 0.4.xls	N/A	xls
TIER20117	Business Design	FTP CPC2 - Logging CPC Related Correspondence v3.0.vsd	Process map showing how contactless calls are logged in TfL's CRM	vsd
TIER20118	Business Design	Service Level Definitions updated in meeting.docx	4 page document outlining Service level definitions over the following heading Objective, SLA metric, Alert threshold, outstanding questions and outstanding decisions	docx
TIER20119	Business Design	5.4 Process Description 1.0.doc	One page document describing the Level 1 Process "Manage System Assets" including objective, key inputs, outputs, triggers, risks, issues and assumptions	doc

Document ID	Category	Document Name	Description	Type
TIER20120	Business Design	5.4.1 Manage Asset Configuration v0.2.vsd	This process map describe the process to manage the configuration of service assets in order to optimise support for the FTP system	vsd
TIER20121	Business Design	5.4.1 Manage Asset Configuration v0.3.doc	Process document describing the Level 2 Process "Manage Asset Configuration" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20122	Business Design	5.4.2 Change Control and Change Management v0.3.doc	Process document describing the Level 2 Process "Change Control and Change Management" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20123	Business Design	Copy of FTP P2 ND RD Requirements v0 3.xls	List of Network Development Reporting & Data Requirements (31 in total) for FTP P2	xls
TIER20124	Business Design	FTP CPC20 - Resolve Billing Issues v1.0.vsd	Flow diagram describing how customer billing issues should be resolved. Process is broken down by "phone" and "correspondence"	vsd
TIER20125	Business Design	Copy of FTP P2 Reporting Requirements v1 0.xls	Data and Reporting requirements FTP P2 covering Enforcement, F&T Policy, Fraud, LBSL, Performance, Marketing	xls
TIER20126	Business Design	5.4.2 Manage Change Control v0.3.vsd	Process document describing the planned and emergency change control process for the FTP systems. Included in 5.4.2 Change Control and Change Management.	vsd
TIER20127	Business Design	Risk Log for FTP All Phases 110114 with outline comments.xlsx	This document is a risk log of risks that apply to all FTP Phases.	xlsx
TIER20128	Business Design	5.5 Process Description v1.0.doc	One page document describing the Level 1 Process "Reporting" including objective, key inputs, outputs, triggers, risks, issues and assumptions	doc
TIER20129	Business Design	Enterprise Architect.pdf	This document looks to describe the information flow and key interfaces between the different systems for the FTP platform.	pdf
TIER20130	Business Design	FTP P2 Reporting Requirements v1.3 - Tool Review 140911.xls	Data & Reporting Requirements Matrix Tool	xls

Document ID	Category	Document Name	Description	Type
TIER20131	Business Design	FTP P2 - high level process overview 0.5.vsd	High level overview of 5.0 System Operations & Integrity hierarchy, sub process and reporting activity. This is a subset of the larger FTP process hierarchy.	vsd
TIER20132	Business Design	Prestige Reporting Audit Project Report v2_3.doc	Audit paper into the activities undertaken by the Prestige Information Services team and the reporting activities undertaken for Oyster.	doc
TIER20133	Business Design	FTP L2 Process 5.5.1 Operational Reporting v2.0.doc	Process document describing the Level 2 Process "Operational Reporting" including definition, process diagram, acceptance criteria, requirements and business rules	doc
TIER20134	Business Design	FTP Tool Selection - Evaluation v0.1.DOC	Document describing the options for a FTP reporting tool comparing the differences between Business Objects and SSRS.	doc
TIER20135	Business Design	Reports_Requirement_Review_Comments AWS.doc	Comments and responses from the FTP Operational Reporting requirements	doc
TIER20136	Business Design	FTP CPC21 - Duplicate PAN Issues v0.2.vsd	Flow diagram describing how contact centre agents should handle customer enquiries about duplicate PAN issues.	vsd
TIER20137	Business Design	FTP Tool Selection - Training Estimate v0.0.DOC	Document describing the training required to implement a new FTP reporting tool. Very high level.	doc
TIER20138	Business Design	FTP P2 Enforcement Requirements v1.0.xls	Reporting requirements for Enforcement and Prosecutions Data including entry exit taps, RIDs, card type	xls
TIER20139	Business Design	FTP P2 F&TPolicy Requirements v1.0.xls	FTP2 Fares and Ticketing Policy Data & Reporting Requirements	xls
TIER20140	Business Design	FTP P2 Finance R&D Requirements v0.0.xls	FTP2 Network Development Bus Planning Reporting Requirements	xls
TIER20141	Business Design	FTP P2 Fraud Requirements v1.0.xls	FTP2 Fares and Ticketing Fraud Data & Reporting Requirements	xls
TIER20142	Business Design	Management Information Requirements for Fraud Management.doc	Describes the Management Information Requirements for Fraud Management.	doc
TIER20143	Business	FTP P2 GCS Requirements	FTP2 Group Customer Services (GCS) Data & Reporting Requirements.	xls

Document ID	Category	Document Name	Description	Type
	Design	v1.0.xls		
TIER20144	Business Design	IS Reporting Breakdown.xls	Description of the reports produced for Buses, TOCs, service and other stakeholders. Descriptions of the current users of the reporting system, frequency etc. Oyster focused with CPC comments.	xls
TIER20145	Business Design	Reporting Backlog AWS 220811.xlsm	Document describing the reporting backlog, contains high level reporting requirements and the progress in developing these.	xls
TIER20146	Business Design	CASC & CAS Handover v0.3.docx	A document which lists all of the CASC change requests on the backlog. This is out of date and some of these changes have been implemented. However it provides an outline of some of the improvements we intend to make to the customer account.	docx
TIER20147	Business Design	FTP P2 LBSL R&D Requirements v1.0.xls	FTP2 London Buses Reporting and Data Requirements.	xls
TIER20148	Business Design	FTP P2 ND R&D Requirements v0.2.xls	FTP2 Network Development Reporting & Data Requirements.	xls
TIER20149	Business Design	FTP Phase 1 Business Requirements 1 9 20100226.xls	FTP1 Business Requirements	xls
TIER20150	Business Design	Enforcement Workshop.ppt	Presentation on the high level objective or reports for Surface Enforcement for a reporting workshop.	ppt
TIER20151	Business Design	ND requirements for Oyster Analysis 27 Oct 10.docx	This functional specification document details the data and reporting requirements Buses have for CPC usage, revenue and transactions etc.	docx
TIER20152	Business Design	Drawing1.vsd	Document describing the process for raising reporting requests. Doesn't appear to relate to an FTP process.	vsd
TIER20153	Business Design	Customer database FTP essential core requirements v1 0 (4).docx	This document is intended to summarise the essential core requirements from FTP for the Customer database.	docx
TIER20154	Business Design	FTP P2 Marketing Requirements v1.0.xls	Document from 9 August 2011 describing the Marketing's high level data requirements, noting where they are included in the detailed requirements.	xls

Document ID	Category	Document Name	Description	Type
TIER20155	Business Design	FTP Project Top level questions and answers 050711.doc	Document containing questions and related answers FTP data for the customer database. Indicates a lot of the non-functional requirements and TfL users.	doc
TIER20156	Business Design	IT for advanced analytics.pdf	Document describing the data and reporting requirements needed by MIT to undertake research on customers Oyster journeys.	pdf
TIER20157	Business Design	IBL LBSL data_00b.doc	High level document describing the Initial Bus Launch and LBSL's requirements/questions relating to CPC data and reporting.	doc
TIER20158	Business Design	Current Oyster data fields.xls	Spreadsheet containing the data fields contained on an Oyster card from July 2011.	xls
TIER20159	Business Design	FTP P2 TOCs Requirements v1.0.xls	FTP2 Train Operating Companies (TOCs) Data & Reporting Requirements	xls
TIER20160	Business Design	Current Oyster online data fields.doc	Document from July 2011 describing the data fields held on Oyster Online (specifically those for Autoload, online orders/items and usernames).	doc
TIER20161	Business Design	IT_recommendation.pdf	Research paper written by MIT proposing the structure and uses of a data warehouse to TfL.	pdf
TIER20162	Business Design	FTP P2 Performance Requirements v1.0.xls	FTP2 Performance Data & Reporting Requirements	xls
TIER20163	Business Design	TOCs SDG Presentation 0.0.ppt	Presentation to describing high level reporting and data requirements of the Train Operating Companies (TOCs) and next actions.	ppt
TIER20164	Business Design	(FTP_036) CPC Passenger List v1.7	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC Passenger List report.	doc
TIER20165	Business Design	(FTP_037) Ultimate RID Report v1.7	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the Ultimate RID Report.	doc

Document ID	Category	Document Name	Description	Type
TIER20166	Business Design	(FTP_039) TfL Complete-Incomplete Journeys v1.1	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the TfL Complete-Incomplete Journeys Report.	doc
TIER20167	Business Design	(FTP_040) TOC Incomplete Journeys Report v0 1	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the TOC Incomplete Journeys Report.	doc
TIER20168	Business Design	(FTP_041) CPC Journey History Report v2.0	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC Journey History Report.	doc
TIER20169	Business Design	(FTP_042) CPC Manually Completed Journeys v0.4	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the Manually Completed Journeys Report.	doc
TIER20170	Business Design	(FTP_043) CPC Customer Account Detail Report v0.2	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC Customer Account Detail Report.	doc
TIER20171	Business Design	(FTP_044) CPC CNAFT List Report v0.3	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC CNAFT List Report.	doc
TIER20172	Business Design	(FTP_047) RID Summary Report v0.5	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the RID Summary Report.	doc
TIER20173	Business Design	(FTP_049) Name & Postcode Search Report v0.1	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the Name & Postcode Search Report.	doc

Document ID	Category	Document Name	Description	Type
TIER20174	Business Design	(FTP_051) CPC Journey Volumes by Location v0.3	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC Journey Volumes by Location Report.	doc
TIER20175	Business Design	(FTP_052) CPC Usage, Capped & Uncapped v0.1	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC Usage, Capped & Uncapped Report.	doc
TIER20176	Business Design	(FTP_055) TOC RID Tap Report v0.3	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the TOC RID Tap Report.	doc
TIER20177	Business Design	(FTP_056) CPC Capping Trend Report v0.5	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPC Capping Trend Report.	doc
TIER20178	Business Design	(FTP_069) RP Max Fare Apportionment v1.0	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the RP Max Fare Apportionment Report.	doc
TIER20179	Business Design	FTP_011 CPCs Used by Scheme, Issuer & Card Type - v0.6	Report that shows the total number of CPCs used by scheme, issuer and card type. Trend analysis will be crucial to monitor trends and fraudulent travel. Issuer details as well as scheme information will be important.	xls
TIER20180	Business Design	(FTP_071) Cpay Autofill Refunds v0 2	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CPAY Autofill Refunds Report.	doc
TIER20181	Business Design	CE GLBPS Driver Duty Functional Specification v1 0	This functional specification document details the low level business process, format, definition of business logic and report fields and the font/colours to use for the CE GLBPS CPAY Driver Duty Report.	doc

Document ID	Category	Document Name	Description	Type
TIER20182	Business Design	FTP_010 Chargeback Report v0.3	Report that shows all Authorisation requests and settlement references for every CPC transaction.	xls
TIER20183	Business Design	FTP_012 Daily CPC Declined Volume and Value - v0.6	Report that shows where a CPC has been declined, the system must be able to report the number and value of CPCs with a daily spend under or equal to £6 and above £6, for each day.	xls
TIER20184	Business Design	FTP_013 Weekly Reconciliation Report v0.4	Report to capture variances between the Weekly Revenue Report settlement value and the CPC RSP Weekly Export File.	xls
TIER20185	Business Design	FTP_022 CPC Resubmitted Debts (age) Auth Succ-Dec - v0.4	Report, by scheme, issuer and card type, the total number of cards and value of debt re-submitted (showing the age of the debt). Also the total number of CPCs and value of debt successfully Authorised/Declined	xls
TIER20186	Business Design	FTP_023 CPC Auth List - Intra-Day - v0.7	Report by scheme, issuer and card type, the total number of CPCs sent for authorisation during the day (Intra Day), including approved/declined and respective values.	xls
TIER20187	Business Design	FTP_024 CPC Auth List - End of Day - v0.7	Report by scheme, issuer and card type, the total number of CPCs sent for authorisation at the end of each day (including approved/declined and respective values). The report does not include authorisation requests from cards already on the Deny List.	xls
TIER20188	Business Design	FTP_025 Additional Journeys Made on Declined CPCs - v0.4	Reports the details of any 'Declined' CPCs, that have made subsequent journeys (only for journeys made 60 minutes or more, after the declined authorisation time)	xls
TIER20189	Business Design	FTP_026 CPC Autofill Results - v0.5	Periodic report showing the number of Auto filled CPC journeys, by date and Autofill ID	xls

Document ID	Category	Document Name	Description	Type
TIER20190	Business Design	FTP_027 CSC RSP 7 Day Reconciliation Report-v0.3	Report to capture variances between the Revenue Report settlement value and the CPC RSP 7 Day Export File. Used to reconcile Revenue Settlement with RSP and monitor file errors that may occur.	xls
TIER20191	Business Design	FTP_028 Periodic Reconciliation Report	Report to capture variances between the Periodic Revenue Report settlement value and the CPC RSP Weekly Export Files for the relevant period.	xls
TIER20192	Business Design	FTP_029 Late Data Periodic Reconciliation Report v0.3	Report to capture variances between the Late data Revenue Report settlement value and the CPC RSP Periodic Export File. Report is produced 15 days after the TfL reporting period ends.	xls
TIER20193	Business Design	FTP_030 Very Late Data Periodic Reconciliation Report v0.3	Report to capture variances between the Very Late data Revenue Report settlement value and the CPC RSP Post Periodic Export File. Report is produced 43 days after the TfL reporting period ends.	xls
TIER20194	Business Design	Device requirements 0.3.xls	Initial list of high level requirements for the Revenue Protection device	xls
TIER20195	Business Design	FTP CPC23 - Issue Reporting Process v4.0.vsd	Flow diagram describing how agents should reports issues/bugs/inaccuracies with the contactless system during the trial and initial launch periods.	vsd
TIER20196	Business Design	FTP_032 CPC Automated Corrections - v0.4	Report shows the breakdown of all automated CPC refunds/corrections processed by type, number and value.	xls
TIER20197	Business Design	FTP RP Business Requirements V2.0.docx	Business Requirements for the Revenue Protection Device	docx
TIER20198	Business Design	Bus Boarding - RID.vsd	This process map describes the use of the RID on a bus when there is more than one inspector and on a Bus Block.	vsd
TIER20199	Business Design	FTP RPI Device Outline requirements V7.docx	This document outlines high level business requirements for the Revenue Inspection Device	docx
TIER20200	Business Design	Con note FTP special charge FINAL.doc	This document is a note of conference with Richard Drabble QC on the matter of issues arising in relation to Revenue Inspection for the Future Ticketing Project.	doc

Document ID	Category	Document Name	Description	Type
TIER20201	Business Design	FTP Phase 2 - Rail Revenue Inspection- The Customer Experience v1.0.doc	This document provides detail of the customer experience of the Revenue Inspection process for Contactless Payment Cards (CPCs). Background information on the current Revenue Inspection process in the Oyster Rail environment will be provided, as well as detail on the customer experience throughout the new Rail Inspection process. This document describes the plan for Rail inspection of CPCs used for travel, although this may be a phased rollout. The process for buses is also briefly summarised.	doc
TIER20202	Business Design	FTP RP High Level Process V4 0.docx	The purpose of this document is to lay out an approach to Revenue Protection in FTP, for review and acceptance by stakeholders across TfL. Requirements are technology-neutral.	docx
TIER20203	Business Design	FTP Ticket advice.doc	This document is a legal note which gives advice on the following issues: 1. Whether the proposed method of payment aligned to the Future Ticketing Project (FTP) that is, payment by credit card constitute payment by means of a ticket within the meaning of existing legislation? 2. If the answer to the above is in the negative, whether Revenue Inspectors will be able to demand to see the credit cards used for payment, when in fact it is not a ticket within the meaning of existing legislation?	doc
TIER20204	Business Design	FTP2 Recommendations paper - Bus Revenue Inspection Options.docx	This document describes the options for Revenue Inspection on buses in the Future Ticketing Project (FTP) Phase 2. It is intended to provide sufficient information to enable an evaluation of the options with a view to determining the most cost-effective solution to support revenue inspection on buses in FTP, balancing costs, benefits and risks.	docx

Document ID	Category	Document Name	Description	Type
TIER20205	Business Design	FTP2 Recommendations paper - Revenue Inspection Tariff Nov11.docx	This briefing note summarises the outcome of a series of meeting between Andrew Anderson (Fares & Ticketing) and Abbey Ameen and John Jackson (Legal) to consider the basis for applying a Revenue Inspection Tariff in the Future Ticketing Project.	docx
TIER20206	Business Design	LOROL RID Presentation.ppt	This document is a presentation on how Revenue Inspection works under FTP2.	ppt
TIER20207	Business Design	PFN issued and paid.xls	Table listing across LUL, LOROL, Buses and DLR for Penalty fare notices issued and paid within a 6 months period.	xls
TIER20208	Business Design	Process Description 6.1 Revenue Protection.docx	Single page Revenue Protection requirement outlining triggers (planned and ad hoc revenue inspectors), key inputs (Conditions of carriage, Business rules), Key outputs (Penalty Charge Notices)	docx
TIER20209	Business Design	FTP CPC24 - Duplicate Refund Checks v1.0.vsd	Flow diagram which describes the process contact centre agents should follow to determine if a customer has been previously refunded (to prevent duplicate refunds from being manually processed)	vsd
TIER20210	Business Design	RID Business Requirements Central Office V2.0.docx	This document outlines the requirements for the Central Office systems to support Revenue Protection Inspection and the new Revenue Inspection Device for FTP	docx
TIER20211	Business Design	Revenue Inspection Next Steps Oct 2010.vsd	Visio process Map detailing Revenue Inspection – Next steps. Diagram shows the interactions between F&T Activity, F&T with Stakeholders and Cubic Activity	vsd
TIER20212	Business Design	RID Day 1 Requirement Summary.docx	One page document providing a summary of the Revenue Inspection Device's functionality at the launch of FTP	docx
TIER20213	Business Design	RID Functional Requirements v1_0.pdf FTA-FR262-LET-220615.pdf	Password protected - can't access. [SH] UPDATE - we have found the original documents and have included this in the folder and removed the password protected version. This is a Cubic-written document	pdf

Document ID	Category	Document Name	Description	Type
TIER20214	Business Design	Revenue Inspection Overview 0 7.docx	This document provides an overview of Revenue Inspection in FTP2.	docx
TIER20215	Business Design	RID Back Office System Information v0.1.pdf	Visio process Map for RID back office system information. Process includes activities such as entering RID Tap reference number into the system, reviewing card status and obtaining/Printing Deny list report	pdf
TIER20216	Business Design	RID Contactless Payment Card Inspection Logic v0.2.doc	This document describes the CPC inspection Logic that the Revenue Inspection Device uses. This covers Card Reas, Bus Logic, Tram Logic and Rail Logic.	doc
TIER20217	Business Design	RID parameters.doc	Single page document outlining the parameters for a CPC to be read with a RID device	doc
TIER20218	Business Design	RID reports.vsd	Visio diagram that shows 2 short examples of a RID report, the details include RID number, Inspection number, Card number, token number, date and time	vsd
TIER20219	Business Design	RID Summary.pptx	4 page PowerPoint point summary on RID inspection process. Seems like a rough first draft.	pptx
TIER20220	Business Design	Stakeholder Device Requirements 1.0.xls	A list of high level requirements for the Revenue Inspection Device which have been mapped to transport modes (e.g., LU, Rail, Busses etc.)	xls
TIER20221	Business Design	RID User Administration v0.1.pdf	This document describes the process for creating, deactivating and amending an account on a Revenue Inspection Device.	pdf
TIER20222	Business Design	RP Deliverables - AD.xls	A list of Revenue Protection Deliverables (Processes) ranging from Buses, LUL, DLR to NR.	xls
TIER20223	Business Design	RPI Device Discussion 0 12 Brief.pptx	This presentation gives an overview of Revenue Protection in FTP.	pptx
TIER20224	Business Design	To view the RID Functional Requirements Spec.doc	A single paragraph stating requests to for passwords to view PDF RID requirements V1_0pdf to be made via Andrew Anderson	doc

Document ID	Category	Document Name	Description	Type
TIER20225	Business Design	CASC capping narrative.pptx	Provides an outline of the various options we considered to implement a better description of Caps and a narrative which explains how much a customer has 'saved' because of a Cap	pptx
TIER20226	Business Design	FTP CPC3 - Resolve Card Issues v1.1.vsd	Flow diagram which shows what a customer should do if there is an issue with their contactless payment card (e.g. not working on the reader, declined etc). The process is broken down by channel (e.g. phone, station, web)	vsd
TIER20227	Business Design	Validation Logic 1.vsd	This document describes the validation processes for Read Card, Bus Taps, Rail Taps and Tram Taps.	vsd
TIER20228	Business Design	CNAFT List Overview v0.4.docx	<p>The purpose of this document is to summarise the rules for when a Contactless Payment Card (CPC) is:</p> <ul style="list-style-type: none"> • Added to the Card Not Approved for Travel (CNAFT) list following a failed revenue inspection • Removed from the CNAFT list <p>Cards may also be added to the CNAFT list when authorisation is declined by the bank or card issuer. This case is outside the scope of this document.</p>	docx
TIER20229	Business Design	FTP CPC4 - Incomplete Journeys v1.0.vsd	This document describes the process that customer service agents should follow to resolve Incomplete Journeys when a customer calls the contact centre.	vsd
TIER20230	Business Design	Disputes update Mar 2014 - v0.5.pptx	This presentation gives a summary of the Revenue Inspection Tap Dispute Policy.	pptx
TIER20231	Business Design	FTP 2 L2 Process 6.1.10 Manage Revenue Inspection Tap Challenge v1.11.docx	This document describes the process for when a customer challenges a rail or bus revenue inspection tap.	docx
TIER20232	Business Design	FTP 2 L2 Process 6.1.10 Revenue Protection Fare Appeals v1.1.doc	This document defines the process by which customers can appeal against a Revenue Protection Fare, handling of their appeal and possible outcomes.	doc

Document ID	Category	Document Name	Description	Type
TIER20233	Business Design	FTP CPC5 - Accidental Taps v1.0.vsd	This document describes the process that customer service agents should follow when a customer calls the contact centre after their CPC was tapped on a reader accidentally.	vsd
TIER20234	Business Design	Possible Appeal Scenarios.doc	The document lists possible scenarios where a customer can make an appeal against a penalty fare e.g. Customer attempts to touch in but the readers at the station are not working	doc
TIER20235	Business Design	Revenue Inspection Appeals and Refunds.ppt	This presentation explains the Revenue Protection Fare Appeals and Refunds Process.	ppt
TIER20236	Business Design	Revenue Protection Fare Appeal Scenarios.doc	A table matrix which outlines the possible scenarios where a customer can make an appeal against a penalty fare. This is further categorised on if a refund is due (Y/N/Maybe)	doc
TIER20237	Business Design	FTP2 Revenue Inspection Apportionment v0.3.docx	This document aims to define the requirements for apportioning money obtained from Revenue Protection Fares (RPF) obtained from Contactless Payment Cards (CPCs) via Revenue Inspection Devices (RIDs).	docx
TIER20238	Business Design	RID Apportionment.vsd	This document describes the process RID apportionment between Rail Settlement Plan, DLR, Trams, Buses and LUL.	vsd
TIER20239	Business Design	FTP2 Continuity of Evidence.docx	This paper details the information available to revenue inspection staff during the process of inspecting Contactless Payment Cards (CPCs) and proposes a model of what data may need to be captured and reported on to provide continuity of evidence from inspection to detailed reports of card activity when a case is taken to court for prosecution.	docx
TIER20240	Business Design	FTP CPC6 - Mixed Card Journeys v1.0.vsd	This document describes the process for how Customer Service Agents should resolve Mixed Card journeys by Phone and Correspondence.	vsd

Document ID	Category	Document Name	Description	Type
TIER20241	Business Design	RID Prosecution Information.vsd	Visio process Map for RID back office system information. Process includes activities such as entering RID Tap reference number into the system, reviewing card status and obtaining/Printing Deny list report	vsd
TIER20242	Business Design	FTP 2 L2 Process 6.1.1.1 RID User Administration v0.1.vsd	This document describes the process for RID User Administration including creating, deactivating and amending an account.	vsd
TIER20243	Business Design	FTP 2 L2 Process 6.1.1.2 Apply RID Settings v0.1.vsd	This document describes the process to apply RID settings.	vsd
TIER20244	Business Design	FTP 2 L2 Process 6.1.1.3 Revenue Protection - Buses v1.2.vsd	This document shows the processes to carry out Revenue Inspection activities on a Bus.	vsd
TIER20245	Business Design	FTP 2 L2 Process 6.1.1.4 Revenue Protection - LUL v1.2.vsd	This document shows the processes to carry out Revenue Inspection activities on London Underground.	vsd
TIER20246	Business Design	FTP 2 L2 Process 6.1.1.5 Revenue Protection - Tramlink v1.1.vsd	This document shows the processes to carry out Revenue Inspection activities on Tramlink services.	vsd
TIER20247	Business Design	FTP 2 L2 Process 6.1.1.6 Revenue Protection - DLR v1.1.vsd	This document shows the processes to carry out Revenue Inspection activities on DLR services.	vsd
TIER20248	Business Design	FTP 2 L2 Process 6.1.1.7 Revenue Protection - LOROL v1.1.vsd	This document shows the processes to carry out Revenue Inspection activities on London Overground services.	vsd
TIER20249	Business Design	FTP CPC9 - Gestures of Goodwill v1.0.vsd	This document describes the process that agents should follow to issue a CPC Gesture of Goodwill refund.	vsd
TIER20250	Business Design	FTP 2 L2 Process 6.1.1.8 Revenue Protection - National Rail v1.1.vsd	This document shows the processes to carry out Revenue Inspection activities on National Rail Services.	vsd

Document ID	Category	Document Name	Description	Type
TIER20251	Business Design	121211 Revenue Inspection Proposition approved.docx	This paper updates the proposition for the Revenue Inspection Charge and formally documents the changes to the proposition arising from new factors which have come to light since the original proposition was created and approved. It describes a revised proposition which is considered to be sustainable in the context of these factors and asks the Steering Group to provide direction on the technical delivery necessary to support the proposition.	docx
TIER20252	Business Design	Alternative for Revenue Inspection Fare Application.docx	This document outlines a solution to customer notifications of and ability to dispute a Revenue Inspection Charge that has been applied.	docx
TIER20253	Business Design	Con note FTP special charge V2.docx	This document is a note of conference with Richard Drabble QC on the matter of issues arising in relation to Revenue Inspection for the Future Ticketing Project.	docx
TIER20254	Business Design	Instructions for Richard Drabble QC 250112.doc	This document outlines the instructions to leading counsel to advise in conference on issues arising in relation to revenue inspection for the Future Ticketing Project.	doc
TIER20255	Business Design	Revenue Inspection Charge Tariff Options.docx	This briefing note outlines the options for determining a revenue inspection charge in the Future Ticketing Project, considering their merits from the customer experience perspective. A similar review of the options from a legal perspective is also being evaluated by TfL Legal. These two documents will inform the basis for applying a Revenue Inspection Tariff in the Future Ticketing Project.	docx
TIER20256	Business Design	Greater London Authority Act 1999.docx	Extracts relating to Penalty Fares (Schedule 17) from the Greater London Authority Act 1999	docx
TIER20257	Business Design	Revenue Inspection Charge paper.docx	This paper sets out the basis for the application of a Revenue Inspection Fare as implemented in the Future Ticketing Project.	docx

Document ID	Category	Document Name	Description	Type
TIER20258	Business Design	RPI Device Discussion 0 6a Legal.pptx	Presentation which describes the legal implications of FTP Revenue Protection Devices. This is broken down into FTP Objectives/Phases, card types & numbers, and Inspection of Credit and Debit cards	pptx
TIER20259	Business Design	TOC Legislation.doc	Document contains extracts from various Railway Byelaws (NR) in relation to Travel and Fares and Penalty and Enforcement. The extracts include the Regulations of Railways Act 1989 and The National Rail Conditions of Carriage	doc
TIER20260	Business Design	incident from larry.vsd	Process map detailing steps for identifying, logging and replacing faulty RID readers	vsd
TIER20261	Business Design	RID admin outstanding qs.xlsx	A list of questions/issues raised regarding RID administration.	xlsx
TIER20262	Business Design	RID management admin v1.1 - Final.docx	This document describes the processes and procedures involved with the management and administration of Revenue Inspection Devices (RID) and their associated accessories. This document is to be used by Transport Trading Limited (TTL), its contractor (Cubic) and London transport operators involved with the acceptance of Contactless Payment Cards to ensure a common set of procedures are adopted when handling RIDs, the associated accessories and user accounts.	docx
TIER20263	Business Design	RID Management Plan Example.doc	RID Management Plan template detailing fields to be populated by staff requesting RIDs. Fields include Contact details, Central Accessory Delivery location, RID collection/delivery Location, No. RIDs at location	doc
TIER20264	Business Design	RID processes 0.7.vsd	Process map detailing requests from TOCs for additional assets (RIDs) The process shows the relationship between the TOC, TTL Service Team, TLL Commercial Team, and Cubic	vsd
TIER20265	Business Design	FTP 2 L2 6 2 2 Process Map Assess Payment Authorisation 1 4.vsd	Transaction model process governing end of day authorisations. Contained within Word doc Assess Payment Authorisation	vsd

Document ID	Category	Document Name	Description	Type
TIER20266	Business Design	FTP 2 L2 Process 6 2 1 Assess Right to Travel 1 4.docx	This document describes how to determine whether a Contactless Payment Card (CPC) requires authorisation to allow it to be used for travel on the network, when taps are received.	docx
TIER20267	Business Design	FTP 2 L2 Process 6 2 2 Assess Payment Authorisation 1 4.docx	This document describes how to determine whether CPCs require a new authorisation before TfL can settle their Daily Charge for travel, and enforce the rules of the Transaction Model.	docx
TIER20268	Business Design	FTP 2 L2 Process 6 2 3 Manage Authorisation 1 5.docx	This document describes how to manage authorisations.	docx
TIER20269	Business Design	FTP Refund Enhancements v1.0.doc	<p>The purpose of this document is to provide detailed requirements for the ability for agents to void the following journey types and refund the charge to the customers CPC via the Customer Account System (CAS):</p> <p>Same Station Exit Journeys – Journeys where a customer has tapped their CPC to enter a station and tapped to exit within 2 minutes of the entry tap at the same station</p> <p>Here to Here Journeys – Journeys where a customer has tapped their CPC to enter a station and tapped to exit between 2 and 30 minutes after the entry tap at the same station</p> <p>Incomplete Journeys – Journeys which have only an entry (unfinished journey) or an exit (unstarted journey), resulting in a maximum fare being charged</p>	doc

Document ID	Category	Document Name	Description	Type
TIER20270	Business Design	Process Description 6.2 Authorise Cards 1.1.docx	High level description of process to request authorisation from the card holder's issuing bank, via TfL's Merchant Acquirer and record the result.	docx
TIER20271	Business Design	FTP 2 L2 Process 6 3 1 Update Deny List 1 1.docx	This document describes the process to ensure that an up to date record is held of the set of CPCs which are not permitted to travel on the network.	docx
TIER20272	Business Design	FTP 2 L2 Process 6 3 2 Update Warning List 1 0.docx	Dormant Process - No Longer Required	docx
TIER20273	Business Design	FTP 2 L2 Process 6 3 3 Update Approved List 0 1.docx	Dormant Process - No Longer Required	docx
TIER20274	Business Design	FTP 2 L2 Process 6 3 4 Distribute Lists 1 0.docx	This document describes the process to provide reader devices with the correct version of centrally managed lists.	docx
TIER20275	Business Design	FTP 2 L2 Process Map 6 3 2 Manage Warning List 1 0a.vsd	Dormant Process - No Longer Required	vsd
TIER20276	Business Design	FTP 2 L2 Process Map 6 3 2 Manage Warning List 1 0b.vsd	Dormant Process - No Longer Required	vsd
TIER20277	Business Design	FTP 2 L2 Process Map 6 3 4 Distribute Lists 1 0a.vsd	Process governing list distribution. Contained within Distribute Lists word doc	vsd
TIER20278	Business Design	FTP 2 L2 Process Map 6 3 4 Distribute Lists 1 0b.vsd	Process governing list distribution. Contained within Distribute Lists word doc	vsd
TIER20279	Business Design	Process Description 6.3 Manage Lists 1.1.docx	High level description of process to add, update and delete card numbers on lists to support Card Authorisation, Fare Calculation & Revenue Protection functions. Distribute to Front Office devices.	docx
TIER20280	Business Design	2012-07-27 Response to Oyster-FTP questions from Jenny Mills.docx	Document outlining responses to questions from the Information Commissioner's office on Oyster and FTP (i.e. access to and retention of billing information).	docx
TIER20281	Business Design	Payment Services Directive.docx	Paper describing how TfL intend to meet its obligations and support the obligations of card issuers relating to charging and billing.	docx

Document ID	Category	Document Name	Description	Type
TIER20282	Business Design	FTP v Oyster Charging Differences.xls	Scenarios document describing known situations when FTP and Oyster will result in different charges and the actions agents should follow to manage customer issues with these.	xls
TIER20283	Business Design	Token to PAN Process v0.5.vsd	This document describes the process to carry out a Police Request for cardholder details.	vsd
TIER20284	Business Design	7.1 Account for Sales 1.0.docx	High level description of the process to record and account for contactless transactions, and to produce regular financial reports in line with TfL's regulatory obligations.	docx
TIER20285	Business Design	Settlement_Ledger_Presentation.ppt	This document describes the Payments and Risk Engine Settlement and Ledgers.	ppt
TIER20286	Business Design	7.1.2 Writing Off Debt v1.0.docx	This document describes the process to write off outstanding debt held against CPCs in the TTL accounts where TfL has been unsuccessful in retrieving the debt via the Debt Recovery Cycle, and in the FTP system once the associated journey data has been de-personalised.	docx
TIER20287	Business Design	Debt Phases.ppt	High level slide showing stage of accountancy for writing off debt	ppt
TIER20288	Business Design	CASC changes Apr 14 v0.4.pptx	Describes a number of improvements we planned to make to CASC. Some of these were implemented (e.g. Hide Card, Capping Description, Debt Adjustment Dates, Travel Statement Views, New Design, Refund Notifications)	pptx
TIER20289	Business Design	FTP Voiding CPC Bus Transactions v1.1.docx	Discussion/options paper on the solution to CPC customers to allow them to 'void' their transaction immediately after payment (e.g. if they decide not to travel).	docx
TIER20290	Business Design	FTP2 process map 7.1.2 Writing Off Debt 1.0.vsd	Process showing steps to write off outstanding CPC debt from an accounting perspective	vsd

Document ID	Category	Document Name	Description	Type
TIER20291	Business Design	Chargebacks Meeting Notes 141211.docx	Meeting notes from discussion about how to handle chargeback requests on contactless transactions	docx
TIER20292	Business Design	FTP Web Form Discussion Paper.doc	The purpose of this document is to give an overview of new business requirements for FTP web forms passing submitted information to Customer Services and the considerations and constraints around this.	doc
TIER20293	Business Design	FTP Web Form Scoping Paper.doc	The purpose of this document is to give an overview of new business requirements for FTP web forms passing submitted information to Customer Services and the considerations and constraints around this. This is to inform Stakeholders, developers and Business Analysts associated with the Customer Account System of changes to requirements.	doc
TIER20294	Business Design	Card States.vsd	Document describing the different types of products and concessions/discounts customers can have on an Oyster card relating to registered customers specifically.	vsd
TIER20295	Business Design	7.1.1 Account for Travel v0.2.doc	This document describes the process to account for and report on revenue generated through the use of contactless payment cards (CPCs) on all TfL services.	doc
TIER20296	Business Design	FTP Webforms 0.4.vsd	This document describes the processes customers follow when using the Webforms on the TfL Website, The processes include Submitting an Enquiry, Clearing Debt and In Account Functions.	vsd

Document ID	Category	Document Name	Description	Type
TIER20297	Business Design	Customer Account Management Functional Requirements v0.5 (Draft).docx	<p>The purpose of this document is to:</p> <ul style="list-style-type: none"> • Outline the plan and structure of Customer Self Care function. • Describe precisely the responsibilities, relationships and interactions of the various services that comprise it. • Document the application and technical parts of the system and how they are related. • Document any business application functionality requirements necessary for the technical design process. • Capture any user interface requirements; provide suggested screen/page layouts; describe expected user / system interaction; consider possible information capture; highlight performance requirements and exception handling. • Raise and resolve any design considerations and implementation issues. 	docx
TIER20298	Business Design	EMV Reader Functional Definition V0.0.doc	Requirements for EMV/ITSO reader. Detailed systems requirements to inform the procurement of these readers. Contains some items which have not been cleared from the initial template.	doc
TIER20299	Business Design	FRS Payments Extension V1 0_100107.docx	Paper produced by Consult Hyperion on 05 January 2010 for FTP describing the potential requirements/functions of the Contactless reader.	docx
TIER20300	Business Design	Meeting to Discuss Bus Launch Transaction Settlement 180110.doc	Meeting minutes noting discussion about the Funds Reconciliation System (FRS) and potential use of this system and others to allow charging/settlement to enable to initial bus launch.	doc
TIER20301	Business Design	FTP2 process map 7.1.1 Account for Travel 0.2.vsd	High level process showing steps to record and account for contactless transactions, and to produce regular financial reports in line with TfL's regulatory obligations.	vsd

Document ID	Category	Document Name	Description	Type
TIER20302	Business Design	TfL Funds Reconciliation System.doc	Requirements document on the Funds Reconciliation System for January 2010, contains as-is descriptions and to-be requirements.	doc
TIER20303	Business Design	FTP_Initial Bus Launch_System Requirements V0.2.doc	Systems requirements document on functions required to deliver the initial bus launch, contains information on systems architecture maps, requirements data field etc.	doc
TIER20304	Business Design	Revised TfL proposal 12 Jan 2011.docx	Early draft of the Transit Transaction Model proposal. Likely to be a more up to date version.	docx
TIER20305	Business Design	161 iBus CSI Interface V08.pdf	LBSL Document describing the technical interfaces between the iBus System and the Central Sign Infrastructure system. Architecture, data, requirements. Likely not of use.	pdf
TIER20306	Business Design	Oyster iBus Data Integration Requirements Summary 1 July-7.pdf	Document describing the requirements to enable the detection of faulty fare collection equipment (Oyster readers) on TfL's buses.	pdf
TIER20307	Business Design	FR037 - Introduction of a New Revenue Inspection Device.doc	Variation instructing Cubic to investigate appropriate Revenue Inspection device technology to replace the MOVie device.	doc

Document ID	Category	Document Name	Description	Type
TIER20308	Business Design	PID FTP RPI Device V0 2.doc	<p>This Project Initiation Document formalises the following project areas for the implementation of a new Inspection device for FTP:</p> <ul style="list-style-type: none"> • Objectives • Scope • Approach • Project controls • Stakeholder management • Project plan <p>The PID is a base document for the project and will be reviewed and updated at regular intervals throughout the project by the Project Manager</p>	doc
TIER20309	Business Design	FTP2 - PayTag v0.2.docx	This paper looks at the impact Barclaycard PayTags will have on customers and TfL when FTP Phase 2 is launched and proposes options to mitigate any issues.	docx
TIER20310	Business Design	FTP RPI Device Outline requirements V9.docx	This document outlines high level requirements for the Revenue Protection Inspector's Device, a system component of the Future Ticketing Programme.	docx
TIER20311	Business Design	FTP2 L2 Process 4.0.1 Identify customer 0.4.docx	This document describes the process to securely identify a CPC record within the FTP Customer Account System and confirm sufficient information from the customer to be satisfied that the CPC belongs to them.	docx
TIER20312	Business Design	FTP RPI Device Requirements Summary 1.docx	This document gives a very high level summary of requirements for the Revenue Protection Inspector's Device, a system component of the Future Ticketing Programme. It is intended as an initial check list to help identify potential platforms.	docx
TIER20313	Business Design	Stakeholders.docx	List of TfL stakeholders for the RID project. Looks very out of date.	docx

Document ID	Category	Document Name	Description	Type
TIER20314	Business Design	Contactless Acceptance Business Requirements V1 51 (3).docx	This document lists the overall business requirements of Transport for London for acceptance of "open" (internationally branded) contactless payment cards for travel (i.e. without the need for an intermediate ticket purchase transaction). It focuses on the requirements of the card acceptance interface (i.e. the interface between Transport for London's systems and those of Transport for London's acquirer) and on the contractual and operational acceptance conditions; other documents will list the functional requirements for the gate and reader systems, and for the back-office processing.	docx
TIER20315	Business Design	TCM - PCMS Functional Requirements V0 24.docx	This document lists the functional requirements for the Transit Card Manager, including the requirements for the Payment Card Management System and List Manager, the interfaces between the TCM and other systems such as the Payment Card Settlement Engine, Revenue Protection System, Customer Accounts System and Fares and Aggregation Engine, and the authorisation interface to an acquirer.	docx
TIER20316	Business Design	FTP2 L2 Process 4.1.1 Provide billing information 1.3.doc	This document describes the process to provide all customers with access to their charge and journey information online and through the contact centre.	doc
TIER20317	Business Design	TCM data gathering report 20100331.docx	This document describes an information-gathering process which was undertaken between November 2009 and March 2010, to provide input into the business case for Phase 2 of the Future Ticketing project (Phase 1 does not require the use of a TCM) and into the Functional and Non-Functional Requirements to be used in any procurement process.	docx
TIER20318	Business Design	TCM function matrix 20100322.xlsx	Document comparing potential solutions for the Transit Card Manager from different suppliers. Scoring and notes made on each solution.	xlsx

Document ID	Category	Document Name	Description	Type
TIER20319	Business Design	TCM.doc	This document gives information on the Transit Card Manager.	doc
TIER20320	Business Design	TCM.vsd	This document shows the process for the Transit Card Manager.	vsd
TIER20321	Business Design	TCM_Functional_V0.0b.doc	Document describing the overall functions of the Transit Card Manager, it's functions and processes undertaken.	doc
TIER20322	Business Design	FTP2 L2 Process 4.2.1 Create customer account 1.0.doc	This document describes the process to create an account for a customer that will enable them to access customer support services via the website or the contact centre.	doc
TIER20323	Business Design	TfL proposal 14 Dec 2010.pdf	This proposal sets out a method by which contactless credit and debit cards could be used to allow cardholders to pay for 'Pay As You Go' travel on the public transport services provided by TfL, and on the services of those private transport operators, notably the Train Operating Companies that serve London, who also share TfL's smartcard infrastructure.	pdf
TIER20324	Business Design	090721 Lunchtime Seminar re Customer Proposition.ppt	Internal (TfL) presentation on the Future Ticketing Project high level objectives and detailed data of Contactless vs. Oyster vs. Paper (customer focused).	ppt
TIER20325	Business Design	7 Day Cap Slide.ppt	Short presentation on the '7 Day Cap' , describes basic rules and customer outcomes/benefits.	ppt
TIER20326	Business Design	Alternative Customer Proposition.doc	Detailed proposition from 2008 outlining customer and business propositions of FTP, includes data on ticket sales and business aims which EMV will enable (e.g. cashless bus, stations congestion reduction).	doc
TIER20327	Business Design	Customer Proposition - Feb v6.ppt	Very old presentation from 2008 on the customer proposition, description of vision, high level end to end process, customer types etc.	ppt
TIER20328	Business Design	Customer Proposition - Feedback Form HL11.doc	Complete comments sheet providing feedback on the customer proposition and responses to these.	doc

Document ID	Category	Document Name	Description	Type
TIER20329	Business Design	Customer Proposition Paper 2009 V1 2.pdf	Detailed proposition describing the overall FTP stages, migration to EMV plan, customer types/products.	pdf
TIER20330	Business Design	FTP2 L2 Process 4.2.2 Update customer account 1.2.doc	This document describes the process to allow registered customers to update the information they provided to TfL to create their online accounts with TfL.	doc
TIER20331	Business Design	Customer Proposition Paper 2010 1.6.pptx	High level proposition on Contactless, also contains information on usage at other retailers and market uptake.	pptx
TIER20332	Business Design	Customer Proposition Update 20080811.ppt	Customer proposition outlining the FTP stages, migration strategy and high level plan post launch.	ppt
TIER20333	Business Design	Customer Proposition Update for Programme Board May 2012.pptx	Detailed proposition describing FTP phase 2. Additional detail on how contactless will work on the modes (systems) and end to end services.	pptx
TIER20334	Business Design	Customer Proposition.zip	Zip file containing customer proposition version 1.2 (already included above) and a report by MVA Consulting on card usage/preference and methods of encouraging EMV (previously in customer propositions).	zip
TIER20335	Business Design	customer proposition_product quality process.xls	RACI matrix for the customer proposition, focused to TfL reviewers, partially complete.	xls
TIER20336	Business Design	CASC notifications v0.2.ppt	A description of the changes we made to the behaviour of notifications in CASC	ppt
TIER20337	Business Design	Customer Registration V1.ppt	Presentation which describes the current channels customers used to register and proposed levels of registration and data which can be obtained in FTP (i.e. functionality developed for customers using CASC with/without an online account).	ppt
TIER20338	Business Design	Customer View of PbR.ppt	High level presentation on the logic behind CPC journey construction, fare calculation and bill payment (functionality of FAE and PaRE).	ppt

Document ID	Category	Document Name	Description	Type
TIER20339	Business Design	Fraud Personas v0 3.docx	Customer personas on potential customer who could potentially commit fraud with a CPC (Phase 2 and 3).	docx
TIER20340	Business Design	FTP Customer Proposition v0.2.doc	Early draft of the customer proposition, very detailed, describes strategy for development of detail proposition (stakeholders), the customer types, product offering, customer service & delivery plan.	doc
TIER20341	Business Design	FTP Overview.pptx	High level customer proposition and timeline for the FTP programme, the outcome/vision for each mode.	pptx
TIER20342	Business Design	FTP2 L2 Process 4.3.3 Resolve card issue 1.2.doc	This document describes the process to provide support to customers whose contactless payment cards (CPCs) have been denied access to travel using TfL's services or customers who do not have a valid card but an active season ticket resulting in them being unable to use TfL's services.	doc
TIER20343	Business Design	phases timeline 0810.ppt	FTP stages and timeline, very out of date, based on original programme aims/structure.	ppt
TIER20344	Business Design	Present to Future Ticketing Mapping5.doc	Documents the 'current' types of ticket and maps them to potential future mediums/formats following FTP, uses initial programme structure.	doc
TIER20345	Business Design	ProdByPM_200809.xls	Purchase data on season ticket type, payment method (card/cheque etc.) and length of validity. No information on the dates sampled.	xls
TIER20346	Business Design	TfL New Reader Functional Base Specification v0_99.doc	Paper produced by Consult Hyperion on 05 January 2010 for FTP describing the potential requirements/functions of the Contactless reader earlier version of FRS Payments Extension V1 0_100107.docx	doc
TIER20347	Business Design	Travel Plans Matrix 0.1.doc	Table mapping different types of travel product to TfL and bank issued EMV card (very out of date).	doc
TIER20348	Business Design	FTP2 L2 Process 4.3.4 Resolve charging issue 1.1.doc	This document describes the process to process and respond to customer queries relating to journeys and the resulting charges made to their contactless payment cards (CPCs).	doc

Document ID	Category	Document Name	Description	Type
TIER20349	Business Design	Customer Proposition Paper AutoFill.ppt	Presentation describing the customer proposition of Autofill, how it will potentially appear to the customer and the two rules (very out of date).	ppt
TIER20350	Business Design	branding.pptx	Presentation on branding of the bus reader to inform customers of CPC acceptance (out of date).	pptx
TIER20351	Business Design	PayPass Special Trial Turnstile.jpg	Image of contactless reader on rail gates.	jpg
TIER20352	Business Design	Re Payment cardsdevicesphones in Transit.htm	A copy of an email chain from MasterCard discussing photographs of payment cards used in the transit environment.	htm
TIER20353	Business Design	worldpaycaptioned-16.jpg	Image of contactless reader on a bus.	jpg
TIER20354	Business Design	whyIBL (2).docx	Paper describing FTP, it's structure and the rational and benefits of the initial bus launch.	docx
TIER20355	Business Design	1. TfL Phase 2 Standard Process v2.pdf	Customer Experience Storyboard which shows a visual representation of a Barclays Group Contactless Payment Card holder, using their card to use Transport for London's services.	pdf
TIER20356	Business Design	2. TfL Phase 2 card declined at reader v2.pdf	Customer Experience Storyboard which shows a visual representation of a Barclays Group Contactless Payment Card holder, being denied access to the TfL transit system because the card is not accepted at the card reader.	pdf
TIER20357	Business Design	3. TfL Phase 2 card declined at Auth v2.pdf	Customer Experience Storyboard which shows a visual representation of a Barclays Group Contactless Payment Card holder, who is using the TfL transport system, however the auth is declined (the auth could either be the Right to Travel authorisation, or the end of day authorisation).	pdf

Document ID	Category	Document Name	Description	Type
TIER20358	Business Design	4. TfL Phase 2 deny list removal process v2.pdf	Customer Experience Storyboard which shows a visual representation of a Barclays Group Contactless Payment Card holder, who either: 1. Has a card which is indebted to TfL. 2. Has a card which has been placed on the deny list due to a failed authorisation (no debt to TfL will be outstanding).	pdf
TIER20359	Business Design	5. TfL Phase 2 Late Tap Scenario v2.pdf	Customer Experience Storyboard which shows a visual representation of a Barclaycard customer who has forgotten to tap in or out of a TfL gate (in this example customer does not tap out).	pdf
TIER20360	Business Design	Tfl Phase Two_Scenario 3.0 - Introduction_v5.0_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Introduction)	doc
TIER20361	Business Design	Tfl Phase Two_Scenario 3.1 - Transaction Successful (Happy Path)_v5.0_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Happy Path)	doc
TIER20362	Business Design	Tfl Phase Two_Scenario 3.2 - Incomplete Journey(Cust Mistake)_v5.0_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Incomplete journeys)	doc
TIER20363	Business Design	Tfl Phase Two_Scenario 3.3 - Transaction Unsuccessful(UnHappy)_v5.0_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Unhappy Path)	doc

Document ID	Category	Document Name	Description	Type
TIER20364	Business Design	Tfl Phase Two_Scenario 3.4 - Entry Deny List_v5.0_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Entry Deny list)	doc
TIER20365	Business Design	Tfl Phase Two_Scenario 3.5 - Exit Deny List_v5.0_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Exit Deny list)	doc
TIER20366	Business Design	FTP2 L2 Process 4.3.5 Resolve payment failure 1.1.doc	This document describes the process to allow customers to re-enable their contactless payment card (CPC) for travel (i.e. remove from the Deny List where addition is a result of a declined authorisation).	doc
TIER20367	Business Design	Tfl Phase Two_Scenario 3.6 - Query Management (TFL and Members)_v5.1_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Query Management)	doc
TIER20368	Business Design	Tfl Phase Two_Scenario 3.7 - Disputes and Chargebacks_v5.1_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Disputes and Chargebacks)	doc
TIER20369	Business Design	Tfl Phase Two_Scenario 3.8 - Revenue Inspection_v5.1_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Revenue Inspection)	doc

Document ID	Category	Document Name	Description	Type
TIER20370	Business Design	Tfl Phase Two_Scenario 3.9 - Transit TfL Website_v5 1_11 03 2013.doc	The document outlines generic TfL Phase Two scenarios where a Contactless Payment Card (CPC) is used to make a payment on TfL's transit network: TfL buses, TramLink, DLR, Overground and Underground. The launch of Phase Two is scheduled for November 2013. (Transit TfL Website)	doc
TIER20371	Business Design	UKCA - Post works 18-20 - Process flows change Log.xls	A list of the process flow logs for TfL Phase Two scenarios from 3.0 - 3.9	xls
TIER20372	Business Design	Challenge Point Mitigations 1 0.xlsx	The document outlines CPC challenge mitigations scenarios including responses to potential instances such as 'Card not working', 'Customer lacks confidence that CPC is safe and secure' The document is in a table format and uses an RAG system to rank each scenario	xlsx
TIER20373	Business Design	FTP Customer Experience - Phase 1 Map 1 (1.0 FINAL).vsd	Customer Experience Storyboard which shows a visual representation of a customer using their contactless payment card (CPC) to travel on a bus. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development. (Visio)	vsd
TIER20374	Business Design	FTP Customer Experience - Phase 1 Map 1 (1.0).pdf	Customer Experience Storyboard which shows a visual representation of a customer using their contactless payment card (CPC) to travel on a bus. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development. (PDF)	pdf
TIER20375	Business Design	Document list.docx	A list of Phase 2 Customer Experience Maps	docx

Document ID	Category	Document Name	Description	Type
TIER20376	Business Design	FTP CE Map 2.1 Phase 2 payment process (1.3).vsd	This map presents a visual representation of a customer successfully using their contactless payment card (CPC) to travel on Transport for London services. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20377	Business Design	FTP CE Map 2.10 Query charge - unregistered (1.2).vsd	This map presents a view of an unregistered customer querying a charge that has been made to their CPC. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20378	Business Design	FTP CE Map 2.11 Revenue Inspection - Bus (1.2).vsd	This map presents a view of a customer being checked by a TfL Revenue Inspector while making a bus journey. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20379	Business Design	FTP CE Map 2.12 Revenue Inspection - Rail (1.3).vsd	This map presents a view of a customer being checked by a TfL Revenue Inspector, either while making or on completion of a rail journey. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20380	Business Design	FTP CE Map 2.13 Telephone ID&V (unregistered customer) (0.1).vsd	This map presents a view of an unregistered customer who calls TfL for telephone support relating to their journey history, charges or Deny List status. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd

Document ID	Category	Document Name	Description	Type
TIER20381	Business Design	FTP CE Map 2.14 Service Disruption (0.0).vsd	This map presents a visual representation of a customer experiencing service disruption while using their contactless payment card (CPC) to travel on Transport for London services. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20382	Business Design	FTP CE Map 2.15 Incomplete Journey (Unstarted).vsd	This map presents a view of a customer using their CPC for rail travel but did not "touch in" at the start of their journey. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20383	Business Design	FTP CE Map 2.16 Denied at reader - TfL Denied (0.0).vsd	This map presents a visual representation of a customer attempting to use their contactless payment card (CPC) to travel on Transport for London services. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20384	Business Design	FTP CE Map 2.17 Challenge Revenue Inspection (Day 1) (0.1).vsd	This map presents a view of a customer who has been placed on the Deny List because of multiple failed Revenue Inspections Taps and contacts TfL to challenge this. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20385	Business Design	FTP CE Map 2.2 Incomplete journey (1.3).vsd	This map presents a view of a customer using their CPC for rail travel but not touching out at the end of their journey. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd

Document ID	Category	Document Name	Description	Type
TIER20386	Business Design	FTP CE Map 2.3 Declined authorisation (1.3).vsd	This map presents a visual representation of a customer using their contactless payment card (CPC) to travel on Transport for London services. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20387	Business Design	FTP CE Map 2.4 Denied at reader (1.2).vsd	This map presents a visual representation of a customer attempting to use their contactless payment card (CPC) to travel on Transport for London services. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20388	Business Design	FTP CE Map 2.5 Resolve CPC Issue (1.2).vsd	This map presents a view of a contactless payment card (CPC) issue being resolved, following a declined authorisation. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20389	Business Design	FTP CE Map 2.6 Automated DL removal (1.2).vsd	This map presents a view of a contactless payment card (CPC) being removed from the Deny List, following an automated authorisation request generated by the TfL system. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20390	Business Design	FTP CE Map 2.7 Registration (1.3).vsd	This map presents a view of a customer registering their CPC and contact details on the TfL website. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd

Document ID	Category	Document Name	Description	Type
TIER20391	Business Design	FTP CE Map 2.8 Check usage (1.3).vsd	This map presents a view of a customer accessing usage information (charging and journey history) relating to their CPC .The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20392	Business Design	FTP2 L2 Process 4.3.6 Issue Goodwill Payments 1.6.doc	This document describes the process to allow Contact Centre Agents to make a financial Gesture of Goodwill to customers direct to their Contactless Payment Card (CPC) via the Customer Account System.	doc
TIER20393	Business Design	FTP CE Map 2.9 Query charge - registered (1.2).vsd	This map presents a view of a registered customer querying a charge that has been made to their CPC . The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20394	Business Design	FTP CE Map 3 New Maps .vsd	This map presents a view of a customer using their CPC for rail travel but did not “touch in” at the start of their journey. The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.	vsd
TIER20395	Business Design	FTP2 CEM - challenges & mitigations 1.2.xlsx	The document outlines CPC challenge mitigations scenarios including responses to potential instances such as ‘Card not working’, ‘Customer lacks confidence that CPC is safe and secure’ The document is in a table format and uses an RAG system to rank each scenario	xlsx

Document ID	Category	Document Name	Description	Type
TIER20396	Business Design	FTP CCO Maps - Phase 2 - v 0.2.vsd	<p>Customer Experience Storyboard which a visual representation of a customer successfully using their contactless payment card (CPC) to travel on TfL services.</p> <p>The map shows the customer perspective throughout the process, highlighting interactions and frustrations that can be improved during the solution development.</p>	vsd
TIER20397	Business Design	Classification Codes v0.3.xls	Reason codes used to classify customer enquiries in TfL's CRM (SAP)	xls
TIER20398	Business Design	Balance Checking Summary - UKCA March 2012.ppt	PowerPoint presentation on 'TfL Research – Journey History' The Market research shows 6 slides including topics on how often customers check their Oyster balance, reason for checking balance, frequency of checking their balance.	ppt
TIER20399	Business Design	Checking Oyster balance and journey history 201202 v2.0.pptx	PowerPoint presentation on findings from the Market research paper for reasons and frequency of customers checking their Oyster card balance	pptx
TIER20400	Business Design	Eligibility for research.doc	The document outlines the eligibility criteria for those taking part in the customer research for Journey history usage	doc

Document ID	Category	Document Name	Description	Type
TIER20401	Business Design	FTP Customer Research.doc	<p>The document outlines the FTP customer Proposition research. This purpose of this includes</p> <ul style="list-style-type: none"> • Refine the proposals as recommended within the customer proposition • Validate for the modes that the customer proposition is realistic and deliverable • Validate the assumptions made in the customer proposition and business case • To inform the development of customer processes • Understand the perceived barriers for take up of services and identify mitigating actions which could overcome these • Identify key marketing messages 	doc
TIER20402	Business Design	20090619 TfL FT Research findings presentation & additional analysis v6.ppt	PowerPoint presentation on 'Future Ticketing Research' Key research findings and additional analysis by Gerard Wilson and Imogen Miller 19th June 2009 (65 slides)	ppt
TIER20403	Business Design	Channel matrix1.doc	The document outlines a list of channels, payment methods and services for travel products	doc
TIER20404	Business Design	Feedback on 2nd version.doc	FTP Research questionnaire document for Market research	doc
TIER20405	Business Design	Research Raw Data.xls	Raw data for market research including questionnaire data variable information and value data	xls
TIER20406	Business Design	TfL future ticketing research - addendum to proposal v2_1.doc	Scope and timeline for customer research report by MVA Consulting. Final report produced see '20091009 TfL Future Ticketing report vFINAL' document.	doc
TIER20407	Business Design	2009 MVA Customer Research Highlights.pptx	Presentation of key points/graphs in the '20091009 TfL Future Ticketing report vFINAL' document .	pptx

Document ID	Category	Document Name	Description	Type
TIER20408	Business Design	20090522 IN10 Topline results v2.doc	Subset of the data included in the '20091009 TfL Future Ticketing report vFINAL' document. Initially focused to customer's sampled, modes and tickets used. Lots of data on broader subjects e.g. purchasing habits.	doc
TIER20409	Business Design	20090703 TfL Future Ticketing final report v9.doc	Early draft of '20091009 TfL Future Ticketing report vFINAL'.	doc
TIER20410	Business Design	20090708 IN11 Modal analysis v1.doc	Subset of the data included in the '20091009 TfL Future Ticketing report vFINAL' document. Specifically focused to ticket types and mode.	doc
TIER20411	Business Design	20091009 TfL Future Ticketing report vFINAL.PDF	Detailed report produced by MVA Consultancy on future ticketing for London and non-London residence. Data on card preferences, ticket types, registration etc.	pdf
TIER20412	Business Design	Customer Research Headlines 20090526.ppt	Presentation on results of customer research into card preferences (TfL vs. CPC), preferred customer service channels and other CPC related points.	ppt
TIER20413	Business Design	Summary of MVA Report for GLA.docx	Summary of quantitative survey of Londoners and UK visitors to London on future ticketing options and issues with ticketing in the operational environment.	docx
TIER20414	Business Design	2009-01-14 TfL Overseas card costs P4.ppt	Presentation on Euromonitor International consultancy describing the company at a high level and the costs of works being undertaken on behalf of TfL.	ppt
TIER20415	Business Design	Single source document 1.docx	Word draft of Single Source Euromonitor Int PDF document for Euromonitor consultancy services.	docx
TIER20416	Business Design	Single Source Euromonitor Int.pdf	Single source procurement request for Euromonitor International research services.	pdf
TIER20417	Business Design	Customer Service.docx	Copies of graphs from customer research slides/graphs on perceptions of responsibility for solving daily charging errors.	docx
TIER20418	Business Design	LBG - FTP Presentation.pdf	Presentation with content from customer propositions, comms strategy and managing customer's online accounts.	pdf

Document ID	Category	Document Name	Description	Type
TIER20419	Business Design	DenyListSlidesfor11May_updated_24May.pptx	Document describing the process of adding and removing cards from the deny list (i.e. via the payment of debt).	pptx
TIER20420	Business Design	reader display messages.doc	Looks at the scenarios for Bus and Rail when a CPC is touched against a reader and what messages are displayed. Looks like a working document which was not updated/completed.	doc
TIER20421	Business Design	IBL Display messages V1 0 20110715_JF.xlsx	Table showing the passenger and customer messages displayed when there are errors reading a CPC. Marked up version. Looks out of date/not updated.	xlsx
TIER20422	Business Design	Customer Proposition 2009 V1.pptx	Customer proposition outlining the Initial Bus Launch, it's vision benefits, customers and next steps in the development.	pptx
TIER20423	Business Design	Customer Actions Processes 2.pptx	Triggers and high level processes relating to Phase 2 and 3 of FTP including retailing season tickets, travelling and customer service.	pptx
TIER20424	Business Design	FTP2 L2 Process 4.3.6 Make Payment to a CPC v1.9.doc	This document describes the process to allow Contact Centre Agents to make a payment to customers direct to their Contactless Payment Card (CPC) via the Customer Account System (CAS).	doc
TIER20425	Business Design	FTP Phase 2 Customer Scenarios v0.1.xlsx	Table describing customer challenges (issues experienced/pain points) with CPC and & mitigations/solutions. Not complete but does describe multiple pain points.	xlsx
TIER20426	Business Design	Future Ticketing Project Phase 2 Detailed Proposition.pptx	This presentation describes the customer and staff proposition for FTP Phase 2.	pptx
TIER20427	Business Design	FT Overview for GCS 120710.ppt	This document gives an overview of the FTP that was delivered to Group Customer Services (Contact Centre). It gives an overview of the customer proposition, future ticketing stakeholder engagement, other activities to support customer self-service and an overview of FTP customer research.	ppt
TIER20428	Business Design	OMA.ppt	This presentation outlines an early (2009) version of the FTP Customer Proposition.	ppt

Document ID	Category	Document Name	Description	Type
TIER20429	Business Design	TfL FTP Overview.ppt	This presentation gives background to TfL, history of ticketing and an introduction to FTP.	ppt
TIER20430	Business Design	FTP customer registration - workshop.ppt	This presentation outlines early customer data and registration requirements for FTP (2008).	ppt
TIER20431	Business Design	FTP2 process map 4.1.1 Provide billing information 1.1.vsd	This document describes the process used to provide all customers with access to their charge and journey information online and through the contact centre.	vsd
TIER20432	Business Design	FTP customer registration.ppt	This presentation outlines registration in FTP, why it is needed, the data needed and how customers will be able to register.	ppt
TIER20433	Business Design	7 Day Cap Method.pdf	This document describes the 7 Day Capping decision making process.	pdf
TIER20434	Business Design	Updated risk report Feb 14_ND.docx	This report seeks to update the position paper written in relation to the Future Ticketing Project (FTP) and use of contactless payment cards (CPCs) in October 2012 and widely circulated at that time. That paper sought to consolidate all identified risks associated with the project identified by professional crime prevention, fraud prevention and data protection specialists within TfL.	docx
TIER20435	Business Design	Emirates Air Line - Phase 2 requirements v 1.3.docx	The purpose of this document is to outline how customers will use Contactless Payment Cards (CPCs) to travel on the Emirates Air Line (EAL). The document provides an outline of EAL in Phase 2 to highlight the rationale for implementing the solution, a detailed proposition, as well as potential risks, issues and any outstanding questions that need to be addressed before the solution can be developed.	docx
TIER20436	Business Design	FAE - CableCar v1 1.docx	This document describes how FAE works on Emirates Air Line services.	docx

Document ID	Category	Document Name	Description	Type
TIER20437	Business Design	FTP - CASC CableCar FRS V1 0.docx	This document outlines the CASC requirements for Emirate Air Line Services including tap format and journeys.	docx
TIER20438	Business Design	EMV on River - Business Process impacts 0.2.xlsx	Process hierarchy for EMV on river.	xlsx
TIER20439	Business Design	EMV on River - high level business process overview 0.0 DRAFT.vsd	This document describes the high level business processes required for CPC acceptance on River Services.	vsd
TIER20440	Business Design	London River Services - CPC acceptance v 1.1.docx	This document intends to inform the development work necessary to support the delivery of Contactless Payment Card (CPC) acceptance on River, by capturing the business requirements and describing how customers will use CPCs to travel on River Bus services.	docx
TIER20441	Business Design	FTP2 process map 4.2.2 Update customer account 1.1.vsd	This document describes the process to allow registered customers to update the information they provided to TfL to create their online accounts with TfL.	vsd
TIER20442	Business Design	FTP Phase 2 - Revenue Inspection Leniency Strategy Proposal v3.1.docx	Document outlining TfL proposed strategy/policy on revenue inspection and prosecutions during the launch of FTP2.	docx
TIER20443	Business Design	Dartford - Oyster and CPC Acceptance v1.1.doc	This document addresses the business requirements and scoping areas required to deliver the extension of Oyster and CPC Acceptance to Dartford Station. Areas relating to the procurement of station hardware and software upgrades will be addressed outside of this document.	doc
TIER20444	Business Design	Dartford - Project Touch Points.xls	Project Touch Points for Oyster and CPC extension to Dartford.	xls
TIER20445	Business Design	Dartford.vsd	This document shows an image of the Zones in the TfL network and where Dartford Station sits (Zone 8).	vsd
TIER20446	Business Design	FTP2 process map 4.3.3 Resolve card issue 1.2.vsd	This process map describes how a customer can resolve a card issue via the website, contact centre and operational staff on a bus or in a station.	vsd

Document ID	Category	Document Name	Description	Type
TIER20447	Business Design	HS1 business requirements v1.0.doc	The purpose of this document is to outline the business requirements relating to ticketing on the High Speed 1 (HS1) service between St Pancras International and Stratford International and how the addition of pay as you go (PAYG), on Oyster and Contactless Payments Cards (CPC), will be used for travel on this mode.	doc
TIER20448	Business Design	Hertford East Extension - Oyster and CPC acceptance v1.0.doc	This document addresses the business requirements and scoping areas required to deliver the extension of Oyster and CPC Acceptance to Hertford East. The following stations included in the extension are Rye House, St. Margarets (Herts), Ware and Hertford East. Areas relating to the procurement of station hardware and software upgrades will be addressed outside of this document.	doc
TIER20449	Business Design	Hertford East Extension_v2_12042015.ppt	Presentation on Oyster and CPC extension to Hertford East.	ppt
TIER20450	Business Design	trainmap.jpg	Map of Abellio Greater Anglia train services to Hertford East for Oyster and CPC extension.	jpg
TIER20451	Business Design	Lea Bridge - Project Touch Points v0.1.xlsx	Project Touch Points for Oyster and CPC extension to Lea Bridge Station.	xlsx
TIER20452	Business Design	FTP2 process map 4.3.5 Resolve payment failure 1.0.vsd	This process map describes how a customer can resolve a payment failure via the website and the contact centre (through IVR).	vsd
TIER20453	Business Design	Lea Bridge Station v0.6.docx	The purpose of this document is to outline the business requirements for ticketing at Lea Bridge station. The installation of PVALs will allow for the acceptance of both Oyster and CPC for PAYG/Travelcard journeys to and from Lea Bridge.	docx
TIER20454	Business Design	6240 Hertford Nth Epsom Work Request Form.docx	Business Design Work Request Form describing the work requirement for Oyster and CPC extension to Hertford North Stations & Epsom.	docx

Document ID	Category	Document Name	Description	Type
TIER20455	Business Design	Hertford North Extension - Oyster and CPC acceptance v0.1.docx	This document addresses the business requirements and scoping areas required to deliver the extension of Oyster and contactless payment card (CPC) Acceptance to Hertford North. The following stations included in the extension are Cuffley, Bayford and Hertford North. Areas relating to the procurement of station hardware and software upgrades will be addressed outside of this document.	docx
TIER20456	Business Design	Hertford Nth Epsom Work Request Form.docx	Business Design Work Request Form describing the work requirement for Oyster and CPC extension to Hertford North Stations & Epsom.	docx
TIER20457	Business Design	CR 99 SDM Requirements v0.2.xlsx	This document describes the requirements for the Service Disruption Manager (SDM) Change Request 99 - Configure Disruption Type.	xlsx
TIER20458	Business Design	Disruption Matrix v0.3.xlsx	Table showing the disruption scenarios which are triggered in each of the disruption types (explaining business rules for relationships between disruption types and scenarios).	xlsx
TIER20459	Business Design	SDM High level 1 process v0.1.vsd	Process hierarchy and processes for the SDM user portal describing level one functions broken down into level 2 processes.	vsd
TIER20460	Business Design	SDM Reporting Reqs v0.1.xlsx	This document describes the Reporting Requirements for Service Disruption Manager.	xlsx
TIER20461	Business Design	SDM Reporting Requirements v0.1.docx	This document describes the Reporting Requirements for Service Disruption Manager.	docx
TIER20462	Business Design	SDM Service desk Briefing April 2016 v1.0.pptx	This presentation is a briefing on Service Disruption Manager. It gives an explanation on how SDM works and journey construction,	pptx
TIER20463	Business Design	SDM Service desk Briefing session 2 v1.0.pptx	This presentation is a briefing on Service Disruption Manager and gives examples of Operational Scenarios,	pptx

Document ID	Category	Document Name	Description	Type
TIER20464	Business Design	SDM TOC Impact v1.0.docx	Document describing the implementation plan of Service Disruption Manager and the engagement with the Train Operating Companies (TOCs) for the vanguard test period and during business as usual.	docx
TIER20465	Business Design	SDM_CRs_v0.1.xlsx	This document outlines the SDM Change Requests and their status.	xlsx
TIER20466	Business Design	Service Disruption Manager CRsv1.0.pptx	This presentation is a briefing on Service Disruption Manager change requests and explains which have been complete, which are due to be completed and explains some of the changes.	pptx
TIER20467	Business Design	SDR CE Service Desk Procedure v1.2.docx	The purpose of this document is to describe the manual process, for entering disruption data in a format that meets the requirements to trigger the validation process for the Service Delay Refund (SDR) project due to launch in June 2014. This process is to be performed by the CE Service desk team.	docx
TIER20468	Business Design	SDR Customer Notifications v0.7.docx	The purpose of this document is to detail customer on screen, and customer e-mail notifications for the Service Delay Refunds project, due to launch by April 2014. The project will cover customer initiated CPC claims via CASC and Oyster and Magnetic ticket claims via Oyster Online.	docx
TIER20469	Business Design	SDR Financial Reporting Requirements v1.0.docx	This document describes the Service Delay Refunds Financial Reporting Requirements.	docx
TIER20470	Business Design	SDR Night Tube requirements v0.2.xlsx	Requirements for Service Delay Refunds on Night Tube Services.	xlsx
TIER20471	Business Design	SDR Online Requirements v0.9.xlsx	Business Requirements for Service Delay Refunds.	xlsx
TIER20472	Business Design	SDR Overground expansion 2015 v0.4.xlsx	Service Delay Refunds Business Requirements for the transfer of Greater Anglia Services to London Overground/TfL Rail Services.	xlsx

Document ID	Category	Document Name	Description	Type
TIER20473	Business Design	SDR Validation Rules and Processes v1.0.docx	<p>The purpose of this document is to outline the business rules for the validation process relating to the proposed Service Delay Refund (SDR) project. The validation process is run once a customer initiated online refund is submitted for a disrupted journey for Oyster and Magnetic ticket customers via OOL and for CPC customers via CASC. The process will perform two vital functions.</p> <ul style="list-style-type: none"> • To validate a customer submitted claim against actual disruption event data and where possible customer journey data. • To assign the correct refund value to the claim. 	doc
TIER20474	Business Design	SDR_CCO training Jan v1.1.pptx	This document is a training pack on Service Delay Refunds for Contact Centre agents. It gives an overview of SDR, explains scenarios and what agents are required to do.	ppt
TIER20475	Business Design	FTP2 process map 4.3.6 Make Gesture of Goodwill 0.7.vsd	This process map describes how TfL contact centre agents can request goodwill payments for customers and how they are approved.	vsd
TIER20476	Business Design	FTP2 process map 4.3.6 Make Payment to CPC 0.8.vsd	Process flow showing how a goodwill payment is made straight to a contactless payment card. This hasn't been implemented in London yet	vsd

Document ID	Category	Document Name	Description	Type
TIER20477	Business Design	FTP2 Recommendations paper - Identifying customers 1.0.docx	<p>This document is a briefing note and was compiled to seek approval from the FTP Phase 2 Steering Group to proceed with a proposed route for:</p> <ul style="list-style-type: none"> - Identifying customers who require service from the contact centre - Identifying unregistered customers who request billing information online - Providing an increased amount of billing information to unregistered customers via the website. <p>The note includes proposed options and recommendations.</p>	docx
TIER20478	Business Design	FTP2 Recommendations paper - Registration with Oyster link 1.0.docx	Discussion/options paper on the incorporating Oyster data on the CASC to connect customers in the Customer Database during the account registration process.	docx
TIER20479	Business Design	FTP2 Self-Serve IVR Business Requirements v0.1.doc	The purpose of this document is to outline the high-level call flow and collate the sub-processes and requirements that will form part of the FTP Self-Serve IVR to enable third-party providers to produce a technical design for this service.	doc
TIER20480	Business Design	FTP2 Unreg address verification v0.3.docx	This document describes the process for Contact Centre Address Verification for Unregistered Customers. This process is a workaround for customers not being able to enter their address verification in the IVR.	docx
TIER20481	Business Design	FTP2 Unreg address verification v0.3.vsd	This document describes the process for Contact Centre Address Verification for Unregistered Customers. This process is a workaround for customers not being able to enter their address verification in the IVR.	vsd

Document ID	Category	Document Name	Description	Type
TIER20482	Business Design	Gesture of Goodwill Day 1 Release Process 0.2.vsd	Process diagram describing the process contact centre agents should follow to issue a goodwill refund using the Oyster Refund Service (ORS) after a customer contacts by letter/email.	vsd
TIER20483	Business Design	Gesture of Goodwill Release Zero Process.vsd	Process diagram describing the process contact centre agents should follow to issue a goodwill refund using the Oyster Refund Service (ORS) after a customer contacts by phone.	vsd
TIER20484	Business Design	How to IDV contactless customers v1.2.doc	This document provides a guide for contact centre agents on the Identification and Verification (ID&V) of registered and unregistered customers.	doc
TIER20485	Business Design	Night Tube - CASC v0.2.pptx	This document describes the changes required to CASC, CAS and 7 Day Checker for the introduction of Night Tube.	pptx
TIER20486	Business Design	Non-unique PAN v0.4.docx	This document describes the different challenges to customers using contactless payment cards (CPCs) with non-unique Primary Account Numbers (PAN) for travel. It defines the issues and recommends solution(s) to improve customer experience where possible.	docx
TIER20487	Business Design	Oyster v FTP charging differences v4.0.doc	Document describing scenarios where Oyster and CPC result in different charges and actions contact centre staff should follow to 'correct' the charge.	doc
TIER20488	Business Design	PayTag Summary v0.3.pptx	This document is a Customer Proposition for FTP Phase 2 Barclaycard PayTag and non-standard form factors.	pptx
TIER20489	Business Design	FTP 2 L2 Process 5.1.2 Manage Customer Access 1.4.doc	Process and requirements document giving business level description of the real-time decision making at the reader to determine whether a customer can travel and indication of the decision to the customer, staff and system	doc
TIER20490	Business Design	FTP POD Codes with Staff advice	Guidance document on POD codes and the related errors for each ticket type.	pdf

Document ID	Category	Document Name	Description	Type
TIER20491	Business Design	The UK Transit Transaction Model for Contactless CardsA050811	Summary of position agreed at UK Cards Association	docx
TIER20492	Business Design	The UK Transit Transaction Model for Contactless Cards Appendix a	First document to read to understand UK transit transaction model. Summary of position agreed at UK Cards Association, with appendix showing variation between scheme rules	docx

Document Type Key	
Software Abbreviation	Software Description
ppt	Microsoft PowerPoint Presentation
xls	Microsoft Excel Spreadsheet
doc	Microsoft Word Document
vsd	Microsoft Visio Diagram
pdf	Portable Document File
htm	Hypertext Markup Language (HTML) File
jpg	Joint Photographic Experts Group (JPEG) File
xlsx	Microsoft Excel Open XML Format Spreadsheet
pptx	Microsoft PowerPoint Open XML Presentation File
docx	Microsoft Word Open XML Format Document File
zip	Compressed File
EAP	Enterprise Architecture Project
Wiki	Wiki Website
CSV	Comma Separate Values File
Specflow	Specflow File

SCHEDULE 2

LICENCE FEE

1. Subject to the provisions of paragraph 5 below, the maximum amount of the Licence Fee payable by Cubic to TTL is fifteen million (£15,000,000) pounds sterling.

- 2.



3. If and when the total payments made by Cubic and/or Cubic Group Companies to TTL in respect of the Licence Fee equal fifteen million (£15,000,000) pounds sterling, no further payments whatsoever shall be due or payable to TTL in respect of the Licence Fee or under this Agreement.

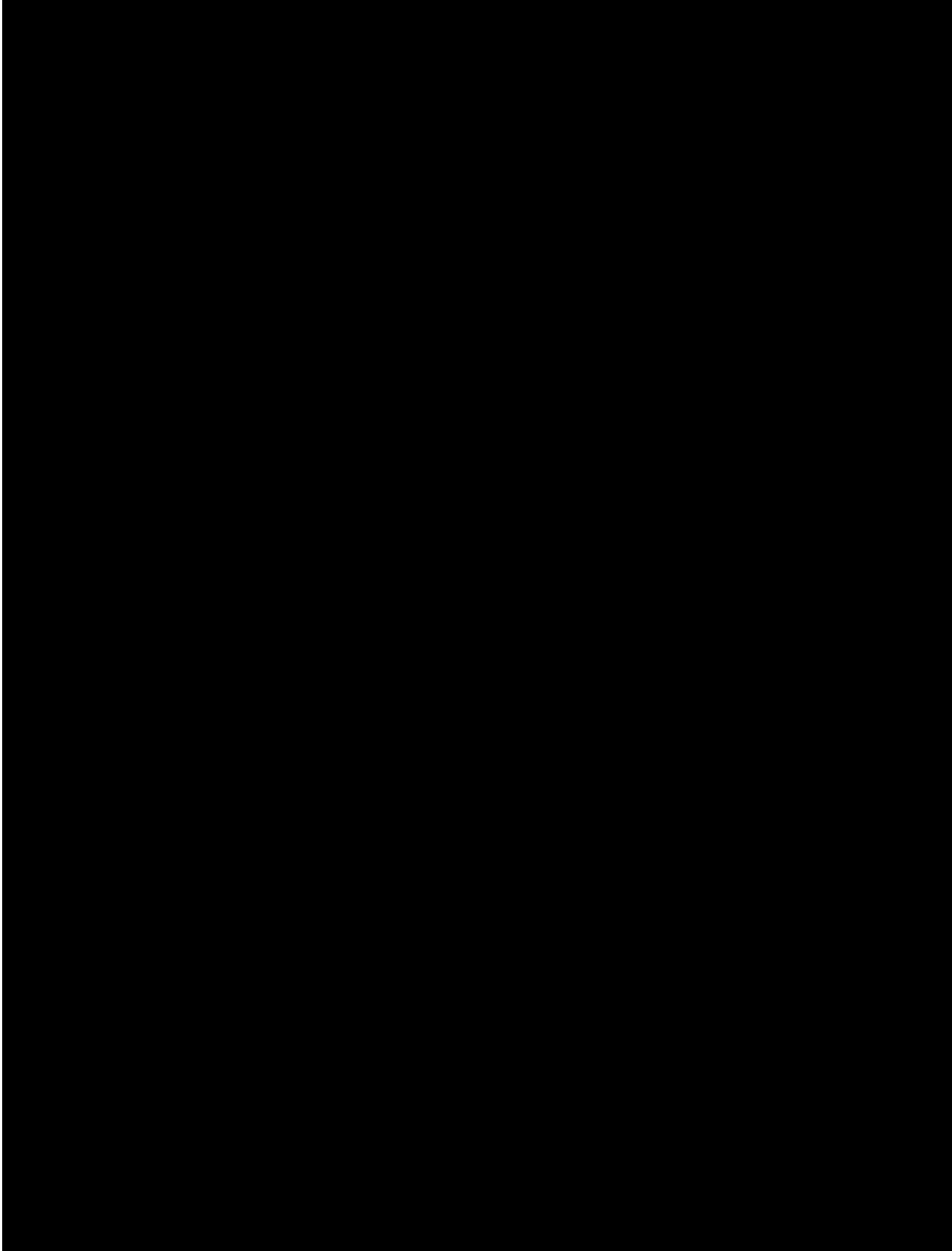
4.

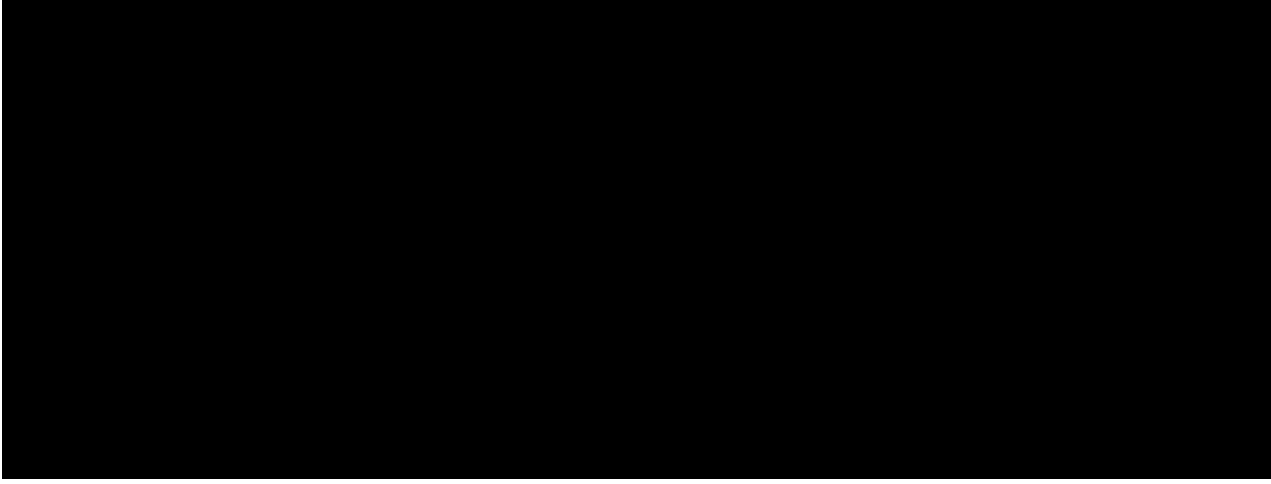


SCHEDULE 3

Third Party and COTS software tools used by TTL

Tool Installed on Dev VM	Version
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SCHEDULE 4

1. Any and all Open Source Software may be protected by copyright or other Intellectual Property Rights. Cubic warrants and shall ensure the Cubic Group Companies:
 - 1.1 shall obtain, comply with and ensure that they are subject to the relevant and applicable Open Source Software licence(s) from the relevant third parties listed in **Part A** of this **Schedule 4** for the Open Source Software listed below (“OSS Licence(s)”); and
 - 1.2 shall inform End Users, where applicable, of the requirement to obtain and ensure that they are subject to the relevant and applicable OSS Licence(s).
2. Open Source Software is not included in any licence granted by TTL under this Agreement and such Open Source Software and the applicable licenses should be obtained separately as set out in the Agreement. Additionally, should Cubic, or any Cubic Group Companies use any other Open Source Software, such use and any licensing requirements shall be Cubic’s (and not TTL’s) responsibility.
3. Cubic’s or any Cubic Group Company’s failure to comply with the terms of the applicable OSS Licence(s) may prevent Cubic or any Cubic Group Company from being entitled to use the relevant Open Source Software listed below. Cubic acknowledges that the TTL Software will or may not function in accordance with its specifications without the use of such Open Source Software.
4. A list of the Open Source Software programs which are supplied with, or should be incorporated in or aggregated with the TTL Software by Cubic or any Cubic Group Company and the applicable OSS Licence(s) is set out in **Part A** of this **Schedule 4**. Where **Part A** of this **Schedule 4** sets out that Cubic or any Cubic Group Company should download the Open Source Software itself and ensure it has the applicable licence rights to do so and for its onward use then Cubic or any Cubic Group Company will do so and maintain all responsibility for complying with its obligations to do so.
5. In the event and to the extent only of any conflict between the terms of this Agreement and any OSS Licence(s), the OSS Licence(s) will prevail with respect only to the relevant Open Source Software.
6. Where the applicable OSS Licence(s) require that the Open Source Software Source Code be made available and the relevant Open Source Software is not delivered in Source Code form by TTL, Cubic or any Cubic Group Company can download the relevant Open Source Software Source Code from the Internet to the extent it is available.
7. Additionally Cubic may, to the extent it is reasonably available and permissible in the applicable OSS Licence(s), for the period of 2 years from 6 May 2016 request (to the extent it is reasonably available and permissible to

be distributed by TTL) the corresponding Source Code for the Open Source Software listed in **Part A** of this **Schedule 4** from TTL upon paying a fee which is no more than TTL's reasonable cost of physically performing this conveying of Source Code, upon sending a specific written request to TTL referring to this Agreement, and providing the software title and release number.

8. **Warranties and Liability in relation to Open Source Software**

8.1 Nothing in this **Schedule 4** will operate to exclude or restrict a Party's Liability (if any):

8.1.1 for death or personal injury resulting from its negligence or the negligence of a person for whom it is vicariously liable (negligence being as defined in Section 1(1) Unfair Contract Terms Act 1977);

8.1.2 for its fraud or fraudulent misrepresentation or fraud or fraudulent misrepresentation by a person for whom it is vicariously liable;

8.1.3 for breach of its obligations arising under section 12 Sale of Goods Act 1979;

8.1.4 for breach of its obligations arising under Section 2 Supply of Goods and Services Act 1982;

8.1.5 for breach of its obligations arising under Section 8 Supply of Goods (Implied Terms) Act 1973;

8.1.6 arising under Section 2(3) Consumer Protection Act 1987; or

8.1.7 for any matter for which it is not permitted by law to exclude or limit, or to attempt to exclude or limit, its liability.

9. Cubic expressly agrees that the exclusions and limitations in this **Schedule 4** are reasonable because (amongst other matters):

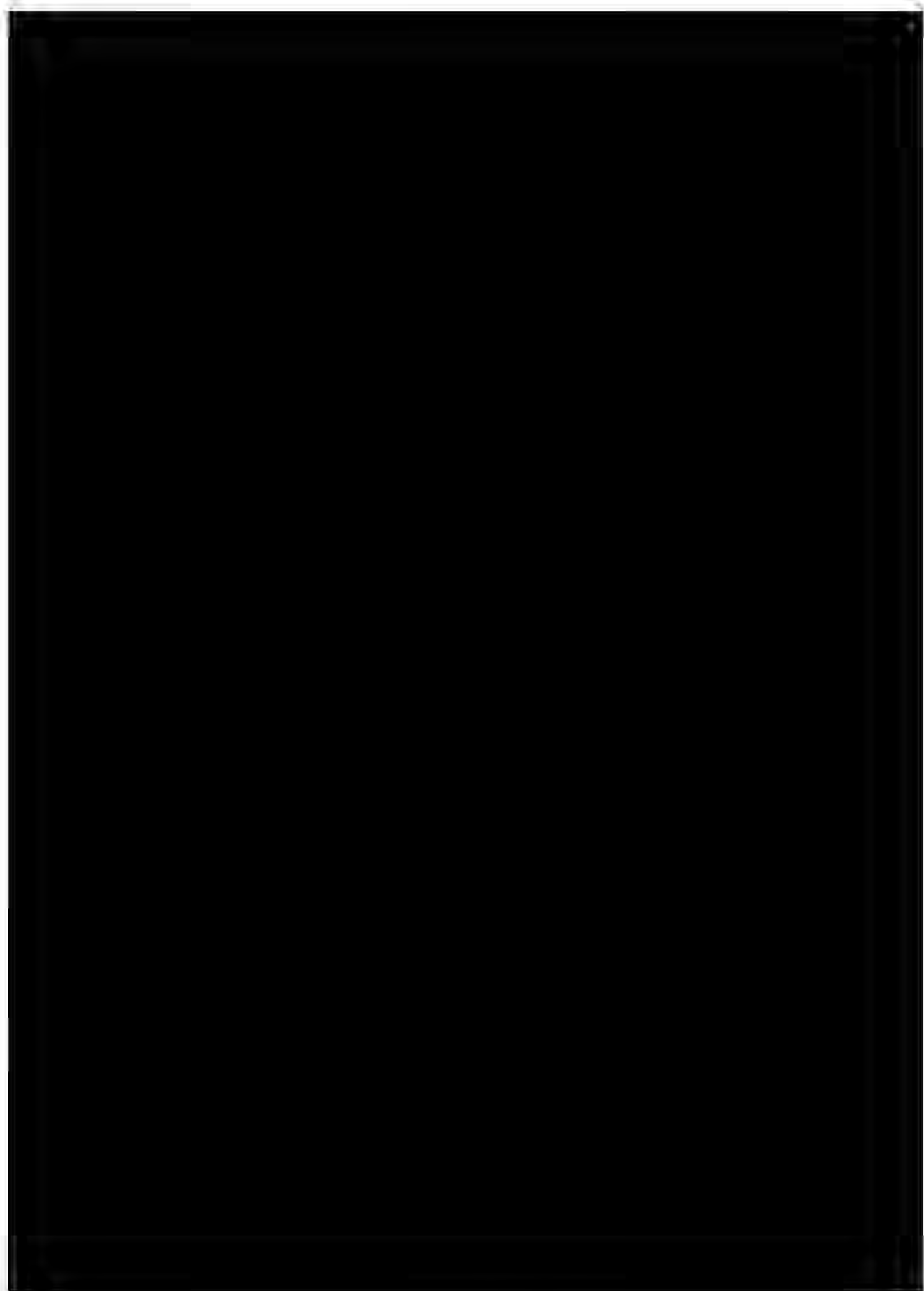
9.1 Save as set out in paragraph 7 (which is merely a handling fee)TTL has not charged Cubic for the supply of the Open Source Software and has not received any commission, royalty or other payment for supplying it;

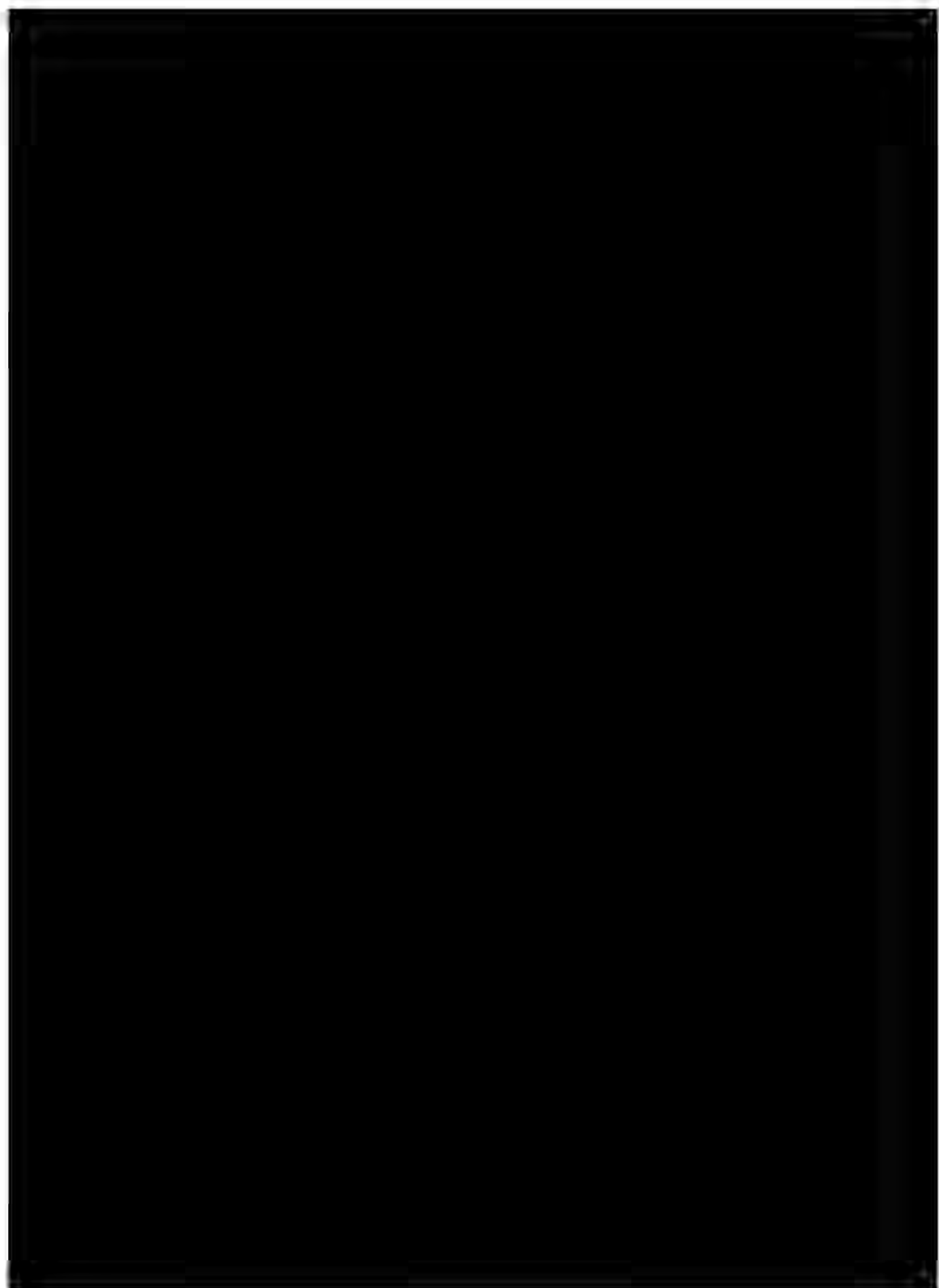
9.2 the Open Source Software has not been developed or provided by TTL, and is made generally available for use by its respective third party proprietors, licensors and/or development communities in accordance with their relevant OSS Licence(s);

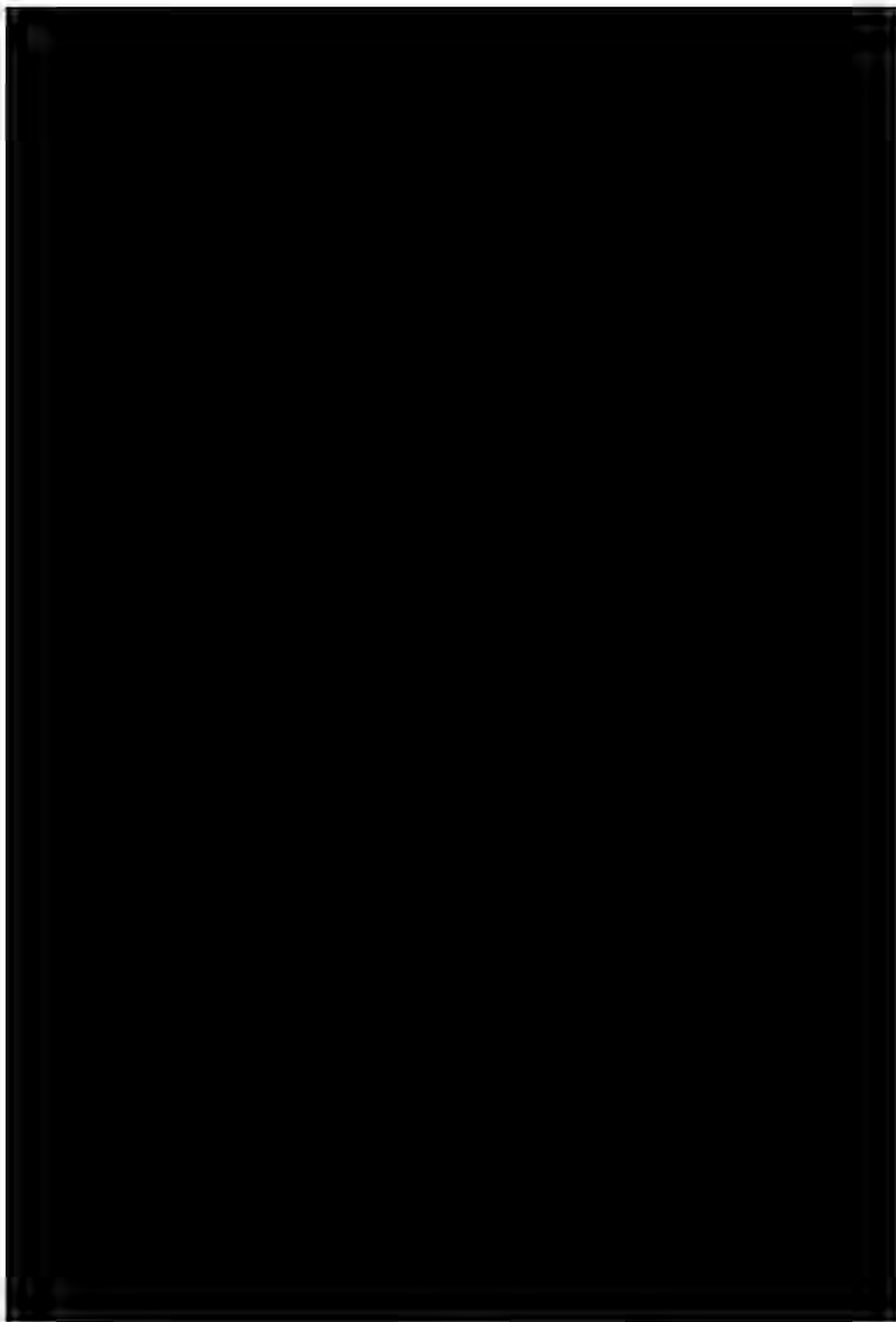
9.3 although the TTL Software is developed by TTL with the appropriate interfaces to the Open Source Software set out in **Part A** of this **Schedule 4** and/or with the intention that it be used with the Open Source Software set out in **Part A** of this **Schedule 4**, TTL could have advised Cubic to download and install some or all of the Open Source Software itself instead of TTL supplying it, and TTL (or the relevant third party, as applicable) has supplied the Open Source Software set out in **Part A** of this **Schedule 4** for Cubic's

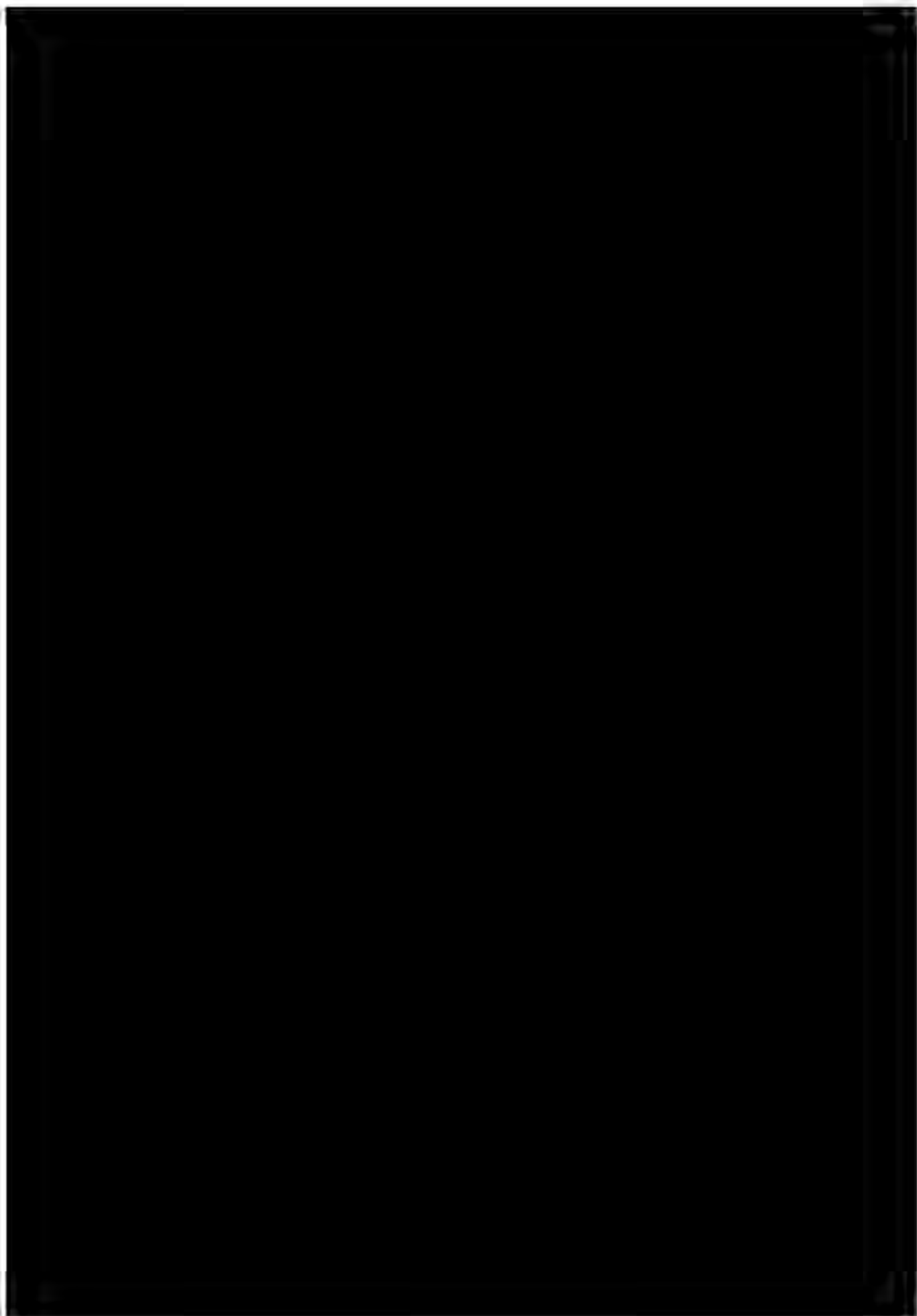
convenience and to facilitate and reduce the cost of installation and configuration;

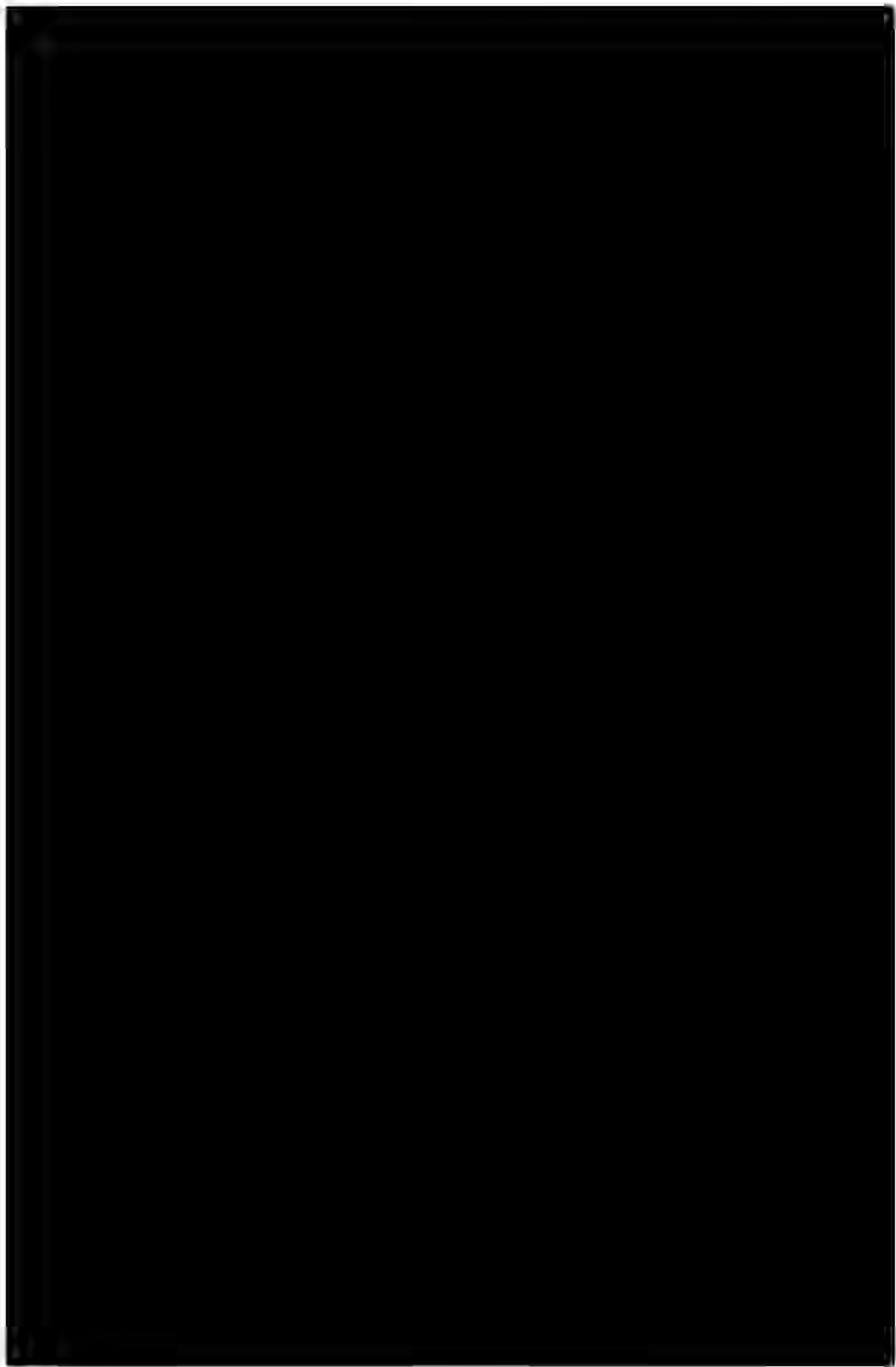
10. Without prejudice to **Clause 7.5.1** and subject always to paragraph 8 above, TTL provides no warranty, and excludes all Liability, in respect of any and all Open Source Software (including that set out in **Part A** of this **Schedule 4**), and such Open Source Software is provided by TTL as a third party product “as is” and with all faults. The OSS Licence(s) will define the warranties, if any, provided by the authors, proprietors and/or licensors of the Open Source Software.
11. Without prejudice to the generality of this **Schedule 4** but subject always to paragraph 8 above, TTL specifically disclaims any responsibility or Liability for defects in the TTL Software caused by Cubic and/or any third party using or altering any Open Source Software or its configuration or interfaces with the TTL Software whether pursuant to use of the Source Code which is permitted by the relevant OSS Licence(s) or otherwise.
12. Cubic accepts and agrees that it will and its Group Companies shall have no claims and shall make no claim against TTL and/or any Group Companies in the event of third party claims (including End User claims) relating to any Open Source Software (including the Open Source Software set out in **Part A** of this **Schedule 4**), including claims that the Open Source Software infringes the Intellectual Property Rights of a third party. The OSS Licence(s) will define the protection against third party claims, if any, provided by the authors, proprietors and/or licensors of the Open Source Software.

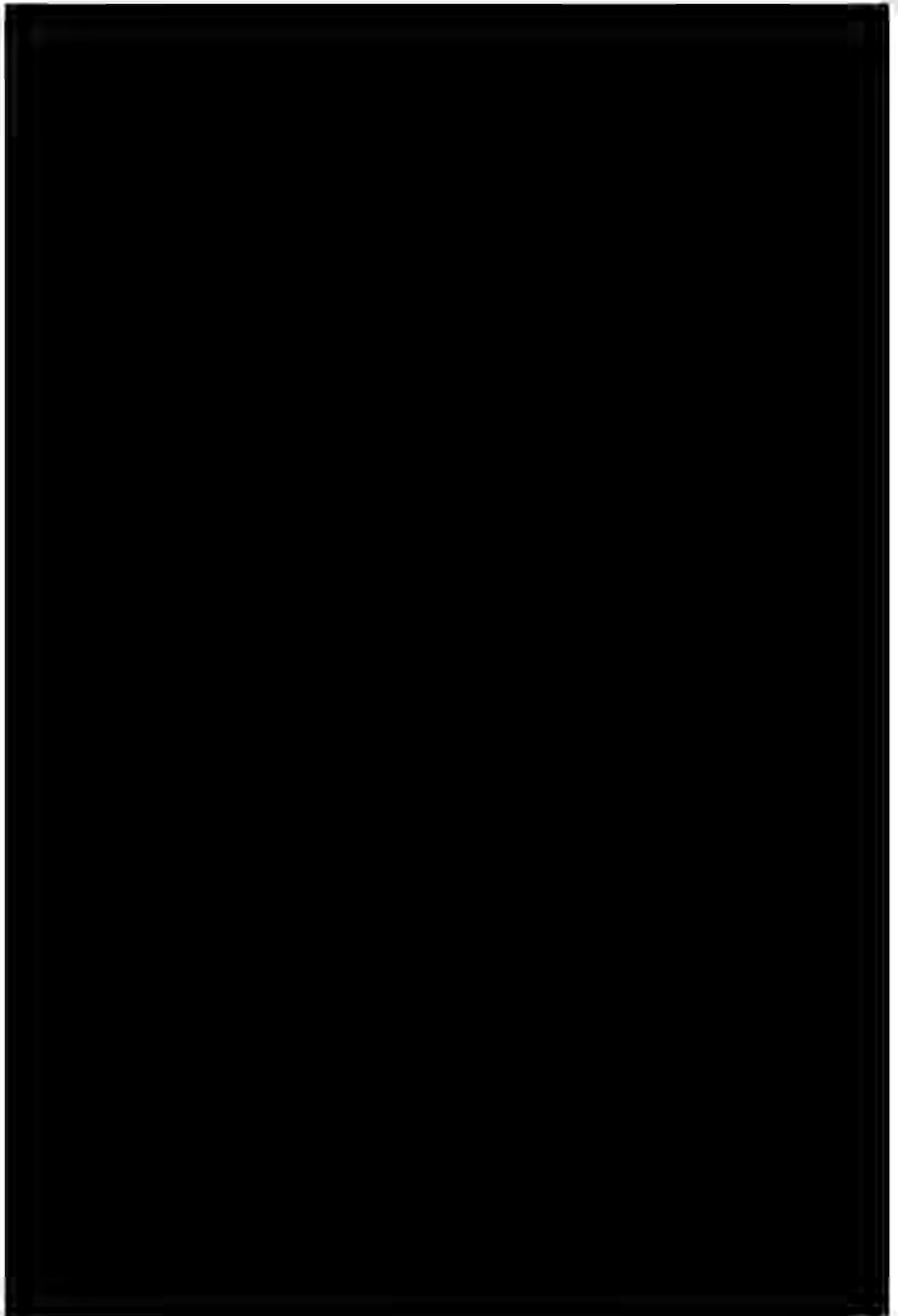


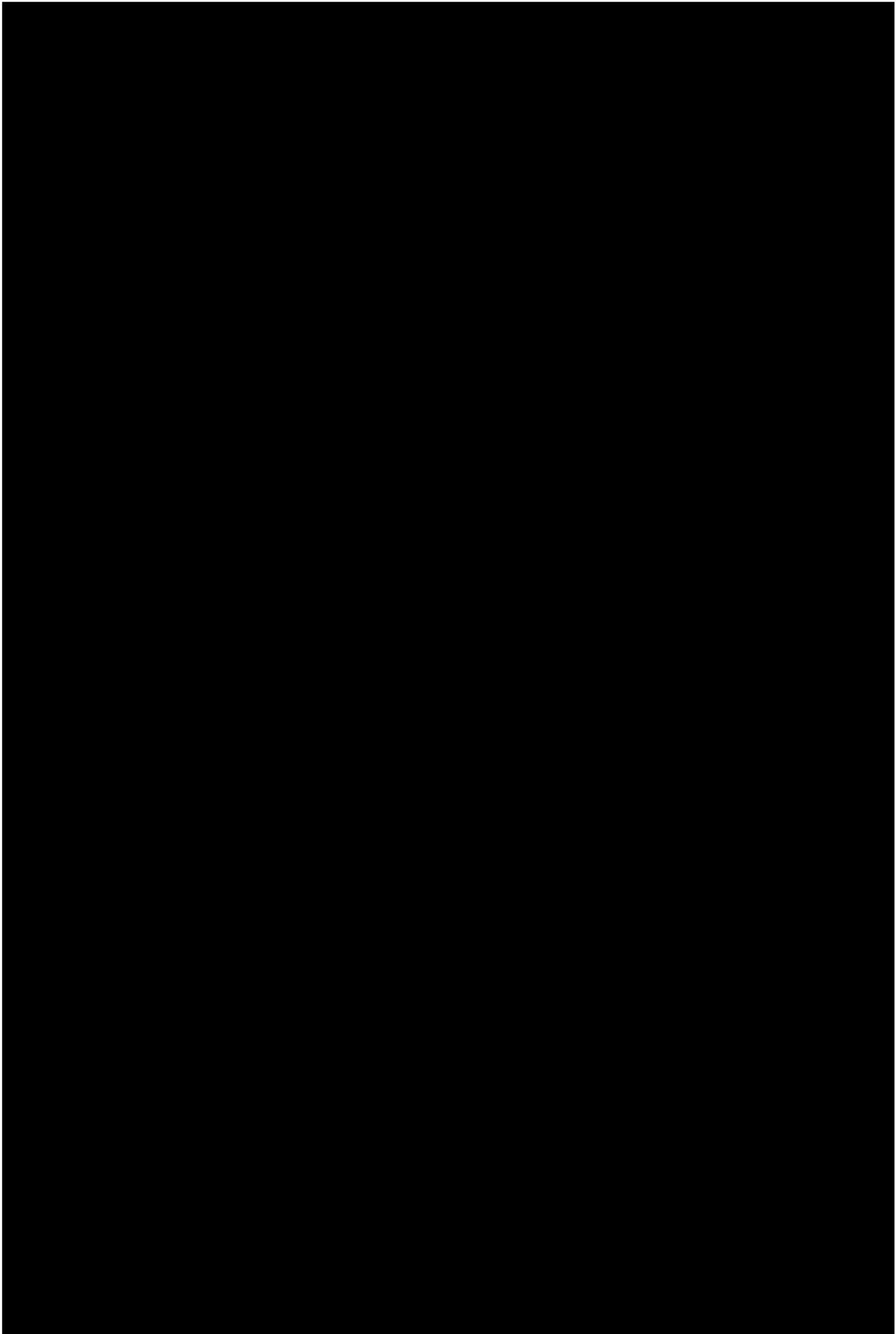


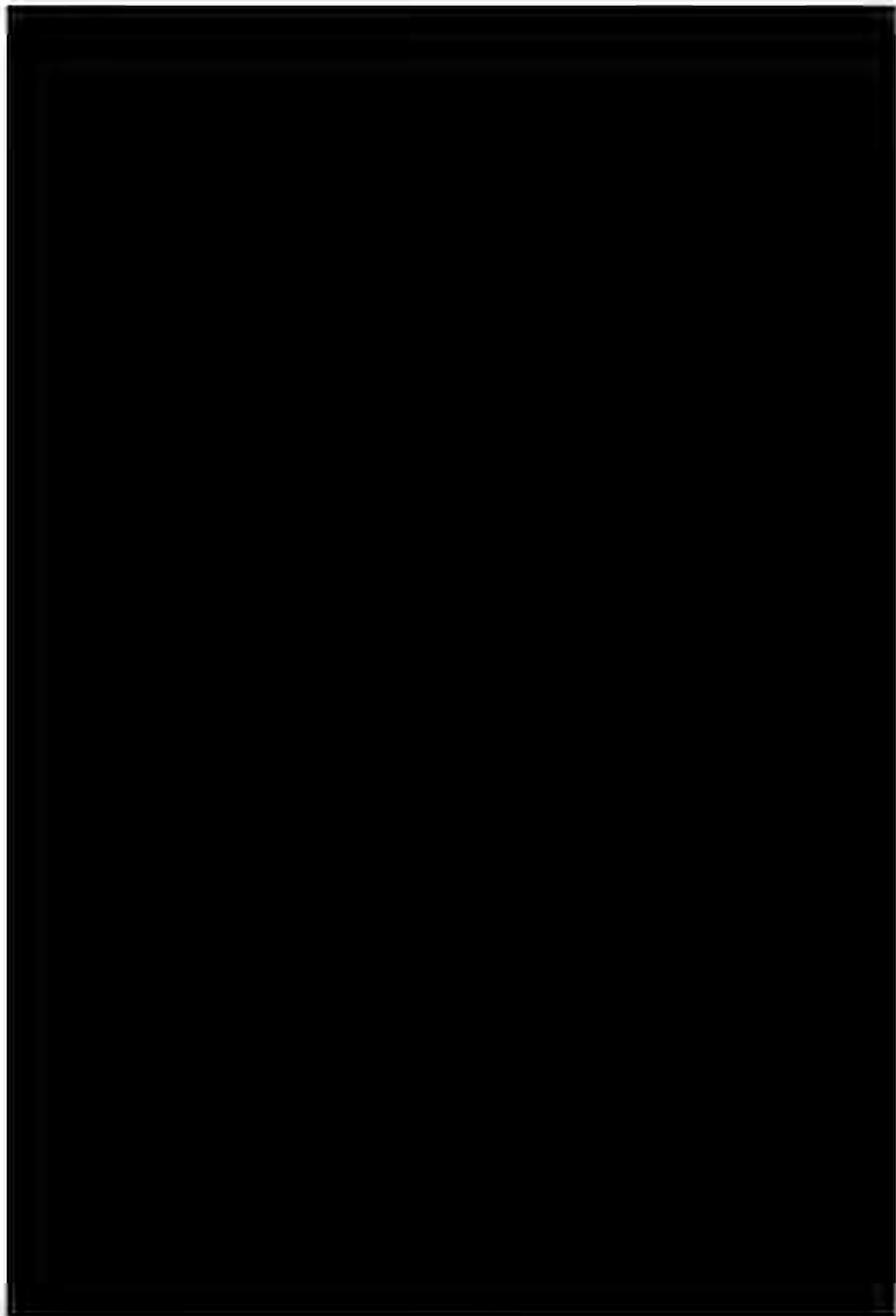


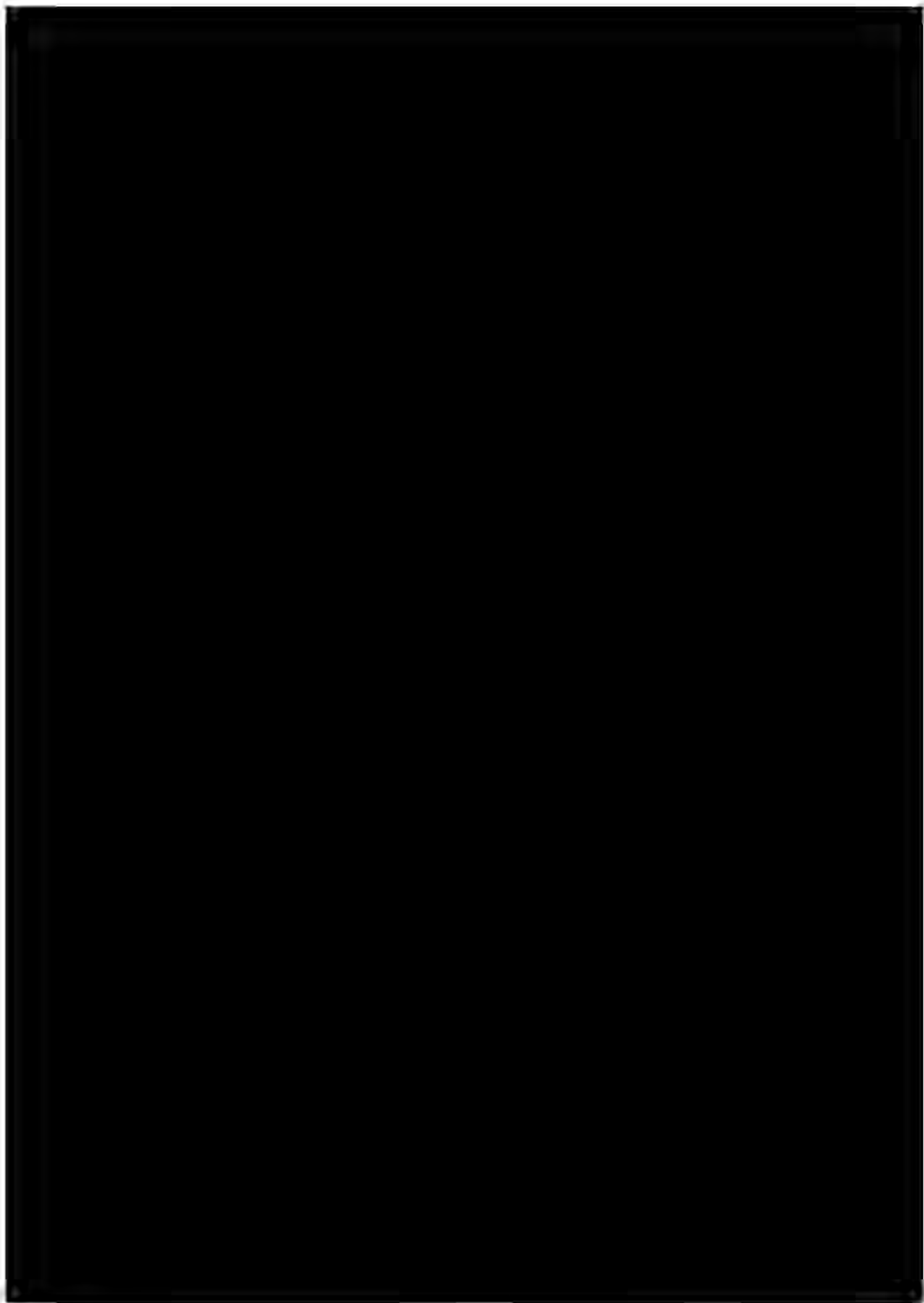


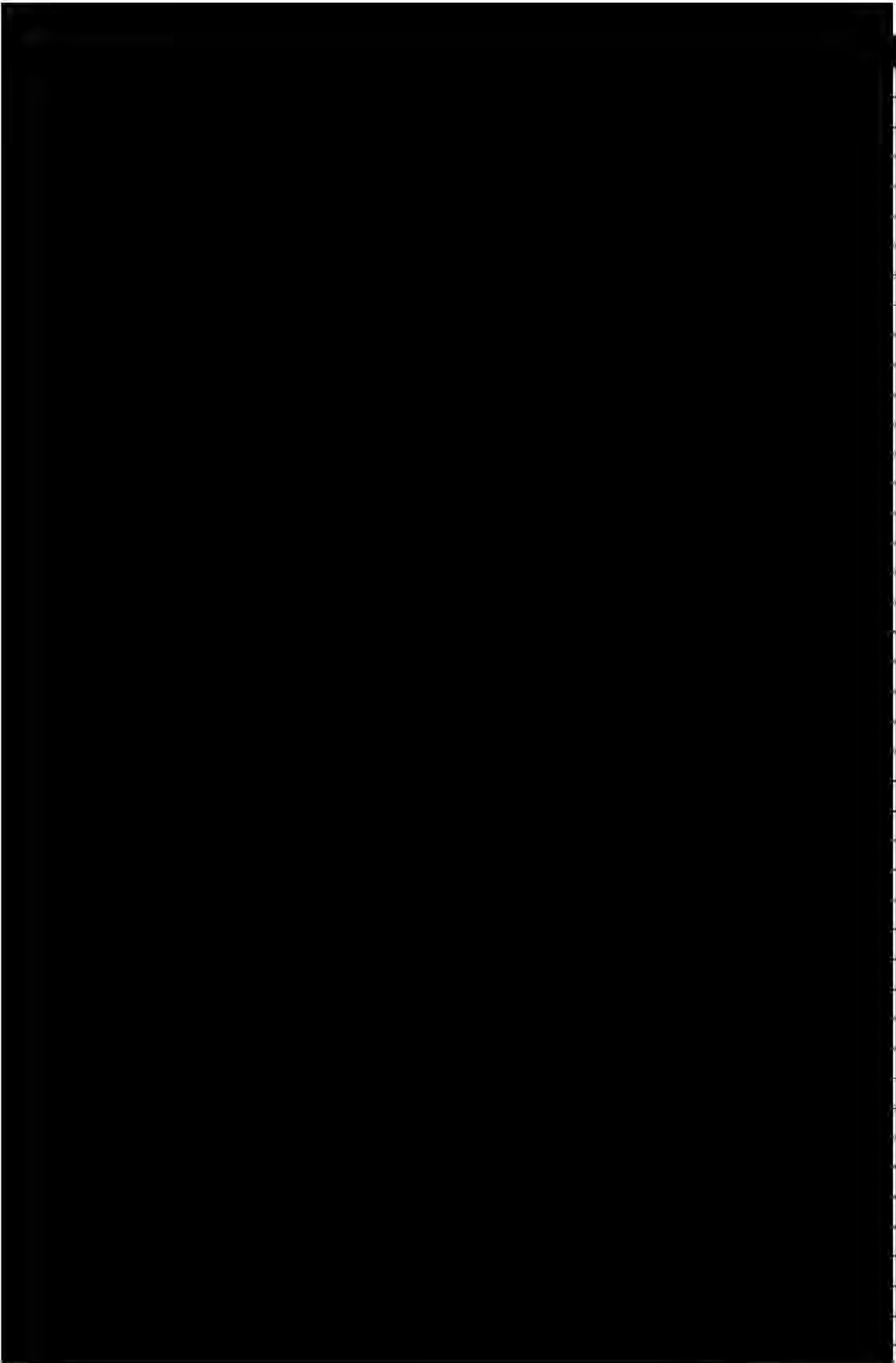


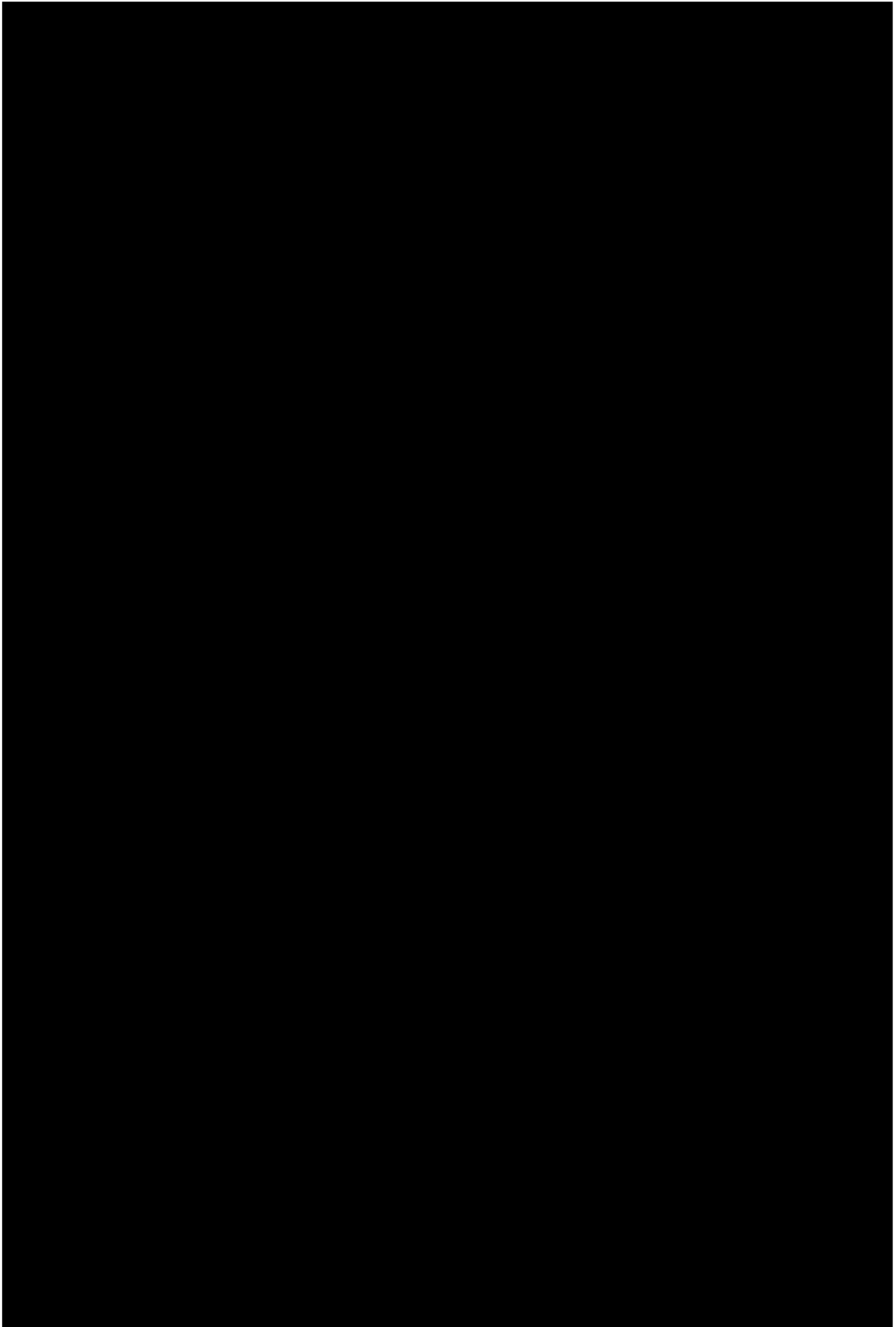


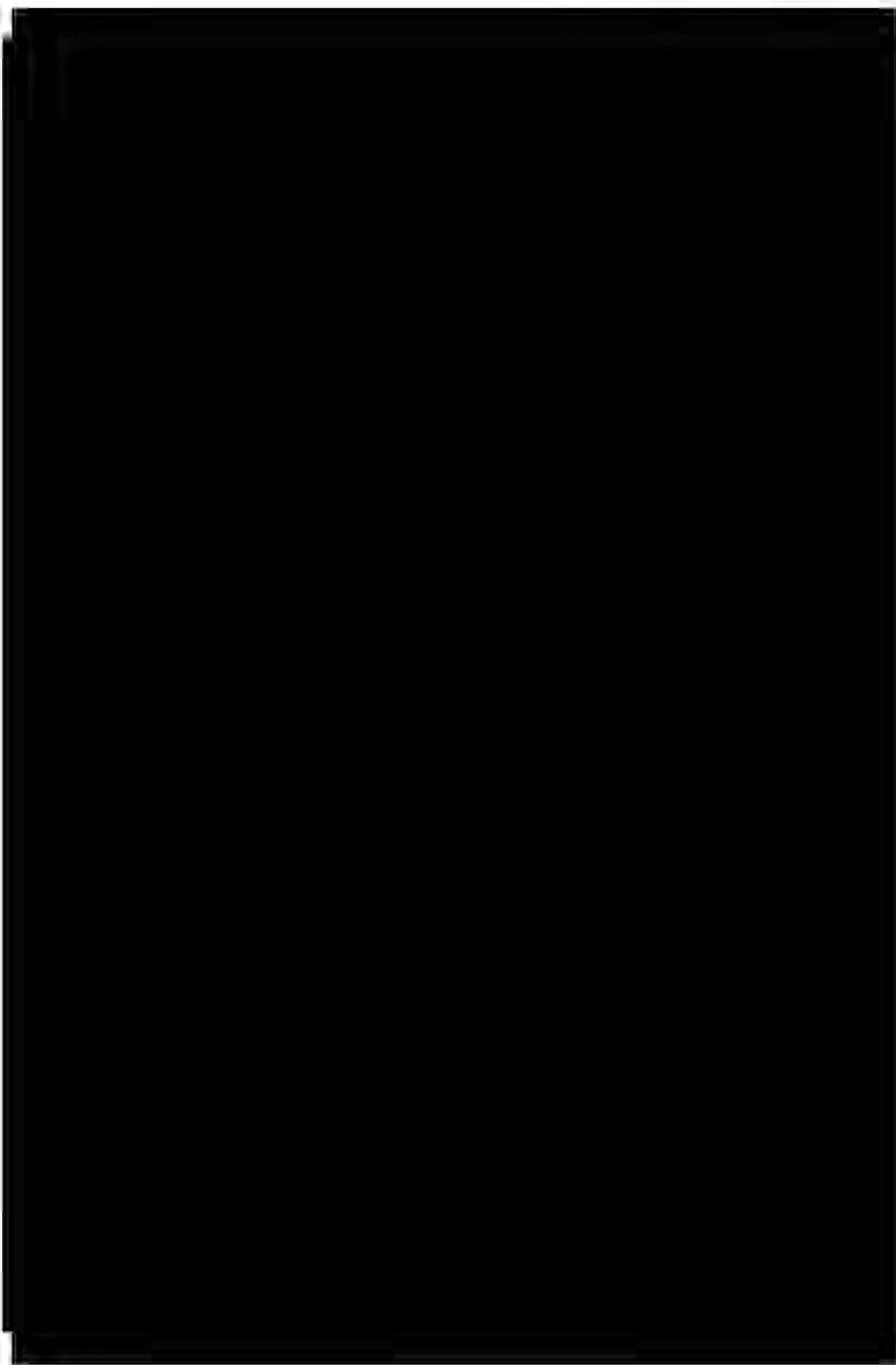


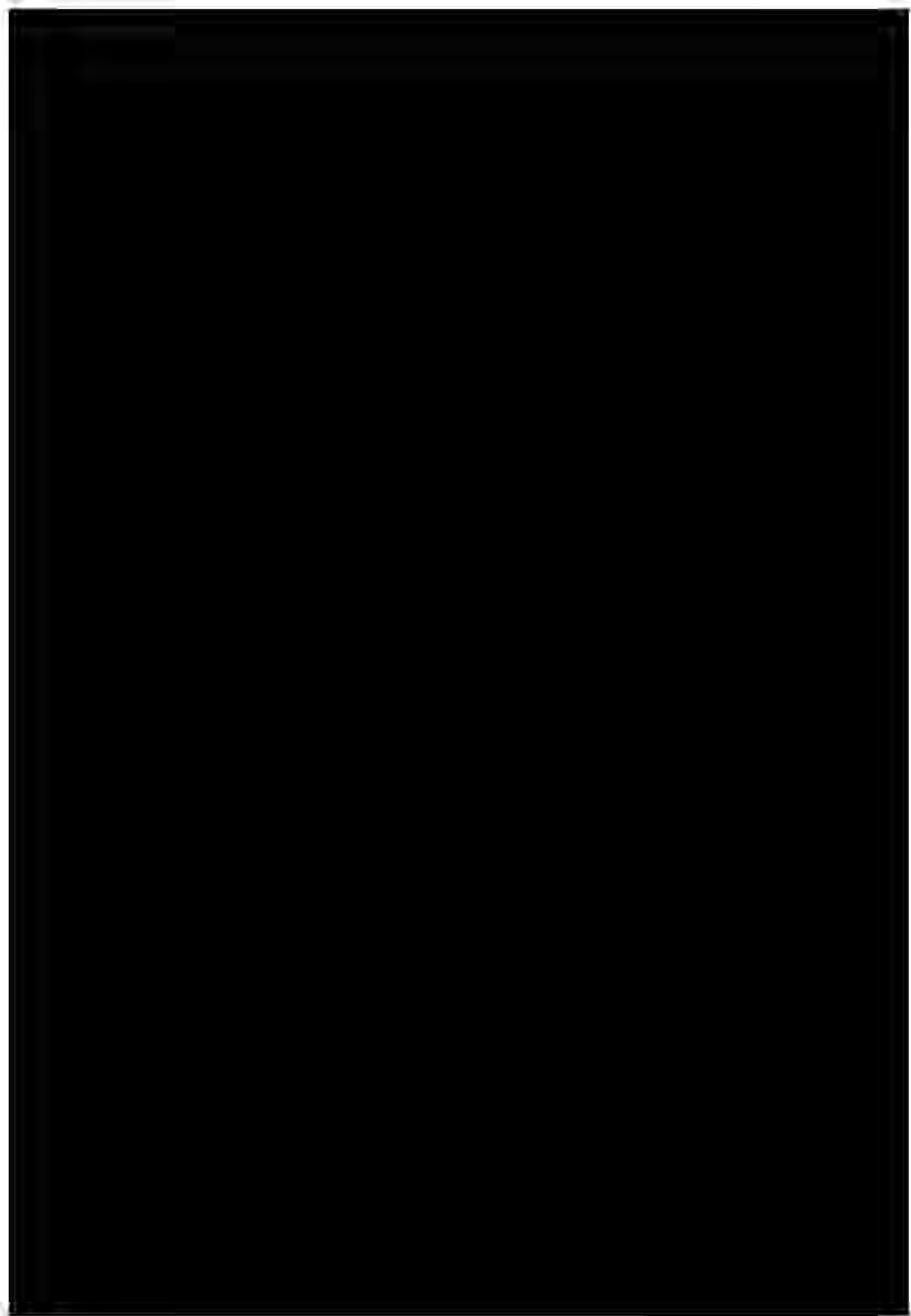


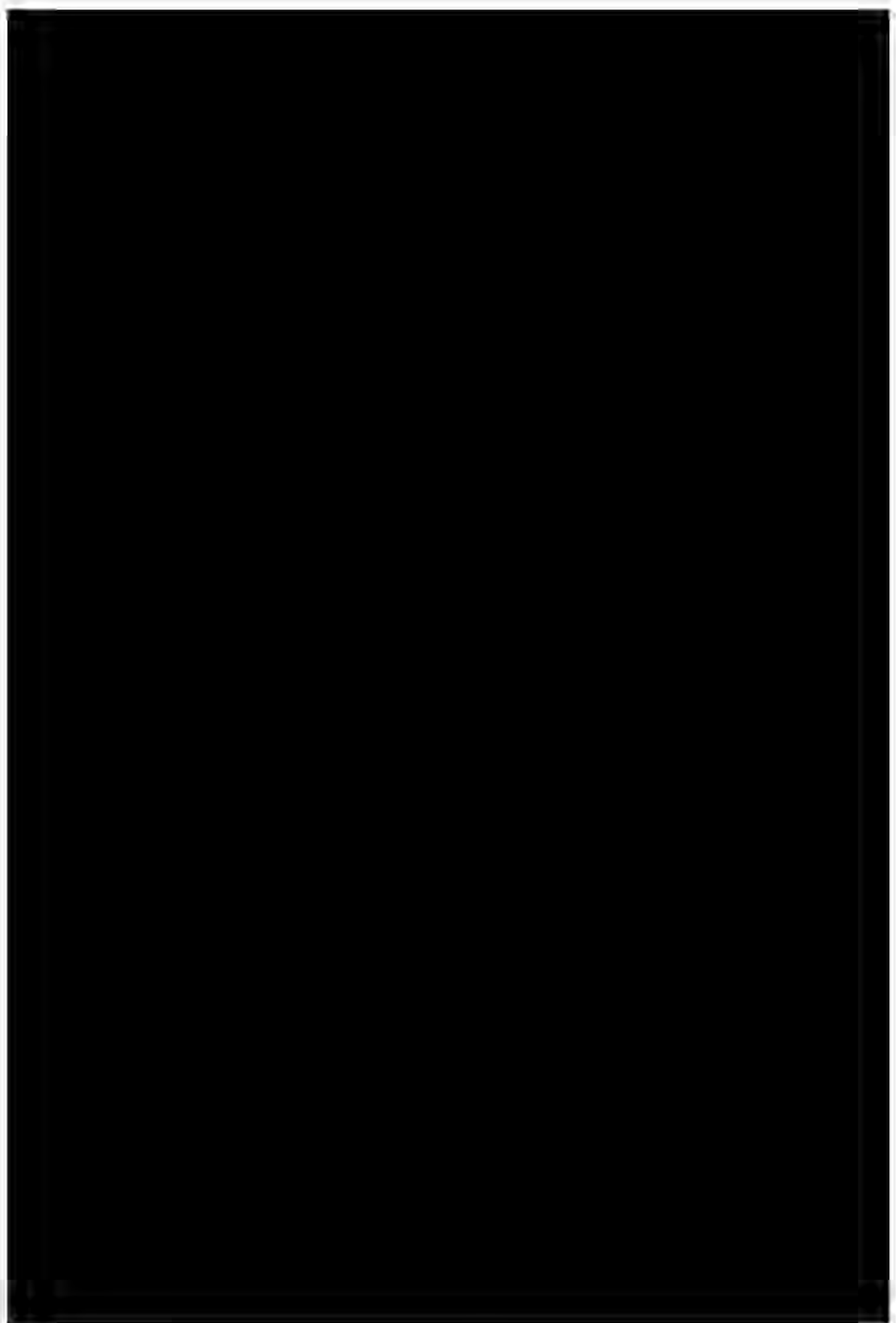


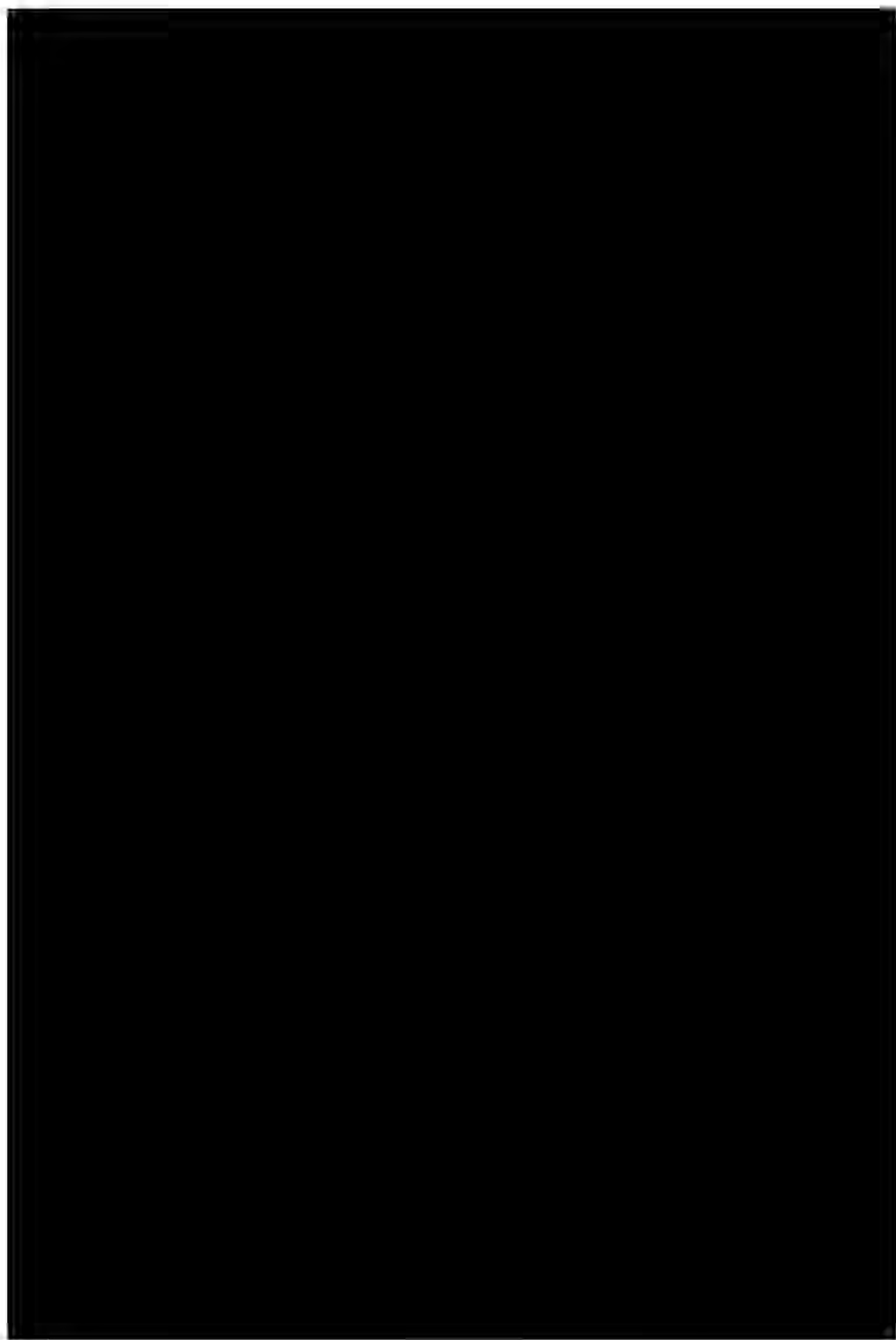


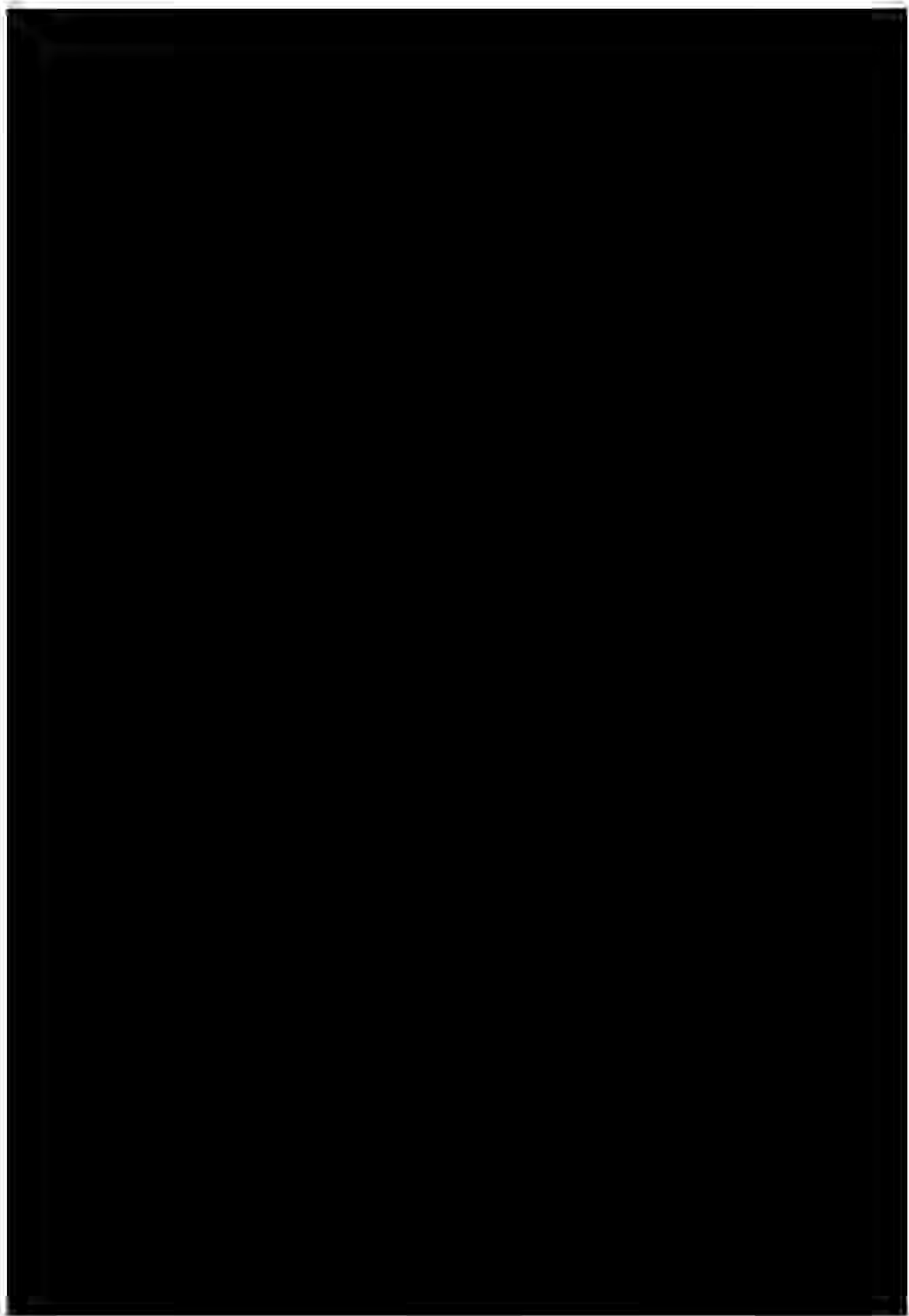


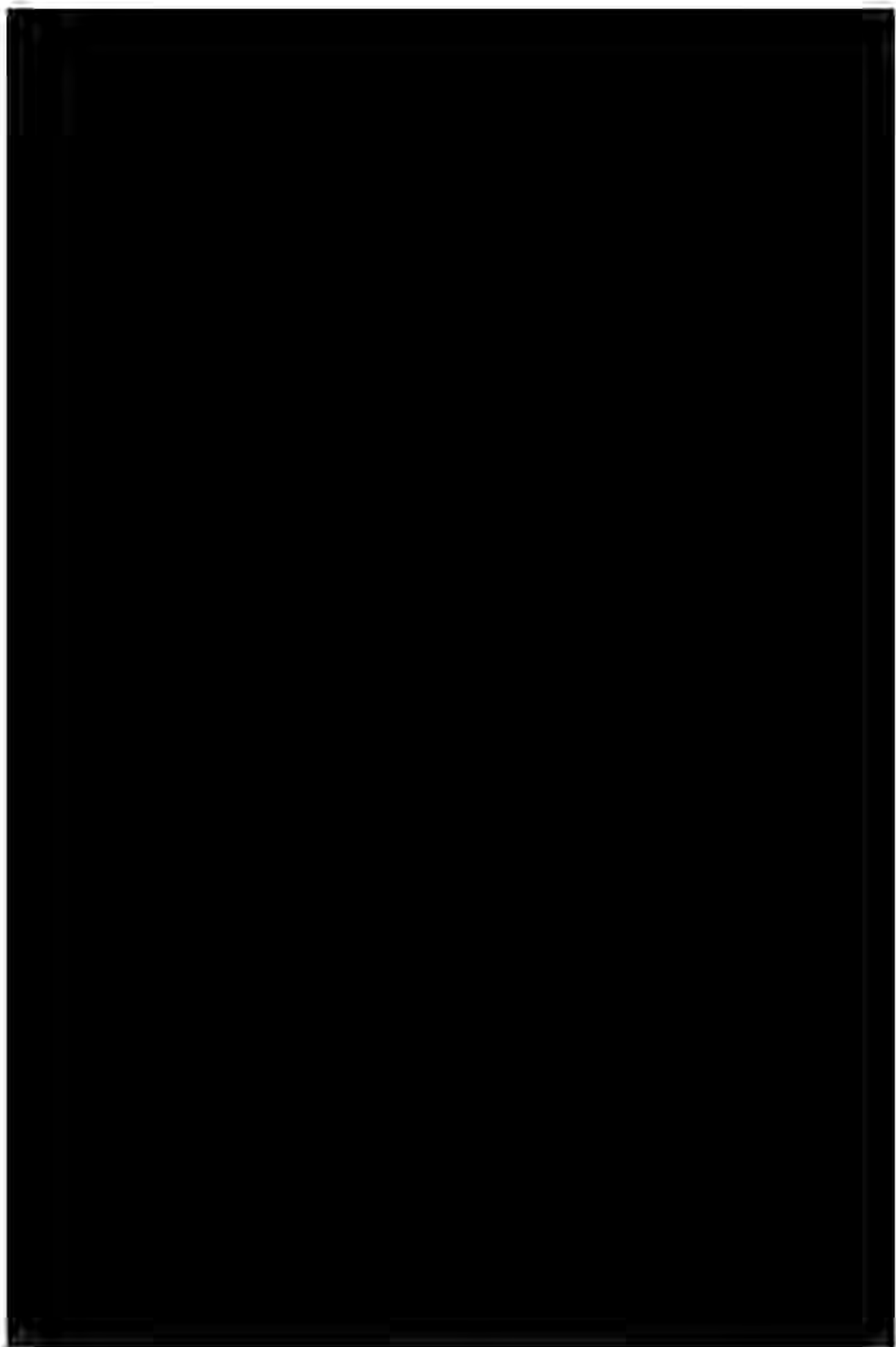


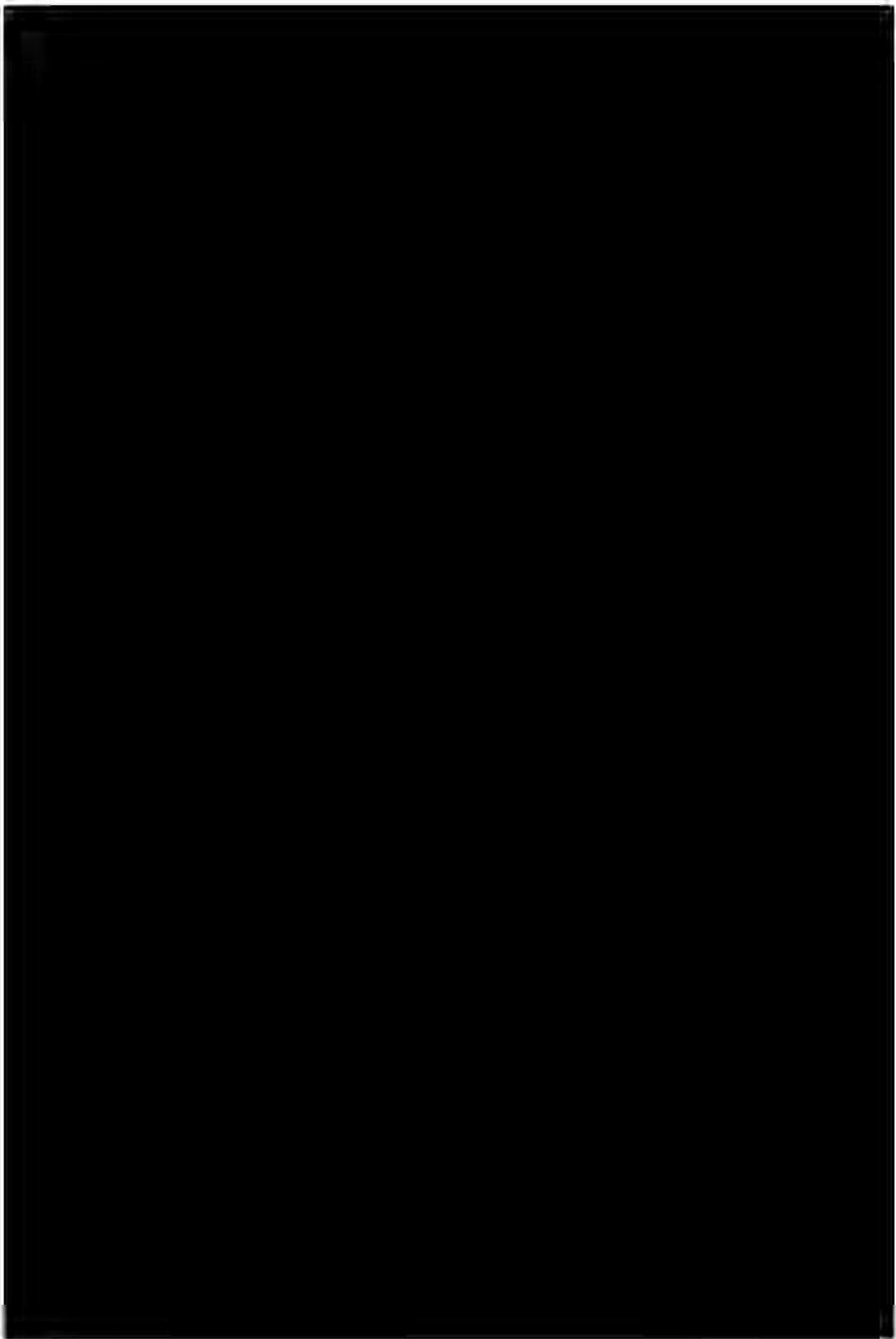


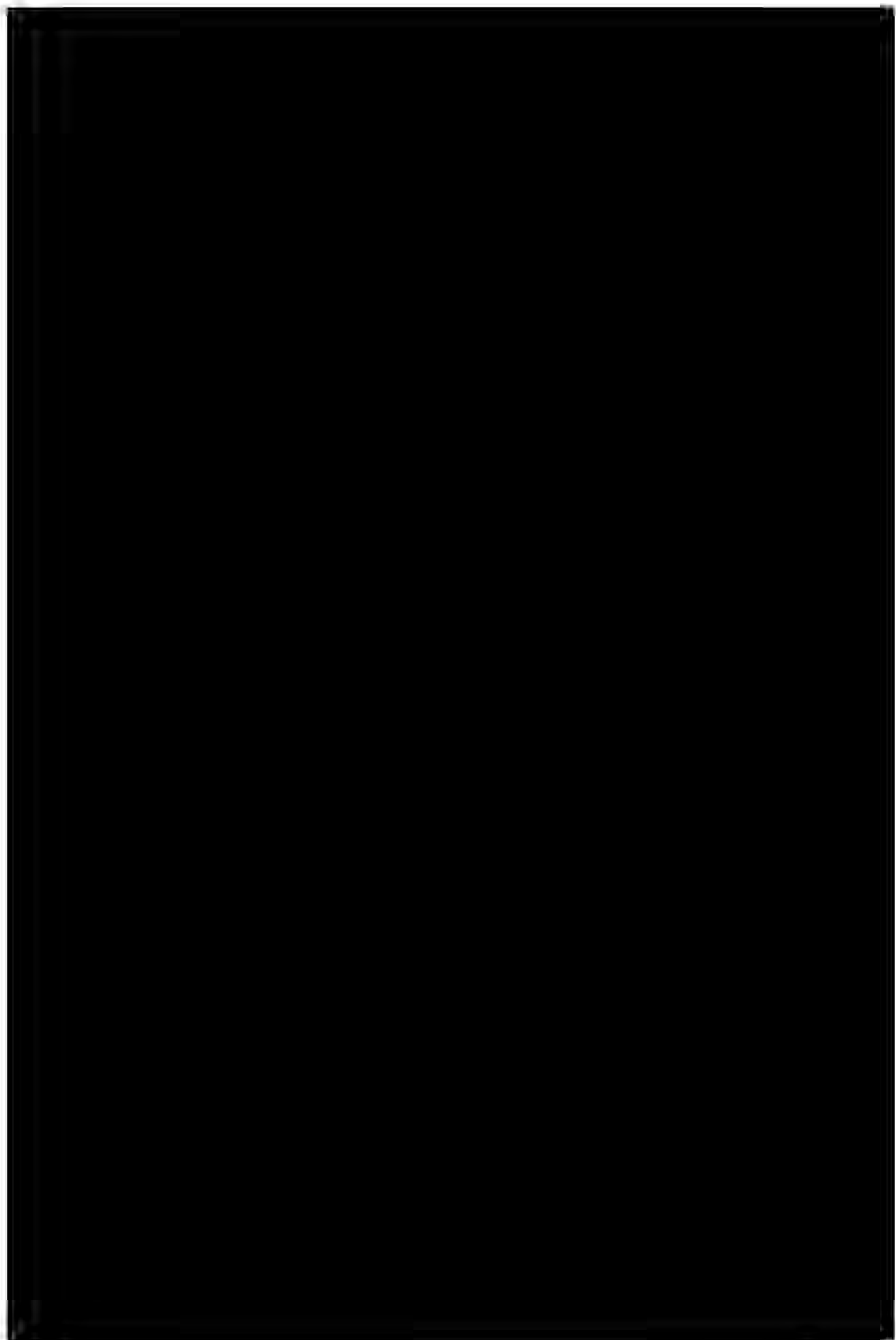


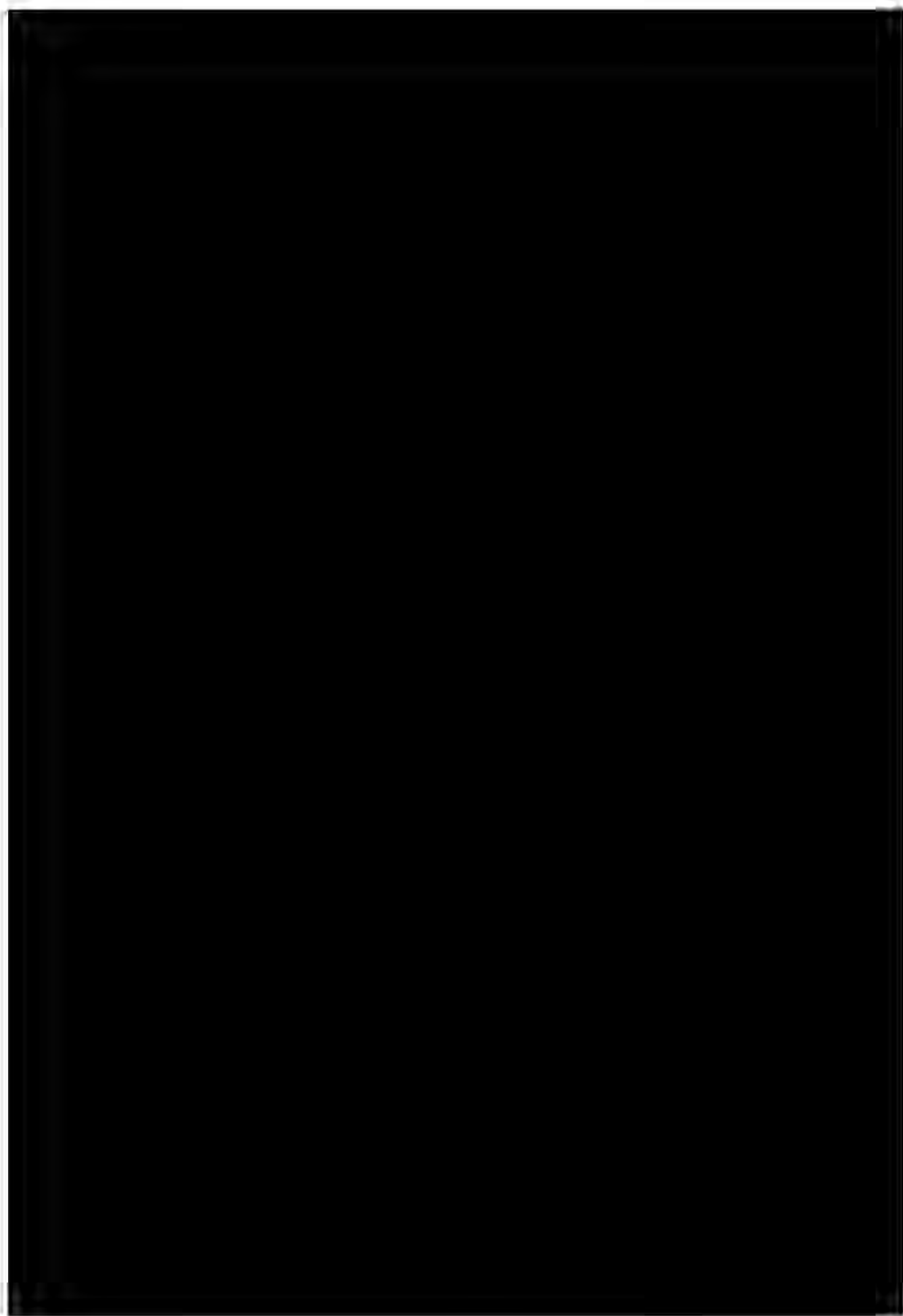


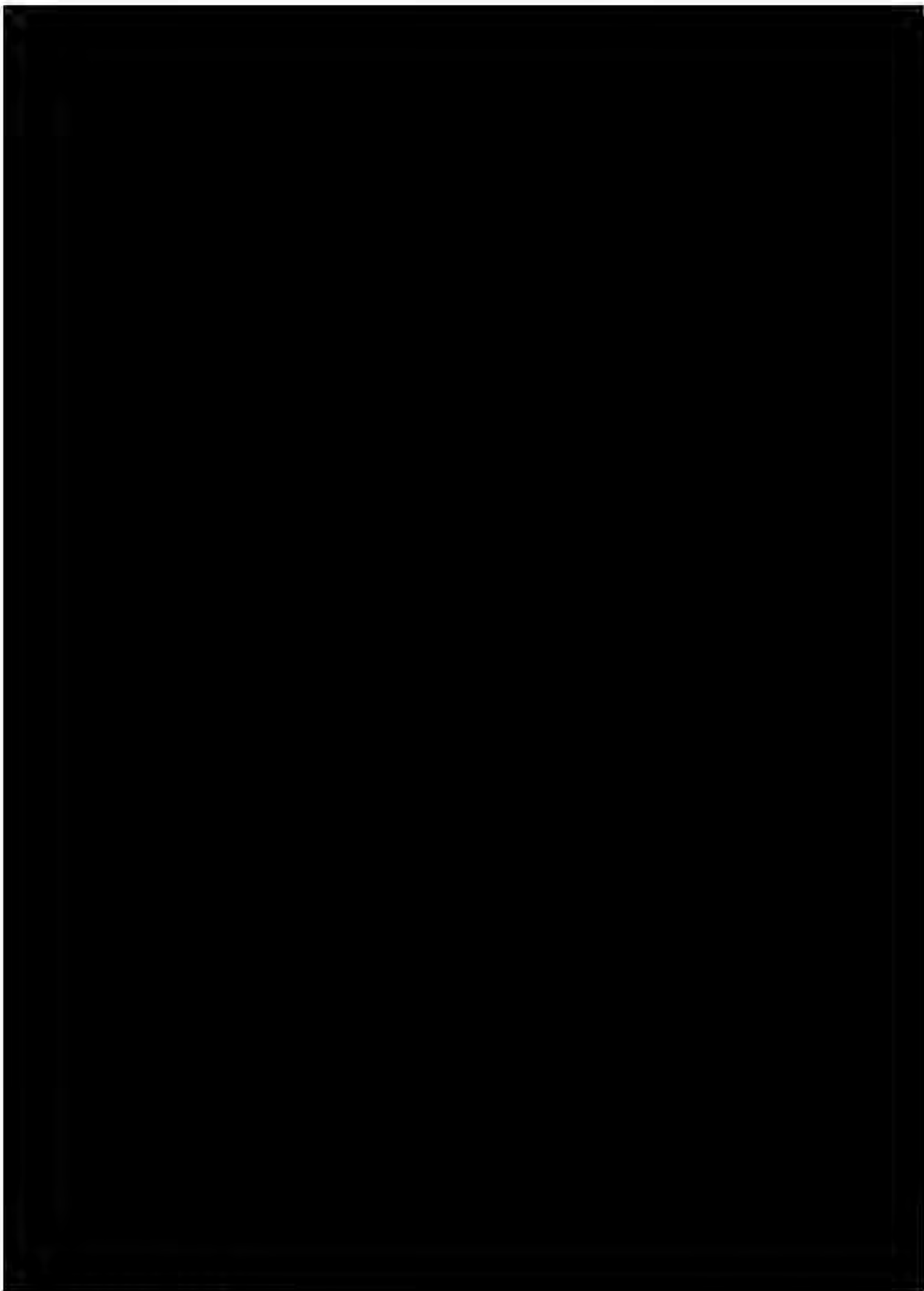




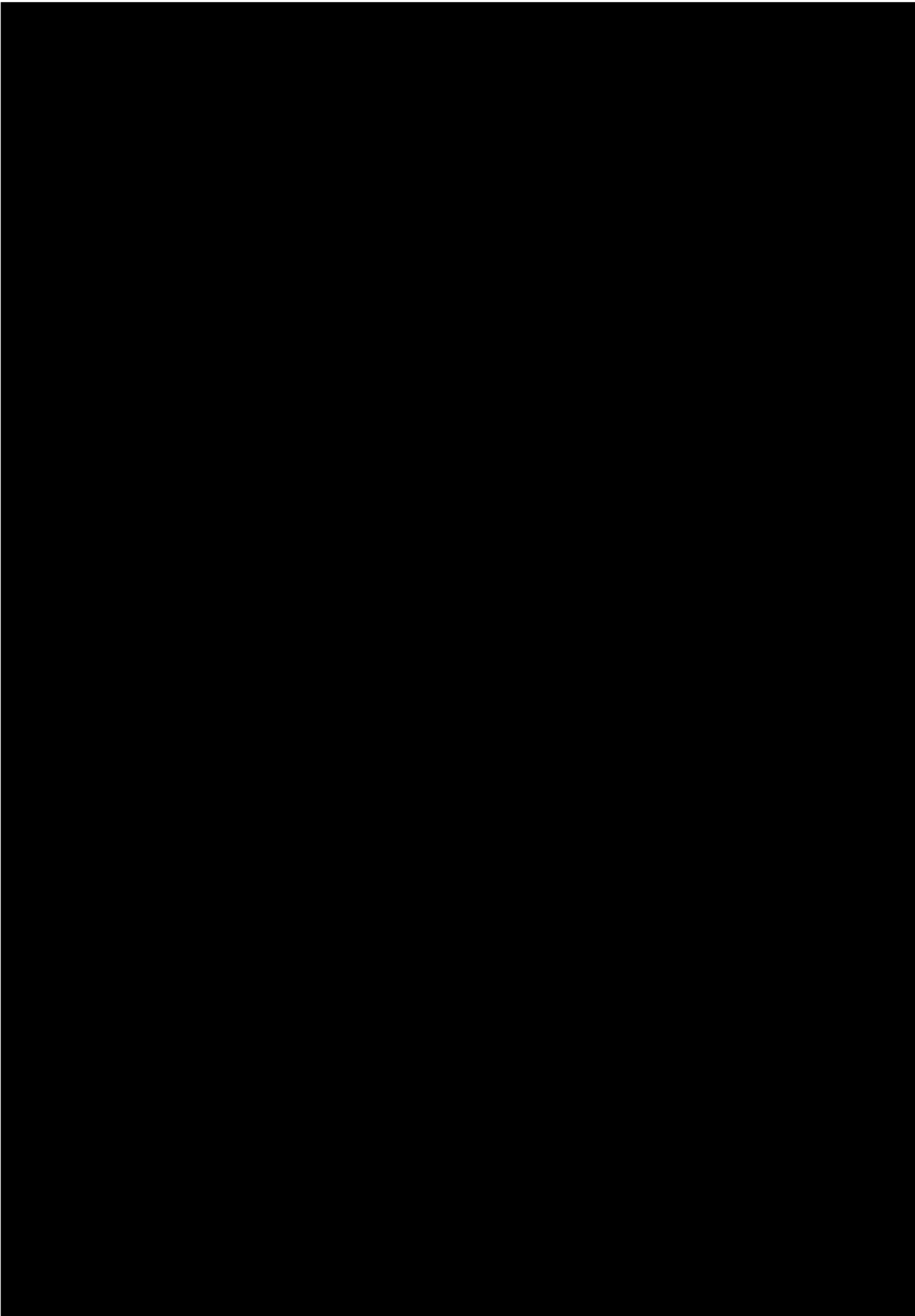


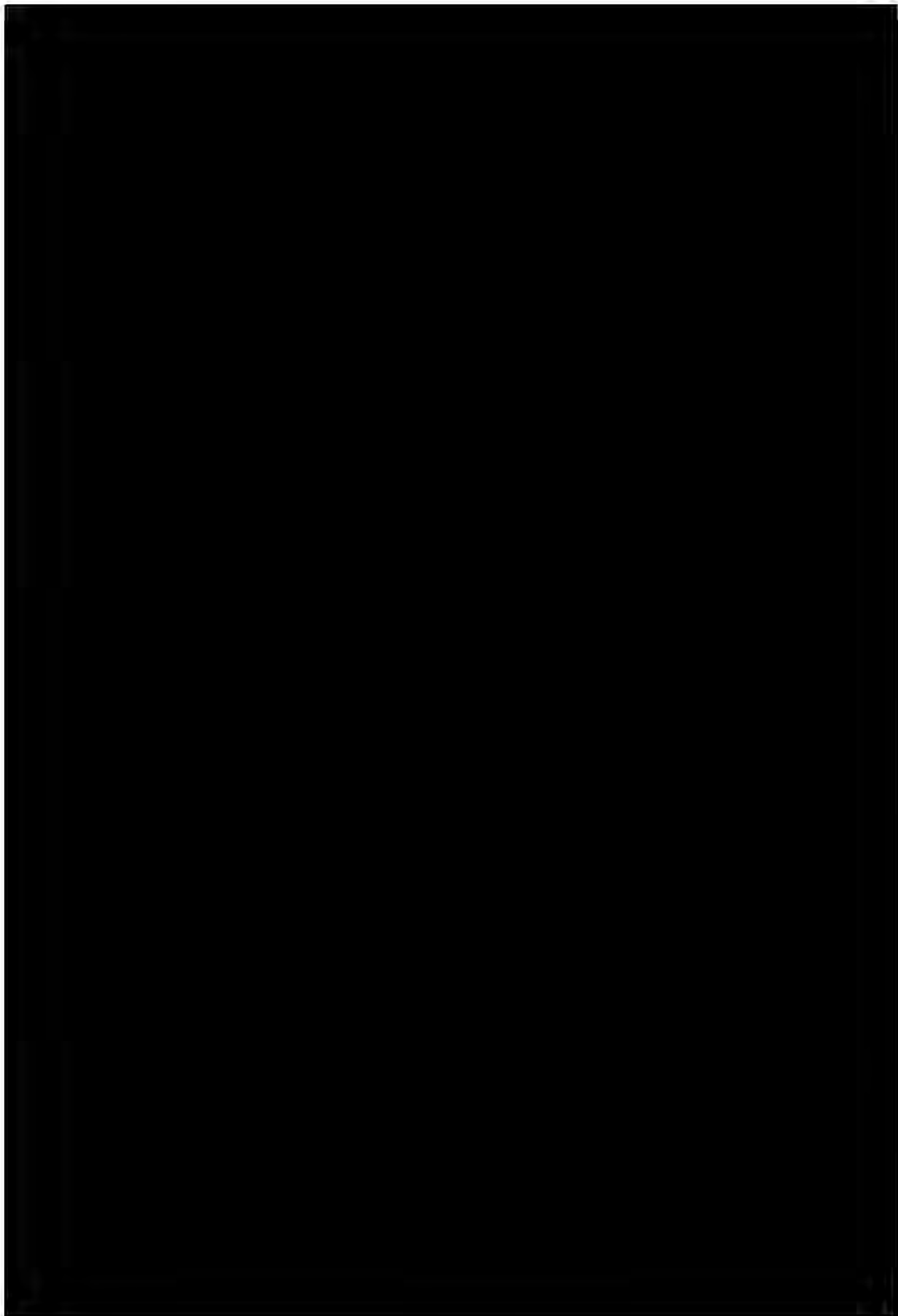


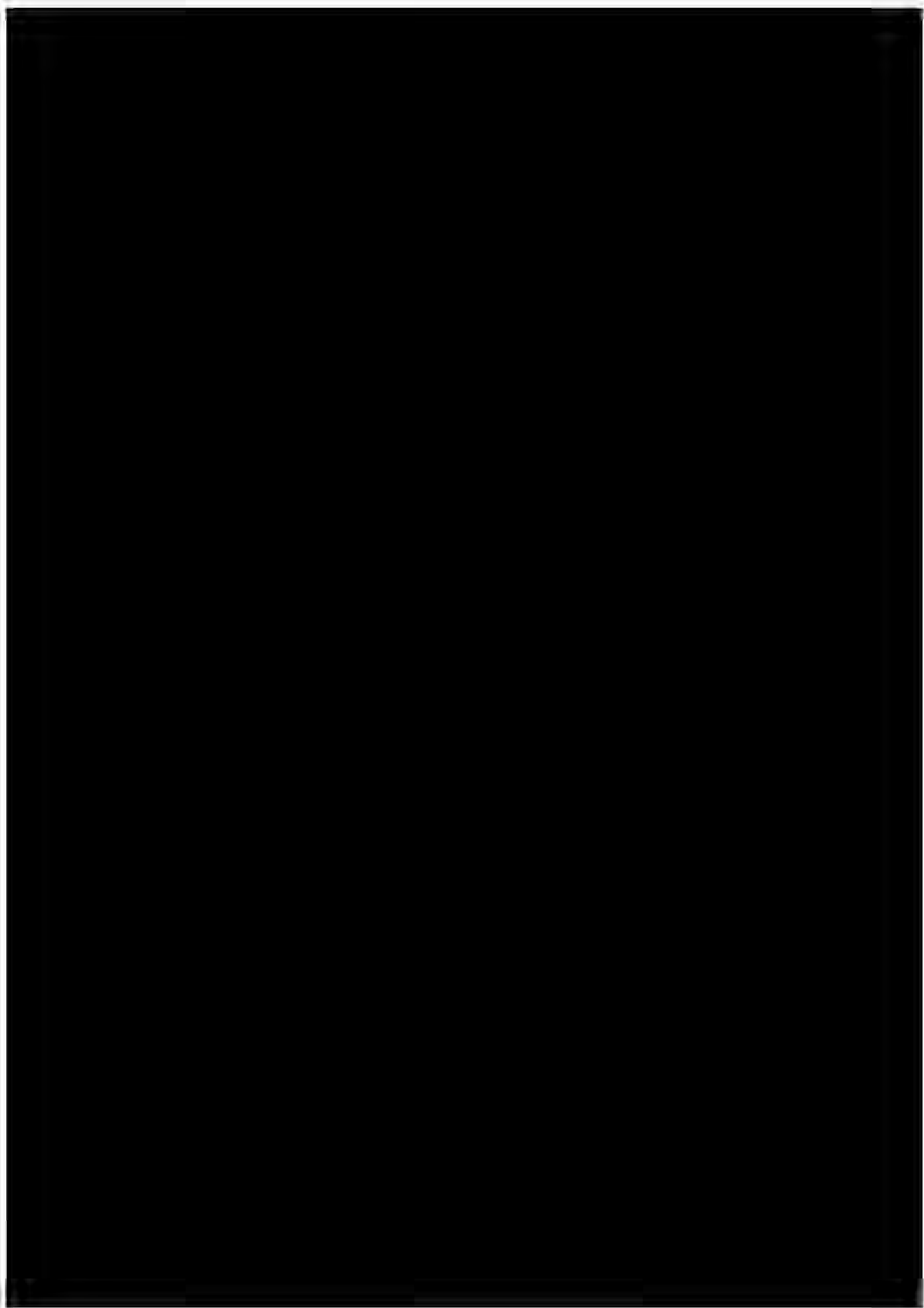




MASTER DATA









THIRD PARTY OWNED SOFTWARE

NONE APPLICABLE

COTS

NONE APPLICABLE

Schedule 5 – TTL Consultant Availability

Band	Role	Business Unit	Hours per week	Hours per Period	Cap (total hours)
DIRR	CTO & Director of CE	CE Directors Office	3.5	14	84
BAND2	Business Operations Support	CE Directors Office	3.5	14	168
ADC0	Business Operations Support Assistant	CE Directors Office	3.5	14	168
BAND5	Head of Business Development	Business Development	7	28	168
BAND4	Business Development Manager	Business Development	14	56	672
BAND3	Business Development Secondee	Business Development	7	28	336
BAND2	Transformation Strategy Analyst	Business Development	14	56	672
BAND5	Head of Customer Technology	Customer Technology	7	28	168
BAND4	Online Systems Manager	Customer Technology	7	28	336
BAND4	Service Design and Transition Manager	Customer Technology	7	28	336
BAND4	Back Office Systems Manager	Customer Technology	7	28	336
BAND4	Agile Delivery Manager	Customer Technology	7	28	336
BAND4	IPR Manager	Customer Technology	7	28	336
BAND4	Lead Technical Expert	Customer Technology	7	28	336
BAND4	Customer Technology Architect Manager	Customer Technology	7	28	336
BAND4	Systems Assurance Manager	Customer Technology	7	28	336
BAND3	Senior Software Developer	Customer Technology	21	84	1008
BAND3	Agile Development Lead	Customer Technology	7	28	336
BAND3	Test Analyst	Customer Technology	7	28	336
BAND3	Revenue Systems Analyst	Customer Technology	35	140	1680
BAND3	Integration Lead	Customer Technology	7	28	336
BAND3	Solution Architect	Customer Technology	7	28	336
BAND3	Senior Solution Architect	Customer Technology	7	28	336
BAND3	Technical Delivery Expert	Customer Technology	7	28	336
BAND3	CE Change & Configuration Manager	Customer Technology	7	28	336
BAND3	Data Assurance Manager	Customer Technology	7	28	336
BAND3	Business Applications Manager	Customer Technology	7	28	336
BAND3	Integration Test Manager	Customer Technology	7	28	336
BAND3	Senior Infrastructure Architect	Customer Technology	7	28	336
BAND5	Head of Infrastructure Operations	Infrastructure Ops	7	28	168
BAND4	Service Design Manager	Infrastructure Ops	7	28	336
BAND4	Programme Manager	Infrastructure Ops	7	28	336
BAND2	PMO Support	Infrastructure Ops	14	56	672
BAND5	Head of Transformation Delivery	Transformation Del	7	28	168
BAND5	Head of Sponsorship, Customer Experience	Transformation Del	7	28	168
BAND4	Business Design Manager	Transformation Del	10.5	42	504
BAND3	Contactless Ticketing Fraud & Paymnt Mgr	Transformation Del	7	28	336
BAND3	Operational Delivery Manager	Transformation Del	7	28	336

BAND3	Delivery Control Manager	Transformation Del	7	28	336
BAND3	Business Analyst	Transformation Del	21	84	1008
BAND3	Payments & Fraud Analyst	Transformation Del	7	28	336
BAND3	Business Analyst Team Leader	Transformation Del	7	28	336
BAND2	Junior Business Analyst	Transformation Del	21	84	1008
BAND5	Payments Operations Manager	Transformation Del	10.5	42	504

Schedule 6

Part A – Consultancy request Form

Reference	
Client	<i>E.g Cubic UK/Cubic NY/Cubic Sydney/Other</i>
Date	<i>Date of the request</i>
Name of Requester	
Project Name	
Brief description of work	<i>Detail here all (a) Services and (b) deliverables with full descriptions of what is required.</i>
Proposed Start Date	
Proposed Completion Date	
Priority	Low/Medium/High
Travel requirements	
Proposed Expenses	
Materials and costs	
Other	

Part B – Consultancy Request Response

Reference	
Client	<i>E.g Cubic UK/Cubic NY/Cubic Sydney/Other</i>
Name of Requester	
Project Name	
Date	<i>Date of the response</i>
Proposed Scope of works	<i>Detail here all (a) Services and (b) deliverables with full descriptions of what is required.</i>
Proposed Start Date	<i>Start date proposed for the work outlined above. If this differs from the Required Start Date then please provide an explanation.</i>
Proposed End Date	<i>End date proposed for the work outlined above. If this differs from the Required End Date then please provide an explanation.</i>
Resources Required	<i>Detail here the types of resources required and the approximate number of hours they will be required to work</i>
Travel requirements	Confirm travel arrangements

Signed _____

Date _____